



First Quarter 2015 Progress Report

Whirlpool Facility
Fort Smith, Arkansas

Prepared for:
Whirlpool Corporation

Prepared by:
ENVIRON International Corporation

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ENVIRON

First Quarter 2015 Progress Report
January 1, 2015 through March 31, 2015
Whirlpool - Fort Smith, Arkansas

1. INTRODUCTION

This quarterly report has been prepared in accordance with the Remedial Action Decision Document (RADD) dated December 27, 2013, for the Whirlpool Fort Smith, Arkansas, site (Site). This First Quarter Progress Report (Report) is not forward looking, but is instead a description of past activities and a review of previously collected data that has been validated and summarized for this report. This report includes a description of the work completed during the First Quarter of 2015, findings of the activities completed in this reporting period, issues identified and resolved, and deviations or schedule adjustments from plans and correspondence submitted to the Arkansas Department of Environmental Quality (ADEQ). Details regarding the discussion of Summary of Findings are provided in the documents attached to this Report.

2. SUMMARY OF FINDINGS

- Monitoring to assess the impact of ISCO injection events measured decreases in trichloroethene (TCE) concentrations in groundwater at Areas 2 and 3, Neck Area and Area 1 of approximately 69%, 70% and 66%, respectively.
- Natural attenuation of TCE is continuing to occur via biological mechanisms or other natural attenuation mechanisms in both onsite and offsite groundwater.
- The approximate location of the hydraulic divide between the north and south groundwater plume boundaries continued to be south of Ingersoll Avenue, which is generally consistent with previous reporting periods and historic results.
- The south groundwater plume beneath the Whirlpool property and the north plume extending north beyond Ingersoll Avenue both continue to exhibit general characteristics of stable to decreasing plumes based upon statistical analysis of temporal TCE concentration trends through the First Quarter of 2015. 86% of monitoring wells in the south plume and 79% of wells in the north plume exhibit either little or no TCE or a decreasing or stable TCE concentration trend. Variability of the plume boundary is evident at a few locations and a few select wells exhibited increasing concentrations. The areas of the south plume and north plume have decreased approximately 3% and 5%, respectively, comparing the 2014 Fourth Quarter and 2015 First Quarter plume boundaries.
- Based on first quarter groundwater data, the average minimum and maximum quantities of TCE in groundwater associated with the Site has been assessed for the north and south groundwater plumes. The quantity of TCE in the north plume is estimated to range from less than 1 to 2 gallons, the quantity of TCE in the south plume is estimated to range from 2 to 9 gallons, and the quantity of TCE in the northeast plume is estimated to contain less than 1 gallon; for a combined volume of TCE in groundwater ranging from 3 to 12 gallons.
- Risk estimates based upon groundwater and soil vapor data for potential vapor intrusion from offsite groundwater continue to be below ADEQ's risk management limits.
- There are no known TCE impacts to offsite surface water or sediment.

- The Site human health exposure risks remain unchanged.
- The owner of the Independent Living Inc. property (Bost, Inc.) located at 1410 Jacobs Avenue provided a report of indoor air sampling performed in April 2013. The indoor air sampling results did not detect TCE or TCE breakdown constituents [cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride (VC)] in indoor air. This information is provided as Attachment E of this Progress Report.

3. REVIEW OF ACTIVITIES COMPLETED – FIRST QUARTER 2015

During the week of January 12, First Quarter of 2015, groundwater samples were collected via low flow sampling methodologies. Groundwater samples were collected from a total of 78 wells to assist in evaluating the northeast corner, Boys and Girls Club property, in-situ chemical oxidation (ISCO) monitoring, and plume definition. The groundwater samples from locations noted in the RADD were analyzed for parameters as outlined in the RADD, eleven additional groundwater samples were also analyzed for parameters as outlined in the RADD, and the remaining wells were analyzed for VOCs only. The First Quarter 2015 Groundwater Monitoring Report provides details regarding the sampling event and is included as Attachment A.

Groundwater samples were collected concurrent with the First Quarter 2015 groundwater sampling event, from select wells, to evaluate the performance of ISCO events completed onsite to date. The data from this additional sampling effort is presented and evaluated in the First Quarter 2015 Groundwater Monitoring Report (Attachment A).

Key observations based on the groundwater monitoring data include the following:

- The groundwater potentiometric surface observed during the first quarter event is consistent with that historically observed at the Site.
- The direction of the lateral hydraulic gradient continues to be influenced by a hydraulic divide located just south of Ingersoll Avenue with the hydraulic gradient predominantly in the following directions:
    - Hydraulic gradient north of the divide is in a northeasterly direction; and
    - Hydraulic gradient south of the divide is in a southern/southeasterly direction.
- First Quarter groundwater monitoring data shows generally stable to decreasing trends for TCE concentrations at a majority of monitoring well locations.
- First Quarter groundwater monitoring data in conjunction with historical data demonstrate that natural attenuation of TCE is occurring via biological mechanisms in both onsite and offsite groundwater.

- The ISCO events performed in 2014 continue to be effective with TCE concentration reductions as follows:
  - Approximately 84% decrease for source area wells MW-25, MW-85, and MW-86 and approximately 66% decrease for the Area 1 wells (including source area wells);
  - Supplemental neck area decrease of approximately 70% since May 2014; and
  - Approximately 69% decrease for wells in Areas 2 and 3.

During the First Quarter of 2015, additional soil vapor monitoring points were installed, historical soil vapor monitoring points were abandoned, and a soil vapor sampling event was completed in January 2015. Between December 2014 and January 2015 all historical soil vapor monitoring points were abandoned. From January 14 through January 16, 2015 eight new soil vapor monitoring points were installed. The construction and installation of these points was based upon the soil boring/lithology information collected in December 2014.

Soil vapor sampling was completed from January 16 through 21, 2015. Soil vapor samples were successfully collected from VP-5, VP-7, VP-9, and VP-14. However water filled the vapor points at locations VP-6, VP-8, VP-10, and VP-12 and water could not be purged from the sampling train. Water samples were collected from these points except for VP-08 where the water volume was insufficient for sample collection.

The First Quarter 2015 Soil Vapor Monitoring/Vapor Intrusion Report further discusses the abandonment and installation of the points as well as evaluates the water and soil vapor data. This report is included as Attachment B.

Key observations based on the soil vapor monitoring data include the following:

- Risk estimates for potential vapor intrusion from offsite groundwater into offsite residences are below ADEQ's risk management limits of 10^{-5} and 1 for cumulative cancer risk and non-cancer hazards, respectively; and
- Vapor intrusion modeling using shallow water and soil gas samples collected, confirms the modeling results using groundwater VOC concentrations collected from monitoring wells.

During the first quarter 2015 ENVIRON was provided a report from Mr. Jones of Bost, Inc. regarding the indoor air sampling performed in April 2013 at the Bost property building, located at 1410 Jacobs Avenue. The indoor air sampling results did not detect TCE or TCE breakdown constituents [cis-1,2-dichloroethene (cis-1,2-DCE) and vinyl chloride (VC)] in indoor air. This information is provided as Attachment E of this Progress Report.

During the First Quarter of 2015, an investigation was completed to characterize the shallow subsurface geology and groundwater quality near the north boundary of the Whirlpool Corporation (Whirlpool) property and immediately offsite in the residential area north of the

property boundary. This investigation included assessment of TCE impacts in soil and groundwater at the Whirlpool properties (former manufacturing plant property and 1501 Jacobs Avenue) as well as three residential properties. The work was completed in accordance with the Offsite Shallow Groundwater Investigation Work Plan (Work Plan) dated October 2014. During this investigation five borings were completed to evaluate lithology and potential soil impact, six soil samples were collected, nine shallow groundwater monitoring wells were installed and seven were sampled (two were dry at the time of the sampling event), and eight new soil vapor points were installed and sampled for either water or soil vapor except at VP-08 where a sample could not be collected due to field conditions.

The concentrations of TCE detected in the shallow monitoring wells is consistent with levels observed in the northern plume based on 2015 First Quarter groundwater monitoring results. The TCE contamination is evident in groundwater from the offsite shallow monitoring wells that are screened in the deeper zone [approximately 13 to 14 feet below ground surface (bgs)], while TCE was not present in groundwater from the monitoring wells that are screened in the shallow zone (approximately 6 to 10 feet bgs). Based on these initial sampling efforts, TCE impacted groundwater is limited to the deeper zones in the offsite monitoring wells. Additional information regarding this investigation and associated results may be found in Attachment C - Shallow Offsite Groundwater Investigation Report.

4. QUANTITY OF TCE

Estimated average minimum and maximum quantities of TCE in groundwater were calculated for the Site using the results of the First Quarter groundwater monitoring event. The total quantity of TCE distributed throughout the north and south groundwater plumes is calculated based upon the consistent groundwater divide north of the Whirlpool manufacturing facility and south of Ingersoll Avenue. The quantity of TCE calculations are based on separating the northern and southern plumes at the hydraulic divide at the location of MW-24 (see Figures 2A and 2B, Attachment A – First Quarter 2015 Groundwater Monitoring Report). The Northeast plume is also included.

The estimated quantities of TCE included calculation of the volume of groundwater based upon the distinct areas within the plumes (i.e. area of plume within the iso-concentration lines on Figures 2A and 2B of Attachment A), average saturated thickness and total porosity (i.e. area x average saturated thickness x porosity = volume of water). The volume of water and minimum and maximum TCE concentrations based upon the plume boundaries were used to calculate the mass of TCE within each section of the plume. The volume of TCE was then determined based upon the specific gravity of TCE. Parameters used in the calculation of TCE quantities are presented below. Calculations are presented in Attachment D, Table 2.

Northern plume parameters:

- Plume area of approximately 476,500 square feet (ft^2) which is an approximate 5% reduction in plume size compared to the 2014 Fourth Quarter. The north plume consists of 296,000 ft^2 for the portion of the plume with TCE concentrations ranging from 5 micrograms per liter (µg/L) to 100 µg/L; 180,500 ft^2 for the portion of the plume with TCE

concentrations ranging from 100 µg/L to 1,000 µg/L; and, no portion of the plume exhibits TCE concentrations greater than 1,000 µg/L;

- Average saturated thickness of 3.7 feet (see Attachment D, Table 1);
- Total porosity of 0.4; and
- TCE specific gravity of 1.465.

Southern plume parameters:

- Plume area of approximately 869,700 ft^2 which is an approximate 3% reduction in plume size compared to the 2014 Fourth Quarter. The south plume consists of 442,300 ft^2 for the portion of the plume with TCE concentrations ranging from 5 µg/L to 100 µg/L; 324,500 ft^2 for the portion of the plume with TCE concentrations ranging from 100 µg/L to 1,000 µg/L; and 102,900 ft^2 for the portion of the plume with TCE concentrations ranging from 1,000 µg/L to 10,000 µg/L.
- Average saturated thickness of 8.3 feet (see Attachment D, Table 1);
- Total porosity of 0.4; and
- TCE specific gravity of 1.465.

Northeastern plume parameters:

- Plume area of approximately 257,800 ft^2 consisting of 187,600 ft^2 for the portion of the plume with TCE concentrations ranging from 5 µg/L to 100 µg/L; and, 70,200 ft^2 for the portion of the plume with TCE concentrations ranging from 100 µg/L to 1,000 µg/L;
- Average saturated thickness of 4.4 feet (see Attachment D, Table 1);
- Total porosity of 0.4; and
- TCE specific gravity of 1.465.

Based on the plume information listed above, the following ranges of the quantities of TCE distributed throughout the respective plumes were calculated:

Plume Location	Estimated Minimum Volume	Estimated Maximum Volume
Northern Plume	Less than 1 gallon	2 gallons
Southern Plume	2 gallons	9 gallons
Northeastern Plume	Less than 1 gallon	Less than 1 gallon

Therefore the total average minimum and maximum quantities of TCE in groundwater associated with the site is approximately 3 to 12 gallons of TCE.

These estimated quantities illustrate the limited volume of TCE present in groundwater.

5. DATA AVAILABLE IN THIS QUARTER

Analytical data for the 78 wells sampled, including water levels from this sampling event, are included in the First Quarter 2015 Groundwater Monitoring Report included as Attachment A.

Analytical data for the soil vapor monitoring are included in the First Quarter 2015 Soil Vapor Monitoring/Vapor Intrusion Report included as Attachment B.

Data associated with installation and monitoring of shallow offsite groundwater wells are included in Attachment C – Shallow Offsite Groundwater Investigation Report.

Analytical results for indoor air sampling conducted in April 2013 at the Bost property is included as Attachment E.

6. ISSUES ENCOUNTERED AND RESOLUTION

The RADD identified five locations where soil vapor monitoring should be performed at on and offsite areas. These locations included those installed in 2012. However, as stated in previous quarterly progress reports and other correspondence with ADEQ many of these points had filled with water after installation, therefore these points were abandoned in January 2015. An Addendum to the Soil Vapor Monitoring Program was submitted to ADEQ on October 2, 2014. Borings were completed in the Fourth Quarter 2014 in accordance with the Shallow Offsite Groundwater Investigation Work Plan submitted to ADEQ on October 30. Offsite soil vapor points and shallow groundwater monitoring wells were installed in January 2015.

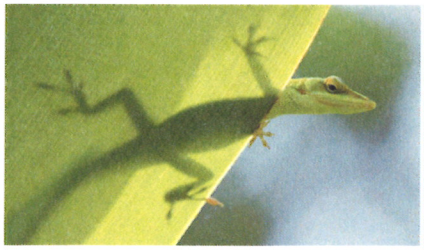
7. SCHEDULE

There are no schedule deviations to report in the First Quarter 2015. Remedial activities were implemented in 2014 and ongoing groundwater monitoring results continue to show improved groundwater conditions as a result of these remedial activities.

LIST OF ATTACHMENTS

Volume 1
Attachment A: First Quarter 2015 Groundwater Monitoring Report

Volume 2
Attachment B: First Quarter 2015 Soil Vapor Monitoring/Vapor Intrusion Report
Attachment C: Shallow Offsite Groundwater Investigation Report
Attachment D: Quantity of TCE Tables 1 and 2
Attachment E: Indoor Air Sampling Results – 1410 Jacobs Avenue





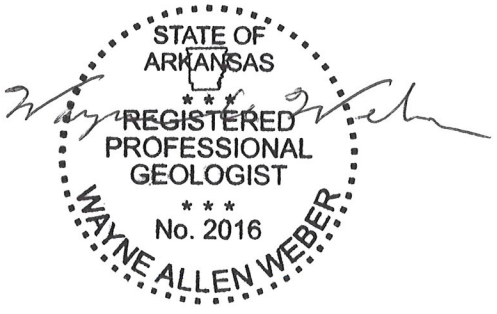
ATTACHMENT A
First Quarter 2015 Groundwater Monitoring Report
Whirlpool Facility
Fort Smith, Arkansas

Prepared for:
Whirlpool Corporation

Prepared by:
ENVIRON International Corporation

Date:
May 2015

Project Number:
3437470A



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1 Introduction

ENVIRON International Corporation (ENVIRON) has prepared this First Quarter 2015 Groundwater Monitoring Report (Report) for the Fort Smith, Arkansas, Site (Site) on behalf of Whirlpool Corporation (Whirlpool). The work was performed and the report prepared in accordance with the December 27, 2013, Remedial Action Decision Document (RADD) issued by the Arkansas Department of Environmental Quality (ADEQ) and ADEQ comment letters and ENVIRON/Whirlpool responses to previous quarterly monitoring reports[1].

Whirlpool has been monitoring the groundwater at the Site since 1989. This report is Attachment A of the First Quarter 2015 Progress Report for the Site.

This report describes the results of the groundwater monitoring event performed between January 12 and 15, 2015. This event included measuring water levels on January 12 from 85 wells and collection of groundwater samples from 78 wells consisting of 55 wells required for sampling by the RADD plus five wells sampled on the northeast corner of the Whirlpool property (MW-87 through MW-91), four wells sampled on the Boys and Girls Club property (MW-96 through MW-99), seven wells sampled for in-situ chemical oxidation monitoring (ISCO), (MW-23, MW-24, MW-92 through MW-95 and MW-172) and seven additional wells sampled to support the evaluation of the source area, plume boundary and remediation effort.

[1] ADEQ Comments on the First Quarter Groundwater Report dated June 13, 2014; ENVIRON / Whirlpool responses dated July 15, 2014; ADEQ Supplemental Comments on the First Quarter Groundwater Report dated July 31, 2014; and, ENVIRON / Whirlpool response dated September 3, 2014. ADEQ Comments on Second Quarter Progress Report dated September 17, 2014 and ENVIRON / Whirlpool responses dated October 22, 2014. ADEQ Comments on the Third Quarter Progress Report dated January 12, 2015 and ENVIRON/Whirlpool responses dated February 3, 2015.

2 Groundwater Sample Collection and Onsite Activities

ENVIRON performed the First Quarter 2015 Groundwater Monitoring Event (first quarter event) on behalf of Whirlpool during the week of January 12. Activities performed during the monitoring event included measuring water levels in site wells and collecting groundwater samples for analysis of volatile organic compounds (VOCs) and monitored natural attenuation (MNA) parameters.

Constituents of concern (COCs) as identified by the RADD in groundwater for this Site include trichloroethene (TCE) and related degradation (i.e. daughter) products (Table 1). The groundwater monitoring wells sampled in accordance with the RADD for compliance with quarterly monitoring are listed in Table 2. The COCs and additional geochemical parameters were analyzed in collected groundwater samples to evaluate the effectiveness of MNA in support of the natural degradation of site related chlorinated compounds as specified per the RADD, (see RADD Table 2).

As discussed in Whirlpool Corporation's Comments on the Draft Revised Remedial Action Decision Document dated February 20, 2015, a substantial volume of groundwater monitoring data has been collected for this site. This data has demonstrated that conditions are sufficiently stable or improving. Therefore, required monitoring should be adjusted from quarterly to semi-annual on a going forward basis and ADEQ and Whirlpool should agree on a subset of monitoring wells from which data should be collected in each semi-annual event.

As of 2015 Whirlpool has been monitoring field, VOC and MNA parameters as described within the current RADD for five consecutive quarters. Whirlpool also has years of historical VOC monitoring dating back to the late 1980's for the site. As discussed within the United States Environmental Protection Agency (USEPA) guidance document Use of Monitored Natural Attenuation at Superfund, RCRA Corrective Action and Underground Storage Tank Sites (April 1999), "modification of the (MNA) program, including increases or decreases in monitoring parameters, frequency, or locations, may be warranted to reflect changing conditions or improved understanding of natural attenuation processes at the site." Generally, Whirlpool proposes semi-annual groundwater monitoring for all wells; however, recently installed wells will be monitored quarterly until four quarters of data have been collected (i.e. monitoring wells at the northeast corner and on the Boys and Girls Club property).

In addition, due to the amount of data collected, Whirlpool has an improved understanding of MNA processes at onsite and offsite locations; and therefore, is requesting modifications to the parameters monitored specifically for MNA purposes. Continued quarterly monitoring of the full suite of MNA parameters will not improve or change conditions affecting MNA.

After five quarters of sampling for all of the MNA parameters listed in Table 3 of the RADD, a very good baseline of groundwater conditions at onsite and offsite locations has been established. At this time it is important to collect additional data that will provide indications of changes which may affect the rate or extent of natural attenuation versus the baseline already established. Given our current site understanding, reducing both the number of parameters

sampled and the locations where the samples are collected is appropriate. We request to modify Table 3 of the December 2013 RADD to include only the following sample parameters:

- Dehalococcoides (DHC) at select wells that have historically shown the presence of these dechlorinating microbes at concentrations of greater than 500 cells/mL during the last four quarters (currently IW-73, IW-74, MW-56 and MW-38);
- Temperature, pH, specific conductance, dissolved oxygen, oxidation-reduction potential (ORP) and turbidity (water quality criteria evaluated in the field during well purging activities) to be collected at all wells;
- Ferrous iron at wells where total iron has been noted in the last four quarters as being greater than 1 milligram per liter (mg/L), although monitoring of ferrous iron at a specific well location would discontinue if the concentration of ferrous iron falls below 1 mg/L for two or more consecutive sampling events, currently these wells would include: MW-58, MW-60 and MW-67;
- Nitrate/Nitrite at wells where concentrations have been detected above 1 mg/L in the last four quarters since nitrate/nitrite may compete with the reductive pathway, although monitoring of nitrate/nitrite at a specific well location would discontinue if the concentration of nitrate/nitrite falls below 1 mg/L for two or more consecutive sampling events;
- Sulfate at select wells where concentrations have been detected above 20 mg/L since sulfate may compete with the reductive pathway, although monitoring of sulfate at a specific well location would discontinue if the concentration of sulfate falls below 20 mg/L for two or more consecutive sampling events; and
- Total Organic Carbon (TOC) at wells where TOC has been detected, although monitoring of TOC at a specific well location would discontinue if the concentration decreases below detection limits for two or more consecutive sampling events.

The MNA parameters proposed to be removed from groundwater monitoring include: methane; ethane; ethene; hydrogen; vinyl chloride reductase; volatile fatty acids; ferric iron (Iron III); manganese; carbon dioxide; acetylene; sulfide; chloroethanol; alkalinity; chloride; phosphate; and, ammonia. Five quarters of monitoring data is available for the MNA parameters identified in Table 3 of the RADD; therefore, the concentration ranges for these parameters are well documented and further analysis of these parameters is not anticipated to aid in the on-going assessment of MNA.

The following sections describe the Site groundwater monitoring activities completed during the first quarter event.

2.1 Static Water Level Measurements

On January 12, 2015, static water levels were measured in a total of 85 monitoring wells. A groundwater level measurement was not obtained from MW-55 due to the property owner not granting access. Monitoring wells were opened to allow water levels to equilibrate to atmospheric conditions prior to their measurement using an electronic water level meter. The

instrument was calibrated by the manufacturer prior to its purchase and therefore does not require calibration in the field. The water levels were measured to the nearest 0.01 foot with an accuracy of 0.02 feet per the manufacturer's specification. The water level meter probe and tape (i.e. the only non-dedicated sampling equipment) were decontaminated prior to use at each well by spraying and scrubbing the probe and tape with Alconox detergent mixed with distilled water and then rinsing the probe and tape with distilled water prior to being wiped dry.

The first quarter event static water level measurements are presented in Table 3 along with the seven previous water level measurements recorded from site wells.

2.2 Monitoring Well Sampling

After static water level measurement activities were completed, low-flow sampling was performed at each well via the use of a peristaltic pump and dedicated polyethylene tubing. The tubing was placed at a depth within the well approximately equal to the midpoint of the well screen. The wells were then purged, via United States Environmental Protection Agency (USEPA) Low Stress (low-flow) purging procedures (USEPA, 1996); at a rate generally less than 0.1 liters (L) per minute to minimize the amount of drawdown in the well and to reduce the likelihood of elevated turbidity. Flow rates and drawdown were checked continuously during purging. Purge water was then placed into a container prior to transfer to the onsite water holding tank for ultimate proper disposal. The manifest from the disposal is included as Appendix D.

Water quality parameters were measured via a water quality probe and flow thru cell. Instruments were calibrated daily prior to the start of sampling. All instruments were calibrated at a minimum of once per day. Calibration logs are included as Appendix A. Readings were recorded approximately every five minutes until the parameters stabilized. Stabilization was considered obtained when three consecutive rounds of parameter readings met the following:

- Turbidity: +/- 10% for values greater than 10 NTU, or less than 10 NTU;
- Dissolved Oxygen: +/- 10% for values greater than 0.5 mg/L;
- Specific Conductance: +/- 3%;
- Temperature: +/- 1^{o} Celsius;
- pH: within +/- 0.1 standard units; and
- Oxidation Reduction Potential: within +/- 10 millivolts.

Table 4 presents a summary of results for measured field parameters for the 2015 first quarter event.

The groundwater samples were obtained by directly filling the laboratory provided sampling bottles from the pump discharge. VOCs were collected in three 40 milliliter (mL) glass vials that contained hydrochloric acid as a preservative per standard procedures. Samples for assessing Quality Assurance/Quality Control (QA/QC) metrics were collected by alternately filling investigative and QA/QC sample bottles for each parameter. VOC sample bottles for both the investigative and the QA/QC sample were completely filled, purged of headspace and sealed. All other samples (i.e. for non VOC analysis) were collected in appropriate bottles as specified

by the method and/or laboratory. Hach Test Kits (all verified with valid expiration dates) were used to measure ferrous iron in the field. Groundwater samples for analysis of dissolved hydrogen concentration were collected by the Microseeps gas stripping procedure (2014 Microseeps).

A total of 78 groundwater samples, seven field duplicate samples, three matrix spike/matrix spike duplicate (MS/MSD) samples and six equipment blanks were collected during the 2015 first quarter event (i.e. week of January 12). Well access was denied by the property owner at MW-55, therefore samples were not collected during this sampling event. Duplicate samples were taken at a frequency of one duplicate sample per ten groundwater monitoring samples. Duplicate samples were collected from IW-74, ITMW-12, ITMW-9, ITMW-15, MW-38, MW-46R and MW-91.

Because monitoring wells contain dedicated or new tubing, the only equipment transferred and used from well to well is the water level meter used to monitor well water levels during purging and stabilization prior to sampling. Equipment rinsate blanks were collected after each of the six water level meters used during the monitoring event were decontaminated to evaluate field decontamination procedures. Equipment rinsate blanks were collected by pouring ASTM Type II deionized water over the decontaminated water level meter probe and tape into the appropriate sample containers. The rinsate blanks were collected after decontamination procedures at wells MW-91 (EB-01-201501 at 18:00), MW-61(EB-02-201501 at 18:02), MW-84 (EB-03-201501 at 17:10), ITMW-172 (EB-04-201501 at 17:10), MW-67 (EB-05-201501 at 16:30) and MW-23 (EB-06-201501 at 17:40). The preservation and analysis of the equipment rinsate blanks was identical to those of the associated environmental samples.

Due to slow recovery rates, low-flow sampling techniques were not used at the following wells: MW-50, MW-56, MW-57, MW-60, MW-61 and MW-63. These wells were purged dry once and were then allowed to recover prior to collection of the sample. The recovery rates and subsequent sampling for the indicated wells were all less than 24 hours. Adequate sample volume was present for all analytical fractions from the wells designated for sampling with the exception of hydrogen samples from MW-31, MW-50, MW-56, MW-57, MW-60, MW-61 and MW-63. See Section 3.4 Data Quality Assessment for additional information.

Sample containers were labelled and packed on ice in insulated coolers before being shipped under chain of custody via overnight courier or FedEx to Pace Analytical Services in Lenexa, Kansas (VOC and MNA parameters), via FedEx to Microseeps in Pittsburgh, Pennsylvania and via FedEx to Microbial Insights in Knoxville, Tennessee (Microbial parameters). Chain of custody procedures were followed from the point of sample collection through completion of analysis. The laboratories used infrared thermometers to take sample temperatures upon sample receipt in accordance with USEPA "Manual for the Certification of Laboratories Analyzing Drinking Water" fifth edition.

2.3 Other Site Monitoring Activities

During this quarter, additional activities that occurred on the Whirlpool property included the installation of shallow groundwater monitoring wells and new soil vapor monitoring points,

replacement of monitoring wells MW-31, MW-32 and MW-33 and the abandonment of old soil vapor monitoring points. The installation of the shallow groundwater monitoring wells is further discussed in the Shallow Offsite Groundwater Investigation Report included with the First Quarter 2015 Progress Report as Attachment C. The installation of soil vapor monitoring points is further discussed in the First Quarter 2015 Soil Vapor Monitoring and Vapor Intrusion Assessment Report included as Attachment B.

3 Results

The following sections present a discussion of the hydrogeology, analytical methods, the results of the laboratory analyses and an assessment of data quality and usability.

3.1 Hydrogeology

Water levels in 85 wells at the Site were measured on January 12, 2015, during the first quarter event (Table 3) as discussed in Section 2.1. A total of 85 wells were monitored during this event to provide potentiometric information regarding flow direction at the site.

As stated in the July 15, 2014, letter to ADEQ titled "Response to ADEQ Correspondence dated June 13, 2014 – First Quarter 2014 Progress Report," MW-58 will be replaced when access is granted by the property owner. Until the well has been replaced, it will not be included in water level measurements completed during quarterly monitoring events. The well will be abandoned in accordance with the ADEQ Monitoring Well Construction Geotechnical Boreholes and Plug and Abandonment Policy and a new well (MW-58R) will be installed just up-gradient of the abandoned well. As of the first quarter event, access has not been granted to replace this well.

The static water level measured in the wells ranged from 1.50 feet to just over 21 feet below top of the well casing (btwc) during the monitoring event (as noted above, the depth to water measurement in MW-58 was excluded from assessment of water levels based upon the discussion above). Figure 1 shows the contours of the groundwater elevations based on the monitoring well static water level measurements completed on January 12, 2015, for this first quarter event. Based on the current potentiometric maps, the lateral hydraulic gradient, as an indication of the likely direction of groundwater flow, appears to be consistent with historical conditions, including the presence of a groundwater gradient divide that trends east to west just north of the facility building. As illustrated on the figure, the hydraulic gradient is near zero in the area that extends from the western portion of the north parking lot to just north of Jacobs Avenue. North of this point, the hydraulic gradient is directed generally to the north/northeast. South of this flat area, the direction of the hydraulic gradient is to the southeast. East of this flat hydraulic gradient area the general direction of flow is to the northeast.

3.2 Analytical Methods

Seventy-eight groundwater samples were collected from plume boundary wells, onsite wells, offsite wells, Boys and Girls Club wells and ISCO wells and were analyzed for the following parameters in accordance with the indicated laboratory methods:

- VOCs: SW846 5030B/8260B
- Chloroethanol: SW846 8015
- Total Iron: SW846 6010
- Total Manganese: SW846 6010
- Alkalinity: SM 2320B
- Ferric Iron: SM 3500-Fe B#4
- Sulfide: SM 4500-H+B

- Sulfate: EPA 300.0
- Chloride: EPA 300.0
- Ammonia: EPA 350.1
- Nitrate: EPA 353.2
- Nitrite: EPA 353.2
- Total Nitrogen: EPA 353.2
- Carbon Dioxide: SM 4500-CO2 D
- Total Organic Carbon: SM 5310C
- Phosphate: SM 4500P-E
- Volatile Fatty Acids: AM21G
- Methane: AM20GAX
- Ethane: AM20GAX
- Ethene: AM20GAX
- Acetylene: AM20GAX
- Hydrogen: AM20GAX

The analytical methods listed above are contained in the USEPA's Test Methods for Evaluating Solid Waste (SW-846 Third Edition, 1983); the American Public Health Association (APHA), American Water Works Association (AWWA) and Water Environment Federation (WEF) Joint Editorial Board's Standard Methods for the Examination of Water and Wastewater (SM 2 First Edition, 2005); and Analysis of Dissolved Methane, Ethane and Ethylene in Groundwater by the laboratory modified AM20GAX Standard Gas Chromatographic Technique published in the RSKSOP-175 SOP that was prepared for the use of the Groundwater Ecosystems Restoration Division of the USEPA.

3.3 Analytical Results

All VOC analytical data were subjected to data validation in accordance with the USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Review (June 2008). The laboratory analytical reports for the samples are presented in Appendix B. Summaries of analytical results (i.e. detected compounds) for samples collected during the first quarter event are presented in Tables 5 and 6. These tables include data qualifiers that may have been assigned from validation. A discussion of the field and laboratory analytical results for this event is presented below.

3.3.1 VOC Results

This section presents an evaluation of the VOC data that were collected from the Site during the 2015 first quarter event. TCE results for the first quarter (January groundwater sampling event) are presented on Figures 2A and 2B. Additional groundwater sampling occurred in January for ISCO monitoring.

Plume Boundary Wells

In accordance with the RADD, 23 monitoring wells are identified as plume boundary wells (Table 2) at the Site. During this quarter an additional four wells were sampled to assist in the

boundary evaluation. These four wells are further discussed below in the northeast corner well section. VOC concentrations were detected above the RADD remedial action levels (RALs) (Table 1) in four of the 23 samples collected from the plume boundary wells. Tabulated VOC concentrations measured in these wells during the 2015 first quarter event are presented in Table 5.

Notable results from the first quarter sampling event include:

- ITMW-6: 1,1-Dichloroethane concentration of 4.9 micrograms per liter (µg/L) (this result is consistent with historical ranges for ITMW-6 and is lower than the highest concentration of 1,1-dichloroethane in October 2013 at 6.7 µg/L);
- MW-36: Bromomethane concentration of 16.4 µg/L; and
- MW-61 and MW-63: TCE concentrations of 10.2 and 8.2 µg/L, respectively.

Consistent with historical analytical results for the Site, all other plume boundary well VOC results were reported as non-detect or at concentrations less than RALs.

The highest concentration of TCE in a boundary well in this first quarter event of 10.2 µg/L was detected in the sample from MW-61 located south of Jacobs Avenue. The second highest concentration of TCE in a boundary well was identified at MW-63 with a result of 8.2 µg/L. This result is consistent with historical TCE concentrations in this well. In 2006, a result of 11.6 µg/L was detected at MW-63.

TCE concentrations continue to remain above the RAL at MW-61 and a down-gradient well was proposed in the Response to ADEQ's Comments on the Second Quarter Progress Report dated October 22, 2014. The proposed well location is north of the northeast corner of Jenny Lind Road and Brazil Avenue. DP-58 was performed at this location and the TCE concentrations in soil and groundwater were below detection limits at this location. Access to install a monitoring well at this location has not been denied by the city of Fort Smith, but the pending Jenny Lind road construction project will likely subject a well in the city right-of-way at this location to potential damage.

Offsite Wells

In accordance with the RADD, 12 monitoring wells are identified as offsite wells (Table 2). The offsite wells include those installed at offsite properties to the north and northeast of the Whirlpool northern property boundary that are not otherwise identified as plume boundary wells. Tabulated VOC concentrations measured in 11 of the 12 offsite monitoring wells during the 2015 first quarter event are presented in Table 5 (MW-55 was not sampled due to property access restriction by the property owner). An additional two monitoring wells were sampled during this quarter to assist in evaluating offsite wells.

During the first quarter event, the highest concentration of TCE detected in groundwater samples from the offsite wells was 452 µg/L collected from MW-46R. This data is consistent with TCE concentrations from MW-46R dating back to 2006.

Onsite Wells

In accordance with the RADD, 21 monitoring wells are identified as onsite wells (Table 2). Onsite wells designated by the RADD do not include wells identified as plume boundary wells that are located onsite. Onsite wells include four wells north of Ingersoll Avenue and two wells south of Ingersoll Avenue which are north of the Whirlpool northern property fence line, but still located on property owned by Whirlpool Corporation. The remaining onsite wells are located along the perimeter of the former Whirlpool manufacturing facility, within the source area, or south of the source area which includes wells immediately adjacent to the Whirlpool manufacturing building. During this quarter an additional ten monitoring wells were sampled to assist in the evaluation of onsite concentrations. Tabulated VOC concentrations measured in onsite wells during the first quarter event are presented in Table 5.

VOCs were detected above the RADD RALs in 29 of the 31 groundwater samples collected from onsite wells. Parameters exceeding RALs include: TCE in all onsite wells (except for ITMW-14, MW-84, MW-88 and MW-90), bromomethane in nine wells, 1,1-dichloroethane (1,1-DCA) in two wells, 1,1-dichloroethene (1,1-DCE) in two wells, cis-1,2-dichloroethene (cis-1,2-DCE) in five wells, methylene chloride in three wells, 1,1,2,2-tetrachloroethane (1,1,2,2-TCA) in five wells, tetrachloroethene (PCE) in four wells and vinyl chloride (VC) in two wells.

During the 2015 first quarter event, the maximum onsite TCE concentration measured during the first quarter was 81,200 µg/L at MW-86. Historically MW-25 had contained the highest concentrations of TCE from the onsite wells. During the first quarter event the TCE concentration in MW-25 was 2,510 µg/L, down approximately 94% from a 2014 high of 71,700 µg/L during the Third Quarter 2014 monitoring event and down 99% from the historical high of 270,000 µg/L in September 2011. These results further document the successful ISCO remediation events performed at the site.

The concentration of the daughter products (cis-1,2-DCE and 1,1-DCE) are also highest in the wells in the source area and immediately surrounding the source area. The highest concentration of VC was detected at MW-38.

Figures 3 and 4 depict trends in TCE concentration at select onsite wells in the source area. Figure 3 depicts source area TCE concentrations at ITMW-17, ITMW-19 and MW-25 over time. The linear trend for TCE concentration is generally stable to decreasing at these three wells, although TCE concentrations at ITMW-19 and MW-25 have shown dramatic decreases in concentration within the last quarter. Figure 4 depicts TCE concentrations at the northern onsite wells (MW-33, MW-34 and MW-35R along Ingersoll Avenue) over time. The concentration results for MW-34 and MW-35R exhibit stable to decreasing linear trends. MW-33 has shown fluctuation in TCE concentrations over time; however, the current TCE result of 799 µg/L (MW-33R) is less than the maximum detected concentration of 1,700 µg/L, measured in September of 2007.

Figure 5 depicts TCE and cis-1,2-Dichloroethene (cis-1,2-DCE) trends at MW-25 over time. The trend line for TCE shows a stable to slightly decreasing trend whereas the trend for cis-1,2-DCE is increasing. This increase is to be expected given the reduction of TCE concentration. It

should be noted that both TCE and cis-1,2-DCE show significant decreases during the last year between the 2014 first quarter event and 2015 first quarter event.

Northeast Corner Wells

As discussed in the Northeast Corner Investigation Report (dated December 8, 2014), wells were installed at the northeast corner of the Whirlpool property as well as on the Boys and Girls Club property. These wells (MW-87 through MW-91 and MW-96 through MW-99) were installed to identify and delineate TCE impacts at or near the northeast corner of the Site. Analytical results from these wells are included in Table 5. As stated in this report, quarterly monitoring at these wells will be performed for the next year.

During the first quarter event, samples were collected from these wells as shown on Figure 2A and the samples were analyzed for VOCs. Wells MW-97 through MW-99, located on the Boys and Girls Club property, did not contain detected levels of any VOCs (presented as Plume Boundary Wells in Table 5). MW-96 contained 0.59J µg/L of TCE during the first quarter. MW-88 and MW-90 (presented within onsite wells in Table 5), located north of the manufacturing building northeast corner, also did not contain detectable levels of VOCs. MW-87, MW-89 and MW-91 (presented within onsite wells in Table 5) contained TCE at concentrations ranging from 11.4 to 661 µg/L which is comparable with the levels identified during the initial northeast corner investigation in June 2014.

Groundwater samples were also collected in January 2015 for ISCO monitoring. This data is presented in Table 6 and is further discussed in Section 5.

3.3.2 MNA Results

In accordance with the RADD, 55 monitoring wells are monitored for natural attenuation parameters. During the first quarter event, 11 additional wells (not listed in the RADD) were monitored for natural attenuation parameters. Tabulated results are presented in Table 5.

This section presents the natural attenuation data collected from the Site during the 2015 first quarter event.

The USEPA documents “Technical Protocol for Evaluating Natural Attenuation of Chlorinated Solvents in Groundwater” (USEPA, 1998) and “An Approach for Evaluating the Progress of Natural Attenuation in Groundwater” (2011) provides a framework for presenting the lines of evidence that natural attenuation of chlorinated solvents is occurring. The three recognized lines of evidence include:

- Historical groundwater and/or soil chemistry data that clearly demonstrate a trend of decreasing contaminant mass and/or concentration over time at appropriate monitoring points (USEPA, 1998);

- Hydrogeologic and geochemical data that can be used to establish indirectly the type(s) of natural attenuation processes occurring at the site and the rate at which the processes will reduce contaminant concentrations to the cleanup goal (USEPA, 1998); and
- Data from field or microcosm studies which directly demonstrate the occurrence of a specific natural attenuation process at the site and its capacity to degrade the contaminants of concern (USEPA, 1998).

3.3.2.1 Chemical Lines of Evidence

The occurrence and progress of natural attention in reducing COC concentrations is provided by evaluating the presence and effectiveness of the transformation pathways for chlorinated ethenes. Chlorinated ethenes are degraded by both biological and abiotic (non-biological) mechanisms. The graphic below shows the biological (anaerobic) and abiotic transformation pathways for chlorinated ethenes. This graphic does not include other chemically induced aerobic (e.g. ISCO) and anaerobic (e.g. zero valent iron) pathways that can promote degradation of chlorinated compounds.

Abiotic and Biotic Pathways for Chlorinated Ethenes and Ethane

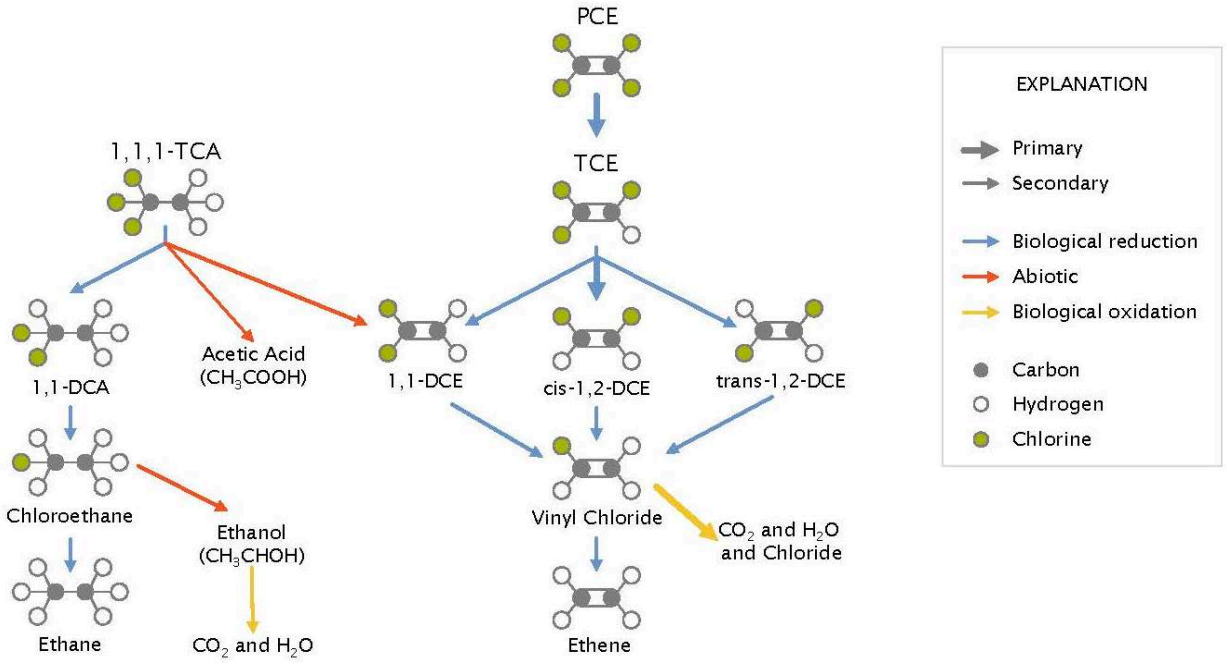


Table 5 presents a summary of analytical results for VOCs in groundwater. These data provide lines of evidence that natural attenuation of TCE is continuing to occur via biological mechanisms in both onsite and offsite groundwater. Groundwater sample results continue to show elevated levels of cis-1,2-DCE in Site monitoring wells, as well as the presence of VC in 11 of the wells monitored.

3.3.2.2 Geochemical Lines of Evidence

The occurrence and progress of natural attenuation in reducing COC concentrations is provided by evaluating geochemical parameters along with the results of conventional chemical and microbial analyses. The detection of cis-1,2-DCE in groundwater samples from this Site is evidence that conditions likely are favorable for active reductive dechlorination processes. Key parameters used to assess the progress of reductive dechlorination include: temperature, concentration or presence of electron acceptors (dissolved oxygen, nitrate, iron, manganese and sulfate), presence and amount of nutrients (e.g. concentrations of nitrogen and phosphorus), bioavailable carbon source to sustain microbial population, concentrations of COCs and pH.

Table 4 presents the groundwater field parameters for the first quarter event. A summary of the key items on this table are discussed below:

- The groundwater during this quarter was generally considered to be under anaerobic to microaerophilic conditions, with 27 out of 65 wells monitored wells showing dissolved oxygen (DO) concentrations less than 1 mg/L and another seven wells displaying DO less than 1.5 mg/L.
- The ORP of the groundwater samples ranged from a low of -141 millivolts (mV) in MW-90 to a high of 644 mV in IW-72 (purged groundwater exhibited pink color presumably due to ISCO injections in this area in 2009). IW-72 has exhibited the highest ORP measurements during the last year of monitoring. In general, the ORP levels were less than 500 mV in most of the Site monitoring wells, which indicate that the groundwater is under manganese reducing to sulfate reducing conditions.
- The pH of the groundwater ranged from a low of 4.11 in MW-25 to a high of 13.72 in MW-86. Monitoring wells MW-86, MW-65 (pH =11.74) and ITMW-18 (pH= 10.08) are likely being impacted by the ISCO activities, which affect the pH levels of groundwater.
- The temperature of the groundwater ranged from about 8.98° to 17.48° Celsius, with the majority of the temperatures around 13-16º Celsius, which is a range that is conducive to most microbes in groundwater.
- The major competing electron acceptors nitrate, manganese, iron and sulfate were evaluated in Site groundwater samples (Table 5). Nitrate levels were generally present at less than 1 mg/L in most of the monitoring wells. A few wells showed nitrate levels above 1.5 mg/L. ITMW-6 and ITMW-9, showed elevated levels of nitrate at 28.1 mg/L and 10.3 mg/L, respectively. Manganese concentrations ranged from 0.007 mg/L in MW-66 to 4.81 mg/L in IW-72. The majority of the wells showed manganese concentrations less than 1 mg/L. Total iron was present in the majority of the groundwater samples at 7.1 mg/l or less, which was consistent with the low levels of ferrous iron measured in groundwater (<4 mg/L). MW-41 showed total iron and ferrous iron concentrations at 3.70 mg/L and 3.30 mg/L, respectively, indicating iron reducing conditions are present in the area around this well; although, previous ISCO events were performed in the vicinity of this well in 2009 (ORP 127.9 mV). Sulfate concentrations were generally less than 100 mg/L with the exception of IW-76 (470 mg/L), IW-77 (1,680 mg/L), MW-25 (4,610 mg/L),

MW-32 (268 mg/L), MW-34 (478 mg/L), MW-35R (7,410 mg/L), MW-65 (3,370 mg/L), MW-81 (472 mg/L), MW-82 (1,460 mg/L),MW-83 (818 mg/L), MW-84 (4,000 mg/L), MW-85 (1,530 mg/L), MW-86 (5,050 mg/L), ITMW-5 (102 mg/L), ITMW-11 (952 mg/L), ITMW-15 (1,520), , ITMW-19 (8,480), IW-80 (474 mg/L). The wells with the elevated sulfate were likely affected by ISCO injection.

- The dissolved hydrogen concentrations ranged from 0.75 nanomolar (nM) in IW-74 to 15,000 nM in ITMW-15. The majority of the wells displayed dissolved hydrogen concentrations greater than 1 nM, which indicates that the majority of the plume is under sulfate reducing to methanogenic conditions.
- TOC levels ranged from less than 1 mg/L to a high of 38.8 mg/L in MW-86. Similar to the previous quarter more than 80 percent of the groundwater samples displayed TOC levels less than 2 mg/L. Methane, ethane and ethene were detected at low concentrations or were non-detect in groundwater samples throughout the Site (Table 5). These results are likely due to low levels of TOC present in the groundwater, which may be inhibiting bacterial growth.
- The alkalinity of the groundwater is relatively low with many of the groundwater samples showing bicarbonate alkalinity concentrations less than 100 mg/L. However, there were thirteen wells that showed bicarbonate alkalinity equal to or greater than 100 mg/L including ITMW-9, ITMW-15, ITMW-19, IW-72 IW-80, MW-38, MW 50, MW-60, MW-61, MW-65, MW-67, MW-83, MW-84, MW-86 and MW-35R. The relatively low alkalinity concentrations in some parts of the plume indicate that the groundwater does not have significant natural buffering capacity in these areas.
- Major nutrients, ammonia and phosphate, were evaluated in groundwater and the results in Table 5 indicate that the groundwater contains non-detectable levels of ammonia (< 0.10 mg/L), with the exception of ITMW-4 (0.25 mg/L), ITMW-7 (0.26 mg/L), ITMW-11 (0.27 mg/L), ITMW-12 (0.13 mg/L), ITMW-15 (0.32 mg/L), IW-77 (0.23 mg/L), IW-80 (0.066 mg/L), MW-25 (1.2 mg/L), MW-65 (0.64 mg/L), MW-82 (0.23 mg/L), MW-84 (0.49 mg/L), MW-85 (0.29 mg/L), MW-86 (3.9 mg/L) and MW-35R (0.87 mg/L). Phosphate was detected at concentrations ranging from non-detect (< 0.03 mg/L) to a high of 2.13 mg/L in MW-65, which indicates that phosphate is present in non-limiting concentrations to the indigenous microbial community in some areas of the Site groundwater.

3.3.2.3 Microbial Lines of Evidence

Table 5 provides the microbial results for the groundwater samples which were evaluated using standard groundwater analysis protocols. Table 5 includes the results for the genus DHC, the functional genes, tceA reductase (tceA), BAV1 VC reductase (BVC) and VC reductase (VCR). Similar to the 2014 sampling results, the DHC microbial population was detected at elevated levels in MW-38 (5,200 cells/mL); a location that is relatively close to the source area. Likewise, the BVC gene was also detected at elevated levels (3,340 cells/mL) in MW-38, which indicates the potential for complete reductive dechlorination in this area. In addition to MW-38, IW-73 showed elevated levels of DHC (3530 cells/mL) and BVC gene (274 cells/mL). The following wells displayed DHC concentrations greater than 30 cells/mL: MW-38, IW-73, IW-74, MW-22, MW-41, MW-57 and MW-58.

The chemical, geochemical and microbial data from the first quarter event are similar to the quarterly monitoring events in 2014. The chlorinated VOC (cVOC) results demonstrate that reductive dechlorination is significantly occurring in various locations of the plume. For example, near monitoring wells MW-38, IW-73, MW-57 and MW-58, the groundwater samples showed significant levels of DHC, which corresponded to significant levels of cis-1,2-DCE, in comparison to the parent compound TCE. In addition, significant VC levels were observed in MW-38 and IW-73, in comparison to the parent compound cis-1,2-DCE. The cis-1,2-DCE to TCE micromolar ratio was 0.47 and 0.12 for MW-38 and IW-73, respectively. These results indicate significant levels of TCE was being converted to cis-1,2-DCE in the groundwater around these wells. The VC to cis-1,2-DCE ratio was 0.11 and 0.25 in MW-38 and IW-73, respectively, indicating that cis-1,2-DCE was being converted to VC at a lower level in comparison to TCE to cis-1,2-DCE in MW-38. Elevated levels of TOC and ethene were also observed in MW-38, which indicate that there is significant organic carbon in this area and that complete reductive dechlorination is also occurring. The lower levels of reductive dechlorination observed in this plume is likely due to the low levels of TOC observed in various locations throughout the plume and the elevated DO levels.

3.4 Data Quality Assessment

All field and analytical data were reviewed by ENVIRON. Validation findings are summarized below. Detailed validation reports are included in Appendix C.

3.4.1 Field Data

Field data were collected and validated according to the RADD, Work Plan and associated SOPs and USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Review (June 2008). The field data and documentation were evaluated against the following criteria, as appropriate:

- Samples were collected at the specified locations identified in the RADD;
- Field instrumentation calibration and quality assurance/quality control (QA/QC) checks on equipment were conducted on a daily basis, prior to field work; and
- Sample documentation protocol and chain-of-custody protocols were followed per ENVIRON Field Procedures.

3.4.2 Laboratory Analytical Data

All VOC (SW846 5030B/8260B) analytical results received data validation by an ENVIRON Project Chemist. During the data validation process, data validation qualifiers were assigned to the results per USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Review (June 2008), as necessary, to indicate potential limitation on use of the data. In addition, data qualifier codes were added to the results to indicate the reason(s) for qualification and the associated bias direction, if discernable.

The following sections provide a summary of the data validation results.

General Usability Assessment

The laboratory data packages for VOC analysis received from PACE Analytical Services were paginated, complete and overall of good quality. The data packages submitted contained modified level II data packages for data validation.

The data quality for VOCs was generally acceptable. For sample MW-86-201501 three analytes were reported with detections above the instrument calibration range at a 1x dilution factor. 1,1,2,2-tetrachloroethane was detected at 1,080 µg/L E, 1,1,1-TCA was detected at 1,100 µg /L E and TCE was detected at 10,900 µg /L E. In the subsequent 2,000X dilution, due to high concentrations of the target compounds 1,1,2,2-tetrachloroethane and 1,1,1-TCA were reported as non-detect and TCE was detected at 81,200 µg /L. Therefore, the original 1x analysis of 1,1,2,2-tetrachloroethane and 1,1,1-TCA above the calibration range were "J" qualified as estimated values and TCE is reported at the 2,000X dilution without qualification.

The overall quality of analytical data is inferred from the quantitative and qualitative data quality indicators of reporting limits, accuracy, precision, completeness, representativeness and comparability. A general overall assessment of each of the data quality assurance objectives is provided below:

- **Reporting Limits.** The minimum reporting limits required were attained on undiluted samples with the exception of 1,3-dichloropropene and 1,1,2,2-tetrachloroethene. The laboratory instrument used for USEPA Method 8260B cannot be calibrated to detect 1,3-dichloropropene at a RAL of 0.41 µg/L or 1,1,2,2-tetrachloroethene at a RAL of 0.066 µg/L as prescribed by the RADD. The method detection limit (MDL) for 1,3-dichloropropene at 0.14 µg/L was below the RAL whereas the MDL for 1,1,2,2-tetrachloroethene was 0.15 µg/L which is above the RAL listed in the RADD. ADEQ was informed of the limitations of the laboratory instrument in March 2014.

  Elevated target analyte concentrations necessitated dilutions for several samples. In such instances, the reviewer selected the result for each target analyte, corresponding to the analysis run with the least dilution. All other analytes were reported from the undiluted analysis if applicable. Results below the reporting limit (RL) were flagged by the laboratory if above the MDL. To reflect the uncertainty associated with values reported between the MDL and RL, these results were qualified as estimated ("J").

- **Precision.** The MS/MSD relative percent difference (RPD) results for VOCs and the field duplicate RPD VOC results satisfied applicable precision criteria. Several analyte recoveries, TCE, methylene chloride and cis-1,2-DCE from well MW-38 performed at dilution showed relatively low precision performance. Laboratory dilution calculations were reviewed and were determined to be accurate. The more conservative (higher) concentrations were reported in tabular form and are used for the purpose of site evaluation.

- **Accuracy.** Accuracy is a measure of bias in a measurement system. The closer the value of the measurement agrees with the true value, the more accurate the measurement. This was expressed as the percent recovery of LCSs, MS/MSDs and surrogates. Surrogate spike recoveries, MS/MSD results and LCS results for COCs

satisfied the applicable evaluation criteria for accuracy, which indicates that overall accuracy with respect to the analytical system and to the site specific matrix can be considered acceptable. While several recoveries were outside of acceptable criteria, these recoveries were not severe enough to impact the usability of the data.

- **Completeness.** Completeness is a measure of the number of valid measurements obtained in relation to the total number of measurements planned. Completeness is expressed as the percentage of valid or usable measurements to planned measurements. No data were rejected during the validation process. As such, the completeness for the 2015 first quarter event is 100%.
- **Representativeness.** Representativeness is a qualitative parameter which expresses the degree to which sample data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, or an environmental condition. The agreement between the field duplicate results was used to assess representativeness. The general agreement between the field duplicate results is considered to indicate that the samples collected are adequately representative of the medium sampled.
- **Comparability.** In essence, comparability was maintained by consistency in sampling conditions, selection of sampling procedures, sample preservation methods, analytical methods and data reporting units.

4 Plume Stability

This section includes discussion of trends for individual wells, trends for groups of wells, plume boundaries and concentration versus time plots. The discussion and assessment of the plume is based upon a macro-analysis of the entire plume versus a single well analysis to categorize the plume stability. Individual wells will exhibit variability and fluctuations that will influence plume boundaries in any given quarter. The macro-analysis of the entire data set minimizes the over weighting of any particular well or data set from a well. Monitoring wells installed after the RADD was issued by ADEQ in December 2013 are only included in this analysis if they have been sampled a sufficient number of times to establish temporal trends (statistical trend analysis typically requires data from at least four sampling events).

Table 7 presents a historical summary of TCE and degradation products, cis-1,2-DCE and VC, concentrations in groundwater samples. These values are used for the analysis of trends described in the remainder of this Section. For purposes of the following discussion, the 68 wells at the Site at the time the RADD was issued by ADEQ and 11 monitoring wells installed in 2014 have been categorized as those located in the northern plume (generally MW-24 and wells to the north characterized by groundwater gradient towards the north-northeast), those located in the southern plume (generally south of MW-24 characterized by groundwater gradient towards the south-southeast) and source area wells, a subset of the southern plume wells, located immediately north of the northwestern corner of the Whirlpool manufacturing building characterized by TCE concentrations greater than 1,000 µg/L. Monitoring wells located in the vicinity of the northeast corner groundwater plume that extends from the Whirlpool property (MW-87 through MW-91) to property owned by the Boys and Girls Club (MW-97 through MW-99) are not included in plume stability evaluation as there is not enough data to establish temporal trends.

4.1 Lines of Evidence

Several analytical tools or “lines of evidence” were used to evaluate plume stability conditions including:

- **Statistical Methods**. Mann-Kendall nonparametric test (Gilbert, 1987; USEPA, 2000) to calculate the temporal trend in individual well analyte concentrations over time.
- **Isoconcentration Maps.** Qualitative method to evaluate temporal trends by comparing representations of plume concentration and extent for certain periods over the duration of monitoring.
- **Time vs. Concentration Plots.** Qualitative method to evaluate temporal trends in constituent concentration for individual wells and for representative concentration of overall plume (mean). The plots also include exponential regression lines to aid the analysis of temporal trends.

4.1.1 Statistical Analysis of Temporal Trends

The Mann-Kendall test (Gilbert, 1987) is a non-parametric test for linear trend, based on the idea that a lack of trend would be represented by a time series plot fluctuating randomly about a constant mean level, with no visually apparent upward or downward pattern. Because Mann-Kendall is a non-parametric test, it is not dependent upon the magnitude of data, the distribution of the data (does not have to have a normal distribution), missing data from a particular sampling event, or irregularly spaced monitoring events. Mann-Kendall assesses whether a time-ordered data set exhibits an increasing or decreasing trend, at a predetermined level of significance.

The Mann-Kendall statistic is computed by looking at all possible pairs of measurements in the data set and scoring each pair as follows:

- An earlier value lower in magnitude than a later one is assigned a value of 1;
- An earlier value higher in magnitude than a later sample is assigned a value of –1; and
- Two identical values are assigned 0.

The scores from all of the pairs are added together to get the Mann-Kendall statistic (S), a positive value of S indicates that a majority of the differences between earlier and later measurements are positive, which suggests an increasing trend over time. Conversely, a negative value for S implies that a majority of the differences between earlier and later values are negative, indicating a decreasing trend. A value near zero indicates a roughly equal number of positive and negative results. This indicates the values have randomly fluctuated around a constant mean with no apparent trend. If the Mann-Kendall test indicates that there is not a statistically significant trend a second test, coefficient of variation (COV), is performed to determine if the trend is stable (COV is less than 1, little variation above and below the mean value) or if no trend exists (COV is greater than 1, high variation above and below the mean value).

The applicable outcomes of the temporal trend analysis are as follows:

- **Increasing**. Statistically significant increasing trend for concentrations (>90% confidence);
- **Stable.** No statistically significant trend for concentrations along with low variability for results (coefficient of variance <1);
- **No Trend**. No statistically significant trend for concentrations along with high variability for results (coefficient of variance >1);
- **Decreasing**. Statistically significant decreasing trend for concentrations (>90% confidence);
- **<PQL (Practical Quantitation Limit).** All sample results have a "J" qualifier (estimated result greater than the method detection limit but less than the reporting limit) or a mixture of non-detects and results with "J" qualifiers; and
- **Not Detected (ND).** Constituent has not been detected at the well during the time period analyzed.

The trend analysis performed for groundwater concentrations from 2009 (when installation of the last of the current wells used for monitoring in accordance with the RADD was complete) through first quarter 2015 are summarized in Tables 8 and 9. Two wells, MW-42B and MW-43, were sampled fewer than four times since 2009 and no statistical evaluation was performed for these wells. In addition, five of the monitoring wells installed in 2014 in the source area (MW-92 through MW-95 and MW-172) and were sampled fewer than four times and no statistical evaluation was performed for these wells. The following is the list of wells in each category (this list is only presented for evaluation of plume stability):

- **Northern Plume Wells (43 wells)**. MW-23, MW-24, MW-27, MW-28, MW-31, MW-32, MW-33, MW-34, MW-35R, MW-36, MW-39, MW-40, MW-41, MW-46R, MW-50, MW-55, MW-56, MW-57, MW-58, MW-60, MW-61, MW-62, MW-63, MW-65, MW-66, MW-67, MW-68, RW-69, MW-70, MW-71, IW-72, IW-73, IW-74, IW-75, IW-76, IW-77, IW-78, IW-79, IW-80, MW-81, MW-82, MW-83 and MW-84.
- **Southern Plume Wells (29 wells)**. ITMW-1, ITMW-2, ITMW-3, ITMW-4, ITMW-5, ITMW-6, ITMW-7, ITMW-9, ITMW-10, ITMW-11, ITMW-12, ITMW-13, ITMW-14, ITMW-15, ITMW-16, ITMW-17, ITMW-18, ITMW-19, ITMW-20, ITMW-21, MW-22, MW-25, MW-26, MW-29, MW-30, MW-37, MW 38, MW-85 and MW-86.
- **Source Area Wells (11 wells)**. ITMW-11, ITMW-12, ITMW-15, ITMW-17, ITMW-18, ITMW-19, MW-25, MW-37, MW-38, MW-85 and MW-86.

Contaminant concentration trends as established during the first quarter event are summarized below:

- **Northern Plume Wells (43 wells):** The Mann-Kendall trend analysis utilizes data from all wells associated with the January 2015 groundwater monitoring event for the northern plume (Table 8) (temporal trend analysis relies upon previous data from five of the 43 wells in the northern plume). As described in more detail below, our determination that a majority of the wells exhibit little or no TCE or a decreasing or stable TCE concentration trend is based on the fact that 79% (34 of 43 wells) of these wells exhibit either little or no TCE or a decreasing or stable TCE concentration trend.

  The trend analysis for the 43 wells associated with monitoring the northern plume (excluding MW-42B and MW-43) indicates the following:

  - Twelve wells exhibit a stable trend for TCE concentrations:
  - Twelve wells exhibit a decreasing trend for TCE concentrations;
  - Eight wells exhibit no trend regarding TCE concentrations (TCE concentrations in six of these wells consisting of MW-27, MW-31, MW-36, MW-39, MW-68 and IW-75 have been non-detect or less than 1 µg/L since October 2012);
  - Four wells exhibit TCE concentrations below detection limits or below reporting limits; and
  - Seven wells exhibit an increasing trend for TCE concentrations.

TCE concentrations in ten of the 43 northern plume wells (23%) have been non-detect or less than 1 µg/L since October 2012 and 24 of the 43 wells (56%) have exhibited decreasing or stable trends; therefore, 34 of the 43 northern plume wells (79%) exhibit either little or no TCE or a decreasing or stable TCE concentration trend. We believe that this supports our plume stability conclusions.

In addition, Table 10 indicates that the average TCE concentration for wells in the northern plume decreased from 384 µg/L in April 2009 to 186 µg/L in January 2015.

As noted, TCE concentration trends are increasing in seven of 43 (16%) of the wells (MW-55, MW-56, MW-57, MW-61, MW-66, MW-67 and IW-77). Further, of the seven wells located in the northern plume with increasing TCE concentration trends:

- Three wells (MW-56, MW-57, MW-66 and MW-67) had concentrations during the 2015 first quarter that were within historical ranges of detected values;
- TCE concentrations at IW-77 have decreased significantly following the second ISCO injection event in May 2014 (decreased from 1,460 µg/L in May 2014 prior to injection to 201 µg/L in January 2015 which is the lowest TCE concentration ever measured at this well (installed and first sampled in 2009);
- MW-61 had a concentration marginally exceeding the historical maximum concentration (10.2 µg/L versus 8.1 µg/L); and
- MW-55 has not been sampled since October 2013 because access has not been granted by the property owner.

- **Southern Plume Wells (29 wells):** As described in more detail below, our determination that a majority of the wells exhibit little or no TCE or a decreasing or stable TCE concentration trend is based on the fact that that 25 of 29 (86%) southern wells exhibit either little or no TCE or a decreasing or stable TCE concentration trend. The trend analysis for the 29 wells associated with monitoring the southern plume indicates the following:
  - Eight wells exhibit a stable trend for TCE concentrations.
  - Ten wells exhibit a decreasing trend for TCE concentrations.
  - Three wells exhibit no trend regarding TCE concentrations (TCE concentrations in each of these three wells consisting of ITMW-16, ITMW-20 and MW-26 have been non-detect or less than 1 µg/L since October 2012).
  - Four wells exhibit TCE concentrations below PQLs.
  - Four wells (ITMW-6 and ITMW-10 located south of the former manufacturing building, MW-85 located in Area 1 and MW-38 located immediately north of Area 1) exhibit an increasing trend for TCE concentrations. MW-38 and MW-85 are source area wells and are discussed further below. ITMW-6 had a concentration during the 2015 first quarter that was within historical range of detected concentrations and demonstrated an increasing concentration trend for cis-1,2-DCE. ITMW-10 will continue to be monitored regarding the increasing trend of TCE concentrations near the south central boundary of the building.

- **Source Area Wells (11 wells):** The eleven source area wells showed predominantly decreasing or stable concentration trends for TCE (seven wells decreasing and two wells stable) and cis-1, 2-DCE (six wells decreasing and four wells stable). Only two of the source area wells (ITMW-38 and MW-85) demonstrated an increasing concentration trend for TCE. TCE concentrations at ITMW-38 and MW-85 during the first quarter event were within historical ranges of detected values. ITMW-17 demonstrated an increasing concentration trend for VC.

4.1.2 Isoconcentration Maps

The maximum extent of the current 5 µg/L isoconcentration line for TCE in groundwater for the first quarter event as shown in Figures 2A and 2B of this report does not extend beyond the bounds of the historical maximum extent, except for in the area of MW-61 at the northeastern edge of the monitoring well network.

Figure 2A of this report does show TCE concentrations exceeding 5 µg/L on and near the northeast corner of the facility. This area was not included in the plume stability analysis because these wells have not been sampled a sufficient number of times to establish temporal trends. The presence of TCE in this area does not necessarily represent an expansion of the plume beyond the bounds of its historical maximum extent.

The 2014 Second Quarter groundwater monitoring event was the first time that the TCE concentration at MW-61 well exceeded 5 µg/L, requiring that the isoconcentration line be extended to include MW-61. This trend continued during the 2015 first quarter event, with a TCE concentration of 10.2 µg/L reported at MW-61. Therefore, MW-61 continues to be included within the 5 µg/L plume boundary.

4.1.3 Concentration vs. Time Plots

The average (arithmetic mean) of the detected TCE, cis-1,2-DCE and VC concentrations were calculated for each of the 15 comprehensive groundwater monitoring events conducted at the Site beginning in 2009 and are summarized in Table 10. Figures 6-9 show the average concentrations versus time for the combined northern and southern plume wells, the northern plume wells, the southern plume wells and the source area wells, respectively. Decreases in average concentrations for TCE, cis-1,2-DCE and VC are noted for the combined northern and southern plume wells, southern plume wells and source area wells. The average concentrations of TCE, cis-1,2-DCE and VC in the northern plume wells are decreasing, but at a moderate rate compared to the remainder of the wells.

TCE and cis-1,2-DCE concentration versus time charts are also provided for pairs of wells located in the southern plume, source area and two located in the northern plume (Figure 10-12). As shown on Figure 10, although TCE concentrations have been increasing in ITMW-10 (primarily during the five most recent sampling events) concentrations of cis-1,2-DCE in ITMW-10 and in nearby ITMW-9 have been decreasing. The concentration of TCE at ITMW-9 shows a stable trend. Figure 11 shows concentration trends for ITMW-19 and MW-25 located in the

source area; concentrations are generally decreasing with decreases of one to two orders of magnitude in December 2014 and January 2015 following the third ISCO injection event in the source area. Although the overall trend is consistent, it is apparent that at MW-25, concentrations of TCE, cis-1,2-DCE and VC have historically changed significantly between spring and fall sampling events with higher concentrations occurring in the fall and lower concentrations occurring in the spring. Figure 12 shows that although concentrations of TCE and cis-1,2-DCE have an overall increasing trends at IW-77, individual concentrations have been decreasing over the last three quarters and overall trends are decreasing at the next down-gradient monitoring well IW-76. Figure 13 shows TCE concentrations at MW-61 increasing above historical maximums.

4.2 Summary of Plume Stability

The overall groundwater conditions at the Site exhibit stable characteristics based upon statistical analysis of temporal concentration trends, decreasing average TCE concentrations in the southern plume, stable to decreasing average TCE concentrations in the northern plume and an aerial extent predominantly within the bounds of the historical maximum plume extent except near MW-61. Increases in TCE concentrations observed in MW-66 and MW-67 are within historical ranges and continue to be reported at levels below the RAL.

The site-wide groundwater conditions can be categorized as three plumes with distinct characteristics (i.e. the southern plume, the northern plume and northeastern plume).

The southern plume is characterized by:

- A relatively flat south, southeast potentiometric gradient;
- Source area (Area 1) TCE concentrations greater than 1,000 µg/L;
- An aerial extent of approximately 869,700 square feet (ft^2) (approximate 3% reduction in the area of the plume compared with the Fourth Quarter of 2014) (predominately located under the footprint of the Whirlpool building); and
- A decreasing trend in average TCE concentrations.

The northern plume is characterized by:

- A north-northeast potentiometric gradient that is flat in the south portion of the north plume but steepens to north-northwest;
- TCE concentrations generally between 100 and 1,000 µg/L;
- An aerial extent of approximately 476,500 ft^2 (approximate 5% reduction in the area of the plume compared with the Fourth Quarter of 2014) located north of the Whirlpool building and extending to the residential area to the north and northeast; and
- A decreasing trend in average TCE concentrations.

The northeast plume is characterized by:

- An east, northeast potentiometric gradient;

- TCE concentrations generally between 5 and 700 µg/L;
- An aerial extent of approximately 257,800 ft^2 located northeast of the Whirlpool building and extending to property owned by the Boys and Girls Club, but offsite groundwater TCE concentrations are only slightly elevated above MCLs; and
- The northeastern plume is not included in plume stability evaluation as there is not enough data to establish temporal trends.

5 ISCO Remedial Effectiveness

This section includes discussion of 2015 first quarter, TCE concentrations in groundwater as they relate to the effectiveness of the three 2014 ISCO injection events completed in Area 1, the supplemental neck area, Area 2 and Area 3. Further discussion of the three 2014 ISCO injection events are found in the 2014 quarterly progress reports and the 2014 Annual Progress Report. The percent reduction in TCE concentrations was calculated for individual wells and for grouping of wells in areas where ISCO injections occurred. If a well had not been sampled in January 2015 the most recent result available was used to calculate the sum of TCE concentrations for each area. Because the TCE concentrations in January 2015 at the majority of monitoring wells in each area were less than the concentrations from the preceding sampling event (all four wells in the supplemental neck area, six of eight wells in Area 2 and Area 3 [one well was non-detect for both events] and 11 of 15 wells in Area 1) this methodology may underestimate the decrease in TCE concentrations.

Table 11 presents a comparison of baseline (September and October 2014) and 60-day monitoring results (January 2015). The post injection 60 day monitoring results indicate TCE concentration decreases in the monitoring wells ranged from 1% to 99% (TCE concentrations increased in three monitoring wells). Concentration increases relative to baseline concentrations included a 2% increase at MW-85, a 9% increase at ITMW-17 and a 20% increase at MW-172. The sum of TCE concentrations decreased from approximately 944,213 µg/L in September/October 2014 to approximately 323,046 µg/L in January 2015 approximately 60 days following injection (~66% decrease).This represents a further decrease relative to post injection 30 day monitoring results in December 2014 when the sum of TCE concentrations had decreased to approximately 431,793 µg/L (~50% decrease).

MW-86 is located near the former linear drainage feature where the highest concentrations of TCE in groundwater have historically been measured. Table 12 presents historic data from May 2014 (prior to the second injection event) for MW-86 and adjacent wells MW-25 and MW-85 through January 2015. While TCE concentrations increased at MW-85 since May 2014, the sum of TCE concentrations in these three wells has decreased from approximately 553,470 µg/L in May 2014 to approximately 89,650 µg/L in January 2015 (84% decrease) and has decreased more than 50% relative to the December 2014 sum of 199,320 µg/L.

Table 13 summarizes the TCE concentrations from wells in the supplemental neck area. The sum of TCE concentrations in the supplemental neck area decreased from approximately 1,296 µg/L prior to the second injection event in May 2014 to 382 µg/L in January 2015 (~70% decrease). This represents a further decrease relative to post injection 30 day monitoring results in December 2014 when the sum of TCE concentrations had decreased to approximately 572 µg/L (56% decrease). Similarly Table 14 summarizes the TCE concentrations from wells in the area of Area 2 and Area 3. The sum of TCE concentrations in Area 2 and Area 3 decreased from approximately 3,864 µg/L prior to the second injection event to 1,211 µg/L in January 2015 (~69% reduction). This represents a further decrease in TCE concentrations in Area 2 and Area 3 since December 2014 when the sum was 1,736 µg/L (~55% reduction).

The effectiveness of the 2014 ISCO injection events based on the January 2015 monitoring results is summarized as follows:

- The sum of the TCE concentrations in wells in Area 1 (IW-127, IW-141, IW-147, IW-152, IW-153, IW-157, MW-25, MW-38, MW-85, MW-86, MW-92, MW-93, MW-94, MW-95, MW-172, ITMW-11, ITMW-12, ITMW-15, ITMW-17, ITMW-18 and ITMW-19) decreased from approximately 944,213 µg/L prior to the third injection event in September and October to approximately 323,046 µg/L in January, roughly 60 days following the last injection event in this area (~66% decrease). Notable decreases in TCE concentrations (greater than 95%) were observed at MW-25, ITMW-11, ITMW-12, ITMW-15 and ITMW-19.
- The sum of the TCE concentrations in wells in the supplemental neck area (IW-101, MW-23, MW-24, MW-83 and MW-84) decreased from approximately 1,296 µg/L to approximately 382 µg/L roughly six months following the last injection event in this area for an approximate 70% decrease.
- The sum of the TCE concentrations in wells in Area 2 and Area 3 (MW-34, MW-35R, MW-36, MW-65, MW-81, MW-82, IW-77, IW-78, IW-79, IW-80 and IW-115) decreased from approximately 3,864 µg/L to approximately 1,211 µg/L roughly six months following the last injection event in this area for an approximate 69% decrease.
- Overall TCE concentrations continue to decrease in the area of ISCO injections relative to the preceding sampling events.

6 Summary and Conclusion

ENVIRON performed the 2015 first quarter Groundwater Monitoring Event (first quarter event) on behalf of Whirlpool during the week of January 12, 2015. The quarterly monitoring was conducted for collection of groundwater samples for analysis of VOCs and MNA parameters defined by the RADD as well as additional parameters not included in the RADD.

- The groundwater potentiometric surface observed during the first quarter event is consistent with that historically observed at the Site.
- The direction of the lateral hydraulic gradient continues to be influenced by a divide located just south of Ingersoll Avenue with directions of the hydraulic gradient predominantly to the northeast and south on either side of the general divide.
    - Groundwater north of the divide is flowing in a northeasterly direction; and
    - Groundwater south of the divide is flowing in a southern/southeasterly direction.
- First quarter event groundwater monitoring data shows generally stable to decreasing trends for TCE concentrations.
    - Plume boundary well data continue to show results generally consistent with historical TCE concentrations;
    - Offsite well data are similar to previous monitoring events and continue to show generally stable to decreasing TCE concentration trends; and
    - Onsite well data continue to show generally stable to decreasing TCE concentration trends; although, the data has been influenced by the ISCO injections which is apparent by dramatic reductions in TCE concentrations during the last quarter at ITMW-19 and MW-25.
- First quarter event groundwater monitoring data in conjunction with historical data demonstrate that natural attenuation of TCE is occurring via biological mechanisms in both onsite and offsite groundwater.
- The ISCO events performed in 2014 continue to be effective with TCE concentration reductions as follows:
    - Approximately 84% decrease from source area wells MW-25, MW-85 and MW-86;
    - Supplemental neck area decrease of approximately 70% since May 2014; and
    - Approximately 69% decrease from wells in Areas 2 and 3.

7 References

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Tables

TABLE 1
CONSTITUENTS OF CONCERN AND RADD GROUNDWATER REMEDIAL ACTION LEVELS
Whirlpool Facility - Fort Smith, Arkansas

Constituent of Concern	Remedial Action Level (µg/L)[1]
Acetone	12,000[2]
Benzene	5.0
Bromodichloromethane	80
Bromodichloromethane	80
Bromoform	7.0[2]
Bromomethane	4,900[2]
2-Butanone	720
Carbon Disulfide	5.0
Carbon Tetrachloride	100
Chlorobenzene	21,000[2]
Chloroform	80
Chloromethane	190[2]
Dibromochloromethane	80
1,1-Dichloroethane	2.4[2]
1,2-Dichloroethane	5.0
1,1-Dichloroethene	7.0
cis-1,2-Dichloroethene	70
trans-1,2-Dichloroethene	100
1,2-Dichloropropane	5.0
1,3-Dichloropropene	0.41[2]
Ethylbenzene	700
2-Hexanone	34[2]
4-Methyl-2-pentanone	1,000[2]
Methylene chloride	5.0
Styrene	100
1,1,2,2-Tethrachloroethane	0.066[2]
Tetrachloroethene (PCE)	5.0
Toluene	1,000
1,1,1-Trichloroethane	200
1,1,2-Trichlrorethane	5.0
Trichloroethene (TCE)	5.0
Vinyl chloride	2.0
Xylenes (total)	10,000

Notes:
RADD = Remedial action decision document
µg/L = Micrograms per liter
(1) = Maximum contamination level (USEPA, May 2013)
(2) = USEPA tapwater screening level (MCL and maximum contaminant level goal unavailable)

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TABLE 2
GROUNDWATER MONITORING WELL NETWORK SAMPLED
FOR RADD QUARTERLY EVENTS
Whirlpool Facility - Fort Smith, Arkansas

Plume Boundary Wells				
ITMW-2	ITMW-4	ITMW-6	ITMW-16	ITMW-20
MW-22	MW-26	MW-27	MW-28	MW-29
MW-31	MW-36	MW-39	MW-40	MW-50
MW-60	MW-61	MW-62	MW-63	MW-66
MW-67	MW-68	IW-72		

Offsite Wells				
MW-41	MW-46R	MW-55	MW-56	MW-57
MW-58	MW-71	IW-73	IW-74	IW-76
IW-77	RW-69			

Onsite Wells				
ITMW-1	ITMW-7	ITMW-9	ITMW-10	ITMW-11
ITMW-12	ITMW-13	ITMW-14	ITMW-15	ITMW-17
ITMW-18	ITMW-19	ITMW-21	MW-25	MW-32
MW-33	MW-34	MW-35R	MW-38	MW-65
IW-80				

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TABLE 3
SUMMARY OF MONITORING WELL STATIC WATER LEVEL MEASUREMENTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Coordinates		Top of Casing Elevation (feet)	Top of Screen Elevation (feet)	Bottom of Screen Elevation (feet)	Screen Length (feet)	Screened Interval (feet)	Static Water Level Elevation (feet)								
	Easting (feet)	Northing (feet)						10/1/2012	4/22/2013	10/14/2013	3/5/2014	3/25/2014	5/12/2014	7/28/2014	10/13/2014	1/12/2014
ITMW-1	591383	368913	476.93	460.43	446.68	13.75	16.50 - 30.25	462.88	461.15	462.43	461.13	460.84	461.70	462.53	463.49	462.15
ITMW-2	591189	369021	474.97	465.04	450.59	14.45	12.75 - 27.20	465.70	465.12	465.92	462.19	461.98	462.89	463.65	464.36	463.72
ITMW-3	591306	369075	474.72	468.14	453.34	14.80	10.65 - 25.45	463.09	465.77	467.17	461.67	461.43	462.31	463.08	463.52	462.64
ITMW-4	591251	368208	478.19	459.70	445.70	14.00	18.20 - 32.20	462.62	460.70	461.99	461.10	460.81	461.54	462.10	463.09	462.01
ITMW-5	590982	368205	478.93	453.65	443.90	9.75	19.90 - 29.65	462.43	454.77	456.54	460.96	460.67	461.37	461.91	462.63	461.87
ITMW-6	590923	367970	483.04	454.60	440.10	14.50	21.65 - 36.15	462.18	454.06	454.74	460.85	460.58	461.29	461.68	462.63	461.72
ITMW-7	590546	368323	481.95	455.97	440.97	15.00	21.90 - 36.90	462.49	458.12	457.98	461.75	461.70	462.33	462.48	463.40	462.80
ITMW-9	591256	368146	481.90	456.57	443.07	13.50	19.95 - 33.45	462.52	455.60	456.53	461.00	460.72	461.45	461.96	462.92	461.90
ITMW-10	590978	368157	480.84	454.93	443.98	10.95	22.65 - 33.60	462.46	457.64	458.75	460.95	460.99	461.39	461.92	462.84	461.85
ITMW-11	590978	369040	474.07	458.82	445.37	13.45	15.25 - 28.70	465.82	462.15	463.43	462.68	462.52	463.27	463.97	464.82	463.77
ITMW-12	590998	369007	476.67	463.19	448.19	15.00	15.00 - 30.00	463.22	464.18	464.77	462.40	462.21	463.12	463.73	464.56	463.57
ITMW-13	591047	369052	477.79	464.93	449.93	15.00	14.00 - 29.00	463.69	463.76	464.34	462.40	462.23	463.10	463.74	464.56	463.48
ITMW-14	591098	369056	477.30	468.24	453.54	14.70	14.80 - 29.50	461.72	468.28	468.88	462.33	462.14	463.04	463.66	464.46	463.38
ITMW-15	590944	369043	474.50	459.50	444.50	15.00	15.00 - 30.00	465.41	462.93	463.54	462.74	462.69	463.40	463.97	464.81	463.76
ITMW-16	590967	369100	478.79	464.90	449.90	15.00	17.00 - 32.00	463.38	466.05	466.48	462.74	462.49	463.38	463.87	466.70	463.77
ITMW-17	590864	369051	477.90	464.84	449.84	15.00	16.00 - 31.00	463.19	465.71	466.20	462.52	462.39	463.25	463.79	464.57	463.57
ITMW-18	590976	368955	473.55	459.07	444.07	15.00	15.00 - 30.00	463.35	463.02	463.99	462.41	462.13	463.09	463.68	464.48	463.05
ITMW-19	590890	368961	476.25	460.67	445.67	15.00	16.00 - 31.00	463.25	463.17	463.65	462.51	462.31	463.20	463.76	464.54	463.51
ITMW-20	590370	369042	477.87	463.30	448.30	15.00	14.00 - 29.00	463.51	462.92	462.81	463.24	463.03	463.76	464.02	464.83	464.15
ITMW-21	590629	368898	476.52	458.50	443.50	15.00	16.00 - 31.00	463.27	461.27	461.71	462.95	463.04	463.54	463.93	464.66	463.92
MW-22	591853	368913	473.93	459.93	444.93	15.00	14.00 - 29.00	463.62	461.55	462.92	461.38	461.27	462.08	463.04	463.91	462.34
MW-23	590892	369238	475.80	461.80	446.80	15.00	14.00 - 29.00	463.42	462.98	463.37	462.74	462.56	463.28	463.99	464.78	463.78
MW-24	590876	369134	476.39	458.39	443.39	15.00	18.00 - 33.00	463.44	462.97	463.37	462.76	462.57	463.47	464.67	464.75	463.75
MW-25	590743	369006	476.89	459.89	444.89	15.00	17.00 - 32.00	463.49	463.12	463.44	462.81	462.63	463.51	463.96	464.71	463.79
MW-26	590566	369230	478.05	459.55	444.55	15.00	18.50 - 33.50	463.88	463.63	463.73	463.28	463.21	464.04	464.35	465.06	464.39
MW-27	591077	369226	475.42	460.42	445.42	15.00	15.00 - 30.00	463.42	463.00	463.35	462.69	462.50	463.41	463.99	464.76	463.75
MW-28	591324	369209	470.49	457.49	442.49	15.00	13.00 - 28.00	463.38	462.69	463.31	462.52	462.28	463.26	463.29	464.51	463.51
MW-29	590181	368371	474.91	458.91	443.91	15.00	16.00 - 31.00	462.87	463.44	462.68	462.66	462.91	463.38	463.30	464.39	463.80
MW-30	590579	368432	478.99	457.99	442.99	15.00	21.00 - 36.00	462.52	462.61	462.58	462.29	462.22	462.91	463.16	463.99	463.29
MW-31	590824	369286	476.03	458.53	448.53	10.00	17.50 - 27.50	463.02	462.80	463.48	462.63	462.55	463.42	463.95	464.73	463.77
MW-32[1]	590909	369279	475.68	458.68	448.68	10.00	17.00 - 27.00	463.36	462.79	463.33	462.72	462.59	463.43	464.60	464.74	463.79
MW-33[1]	590994	369276	474.88	459.08	449.08	10.00	15.80 - 25.80	463.38	463.45	463.48	462.70	462.50	463.43	464.00	464.76	463.77
MW-34[1]	590932	369336	474.29	454.79	444.79	10.00	19.50 - 29.50	463.42	462.89	463.35	462.76	462.68	463.47	463.96	464.81	463.85
MW-35R[3]	590994	369333	473.87	454.37	444.37	10.00	19.50 - 29.50	463.42	463.32	463.35	462.87	462.57	463.42	463.92	464.69	463.76
MW-36[1]	591079	369329	473.30	461.30	446.30	15.00	12.00 - 27.00	463.44	462.89	463.44	462.71	462.75	463.53	464.06	464.85	463.91
MW-37	590972	369028	473.57	458.57	443.57	15.00	15.00 - 30.00	463.46	463.00	463.46	462.67	462.52	463.37	463.99	464.82	463.77
MW-38	590960	369040	474.60	459.60	444.60	15.00	15.00 - 30.00	463.42	462.85	463.42	462.63	462.51	463.40	463.96	464.82	463.75
MW-39[1]	590833	369421	475.46	455.96	445.96	10.00	19.50 - 29.50	463.36	462.63	463.36	461.61	462.62	463.48	463.98	464.78	463.84

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TABLE 3
SUMMARY OF MONITORING WELL STATIC WATER LEVEL MEASUREMENTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Coordinates		Top of Casing Elevation (feet)	Top of Screen Elevation (feet)	Bottom of Screen Elevation (feet)	Screen Length (feet)	Screened Interval (feet)	Static Water Level Elevation (feet)								
	Easting (feet)	Northing (feet)						10/1/2012	4/22/2013	10/14/2013	3/5/2014	3/25/2014	5/12/2014	7/28/2014	10/13/2014	1/12/2014
MW-40[1]	590998	369622	473.35	455.60	445.60	10.00	17.75 - 27.75	463.29	462.95	455.04	462.74	462.55	463.50	463.96	464.76	463.80
MW-41[1]	591061	369469	472.09	453.34	443.34	10.00	18.75 - 28.75	463.64	462.91	463.48	462.76	462.63	463.44	464.05	464.45	463.81
MW-46R	591472	369609	465.76	449.16	444.16	5.00	16.60 - 21.60	462.86	462.45	462.94	462.53	462.18	463.09	463.62	464.28	463.37
MW-50	591415	370213	463.11	455.11	445.11	10.00	8.00 - 18.00	458.39	454.69	458.68	455.90	455.19	456.55	458.82	459.81	457.12
MW-55[1]	591291	369893	465.50	450.00	445.00	5.00	15.50 - 20.50	461.59	462.68	463.06	462.70	NM	NM	NM	NM	465.50
MW-56[1]	591687	369730	463.22	448.72	443.72	5.00	14.50 - 19.50	458.33	459.83	459.98	457.03	456.49	459.64	460.27	462.55	461.41
MW-57[1]	591690	369811	462.90	448.90	443.90	5.00	14.00 - 19.00	457.65	459.61	460.08	458.95	457.65	459.65	459.81	460.35	460.92
MW-58[1]	591570	369907	462.71	450.21	445.21	5.00	12.50 - 17.50	461.85	461.79	462.01	NM	462.11	462.27	462.71	462.71	461.21
MW-60[1]	591710	370193	460.85	448.85	443.85	5.00	12.00 - 17.00	455.93	452.38	456.27	453.25	453.05	454.50	456.84	458.07	454.44
MW-61[1]	592003	370175	459.61	449.11	444.11	5.00	10.50 - 15.50	451.27	450.41	451.98	448.21	450.92	451.92	453.32	452.46	451.85
MW-62[1]	591791	369569	464.33	448.83	443.83	5.00	15.50 - 20.50	457.82	457.88	458.95	456.68	457.61	459.04	460.27	460.58	459.33
MW-63[1]	591994	369560	463.87	447.87	442.87	5.00	16.00 - 21.00	459.28	455.05	460.23	458.82	457.91	458.96	460.68	461.43	458.92
MW-65[3]	590980	369335	473.91	454.41	444.41	10.00	19.50 - 29.50	463.43	462.88	463.26	462.66	462.63	463.42	463.66	464.73	463.77
MW-66	592280	369855	462.05	449.45	444.45	5.00	12.60 - 17.60	457.17	456.69	457.51	456.64	456.71	457.79	458.82	452.57	457.64
MW-67	592291	370027	459.01	449.41	444.41	5.00	9.60 - 14.60	455.14	455.12	457.33	453.19	454.78	456.90	458.42	449.31	454.70
MW-68	591173	369815	469.81	455.81	445.81	10.00	14.00 - 24.00	463.08	462.90	463.31	462.70	462.49	463.44	463.86	464.74	463.89
RW-69[3]	591170	369678	471.25	456.25	446.25	10.00	15.00 - 25.00	463.34	462.93	463.33	462.83	462.50	463.43	463.69	464.44	463.82
MW-70	591162	369693	471.53	NA	NA	NA	NA	463.31	462.92	463.28	462.70	462.52	463.43	464.06	464.91	463.81
MW-71	591170	369695	471.35	NA	NA	NA	NA	463.36	462.93	463.33	462.70	462.55	463.43	463.97	464.82	463.84
IW-72[3]	591056	369590	471.65	456.65	446.65	10.00	15.00 - 25.00	463.06	462.11	462.13	462.69	462.32	463.24	463.66	464.56	463.63
IW-73	591060	369503	471.48	NA	NA	NA	NA	463.38	462.88	463.43	462.73	462.61	463.45	463.88	464.46	463.77
IW-74[2,3]	591058	369545	472.06	457.06	447.06	10.00	15.00 - 25.00	463.87	462.76	462.38	462.75	462.44	463.34	463.93	464.64	463.70
IW-75	591072	369605	472.17	NA	NA	NA	NA	463.65	462.83	463.58	462.63	462.47	463.44	463.89	464.73	463.79
IW-76	591050	369426	472.26	NA	NA	NA	NA	463.26	462.86	463.20	462.54	462.37	463.25	463.83	464.56	463.61
IW-77[2]	591027	369380	473.01	453.01	443.01	10.00	20.00 - 30.00	463.48	462.91	463.39	462.75	462.54	463.43	463.89	464.74	463.79
IW-78	590984	369338	473.49	NA	NA	NA	NA	463.44	463.27	463.19	463.24	462.65	463.44	463.87	464.73	463.79
IW-79	591018	369335	473.84	NA	NA	NA	NA	463.45	463.41	463.39	462.71	462.65	463.45	464.03	464.77	463.80
IW-80[2,3]	591047	369343	473.30	453.30	443.30	10.00	20.00 - 30.00	463.24	462.38	463.19	462.57	462.44	463.30	463.77	464.62	463.66
IW-129	590989	368977	473.54	448.99	443.99	5.00	24.55 - 29.55	NA	NA	NA	NA	NA	463.08			
IW-130	590924	369186	475.58	452.20	447.20	5.00	23.38 - 28.38	NA	NA	NA	NA	NA	463.20			
IW-131	591006	369339	473.37	453.65	448.65	5.00	19.72 - 24.72	NA	NA	NA	NA	NA	463.21			
MW-81	590977	369395	473.54	453.54	448.54	5.00	20.00-25.00	NA	NA	NA	NA	NA	NA	NA	NA	463.68
MW-82	591039	369406	473.60	452.60	257.60	5.00	21.00-26.00	NA	NA	NA	NA	NA	NA	NA	NA	463.82
MW-83	590946	369211	475.48	453.48	448.48	5.00	22.00-27.00	NA	NA	NA	NA	NA	NA	NA	NA	463.67
MW-84	590882	369194	475.53	451.53	446.53	5.00	24.00-29.00	NA	NA	NA	NA	NA	NA	NA	NA	463.60
MW-85	590760	369018	474.41	449.41	444.41	5.00	25.00-30.00	NA	NA	NA	NA	NA	NA	NA	NA	463.61
MW-86	590767	368995	473.19	450.19	445.19	5.00	23.00-28.00	NA	NA	NA	NA	NA	NA	NA	NA	463.50
MW-87	592269	368835	470.78	453.78	443.78	10.00	17.00-27.00	NA	NA	NA	NA	NA	NA	NA	NA	459.67

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TABLE 3
SUMMARY OF MONITORING WELL STATIC WATER LEVEL MEASUREMENTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Coordinates		Top of Casing Elevation (feet)	Top of Screen Elevation (feet)	Bottom of Screen Elevation (feet)	Screen Length (feet)	Screened Interval (feet)	Static Water Level Elevation (feet)								
	Easting (feet)	Northing (feet)						10/1/2012	4/22/2013	10/14/2013	3/5/2014	3/25/2014	5/12/2014	7/28/2014	10/13/2014	1/12/2014
MW-88	592151	369043	468.89	450.89	440.89	10.00	18.00-28.00	NA	NA	NA	NA	NA	NA	NA	NA	460.80
MW-89	592357	369059	466.91	451.91	441.91	10.00	15.00-25.00	NA	NA	NA	NA	NA	NA	NA	NA	458.05
MW-90	592157	369157	466.71	451.71	441.71	10.00	15.00-25.00	NA	NA	NA	NA	NA	NA	NA	NA	460.99
MW-91	592371	368830	468.90	453.90	443.90	10.00	15.00-25.00	NA	NA	NA	NA	NA	NA	NA	NA	459.04
MW-92	590778	368921	473.74	453.74	503.74	10.00	20.00-30.00	NA	NA	NA	NA	NA	NA	NA	NA	463.66
MW-93	590908	368894	477.81	452.81	442.81	10.00	25.00-35.00	NA	NA	NA	NA	NA	NA	NA	NA	463.51
MW-94	591015	368903	477.86	452.86	442.86	10.00	25.00-35.00	NA	NA	NA	NA	NA	NA	NA	NA	463.36
MW-95	590981	368821	477.63	452.63	442.63	10.00	25.00-35.00	NA	NA	NA	NA	NA	NA	NA	NA	463.40
MW-96	592775	369354	457.83	447.83	442.83	5.00	10.00-15.00	NA	NA	NA	NA	NA	NA	NA	NA	450.13
MW-97	592687	369527	459.43	447.93	442.93	5.00	11.50-16.50	NA	NA	NA	NA	NA	NA	NA	NA	448.41
MW-98	592840	369198	461.62	446.62	441.62	10.00	15.00-20.00	NA	NA	NA	NA	NA	NA	NA	NA	450.18
MW-99	592554	368814	466.80	448.30	443.30	5.00	18.50-23.50	NA	NA	NA	NA	NA	NA	NA	NA	458.73

Notes:
NA: Not available or not installed
NM: Not measured
Horizontal and vertical coordinates converted to Arkansas State Plane, North Zone (NAD83) and North American Vertical Datum of 1988 (NAVD88) based on information provided in historic site file. Casing elevations for ITMW-1 through ITMW-21 and MW-22 extracted from 2011/2012 Annual Ground Water Monitoring Report dated June 28, 2012. Casing elevations for remaining wells extracted from survey data provided by Philip J. Leraris, P.E., L.S., dated May 12, 2009.
Well screen intervals and depths adapted from monitoring well construction diagrams.
1: Construction diagram notes use of pre-packed stainless steel screen.
2: Construction diagram text and graphical representation differ on construction details. Graphical representation used to infer elevations.
3: Construction diagram notes presence of sedimentation sump below screened interval.

TABLE 4
SUMMARY OF FINAL WELL GROUND WATER FIELD PARAMETERS MEASUREMENTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (inches)	Date Sampled	Water Level Prior to Purging (feet btoc)	Total Depth of Well Casing (feet)	Set Tubing Depth (feet)	Time Sampled	Water Level After Purging (feet btoc)	Purge Volume (gallons)	Purge Rate (mL/min)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
ITMW-1	4	1/14/2015	14.78	30.25	25.3	15:20	14.8	1.0	100	13.68	557	5.86	1.82	152.7	1.08	0.00	Clear	ITMW-1-201501
ITMW-2	4	1/13/2015	11.89	27.20	20.2	16:20	11.89	1.8	100	16.35	34.9	6.01	1.94	62.9	2.38	0.00	Clear	ITMW-2-201501
ITMW-3^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
ITMW-4	4	1/13/2015	16.43	32.20	24.7	09:30	16.46	2.1	100	8.98	216	6.43	1.33	45.8	14.7	0.56	Yellow Hue	ITMW-4-201501
ITMW-5^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
ITMW-6	4	1/13/2015	21.54	36.70	29.6	11:48	21.55	2.9	100	16.78	1097	6.14	0.62	27.5	0.15	0.00	Clear	ITMW-6-201501
ITMW-7	4	1/14/2015	19.43	39.13	34.1	11:55	19.4	1.0	100	13.34	1016	4.94	0.85	182.7	2.77	0.00	Clear	ITMW-7-201501
ITMW-9	4	1/13/2015	20.23	33.45	28.5	09:20	20.25	1.5	100	13.40	560	6.06	0.83	62.3	0.47	0.03	Clear	ITMW-9-201501
ITMW-10	4	1/14/2015	18.95	33.60	28.6	16:47	19.01	1.0	100	14.81	717	5.74	0.63	145.7	1.36	0.00	Clear	ITMW-10-201501
ITMW-11	4	1/15/2015	10.26	28.70	23.7	10:22	10.3	2.0	100	14.68	5937	4.83	2.75	572.5	1.71	0.36	Clear	ITMW-11-201501
ITMW-12	4	1/15/2015	13.11	30.00	25.0	09:32	13.14	2.5	100	11.48	4158	5.80	0.94	361.5	0.67	0.00	Clear	ITMW-12-201501
ITMW-13	4	1/14/2015	14.27	31.98	27.0	15:20	14.31	0.9	100	15.63	214	6.07	1.54	135.2	0.69	0.00	Clear	ITMW-13-201501
ITMW-14	4	1/14/2015	13.85	29.50	24.5	14:35	13.98	2.5	100	14.78	127	5.75	1.47	-55.4	7.2	3.32	Clear	ITMW-14-201501
ITMW-15	4	1/15/2015	10.67	30.00	25.0	12:50	10.68	1.0	100	16.31	8803	6.47	4.70	385.9	4.76	0.00	Clear	ITMW-15-201501
ITMW-16	4	1/14/2015	15.10	32.00	24.5	12:35	15.54	1.8	100	16.02	222	6.92	5.73	59	17.6	0.00	Clear	ITMW-16-201501
ITMW-17	4	1/15/2015	14.25	31.00	27.0	09:47	14.28	1.0	100	14.29	1273	5.78	11.68	287	1.11	0.03	Clear	ITMW-17-201501
ITMW-18	4	1/15/2015	10.14	30.00	25.0	10:00	10.23	2.5	100	12.05	467	10.08	6.40	151.5	0.28	0.10	Clear	ITMW-18-201501
ITMW-19	4	1/15/2015	12.81	31.00	26.0	13:10	12.95	1.5	100	13.85	35689	8.37	15.89	419.6	2.2	0.16	Clear	ITMW-19-201501
ITMW-20	4	1/12/2015	13.60	29.00	24.0	16:20	14.04	1.5	100	14.38	564	6.31	3.20	19.9	0.64	0.29	Clear	ITMW-20-201501
ITMW-21	4	1/14/2015	12.56	31.00	26.0	13:50	12.84	1.0	100	16.25	2443	5.09	3.66	171	0.52	0.14	Clear	ITMW-21-201501
MW-22	4	1/13/2015	11.76	29.00	24.0	09:45	11.83	1.5	100	10.82	17,900	5.59	3.18	168	0.69	0.00	Clear	MW-22-201501
MW-23^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-24^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-25	4	1/15/2015	13.20	32.00	27.0	11:25	13.2	1.5	100	17.48	14020	4.11	0.36	441.7	2.06	0.02	Clear	MW-25-201501
MW-26	4	1/15/2015	13.74	33.50	26.0	09:00	13.91	2.1	100	10.09	1107	5.56	2.59	17.5	0.54	0.00	Clear	MW-26-201501
MW-27	4	1/14/2015	11.73	30.00	25.0	12:05	11.7	1.0	100	14.04	337	5.77	0.99	152.5	6.26	0.00	Clear	MW-27-201501
MW-28	4	1/14/2015	7.06	28.00	23.0	09:50	7.31	2.5	100	11.48	350	6.27	1.72	170	1.61	0.00	Clear	MW-28-201501
MW-29	4	1/13/2015	11.24	31.00	23.5	12:23	11.32	2.9	100	13.51	439	5.17	2.65	45.5	61.7	0.00	Sand Color	MW-29-201501
MW-30^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-31	0.75	1/12/2015	12.34	27.50	22.5	17:00	13.68	3.0	100	13.93	491	5.28	0.08	89.8	1.52	0.16	Clear	MW-31-201501
MW-31R	2	1/19/2015	11.74	30.00	25.0	15:50	11.78	2.9	100	19.46	447	5.60	0.48	-334.1	15.50	NM	Clear	MW-31R-201501
MW-32	0.75	1/14/2015	11.98	27.00	22.0	14:50	12.04	1.5	100	16.97	1570	4.56	0.15	336.5	0.44	0.00	Clear	MW-32-201501
MW-32R	2	1/19/2015	11.58	30.04	25.0	15:30	11.58	2.5	100	20.02	1969	4.94	0.32	132.2	8.49	NM	Clear	MW-32R-201501
MW-33	0.75	1/14/2015	11.18	25.80	20.8	17:00	11.62	2.0	100	16.67	738	4.97	0.58	441.5	2.6	0.00	Clear	MW-33-201501
MW-33R	2	1/18/2015	10.98	29.05	24.0	12:10	11.18	2.1	100	19.46	978	5.43	1.77	18.2	18.6	NM	Clear	MW-33R-201501
MW-34	0.75	1/13/2015	10.58	29.50	24.5	13:20	10.71	1.7	100	15.05	2435	4.55	0.49	429.7	9.89	1.00	Clear	MW-34-201501
MW-35R	4	1/13/2015	10.30	29.50	24.5	10:35	14.68	1.6	100	14.68	17960	8.31	0.82	297.2	2.61	0.00	Clear	MW-35R-201501
MW-36	0.75	1/12/2015	9.41	35.58	30.6	16:35	9.49	1.7	100	14.08	1375	5.14	0.35	399.9	1.35	0.00	Clear	MW-36-201501
MW-37^	2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-38	4	1/15/2015	11.85	29.70	24.7	11:55	11.9	2	100	15.50	1042	6.63	0.21	179.5	4	0.17	Clear	MW-38-201501
MW-39	0.75	1/12/2015	11.64	29.40	24.4	14:30	12.48	1.7	100	13.90	1138	5.07	0.46	226.6	1.21	0.00	Clear	MW-39-201501
MW-40	0.75	1/12/2015	9.55	27.75	22.8	14:45	9.66	2.5	100	14.47	818	5.14	0.09	112.2	0.21	0.00	Clear	MW-40-201501
MW-41	0.75	1/14/2015	8.34	28.32	23.3	09:55	8.37	1.2	100	11.09	1236	5.5	0.12	127.9	1.18	3.30	Clear	MW-41-201501
MW-46R	2	1/13/2015	2.46	21.60	16.6	14:55	2.7	1	100	13.25	871	4.89	0.60	-26.4	1.87	0.00	Clear	MW-46R-201501
MW-50	0.75	1/13/2015	6.28	18.00	15.5	14:30	14.87	2	100	14.48	1204	6.7	1.08	90.5	131	0.88	Turbid	MW-50-201501
MW-56	0.75	1/13/2015	0.99	19.50	17.0	11:15	Dry	<0.25	100	10.87	407	5.52	2.69	51.7	over range	0.00	Light Brown	MW-56-201501
MW-57	0.75	1/13/2015	1.59	19.00	17.5	14:37	Dry	0.5	100	13.72	1047	5.49	3.51	98.2	83.7	0.00	Brown	MW-57-201501

ENVIRON

TABLE 4
SUMMARY OF FINAL WELL GROUND WATER FIELD PARAMETERS MEASUREMENTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (inches)	Date Sampled	Water Level Prior to Purging (feet btoc)	Total Depth of Well Casing (feet)	Set Tubing Depth (feet)	Time Sampled	Water Level After Purging (feet btoc)	Purge Volume (gallons)	Purge Rate (mL/min)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
MW-58	0.75	1/14/2015	1.47	17.50	15.0	09:35	4.95	2	100	8.61	924	5	0.29	138.1	4.23	1.03	Cloudy	MW-58-201501
MW-60	0.75	1/13/2015	6.74	17.00	14.5	13:00	Dry	0.12	100	13.42	1193	6.91	3.49	181.9	149	0.08	Brown	MW-60-201501
MW-61	0.75	1/13/2015	8.04	15.50	13.0	16:00	Dry	0.13	100	15.53	604	6.53	3.06	94	48.3	0.11	Brown	MW-61-201501
MW-62	0.75	1/13/2015	5.12	20.50	18.0	11:20	7.50	2.5	100	14.01	649	5.50	1.77	-3	10.1	0.00	Clear	MW-62-201501
MW-63	0.75	1/13/2015	4.19	21.00	18.5	16:25	Dry	0.5	100	9.96	460	5.80	3.92	8.1		0.00	Very Cloudy	MW-63-201501
MW-65	2	1/13/2015	10.33	32.00	27.0	10:40	10.40	1.7	100	16.78	11520	11.74	6.97	211.6	5.26	0.09	Clear	MW-65-201501
MW-66	2	1/14/2015	4.50	17.60	15.1	10:20	4.92	0.5	100	11.99	785	6.07	3.20	10.9	5.98	0.02	Clear	MW-66-201501
MW-67	2	1/12/2015	4.05	14.60	9.6	14:51	8.00	1.5	100	10.72	578	6.86	5.78	130.1	282.00	0.00	Brown	MW-67-201501
MW-68	2	1/12/2015	9.06	24.00	19.0	14:10	6.07	1	100	11.81	1070	4.88	2.33	24.5	1.79	0.11	Clear	MW-68-201501
MW-70^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-71	2	1/14/2015	7.71	24.85	19.9	9:50	7.73	2	100	12.36	906	5.10	1.51	190.5	2.20	0.25	Clear	MW-71-201501
RW-69	4	1/14/2015	7.65	24.75	19.8	11:45	7.69	1.0	100	14.95	1037	5.24	1.96	215.2	0.61	0.00	Clear	RW-69-201501
IW-72	2	1/12/2015	8.02	25.00	20.0	14:00	8.14	2	100	15.47	944	2.03	2.03	644.1	1.6	0.00	Pink - light	IW-72-201501
IW-73	2	1/14/2015	7.78	24.38	19.2	10:40	7.81	1.7	100	15.21	599	6.10	0.38	83.6	5.98	2.16	Clear	IW-73-201501
IW-74	2	1/14/2015	8.44	27.35	22.4	12:10	8.47	0.9	100	17.32	897	5.91	0.50	138.4	1.81	0.00	Clear	IW-74-201501
IW-75^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
IW-76	2	1/14/2015	8.72	26.06	21.0	12:25	8.69	1.7	100	15.07	2316	5.06	0.82	321.9	6.45	0.00	Clear	IW-76-201501
IW-77	2	1/14/2015	9.19	30.00	25.0	15:05	9.18	1.6	100	16.90	6966	5.88	0.37	357.4	5.37	0.06	Clear	IW-77-201501
IW-78^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
IW-79^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
IW-80	2	1/13/2015	10.79	29.50	24.5	13:35	10.79	2	100	17.26	2587	6.31	2.13	446.2	4.54	0.03	Clear	IW-80-201501
MW-81	2	1/13/2015	9.84	26.00	23.5	16:15	9.84	1.2	100	15.26	2152	5.08	0.42	279	3.76	0.00	Clear	MW-81-201501
MW-82	2	1/13/2015	9.91	25.00	20.0	16:00	9.93	1.7	100	16.79	4506	5.89	0.30	370.9	4.60	0.03	Clear	MW-82-201501
MW-83	2	1/15/2015	11.74	26.18	24.2	13:20	11.71	3	100	17.69	2790	6.14	0.90	322.1	6.00	0.00	Clear	MW-83-201501
MW-84	2	1/14/2015	11.87	29.00	21.5	15:30	11.97	3.4	100	18.92	11942	9.25	1.21	175.5	1.65	0.00	Clear	MW-84-201501
MW-85	2	1/15/2015	10.75	29.76	24.8	14:00	10.76	1.7	100	17.90	6608	5.61	1.89	239.6	5.29	0.00	Clear	MW-85-201501
MW-86	2	1/15/2015	9.63	27.87	25.4	12:55	9.96	1.2	100	16.23	11603	6.13	13.72	139.7	2.89	0.04	Clear	MW-86-201501
MW-87	2	1/14/2015	11.10	27.00	22.0	15:13	11.14	1.5	100	15.28	405	5.87	1.18	152	2.60	0.00	Clear	MW-87-201501
MW-88	2	1/13/2015	8.68	28.00	23.0	11:58	9.70	2	100	17.10	223	8.80	4.62	143.7	31.80	0.00	Clear	MW-88-201501
MW-89	2	1/13/2015	8.87	25.00	20.0	14:41	9.59	2.5	100	15.61	1036	5.36	1.25	219.3	3.20	0.00	Clear	MW-89-201501
MW-90	2	1/12/2015	5.77	25.00	20.0	16:25	14.98	2	50	14.49	974	6.53	0.13	-141.2	7.27	3.30	Clear	MW-90-201501
MW-91	2	1/13/2015	9.97	25.00	20.0	16:31	10.13	2	100	17.57	347	6.02	1.41	162.4	8.50	0.00	Clear	MW-91-201501

Notes:

ft btoc =	Feet below top of casing	mL/min =	Milliliters per minute
ORP =	Oxidation reduction potential	mg/L =	Milligrams per liter
DO =	Dissolved oxygen	NTUs =	Nephelometric turbidity units
°C =	Degrees Celcius	NM =	Not measured
Mv =	Millivolts	µS/cm =	Microsiemens per centimeter
^ =	Well not sampled	-- =	Color not noted

All wells gauged using electronic water level meter and purged using peristaltic pumps.
Tubing inlet depths based on estimated distance from total depth.

TABLE 5
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FIRST QUARTER 2015)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	ITMW-1	ITMW-7	ITMW-9	ITMW-9	ITMW-10	ITMW-11	ITMW-12	ITMW-12	ITMW-13	ITMW-14	ITMW-15	ITMW-15	ITMW-17	ITMW-18	ITMW-19	ITMW-21
ENVIRON Sample ID		ITMW-1-201501	ITMW-7-201501	ITMW-9-201501	DUP-02-201501	ITMW-10-201501	ITMW-11-201501	ITMW-12-201501	DUP-04-201501	ITMW-13-201501	ITMW-14-201501	ITMW-15-201501	DUP-05-201501	ITMW-17-201501	ITMW-18-201501	ITMW-19-201501	ITMW-21-201501
Lab Sample ID(s)		027MA042, 145440002, 145440001, 60186183001	027MA035, 145440010, 145440009, 60186183017	027MA012, 145440012, 145440011, 60186097002	60186097026	027MA052, 145440014, 145440013, 60186183027	027MA064, 145440016, 145440015, 60186334012	027MA062, 145440018, 145440017, 60186334009	60186334008	027MA038, 145440020, 145440019, 60186183021	027MA047, 145440022, 145440021, 60186183006	027MA063, 145440024, 145440023, 60186334011	60186334013	027MA061, 145440028, 145440027, 60186334007	027MA056, 145440030, 145440029, 60186334001	027MA059, 145440032, 145440031, 60186334004	027MA044, 145440036, 145440035, 60186183003
Sample Date		1/14/2015	1/12/2015	1/13/2015	1/13/2015	1/12/2015	1/15/2015	1/14/2015	1/15/2015	1/14/2015	1/14/2015	1/15/2015	1/15/2015	1/14/2015	1/14/2015	1/15/2015	1/12/2015
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments					Field Duplicate				Field Duplicate				Field Duplicate				
Volatile Organic Compounds																	
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	18.9 (5.0)	19.0 (5.0)	U (5.0)	U (5.0)	29.1 (5.0)	28.2 (5.0)	U (5.0)	U (5.0)	27.8 (5.0)	U (5.0)
Benzene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	6.2 (2.5)	7.3 (2.5)	U (2.5)	U (2.5)	7.9 (2.5)	10.8 (2.5)	U (2.5)	U (2.5)	6.9 (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chlorobenzene	100	U (0.50)	0.63 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.93 J (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	190	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.9 (0.50)	4.4 (0.50)	U (0.50)	U (0.50)	8.3 (0.50)	10.3 (0.50)	U (0.50)	U (0.50)	18.5 (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.6 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.73 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7	U (0.50)	U (0.50)	1.4 (0.50)	1.4 (0.50)	4.0 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.75 J (0.50)	U (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	70	9.7 (0.50)	10.5 (0.50)	39.1 (0.50)	39.1 (0.50)	38.9 (0.50)	9.8 (0.50)	4.2 (0.50)	4.8 (0.50)	28.5 (0.50)	11.5 (0.50)	2.9 (0.50)	3.8 (0.50)	110 (0.50)	26.5 (0.50)	U (0.50)	U (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.0 (0.50)	0.77 J (0.50)	0.87 J (0.50)	U (0.50)	U (0.50)	0.55 J (0.50)	0.60 J (0.50)	15.5 (0.50)	2.2 (0.50)	U (0.50)	U (0.50)
Methylene Chloride	5	U (0.50)	U (0.50)	1.0 (0.50)	1.1 (0.50)	U (0.50)	U (0.50)	0.51 J (0.50)	1.6 (0.50)	U (0.50)	U (0.50)	0.67 J (0.50)	0.61 J (0.50)	U (0.50)	U (0.50)	0.86 J (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.66 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.0 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	20.7 (0.50)	U (0.50)	U (0.50)	1.4 (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.58 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	5	22.7 (0.50)	34.7 (0.50)	89.6 (0.50)	89.4 (0.50)	403 (2.5)	68.3 (0.50)	57.1 (0.50)	59.3 (0.50)	45.8 (0.50)	4.9 (0.50)	56.5 (0.50)	61.7 (0.50)	3840 (25.0)	488 (50.0)	17.4 (0.50)	10.8 (0.50)
Vinyl Chloride	2	U (0.50)	U (0.50)	1.4 (0.50)	1.4 (0.50)	1.4 (0.50)	1.9 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.5 (0.50)	U (0.50)	U (0.50)	U (0.50)
Metals																	
Iron	NE	U (50.0)	U (50.0)	U (50.0)	NM	U (50.0)	116 (50.0)	32.2 J (50.0)	NM	U (50.0)	839 (50.0)	155 (50.0)	NM	998 (50.0)	26.0 J (50.0)	25.8 J (50.0)	U (50.0)
Manganese	NE	U (5.0)	56.3 (5.0)	407 (5.0)	NM	403 (5.0)	16.3 (5.0)	10.3 (5.0)	NM	U (5.0)	21.0 (5.0)	7.8 (5.0)	NM	61.7 (5.0)	U (5.0)	73.1 (50.0)	256 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)																	
Alkalinity	NE	69800 (20000)	8500 J (20000)	100000 (20000)	NM	81800 (20000)	21900 (20000)	54600 (20000)	NM	67900 (20000)	31700 (20000)	228000 (20000)	NM	25200 (20000)	41600 (20000)	125000 (20000)	15900 J (20000)
Ammonia	NE	U (100)	260 (100)	U (100)	NM	U (100)	270 (100)	130 (100)	NM	U (100)	U (100)	320 (100)	NM	U (100)	220 M1 (100)	2600 (100)	U (100)
Bicarbonate Alkalinity	NE	69800 (20000)	8500 J (20000)	100000 (20000)	NM	81800 (20000)	21900 (20000)	54600 (20000)	NM	67900 (20000)	31700 (20000)	228000 (20000)	NM	25200 (20000)	U (20000)	125000 (20000)	15900 J (20000)
Carbon Dioxide	NE	446000 (20000)	U (20000)	263000 (20000)	NM	370000 (20000)	667000 (20000)	221000 (20000)	NM	175000 (20000)	141000 (20000)	6080000 (20000)	NM	106000 (20000)	U (20000)	111000 (20000)	U (20000)
Organic Carbon (total)	NE	U (1000)	U (1000)	3200 (1000)	NM	1200 (1000)	540 J (1000)	930 J (1000)	NM	U (1000)	580 (1000)	610 J (1000)	NM	2000 (1000)	690 J (1000)	U (1000)	U (1000)
Carbonate Alkalinity	NE	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	NM	U (20000)	36900 (20000)	U (20000)	U (20000)
Chloride	NE	105000 (10000)	310000 (20000)	56700 (10000)	NM	129000 (10000)	16200 (1000)	23600 (2000)	NM	24700 M1 (2000)	9000 (1000)	130000 (10000)	NM	362000 (50000)	79300 (10000)	333000 (20000)	834000 (50000)
Iron, Ferric	NE	U (200)	U (200)	U (200)	NM	U (200)	U (200)	U (200)	NM	U (200)	U (200)	U (200)	NM	1000 (200)	U (200)	U (200)	U (200)
Nitrogen	NE	1000 (100)	2700 (100)	10300 (500)	NM	5700 (200)	1000 (100)	1100 (100)	NM	160 M1 (100)	440 (100)	1500 (100)	NM	140 (100)	1200 (100)	2400 (100)	89 J (100)
Nitrogen, Nitrate (As N)	NE	1000 (100)	2700 (100)	10300 (500)	NM	5700 (200)	1000 (100)	1100 (100)	NM	160 (100)	440 (100)	1500 (100)	NM	140 (100)	1200 (100)	2400 (100)	89 J (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (500)	NM	U (200)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)
pH [STD UNITS]	NE	5.6 (0.10)	4.9 (0.10)	6.1 (0.10)	NM	5.7 (0.10)	4.8 (0.10)	5.8 (0.10)	NM	6.1 (0.10)	5.8 (0.10)	4.9 (0.10)	NM	5.8 (0.10)	10.1 (0.10)	8.4 (0.10)	5.1 (0.10)
Phosphates (total)	NE	32 (30)	32 (30)	170 (30)	NM	32 (30)	520 (30)	100 (30)	NM	66 (30)	66 (30)	940 (30)	NM	140 (30)	U (30)	170 (30)	130 (30)
Sulfide (total)	NE	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	15900 (1000)	9400 (1000)	37500 (2000)	NM	36100 (2000)	952000 (100000)	962000 (100000)	NM	7000 (1000)	12400 (1000)	1520000 (100000)	NM	62400 (10000)	58100 (10000)	8480000 (1000000)	4500 (1000)
Gases																	
Methane	NE	0.33 (0.10)	3.2 (0.10)	16 (0.10)	NM	9.8 (0.10)	1.8 (0.10)	15 (0.10)	NM	1.1 (0.10)	0.53 (0.10)	3.0 (0.10)	NM	20 (0.10)	1.1 (0.10)	3.0 (0.10)	0.76 (0.10)
Ethane	NE	U (0.025)	U (0.025)	0.075 (0.025)	NM	0.064 (0.025)	0.035 (0.025)	0.15 (0.025)	NM	0.075 (0.025)	U (0.025)	0.044 (0.025)	NM	0.19 (0.025)	0.079 (0.025)	U (0.025)	U (0.025)
Ethene	NE	U (0.025)	0.050 (0.025)	0.18 (0.025)	NM	0.045 (0.025)	0.14 (0.025)	0.029 (0.025)	NM	U (0.025)	U (0.025)	U (0.025)	NM	U (0.025)	0.067 (0.025)	U (0.025)	0.030 (0.025)
Hydrogen [nM] [4]	NE	5.6 (0.60)	0.67 (0.60)	14 (0.60)	NM	0.62 (0.60)	0.66 (0.60)	6.2 (0.60)	NM	0.95 (0.60)	2.1 (0.60)	15000 (600)	NM	7.4 (0.60)	1.8 (0.60)	260 (30)	0.81 (0.60)
Molecular Analyses																	
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (1)	U (0.5)	NM	0.9 (0.5)	U (0.5)	U (0.5)	U (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	1 (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	6.4 (1)	U (0.5)	NM	2.7 (0.5)	U (0.5)	U (0.5)	U (0.5)
tceA Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (1)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)

Notes:

1 All concentrations are presented in ug/L except where noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method - Bubble Strip.

U = Not detected
J = Estimated concentration
( ) = Method detection limit for VOCs; reporting limit for all other parameters
* = Sampled on different day than other parameters with different method

RADD = Remedial action decision document
ADEQ = Arkansas Department of Environmental Quality
VOC = Volatile organic compounds
µg/L = Micrograms per Liter
mL = Milliliters
NE = Not established
NM = Not measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 5
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FIRST QUARTER 2015)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	IW-80	MW-25	MW-32	MW-32R	MW-33	MW-33R	MW-34	MW-35R	MW-38	MW-38	MW-65	MW-83	MW-84	MW-85	MW-86	MW-87
ENVIRON Sample ID		IW-80-201501	MW-25-201501	MW-32-201501	MW-32R-GW-20150119	MW-33-201501	MW-33R-GW-20150118	MW-34-201501	MW-35R-201501	MW-38-201501	DUP-06-201501	MW-65-201501	MW-83-201501	MW-84-201501	MW-85-201501	MW-86-201501	MW-87-201501
Lab Sample ID(s)		027MA013, 145440048, 145440047, 60186097034	027MA066, 145450004, 145450003, 60186334015	027MA043, 145450016, 145450015, 60186183002	60186478002	027MA053, 145450018, 145450017, 60186183028	60186478001	027MA016, 145450020, 145450019, 60186097035	027MA014, 145450022, 145450021, 60186097003	027MA060, 145450026, 145450025, 60186334005	60186334006	027MA015, 145450038, 145450037, 60186097004	027MA065, 145460006, 145460005, 60186334014	027MA033, 145460008, 145460007, 60186183015	027MA057, 145460010, 145460009, 60186334002	027MA058, 145460012, 145460011, 60186334003	027MA048, 145460014, 145460013, 60186183007
Sample Date		1/13/2015	1/14/2015	1/13/2015	01/19/2015	1/13/2015	01/18/2015	1/13/2015	1/13/2015	1/15/2015	1/15/2015	1/13/2015	1/15/2015	1/14/2015	1/14/2015	1/15/2015	1/14/2015
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments											Field Duplicate						
Volatile Organic Compounds																	
Acetone	12000	8.3 J (5.0)	102 (5.0)	33.2 (5.0)	60.3 (5.0)	U (5.0)	U (5.0)	42.7 (5.0)	56.6 (5.0)	U (5.0)	U (5.0)	38.7 (5.0)	23.9 (5.0)	97.8 (5.0)	71.5 (5.0)	177 (5.0)	U (5.0)
Benzene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.97 J (0.50)	0.95 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromodichloromethane	80	U (0.50)	4.0 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.4 (0.50)	U (0.50)	U (0.50)
Bromoform	80	0.51 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.0 (0.50)	2.2 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.3 (0.50)	3.8 (0.50)	3.5 (0.50)	U (0.50)
Bromomethane	7	U (2.5)	36.6 (2.5)	22.5 (2.5)	34.9 (2.5)	U (2.5)	U (2.5)	18.1 (2.5)	40.0 (2.5)	U (2.5)	U (2.5)	3.0 J (2.5)	12.3 (2.5)	25.9 (2.5)	32.4 (2.5)	5.9 (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	11.6 (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	7.4 J (5.0)	43.9 (5.0)	U (5.0)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	3.0 (0.50)	U (0.50)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	1.7 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.90 J (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	18.6 (0.50)	U (0.50)	0.97 J (0.50)	U (0.50)	0.99 J (0.50)	U (0.50)	U (0.50)	0.65 J (0.50)	0.64 J (0.50)	U (0.50)	U (0.50)	U (0.50)	17.8 (0.50)	79.4 (0.50)	U (0.50)
Chloromethane	190	0.79 J (0.50)	29.6 (0.50)	10.0 (0.50)	15.5 (0.50)	U (0.50)	0.70 J (0.50)	7.4 (0.50)	46.2 (0.50)	U (0.50)	U (0.50)	3.5 (0.50)	1.4 (0.50)	16.7 (0.50)	4.3 (0.50)	1.6 (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	7.5 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	12.5 (0.50)	35.5 (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	1.7 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.2 (0.50)	10 (0.50)	2.0 (0.50)
1,2-Dichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.82 J (0.50)	0.67 J (0.50)	U (0.50)	U (0.50)	15.6 (0.50)	17.3 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	10.9 (0.50)	5.9 (0.50)
cis-1,2-Dichloroethene	70	U (0.50)	126 (25.0)	0.55 J (0.50)	U (0.50)	13.9 (0.50)	9.9 (0.50)	U (0.50)	U (0.50)	1900 (50.0)	1190 (12.5)	U (0.50)	1.8 (0.50)	U (0.50)	167 (0.50)	128 (0.50)	51.3 (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	35.2 (0.50)	U (0.50)	U (0.50)	1.5 (0.50)	0.83 J (0.50)	U (0.50)	U (0.50)	16.8 (0.50)	18.3 (0.50)	U (0.50)	U (0.50)	U (0.50)	25.3 (0.50)	18.4 (0.50)	U (0.50)
Methylene Chloride	5	U (0.50)	23.8 (0.50)	U (0.50)	U (0.50)	U (0.50)	0.64 J (0.50)	U (0.50)	U (0.50)	0.65 J (0.50)	0.94 J (0.50)	U (0.50)	U (0.50)	U (0.50)	53.2 (0.50)	20.4 (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	41.7 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.71 J (0.50)	0.60 J (0.50)	U (0.50)	U (0.50)	U (0.50)	36.4 (0.50)	1080 J (0.50)	U (0.50)
Tetrachloroethene	5	U (0.50)	7.6 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.5 (0.50)	2.1 (0.50)	U (0.50)	U (0.50)	U (0.50)	13.4 (0.50)	38.5 (0.50)	3.5 (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.76 J (0.50)	0.73 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.7 (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	8.3 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	100 (0.50)	1100 J (0.50)	U (0.50)
1,1,2-Trichloroethane	5	U (0.50)	1.2 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.1 (0.50)	8.1 (0.50)	U (0.50)
Trichloroethene	5	7.1 (0.50)	2510 (25.0)	20.2 (0.50)	12.9 (0.50)	1080 (5.0)	799 (2.5)	22.0 (0.50)	10.9 (0.50)	5440 (50.0)	3910 (12.5)	19.2 (0.50)	101 (0.50)	U (0.50)	5940 (250)	81200 (1000)	661 (5.0)
Vinyl Chloride	2	U (0.50)	1.6 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	133 (0.50)	143 (0.50)	U (0.50)	U (0.50)	U (0.50)	1.1 (0.50)	4.5 (0.50)	U (0.50)
Metals																	
Iron	NE	121 (50.0)	331 (50.0)	U (50.0)	NM	35.5 J (50.0)	NM	188 (50.0)	104 (50.0)	1130 (50.0)	NM	247 (50.0)	149 (50.0)	30.2 J (50.0)	118 (50.0)	4070 (50.0)	240 (50.0)
Manganese	NE	39.0 (5.0)	645 (5.0)	414 (5.0)	NM	99.0 (5.0)	NM	59.9 (5.0)	161 (5.0)	4240 (5.0)	NM	102 (5.0)	13.8 (5.0)	U (5.0)	12.1 (5.0)	2280 (5.0)	118 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)																	
Alkalinity	NE	140000 (20000)	10400 J (20000)	5500 J (20000)	NM	10500 J (20000)	NM	U (20000)	461000 (20000)	315000 (20000)	NM	689000 (20000)	146000 (20000)	334000 (20000)	83500 (20000)	250000 (20000)	54400 (20000)
Ammonia	NE	66 (100)	1200 (500)	U (100)	NM	U (100)	NM	U (100)	870 (100)	U (100)	NM	640 (100)	U (100)	490 (100)	290 (100)	3900 (500)	U (100)
Bicarbonate Alkalinity	NE	140000 (20000)	10400 J (20000)	5500 J (20000)	NM	10500 J (20000)	NM	U (20000)	461000 (20000)	315000 (20000)	NM	U (20000)	146000 (20000)	165000 (20000)	83500 (20000)	250000 (20000)	54400 (20000)
Carbon Dioxide	NE	261000 (20000)	U (20000)	U (20000)	NM	U (20000)	NM	U (20000)	410000 (20000)	425000 (20000)	NM	199000 (20000)	339000 (20000)	220000 (20000)	483000 (20000)	591000 (20000)	195000 (20000)
Organic Carbon (total)	NE	530 J (1000)	4300 (1000)	U (1000)	NM	U (1000)	NM	U (1000)	2200 (1000)	1900 (1000)	NM	6400 (1000)	U (1000)	960 J (1000)	2200 (1000)	38800 (5000)	630 J (1000)
Carbonate Alkalinity	NE	U (20000)	U (20000)	U (20000)	NM	U (20000)	NM	U (20000)	U (20000)	U (20000)	NM	452000 (20000)	U (20000)	169000 (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	206000 (20000)	508000 (50000)	342000 (20000)	NM	220000 (20000)	NM	286000 (20000)	308000 (20000)	38000 (2000)	NM	356000 (50000)	413000 (50000)	362000 (50000)	418000 (50000)	625000 (50000)	62300 (10000)
Iron, Ferric	NE	U (200)	310 (200)	U (200)	NM	U (200)	NM	U (200)	U (200)	960 (200)	NM	U (200)	U (200)	U (200)	U (200)	4000 (200)	240 (200)
Nitrogen	NE	790 (100)	530 (100)	240 M1 (100)	NM	2500 (100)	NM	470 (100)	2700 (100)	130 (100)	NM	2800 (100)	1600 (100)	3400 (100)	1300 (100)	3000 (100)	3700 (100)
Nitrogen, Nitrate (As N)	NE	790 (100)	530 (100)	240 M1 (100)	NM	2500 (100)	NM	470 (100)	2700 (100)	130 (100)	NM	2800 (100)	1600 (100)	3400 (100)	1300 (100)	3000 (100)	3700 (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (100)	NM	U (100)	NM	U (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
pH [STD UNITS]	NE	6.3 (0.10)	4.1 (0.10)	4.7 (0.10)	NM	5.0 (0.10)	NM	4.6 (0.10)	8.3 (0.10)	6.6 (0.10)	NM	11.7 (0.10)	6.1 (0.10)	9.2 (0.10)	5.6 (0.10)	6.1 (0.10)	5.9 (0.10)
Phosphates (total)	NE	700 (30)	66 (30)	66 (30)	NM	32 (30)	NM	U (30)	1100 (30)	66 (30)	NM	2100 (30)	520 (30)	870 (30)	350 (30)	170 (30)	32 (30)
Sulfide (total)	NE	U (50)	U (50)	U (50)	NM	U (50)	NM	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	474000 (50000)	4610000 (500000)	268000 (20000)	NM	17800 (1000)	NM	478000 (50000)	7410000 (500000)	89800 (10000)	NM	3370000 (500000)	818000 (50000)	4000000 (500000)	1530000 (200000)	5050000 (500000)	12500 (1000)
Gases																	
Methane	NE	1.5 (0.10)	92 (0.10)	7.7 (0.10)	NM	1.4 (0.10)	NM	3.8 (0.10)	19 (0.10)	18 (0.10)	NM	8.0 (0.10)	1.3 (0.10)	7.3 (0.10)	29 (0.10)	22 (0.10)	2.8 (0.10)
Ethane	NE	0.042 (0.025)	4.6 (0.025)	U (0.025)	NM	0.035 (0.025)	NM	0.029 (0.025)	0.18 (0.025)	1.2 (0.025)	NM	0.22 (0.025)	0.12 (0.025)	0.14 (0.025)	4.2 (0.025)	2.8 (0.025)	0.067 (0.025)
Ethene	NE	0.058 (0.025)	0.16 (0.025)	U (0.025)	NM	U (0.025)	NM	U (0.025)	0.026 (0.025)	12 (0.025)	NM	0.054 (0.025)	0.12 (0.025)	0.10 (0.025)	0.41 (0.025)	0.78 (0.025)	0.14 (0.025)
Hydrogen [nM] [4]	NE	5.6 (0.60)	2500 (300)	0.88 (0.60)	NM	0.87 (0.60)	NM	16 (0.60)	6.1 (0.60)	13 (0.60)	NM	120 (12)	1700 (60)	5200 (120)	520 (24)	17000 (480)	42 (0.60)
Molecular Analyses																	
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	NM	U (0.5)	U (0.5)	3340 (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	NM	U (0.5)	U (0.5)	5200 (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
tceA Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)

Notes:

1 All concentrations are presented in ug/L except where noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method - Bubble Strip.
U = Not detected
J = Estimated concentration
( ) = Method detection limit for VOCs; reporting limit for all other parameters
* = Sampled on different day than other parameters with different method

RADD = Remedial action decision document
ADEQ = Arkansas Department of Environmental Quality
VOC = Volatile organic compounds
µg/L = Micrograms per Liter
mL = Milliliters
NE = Not established
NM = Not measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 5
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FIRST QUARTER 2015)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-88	MW-89	MW-90	MW-91	MW-91	ITMW-2	ITMW-4	ITMW-6	ITMW-16	ITMW-20	IW-72	MW-22	MW-26	MW-27	MW-28	MW-29
ENVIRON Sample ID		MW-88-201501	MW-89-201501	MW-90-201501	MW-91-201501	DUP-07-201501	ITMW-2-201501	ITMW-4-201501	ITMW-6-201501	ITMW-16-201501	ITMW-20-201501	IW-72-201501	MW-22-201501	MW-26-201501	MW-27-201501	MW-28-201501	MW-29-201501
Lab Sample ID(s)		027MA019, 145460016, 145460015, 60186097036	027MA026, 145460018, 145460017, 60186097015	027MA08, 145460020, 145460019, 60186000008	027MA025, 145460022, 145460021, 60186097013	60186097014	027MA022, 145440004, 145440003, 60186097009	027MA018, 145440006, 145440005, 60186097006	027MA017, 145440008, 145440007, 60186097005	027MA045, 145440026, 145440025, 60186183004	027MA04, 145440034, 145440033, 60186000004	027MA01, 145440038, 145440037, 60186000001	027MA023, 145450002, 145450001, 60186097010	027MA055, 145450006, 145450005, 60186183031	027MA037, 145450008, 145450007, 60186183019	027MA034, 145450010, 145450009, 60186183016	027MA021, 145450012, 145450011, 60186097008
Sample Date		1/13/2015	1/13/2015	1/12/2015	1/13/2015	1/13/2015	1/13/2015	1/12/2015	1/12/2015	1/14/2015	1/12/2015	1/12/2015	1/13/2015	1/12/2015	1/14/2015	1/14/2015	1/12/2015
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments						Field Duplicate											
Volatile Organic Compounds																	
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Benzene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	6.1 (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	190	U (0.50)	U (0.50)	1.4 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	1.1 (0.50)	1.2 (0.50)	U (0.50)	U (0.50)	4.9 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7	U (0.50)	U (0.50)	U (0.50)	3.0 (0.50)	3.1 (0.50)	U (0.50)	U (0.50)	0.65 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	70	U (0.50)	U (0.50)	U (0.50)	31.5 (0.50)	31.0 (0.50)	U (0.50)	2.3 (0.50)	5.7 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.59 J (0.50)	U (0.50)	U (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Methylene Chloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	3.0 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5	U (0.50)	U (0.50)	U (0.50)	1.6 (0.50)	1.2 (0.50)	0.54 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	5	U (0.50)	11.4 (0.50)	U (0.50)	354 (2.5)	317 (2.5)	U (0.50)	1.7 (0.50)	3.7 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.84 J (0.50)	U (0.50)	U (0.50)
Vinyl Chloride	2	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Metals																	
Iron	NE	1810 (50.0)	74.4 (50.0)	4500 (50.0)	627 (50.0)	NM	208 (50.0)	2550 (50.0)	U (50.0)	851 (50.0)	47.2 J (50.0)	114 (50.0)	U (50.0)	U (50.0)	305 (50.0)	184 (50.0)	2770 (50.0)
Manganese	NE	114 (5.0)	618 (5.0)	505 (5.0)	488 (5.0)	NM	9.5 (5.0)	3300 (5.0)	110 (5.0)	13.4 (5.0)	7.8 (5.0)	4810 (5.0)	100 (5.0)	253 (5.0)	200 (5.0)	32.6 (5.0)	188 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)																	
Alkalinity	NE	95600 (20000)	32300 (20000)	300000 (20000)	63800 (20000)	NM	53100 (20000)	91700 (20000)	145000 (20000)	41300 (20000)	85000 (20000)	119000 (20000)	47900 (20000)	24900 (20000)	40200 (20000)	92000 (20000)	13000 J (20000)
Ammonia	NE	U (100)	U (100)	49 J (100)	U (100)	NM	U (100)	250 (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
Bicarbonate Alkalinity	NE	95600 (20000)	32300 (20000)	300000 (20000)	63800 (20000)	NM	53100 (20000)	91700 (20000)	145000 (20000)	41300 (20000)	85000 (20000)	119000 (20000)	47900 (20000)	24900 (20000)	40200 (20000)	92000 (20000)	13000 J (20000)
Carbon Dioxide	NE	84400 (20000)	310000 (20000)	441000 (20000)	178000 (20000)	NM	150000 (20000)	149000 (20000)	337000 (20000)	46300 (20000)	158000 (20000)	337000 (20000)	289000 (20000)	159000 (20000)	172000 (20000)	180000 (20000)	U (20000)
Organic Carbon (total)	NE	4900 (1000)	680 J (1000)	20100 (2000)	560 J (1000)	NM	U (1000)	9100 (1000)	U (1000)	2700 (1000)	530 J (1000)	530 J (1000)	U (1000)	U (1000)	650 J (1000)	610 J (1000)	1200 (1000)
Carbonate Alkalinity	NE	U (20000)	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	15900 (1000)	51600 (5000)	91800 (10000)	48400 (5000)	NM	57300 (10000)	8800 (1000)	158000 (10000)	720 J (1000)	108000 (10000)	242000 (20000)	16400 (1000)	335000 (20000)	59000 (10000)	23200 (2000)	95900 (10000)
Iron, Ferric	NE	1800 (200)	U (200)	1200 (200)	630 (200)	NM	210 (200)	2000 (200)	U (200)	850 (200)	U (200)	U (200)	U (200)	U (200)	300 (200)	U (200)	2800 (200)
Nitrogen	NE	350 (100)	105000 (5000)	U (100)	2700 (100)	NM	1100 (100)	U (100)	28100 M1 (1000)	1500 (100)	1100 (100)	980 (100)	U (100)	2700 (100)	190 (100)	U (100)	1600 (100)
Nitrogen, Nitrate (As N)	NE	350 (100)	105000 (5000)	U (100)	2700 (100)	NM	1100 (100)	U (100)	28100 M1 (1000)	1500 (100)	1100 (100)	980 (100)	U (100)	2700 (100)	190 (100)	U (100)	1600 (100)
Nitrogen, Nitrite	NE	U (100)	U (5000)	U (100)	U (100)	NM	U (100)	U (100)	U (1000)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
pH [STD UNITS]	NE	8.8 (0.10)	5.4 (0.10)	6.5 (0.10)	6.0 (0.10)	NM	6.0 (0.10)	6.4 (0.10)	6.1 (0.10)	6.9 (0.10)	6.3 (0.10)	6.0 (0.10)	5.6 (0.10)	5.6 (0.10)	5.8 (0.10)	6.3 (0.10)	5.2 (0.10)
Phosphates (total)	NE	U (30)	32 (30)	32 (30)	U (30)	NM	66 (30)	32 (30)	77 (30)	140 (30)	66 (30)	170 (30)	32 (30)	32 (30)	170 (30)	84 (30)	170 (30)
Sulfide (total)	NE	U (50)	U (50)	1200 (50)	U (50)	NM	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	20 J (50)
Sulfate	NE	7600 (1000)	4800 (1000)	89000 (10000)	14800 (1000)	NM	16800 (1000)	19800 (1000)	102000 (10000)	50900 (10000)	16600 (1000)	8500 (1000)	15200 (1000)	9500 (1000)	16800 (1000)	39600 (5000)	53500 (10000)
Gases																	
Methane	NE	1.7 (0.10)	3.0 (0.10)	14 (0.10)	47 (0.10)	NM	0.36 (0.10)	18 (0.10)	1.2 (0.10)	0.45 (0.10)	0.80 (0.10)	1.3 (0.10)	1.3 (0.10)	0.11 (0.10)	1.0 (0.10)	0.63 (0.10)	0.50 (0.10)
Ethane	NE	U (0.025)	U (0.025)	0.66 (0.025)	0.46 (0.025)	NM	U (0.025)	0.059 (0.025)	U (0.025)	U (0.025)	U (0.025)	0.054 (0.025)	U (0.025)	U (0.025)	0.034 (0.025)	U (0.025)	0.031 (0.025)
Ethene	NE	0.42 (0.025)	0.10 (0.025)	2.7 (0.025)	0.41 (0.025)	NM	0.049 (0.025)	0.12 (0.025)	0.42 (0.025)	0.10 (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	0.033 (0.025)	U (0.025)	0.034 (0.025)
Hydrogen [nM] [4]	NE	11 (0.60)	0.93 (0.60)	1.7 (1.2)	0.72 (0.60)	NM	35 (0.60)	0.79 (0.60)	U (0.60)	2.8 (0.60)	0.77 (0.60)	0.80 (0.60)	14 (0.60)	0.82 (0.60)	1.9 (0.60)	1.8 (0.60)	0.76 (0.60)
Molecular Analyses																	
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	U (1)	U (0.666667)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.666667)
Dehalococcoides (DHC) [cells/mL]	NE	8.7 (0.5)	14.8 (1)	10.6 (0.666667)	3.9 (0.5)	NM	U (0.5)	7.1 (0.5)	U (0.5)	4.9 (0.5)	U (0.5)	U (0.5)	50.4 (0.5)	0.8 (0.5)	0.55 (0.5)	6.9 (0.5)	U (0.666667)
tceA Reductase [cells/mL]	NE	U (0.5)	1.1 (1)	U (0.666667)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	0.2 J (0.5)	U (0.5)	U (0.5)	U (0.666667)

Notes:

1 All concentrations are presented in ug/L except where noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method - Bubble Strip.

U = Not detected
J = Estimated concentration
( ) = Method detection limit for VOCs; reporting limit for all other parameters
* = Sampled on different day than other parameters with different method

RADD = Remedial action decision document
ADEQ = Arkansas Department of Environmental Quality
VOC = Volatile organic compounds
µg/L = Micrograms per Liter
mL = Milliliters
NE = Not established
NM = Not measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 5
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FIRST QUARTER 2015)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-31	MW-31R	MW-36	MW-39	MW-40	MW-50	MW-60	MW-61	MW-62	MW-63	MW-66	MW-67	MW-68	MW-96	MW-97	MW-98
ENVIRON Sample ID		MW-31-201501	MW-31R-GW-20150119	MW-36-201501	MW-39-201501	MW-40-201501	MW-50-201501	MW-60-201501	MW-61-201501	MW-62-201501	MW-63-201501	MW-66-201501	MW-67-201501	MW-68-201501	MW-96-201501	MW-97-201501	MW-98-201501
Lab Sample ID(s)		027MA05, 145450014, 145450013, 60186000005	60186478003	027MA07, 145450024, 145450023, 60186000007	027MA09, 145450028, 145450027, 60186000009	027MA06, 145450030, 145450029, 60186000006	027MA029, 145460023, 60186097018	027MA030, 145460027, 60186097019	027MA028, 145460028, 60186097017	027MA020, 145450034, 145450033, 60186097007	027MA054, 145460029, 60186097021	027MA046, 145450040, 145450039, 60186183005	027MA02, 145450042, 145450041, 60186000002	027MA03, 145450044, 145450043, 60186000003	60186371003	60186371004	60186371002
Sample Date		1/12/2015	01/19/2015	1/12/2015	1/12/2015	1/12/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/14/2015	1/12/2015	1/12/2015	01/15/2015	01/15/2015	01/15/2015
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments																	
Volatile Organic Compounds																	
Acetone	12000	U (5.0)	8.5 J (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Benzene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromodichloromethane	80	U (0.50)	0.52 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7	U (2.5)	U (2.5)	16.4 (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	6.6 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	190	U (0.50)	U (0.50)	1.2 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	70	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.0 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Methylene Chloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	10.2 (0.50)	U (0.50)	8.2 (0.50)	2.4 (0.50)	1.3 (0.50)	U (0.50)	0.59 J (0.50)	U (0.50)	U (0.50)
Vinyl Chloride	2	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Metals																	
Iron	NE	199 (50.0)	NM	112 (50.0)	44.1 J (50.0)	U (50.0)	19400 (50.0)	7920 (50.0)	13000 (50.0)	356 (50.0)	27600 (50.0)	410 (50.0)	38800 (50.0)	37.3 J (50.0)	NM	NM	NM
Manganese	NE	234 (5.0)	NM	470 (5.0)	402 (5.0)	192 (5.0)	272 (5.0)	894 (5.0)	104 (5.0)	33.7 (5.0)	207 (5.0)	7.0 (5.0)	300 (5.0)	1020 (5.0)	NM	NM	NM
Monitored Natural Attenuation Parameters (Laboratory)																	
Alkalinity	NE	16500 J (20000)	NM	13100 J (20000)	9900 J (20000)	12200 J (20000)	218000 (20000)	404000 (20000)	131000 (20000)	40100 (20000)	43500 (20000)	97900 (20000)	266000 (20000)	8200 J (20000)	NM	NM	NM
Ammonia	NE	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	NM	NM	NM
Bicarbonate Alkalinity	NE	16500 J (20000)	NM	13100 J (20000)	9900 J (20000)	12200 J (20000)	218000 (20000)	404000 (20000)	131000 (20000)	40100 (20000)	43500 (20000)	97900 (20000)	266000 (20000)	8200 J (20000)	NM	NM	NM
Carbon Dioxide	NE	U (20000)	NM	U (20000)	U (20000)	U (20000)	278000 (20000)	455000 (20000)	192000 (20000)	289000 (20000)	176000 (20000)	253000 (20000)	308000 (20000)	U (20000)	NM	NM	NM
Organic Carbon (total)	NE	750 J (1000)	NM	U (1000)	U (1000)	U (1000)	U (1000)	730 J (1000)	U (1000)	U (1000)	700 J (1000)	U (1000)	640 J (1000)	U (1000)	NM	NM	NM
Carbonate Alkalinity	NE	U (20000)	NM	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	NM	NM	NM
Chloride	NE	97800 (10000)	NM	251000 (20000)	332000 (20000)	237000 (20000)	261000 (20000)	139000 (10000)	102000 (10000)	157000 (10000)	152000 (10000)	176000 (10000)	119000 (10000)	334000 (20000)	NM	NM	NM
Iron, Ferric	NE	U (200)	NM	U (200)	U (200)	U (200)	18600 (200)	7800 (200)	12900 (200)	360 (200)	27600 (200)	390 (200)	38700 (200)	U (200)	NM	NM	NM
Nitrogen	NE	160 (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	1500 (100)	690 (100)	270 (100)	200 (100)	57 J (100)	U (100)	NM	NM	NM
Nitrogen, Nitrate (As N)	NE	160 (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	1500 (100)	690 (100)	270 (100)	200 (100)	57 J (100)	U (100)	NM	NM	NM
Nitrogen, Nitrite	NE	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	NM	NM	NM
pH [STD UNITS]	NE	5.3 (0.10)	NM	5.1 (0.10)	5.1 (0.10)	6.1 (0.10)	6.7 (0.10)	6.9 (0.10)	6.5 (0.10)	5.5 (0.10)	5.8 (0.10)	6.1 (0.10)	6.9 (0.10)	4.9 (0.10)	NM	NM	NM
Phosphates (total)	NE	66 (30)	NM	U (30)	32 (30)	32 (30)	280 (30)	170 (30)	74 (30)	66 (30)	1300 (30)	100 (30)	2000 (30)	66 (30)	NM	NM	NM
Sulfide (total)	NE	U (50)	NM	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	NM	NM	NM
Sulfate	NE	31700 (2000)	NM	77800 (10000)	6500 (1000)	2800 (1000)	2000 (1000)	32600 (2000)	17200 (2000)	4400 (1000)	9500 (1000)	6500 (1000)	10200 (1000)	1000 (1000)	NM	NM	NM
Gases																	
Methane	NE	3.6 (0.10)	NM	6.9 (0.10)	0.24 (0.10)	0.31 (0.10)	0.43 (0.10)	0.23 (0.10)	0.50 (0.10)	U (0.10)	0.45 (0.10)	U (0.10)	0.22 (0.10)	3.2 (0.10)	NM	NM	NM
Ethane	NE	U (0.025)	NM	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	NM	NM	NM
Ethene	NE	0.026 (0.025)	NM	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	0.054 (0.025)	U (0.025)	U (0.025)	0.026 (0.025)	NM	NM	NM
Hydrogen [nM] 4*	NE	U (1.2)	NM	56 (1.2)	0.80 (0.60)	0.83 (0.60)	NM	NM	NM	2.9 (0.60)	NM	2.1 (0.60)	3.0 (0.60)	2.2 (0.60)	NM	NM	NM
Molecular Analyses																	
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (5)	U (8.333333)	U (5)	U (0.5)	U (2)	U (0.5)	U (0.5)	U (0.5)	NM	NM	NM
Dehalococcoides (DHC) [cells/mL]	NE	1.1 (0.5)	NM	U (0.5)	U (0.5)	2.6 (0.5)	U (5)	U (8.333333)	U (5)	U (0.5)	U (2)	0.7 (0.5)	U (0.5)	0.4 J (0.5)	NM	NM	NM
tceA Reductase [cells/mL]	NE	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (5)	U (8.333333)	U (5)	U (0.5)	U (2)	U (0.5)	U (0.5)	U (0.5)	NM	NM	NM

Notes:
1 All concentrations are presented in ug/L except where noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method - Bubble Strip.
U = Not detected
J = Estimated concentration
( ) = Method detection limit for VOCs; reporting limit for all other parameters
* = Sampled on different day than other parameters with different method
RADD = Remedial action decision document
ADEQ = Arkansas Department of Environmental Quality
VOC = Volatile organic compounds
µg/L = Micrograms per Liter
mL = Milliliters
NE = Not established
NM = Not measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 5
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FIRST QUARTER 2015)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-99	IW-73	IW-74	IW-74	IW-76	IW-77	MW-41	MW-46R	MW-46R	MW-56	MW-57	MW-58	MW-71	MW-81	MW-82	RW-69
ENVIRON Sample ID		MW-99-201501	IW-73-201501	IW-74-201501	DUP-01-201501	IW-76-201501	IW-77-201501	MW-41-201501	MW-46R-201501	DUP-03-201501	MW-56-201501	MW-57-201501	MW-58-201501	MW-71-201501	MW-81-201501	MW-82-201501	RW-69-201501
Lab Sample ID(s)		60186371005	027MA050, 145440040, 145440039, 60186183010	027MA051, 145440042, 145440041, 60186183013	60186183012	027MA032, 145440044, 145440043, 60186183014	027MA049, 145440046, 145440045, 60186183009	027MA036, 145450032, 145450031, 60186183018	027MA024, 145450036, 145450035, 60186097011	60186097012	027MA010, 145460024, 60186097033	027MA011, 145460025, 60186097001	027MA041, 145460026, 60186183024	027MA040, 145450046, 145450045, 60186183023	027MA027, 145460002, 145460001, 60186097020	027MA031, 145460004, 145460003, 60186097016	027MA039, 145450048, 145450047, 60186183022
Sample Date		01/15/2015	1/13/2015	1/13/2015	1/14/2015	1/13/2015	1/14/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/14/2015	1/14/2015	1/13/2015	1/13/2015	1/14/2015
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments					Field Duplicate					Field Duplicate							
Volatile Organic Compounds																	
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (5.0)	20.4 (5.0)	31.2 (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	110 (5.0)	88.0 (5.0)	U (5.0)
Benzene	5	U (0.50)	U (0.50)	0.70 J (0.50)	0.71 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	10.9 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	11.2 (0.50)	4.0 (0.50)	U (0.50)
Bromomethane	7	U (2.5)	U (2.5)	U (2.5)	U (2.5)	27.1 (2.5)	16.5 (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	38.2 (2.5)	9.7 (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	190	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.5 (0.50)	19.1 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.4 (0.50)	1.0 (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7	U (0.50)	2.2 (0.50)	U (0.50)	U (0.50)	0.64 J (0.50)	U (0.50)	1.3 (0.50)	1.3 (0.50)	1.3 (0.50)	0.79 J (0.50)	0.77 J (0.50)	2.0 (0.50)	1.4 (0.50)	0.94 J (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	70	U (0.50)	6.3 (0.50)	3.8 (0.50)	3.5 (0.50)	8.8 (0.50)	4.8 (0.50)	15.6 (0.50)	11.6 (0.50)	12.0 (0.50)	10 (0.50)	5.4 (0.50)	14.7 (0.50)	6.0 (0.50)	9.9 (0.50)	1.2 (0.50)	4.7 (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.56 J (0.50)	0.78 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Methylene Chloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.90 J (0.50)	0.88 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	5	U (0.50)	70.8 (0.50)	141 (0.50)	139 (0.50)	288 (2.5)	201 (5.0)	425 (5.0)	452 (5.0)	428 (2.5)	326 (2.5)	177 (0.50)	385 (2.5)	170 (0.50)	385 (2.5)	66.0 (0.50)	115 (0.50)
Vinyl Chloride	2	U (0.50)	4.1 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.71 J (0.50)	0.90 J (0.50)	U (0.50)	U (0.50)	0.71 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Metals																	
Iron	NE	NM	2380 (50.0)	U (50.0)	NM	U (50.0)	140 (50.0)	3710 (50.0)	104 (50.0)	NM	2210 (50.0)	14600 (50.0)	1130 (50.0)	404 (50.0)	32.9 J (50.0)	200 (50.0)	154 (50.0)
Manganese	NE	NM	1860 (5.0)	1230 (5.0)	NM	9.1 (5.0)	44.0 (5.0)	5370 (5.0)	101 (5.0)	NM	154 (5.0)	379 (5.0)	351 (5.0)	1130 (5.0)	279 (5.0)	148 (5.0)	814 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)																	
Alkalinity	NE	NM	71400 (20000)	70700 (20000)	NM	13700 J (20000)	133000 (20000)	35700 (20000)	10600 J (20000)	NM	11200 J (20000)	23500 (20000)	8800 J (20000)	16500 J (20000)	20400 (20000)	69700 (20000)	12400 J (20000)
Ammonia	NE	NM	44 J (100)	U (100)	NM	U (100)	230 (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	320 (100)	U (100)
Bicarbonate Alkalinity	NE	NM	71400 (20000)	70700 (20000)	NM	13700 J (20000)	133000 (20000)	35700 (20000)	10600 J (20000)	NM	11200 J (20000)	23500 (20000)	8800 J (20000)	16500 J (20000)	20400 (20000)	69700 (20000)	12400 J (20000)
Carbon Dioxide	NE	NM	176000 (20000)	236000 (20000)	NM	U (20000)	467000 (20000)	257000 (20000)	U (20000)	NM	U (20000)	173000 (20000)	U (20000)	U (20000)	357000 (20000)	254000 (20000)	U (20000)
Organic Carbon (total)	NE	NM	2700 (1000)	770 J (1000)	NM	U (1000)	810 J (1000)	U (1000)	U (1000)	NM	1500 (1000)	1300 (1000)	U (1000)	U (1000)	510 J (1000)	3900 (1000)	U (1000)
Carbonate Alkalinity	NE	NM	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	NM	154000 (10000)	290000 (20000)	NM	382000 (50000)	287000 (20000)	466000 (50000)	280000 (20000)	NM	95500 (10000)	331000 (20000)	288000 (20000)	315000 (20000)	303000 (20000)	178000 (10000)	322000 M1 (20000)
Iron, Ferric	NE	NM	2200 (200)	220 (200)	NM	U (200)	U (200)	410 (200)	U (200)	NM	NM	NM	U (200)	U (200)	U (200)	U (200)	U (200)
Nitrogen	NE	NM	98 J (100)	330 (100)	NM	750 (100)	2500 (100)	21 J (100)	U (100)	NM	22 J (100)	U (100)	U (100)	27 J (100)	640 (100)	1800 (100)	150 (100)
Nitrogen, Nitrate (As N)	NE	NM	98 J (100)	330 (100)	NM	750 (100)	2500 (100)	21 J (100)	U (100)	NM	22 J (100)	U (100)	U (100)	27 J (100)	640 (100)	1500 (100)	150 (100)
Nitrogen, Nitrite	NE	NM	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	340 (100)	U (100)
pH [STD UNITS]	NE	NM	6.1 (0.10)	5.9 (0.10)	NM	5.1 (0.10)	5.9 (0.10)	5.5 (0.10)	4.9 (0.10)	NM	5.5 (0.10)	5.5 (0.10)	5.0 (0.10)	5.1 (0.10)	5.1 (0.10)	5.9 (0.10)	5.2 (0.10)
Phosphates (total)	NE	NM	280 (30)	210 (30)	NM	140 (30)	800 (30)	170 (30)	32 (30)	NM	170 (30)	280 (30)	140 (30)	U (30)	210 (30)	980 (30)	U (30)
Sulfide (total)	NE	NM	U (50)	U (50)	NM	U (50)	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	NM	6900 (1000)	2600 (1000)	NM	470000 (50000)	1680000 (100000)	2800 (1000)	670 J (1000)	NM	22800 (2000)	7400 (1000)	1600 (1000)	4200 (1000)	472000 (50000)	1460000 (10000)	4200 (1000)
Gases																	
Methane	NE	NM	13 (0.10)	4.4 (0.10)	NM	9.0 (0.10)	2.6 (0.10)	9.5 (0.10)	11 (0.10)	NM	0.96 (0.10)	1.9 (0.10)	44 (0.10)	40 (0.10)	0.93 (0.10)	13 (0.10)	2.3 (0.10)
Ethane	NE	NM	U (0.025)	0.029 (0.025)	NM	0.035 (0.025)	0.12 (0.025)	0.027 (0.025)	U (0.025)	NM	U (0.025)	U (0.025)	U (0.025)	U (0.025)	0.082 (0.025)	0.11 (0.025)	U (0.025)
Ethene	NE	NM	0.10 (0.025)	0.066 (0.025)	NM	0.036 (0.025)	0.035 (0.025)	0.036 (0.025)	0.045 (0.025)	NM	0.050 (0.025)	0.087 (0.025)	0.037 (0.025)	0.029 (0.025)	0.31 (0.025)	0.045 (0.025)	0.052 (0.025)
Hydrogen [nM] [4]	NE	NM	0.82 (0.60)	0.75 (0.60)	NM	72 (12)	52 (12)	2.3 (0.60)	2.9 (0.60)	NM	NM	NM	NM	2.2 (0.60)	120 (12)	1900 (48)	4.0 (0.60)
Molecular Analyses																	
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	NM	274 (0.5)	6.8 (0.454545)	NM	U (0.5)	U (0.5)	2.8 (0.5)	0.2 J (0.5)	NM	U (0.5)	63.5 (2.5)	3.8 (0.5)	U (0.5)	U (0.5)	U (0.384615)	0.1 J (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	NM	3530 (0.5)	120 (0.454545)	NM	U (0.5)	U (0.5)	340 (0.5)	2.8 (0.5)	NM	0.65 (0.5)	479 (2.5)	122 (0.5)	6.2 (0.5)	U (0.5)	U (0.384615)	2.6 (0.5)
tceA Reductase [cells/mL]	NE	NM	0.3 J (0.5)	U (0.454545)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NM	0.5 (0.5)	U (2.5)	U (0.5)	U (0.5)	U (0.5)	U (0.384615)	U (0.5)

Notes:

1 All concentrations are presented in ug/L except where noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method - Bubble Strip.

U = Not detected
J = Estimated concentration
( ) = Method detection limit for VOCs; reporting limit for all other parameters
* = Sampled on different day than other parameters with different method

RADD = Remedial action decision document
ADEQ = Arkansas Department of Environmental Quality
VOC = Volatile organic compounds
µg/L = Micrograms per Liter
mL = Milliliters
NE = Not established
NM = Not measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 6
SUMMARY OF ISCO MONITORING WELL ANALYTICAL RESULTS - JANUARY 2015
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	MW-23	MW-24	MW-92	MW-93	MW-94	MW-95	MW-172
ENVIRON Sample ID		MW-23-201501	MW-24-201501	MW-92-201501	MW-93-201501	MW-94-201501	MW-95-201501	MW-172-201501
Lab Sample ID		60186371009	60186371010	60186371007	60186371008	60186371006	60186371001	60186371011
Sample Date		01/15/2015	01/15/2015	01/15/2015	01/15/2015	01/15/2015	01/15/2015	01/15/2015
Volatile Organic Compounds								
Acetone	12000	21.4 (5.0)	80.7 (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	9.7 J (5.0)
Bromodichloromethane	80	U (0.50)	0.79 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	35.5 (0.50)	3.7 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7.0	9.3 (2.5)	37.7 (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	5.0 (2.5)
Chloroethane	12000	U (0.50)	1.3 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	0.56 J (0.50)	U (0.50)	5.6 (0.50)	2.9 (0.50)	6.5 (0.50)	2.8 (0.50)
Chloromethane	190	4.4 (0.50)	55.7 (0.50)	0.64 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	1.8 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.5 (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	U (0.50)	U (0.50)	2.1 (0.50)	26.8 (0.50)	130 (0.50)	37.7 (0.50)	0.72 J (0.50)
cis-1,2-Dichloroethene	70	2.2 (0.50)	U (0.50)	10.4 (0.50)	131 (0.50)	297 (125)	177 (0.50)	22.4 (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	0.87 J (0.50)	1.1 (0.50)	1.7 (0.50)	0.97 J (0.50)	2.8 (0.50)
Methylene Chloride	5.0	U (0.50)	0.88 J (0.50)	U (0.50)	3.4 (0.50)	0.61 J (0.50)	3.7 (0.50)	0.75 J (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.7 (0.50)
Tetrachloroethene	5.0	U (0.50)	U (0.50)	U (0.50)	5.3 (0.50)	2.5 (0.50)	6.4 (0.50)	2.1 (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	1.7 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	1.6 (0.50)	0.82 J (0.50)	2.3 (0.50)	0.56 J (0.50)
Trichloroethene	5.0	115 (0.50)	26.9 (0.50)	1410 (12.5)	18000 (100)	9530 (125)	21100 (100)	3600 (12.5)
Vinyl Chloride	2.0	U (0.50)	U (0.50)	4.6 (0.50)	3.4 (0.50)	2.4 (0.50)	25.6 (0.50)	1.2 (0.50)

Notes:

1 All concentrations are presented in µg/L (parts per billion)
2 Only compounds with at least one detection are shown
3 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013 are double underlined
U = Not detected
J = Estimated concentration
( ) = Method detection limit
RADD = Remedial Action Decision Document
ADEQ = Arkansas Department of Environmental Quality
µg/L = Micrograms per liter

ENVIRON

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-1	11/1/1989	ND	NT	ND
ITMW-1	1/1/1990	ND	NT	ND
ITMW-1	11/1/1993	10	NT	ND
ITMW-1	12/1/1996	21	NT	ND
ITMW-1	2/1/1999	37	ND	ND
ITMW-1	3/1/2000	125	8	ND
ITMW-1	9/19/2000	30.7	7.45	< 10 U
ITMW-1	3/27/2001	30	6	< 10 U
ITMW-1	9/11/2001	27	9	< 10 U
ITMW-1	9/10/2002	35	9	< 10 U
ITMW-1	2/27/2003	29.6	7.14	< 10 U
ITMW-1	9/23/2003	25	12	< 10 U
ITMW-1	4/13/2004	42.2	11.1	< 10 U
ITMW-1	9/21/2004	26	16.7	< 10 U
ITMW-1	9/21/2004	26.1	15.8	< 10 U
ITMW-1	9/28/2005	34.7	11.3	< 10 U
ITMW-1	10/14/2006	20	11	< 10 UJ
ITMW-1	9/20/2007	18	13	< 10 U
ITMW-1	12/9/2008	14	7.3	< 5 U
ITMW-1	10/27/2011	17	8.2	< 5 U
ITMW-1	4/18/2012	32	13	< 5 U
ITMW-1	10/19/2012	10	8.3	< 0.11 U
ITMW-1	4/24/2013	26	9.1	< 0.11 U
ITMW-1	10/15/2013	7.2	5.8	< 0.11 U
ITMW-1	3/8/2014	23.4	8.9	< 0.13 U
ITMW-1	5/13/2014	21.3	8.7	< 0.13 U
ITMW-1	7/30/2014	9.2	5.7	< 0.50 U
ITMW-1	7/30/2014	8.9	5.4	< 0.50 U
ITMW-1	10/15/2014	6.1	4.5 J	< 0.50 U
ITMW-1	1/14/2015	22.7	9.7	< 0.50 U
ITMW-2	10/1/1989	ND	NT	ND
ITMW-2	11/1/1989	ND	NT	ND
ITMW-2	1/1/1990	ND	NT	ND
ITMW-2	1/1/1990	ND	NT	ND
ITMW-2	3/1/1991	ND	NT	ND
ITMW-2	11/1/1993	4	NT	ND
ITMW-2	12/1/1996	3.4	NT	ND
ITMW-2	3/1/2000	ND	ND	ND
ITMW-2	9/19/2000	< 5 U	< 5 U	< 10 U
ITMW-2	3/27/2001	< 5 U	< 5 U	< 10 U
ITMW-2	9/13/2001	< 5 U	< 5 U	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-2	9/11/2002	< 5 U	< 5 U	< 10 U
ITMW-2	2/27/2003	< 5 U	< 5 U	< 10 U
ITMW-2	9/23/2003	< 5 U	< 5 U	< 10 U
ITMW-2	4/13/2004	< 5 U	< 5 U	< 10 U
ITMW-2	4/13/2004	< 5 U	< 5 U	< 10 U
ITMW-2	9/21/2004	< 5 U	< 5 U	< 10 U
ITMW-2	9/21/2004	< 5 U	< 5 U	< 10 U
ITMW-2	9/29/2005	< 5 U	< 5 U	< 10 U
ITMW-2	10/14/2006	4 J	< 5 U	< 10 U
ITMW-2	9/20/2007	< 5 U	< 5 U	< 10 U
ITMW-2	12/9/2008	< 5 U	< 5 U	< 5 U
ITMW-2	11/3/2010	< 5 U	< 5 U	< 5 U
ITMW-2	10/26/2011	< 5 U	< 5 U	< 5 U
ITMW-2	4/17/2012	< 5 U	< 5 U	< 5 U
ITMW-2	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-2	4/24/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-2	10/14/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-2	3/6/2014	0.23 J	0.40 J	< 0.13 U
ITMW-2	3/6/2014	0.28 J	0.51 J	< 0.13 U
ITMW-2	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
ITMW-2	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-2	10/15/2014	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-2	1/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-3	10/1/1989	ND	NT	ND
ITMW-3	1/1/1990	ND	NT	ND
ITMW-3	11/1/1993	3	NT	ND
ITMW-3	12/1/1996	1.7	NT	ND
ITMW-3	2/1/1999	ND	ND	ND
ITMW-3	3/1/2000	ND	ND	ND
ITMW-3	3/1/2000	ND	ND	ND
ITMW-3	9/19/2000	< 5 U	< 5 U	< 10 U
ITMW-3	3/27/2001	< 5 U	< 5 U	< 10 U
ITMW-3	9/11/2001	< 5 U	< 5 U	< 10 U
ITMW-3	9/10/2002	15	< 5 U	< 10 U
ITMW-3	2/27/2003	< 5 U	< 5 U	< 10 U
ITMW-3	9/23/2003	< 5 U	< 5 U	< 10 U
ITMW-3	4/13/2004	< 5 U	< 5 U	< 10 U
ITMW-3	9/21/2004	< 5 U	< 5 U	< 10 U
ITMW-3	9/28/2005	< 5 U	< 5 U	< 10 U
ITMW-3	10/14/2006	< 5 U	< 5 U	< 10 UJ
ITMW-3	9/20/2007	< 5 U	< 5 U	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-3	12/9/2008	< 5 U	< 5 U	< 5 U
ITMW-3	11/4/2010	190	3.9 J	< 5 U
ITMW-3	10/27/2011	4.1 J	< 5 U	< 5 U
ITMW-3	4/17/2012	< 5 U	< 5 U	< 5 U
ITMW-3	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-3	4/23/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-3	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-4	10/1/1989	ND	NT	ND
ITMW-4	11/1/1989	ND	NT	ND
ITMW-4	1/1/1990	ND	NT	ND
ITMW-4	11/1/1993	ND	NT	ND
ITMW-4	12/1/1996	75	NT	ND
ITMW-4	2/1/1999	93	54	ND
ITMW-4	3/1/2000	22	16	ND
ITMW-4	9/20/2000	13.9	10.6	< 10 U
ITMW-4	3/28/2001	9	< 5 U	< 10 U
ITMW-4	9/13/2001	6	8	< 10 U
ITMW-4	9/10/2002	9	< 5 U	< 10 U
ITMW-4	2/28/2003	< 5 U	< 5 U	< 10 U
ITMW-4	9/23/2003	< 5 U	< 5 U	< 10 U
ITMW-4	4/14/2004	< 5 U	< 5 U	< 10 U
ITMW-4	9/22/2004	< 5 U	< 5 U	< 10 U
ITMW-4	9/27/2005	< 5 U	< 5 U	< 10 U
ITMW-4	10/11/2006	6	8	< 10 U
ITMW-4	9/20/2007	5 J	5 J	< 10 U
ITMW-4	12/9/2008	< 5 U	3.2 J	< 5 U
ITMW-4	10/25/2011	4.8 J	5.1	< 5 U
ITMW-4	10/17/2012	3.3 J	4.5 J	7.9
ITMW-4	10/14/2013	3.7 J	6.1	< 0.11 U
ITMW-4	3/6/2014	1.4 J	2.0 J	0.19 J
ITMW-4	5/13/2014	2.0 J	2.1 J	0.18 J
ITMW-4	7/30/2014	2.8 J	4.6 J	< 0.50 U
ITMW-4	10/16/2014	3.4 J	4.9 J	< 0.50 U
ITMW-4	1/13/2015	1.7	2.3	< 0.50 U
ITMW-5	10/1/1989	ND	NT	ND
ITMW-5	1/1/1990	ND	NT	ND
ITMW-5	12/1/1996	21	NT	ND
ITMW-5	2/1/1999	86	39	ND
ITMW-5	3/1/2000	73	59	ND
ITMW-5	9/20/2000	85	64.4	< 10 U
ITMW-5	3/28/2001	100	46	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-5	9/13/2001	72	64	< 10 U
ITMW-5	9/10/2002	108	72	< 10 U
ITMW-5	2/28/2003	90.4	68.7	< 10 U
ITMW-5	9/24/2003	97.3	73.7	< 10 U
ITMW-5	4/14/2004	83.9	55.4	< 10 U
ITMW-5	9/22/2004	105	75.8	< 10 U
ITMW-5	4/6/2005	93.2	72.6	< 10 U
ITMW-5	4/6/2005	87	71	< 10 U
ITMW-5	9/28/2005	79	53.5	< 10 U
ITMW-5	9/28/2005	82.1	54.4	< 10 U
ITMW-5	3/14/2006	92	66.1	< 10 U
ITMW-5	3/14/2006	98.4	66.1	< 10 U
ITMW-5	10/10/2006	110	51	4 J
ITMW-5	4/18/2007	115	39.3	< 10 U
ITMW-5	9/20/2007	120	49	4 J
ITMW-5	4/29/2008	120	43	< 10 U
ITMW-5	12/9/2008	200 E	42	< 5 U
ITMW-5	4/27/2009	160	34	< 5 U
ITMW-5	5/11/2010	190 EF	40	< 5 U
ITMW-5	11/6/2010	350	50	< 5 U
ITMW-5	3/22/2011	370	39	< 5 U
ITMW-5	10/25/2011	150	35	< 5 U
ITMW-5	4/17/2012	290	26	< 5 U
ITMW-5	10/18/2012	260	33	0.64 J
ITMW-5	4/25/2013	220	20	0.50 J
ITMW-5	10/16/2013	260	27	0.55 J
ITMW-6	10/1/1989	ND	NT	ND
ITMW-6	1/1/1990	ND	NT	ND
ITMW-6	12/1/1996	6.8	NT	ND
ITMW-6	5/1/1997	7	ND	ND
ITMW-6	2/1/1999	25	ND	ND
ITMW-6	2/1/1999	6	ND	ND
ITMW-6	3/1/2000	ND	ND	ND
ITMW-6	9/20/2000	< 5 U	< 5 U	< 10 U
ITMW-6	3/28/2001	< 5 U	< 5 U	< 10 U
ITMW-6	9/13/2001	< 5 U	< 5 U	< 10 U
ITMW-6	9/10/2002	< 5 U	< 5 U	< 10 U
ITMW-6	9/10/2002	< 5 U	< 5 U	< 10 U
ITMW-6	2/27/2003	< 5 U	< 5 U	< 10 U
ITMW-6	9/24/2003	< 5 U	< 5 U	< 10 U
ITMW-6	4/14/2004	< 5 U	< 5 U	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-6	9/22/2004	< 5 U	< 5 U	< 10 U
ITMW-6	9/28/2005	< 5 U	< 5 U	< 10 U
ITMW-6	10/11/2006	< 5 U	4 J	< 10 U
ITMW-6	9/20/2007	< 5 U	< 5 U	< 10 U
ITMW-6	12/10/2008	< 5 U	< 5 U	< 5 U
ITMW-6	10/28/2009	< 5 U	2.1 J	< 5 U
ITMW-6	5/10/2010	< 5 U	1.9 J	< 5 U
ITMW-6	10/25/2011	< 5 U	2.7 J	< 5 U
ITMW-6	10/25/2011	< 5 U	2.4 J	< 5 U
ITMW-6	4/17/2012	< 5 U	2.9 J	< 5 U
ITMW-6	10/17/2012	< 1.6 U	3.1 J	< 0.11 U
ITMW-6	4/22/2013	< 1.6 U	2.1 J	0.33 J
ITMW-6	10/14/2013	3.4 J	5.5	0.18 J
ITMW-6	3/6/2014	2.7 J	4.9 J	0.18 J
ITMW-6	5/13/2014	3.6 J	5.3	0.17 J
ITMW-6	7/30/2014	4.4 J	6.7	< 0.50 U
ITMW-6	10/15/2014	3.1 J	5.2	< 0.50 U
ITMW-6	1/13/2015	3.7	5.7	< 0.50 U
ITMW-7	11/1/1989	ND	NT	ND
ITMW-7	1/1/1990	ND	NT	ND
ITMW-7	12/1/1996	290	NT	3
ITMW-7	5/1/1997	380	180	ND
ITMW-7	2/1/1999	ND	ND	ND
ITMW-7	6/1/1999	320	144	ND
ITMW-7	6/1/1999	300	140	ND
ITMW-7	3/1/2000	262	100	ND
ITMW-7	3/1/2000	207	92	ND
ITMW-7	9/19/2000	207	100	< 10 U
ITMW-7	9/21/2000	109	< 5 U	< 10 U
ITMW-7	3/28/2001	161	66	< 10 U
ITMW-7	9/13/2001	139	68	< 10 U
ITMW-7	9/10/2002	137	56	< 10 U
ITMW-7	9/10/2002	128	54	< 10 U
ITMW-7	2/27/2003	172	92.5	< 10 U
ITMW-7	9/24/2003	125	57.3	< 10 U
ITMW-7	4/14/2004	201	80.7	< 10 U
ITMW-7	9/22/2004	132	48.4	< 10 U
ITMW-7	4/7/2005	122	39	< 10 U
ITMW-7	9/28/2005	100	30.5	< 10 U
ITMW-7	3/14/2006	153	59.5	< 10 U
ITMW-7	10/10/2006	140	44	1 J

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-7	4/17/2007	83	29.4	< 10 U
ITMW-7	9/21/2007	72	22	< 10 U
ITMW-7	4/30/2008	70	18	< 10 U
ITMW-7	12/11/2008	66	19	< 5 U
ITMW-7	4/27/2009	87	26	< 5 U
ITMW-7	10/28/2009	60	20	< 5 U
ITMW-7	5/10/2010	73	18	< 5 U
ITMW-7	3/23/2011	225 EF	93.2	56.5
ITMW-7	10/25/2011	99	26	< 5 U
ITMW-7	4/18/2012	100	20	< 5 U
ITMW-7	10/18/2012	63	17	< 0.11 U
ITMW-7	4/25/2013	69	16	0.27 J
ITMW-7	10/17/2013	47	12	< 0.11 U
ITMW-7	3/8/2014	37.4	10	0.24 J
ITMW-7	5/14/2014	37.0	11.1	0.22 J
ITMW-7	7/30/2014	36.7	11.2	< 0.50 U
ITMW-7	10/15/2014	33.7	10.3	< 0.50 U
ITMW-7	1/14/2015	34.7	10.5	< 0.50 U
ITMW-9	1/1/1990	ND	NT	ND
ITMW-9	12/1/1996	230	NT	ND
ITMW-9	5/1/1997	7	ND	ND
ITMW-9	2/1/1999	40	24	ND
ITMW-9	3/1/2000	69	45	ND
ITMW-9	9/20/2000	57.3	14.3	< 10 U
ITMW-9	9/20/2000	54.8	14	< 10 U
ITMW-9	3/28/2001	40	12	< 10 U
ITMW-9	9/13/2001	40	12	< 10 U
ITMW-9	9/10/2002	61	21	< 10 U
ITMW-9	2/28/2003	54.2	37.2	< 10 U
ITMW-9	9/23/2003	91	49.5	< 10 U
ITMW-9	9/23/2003	97.6	53.9	< 10 U
ITMW-9	4/14/2004	71.8	38.8	< 10 U
ITMW-9	9/22/2004	80.7	21.1	< 10 U
ITMW-9	4/6/2005	79	30.4	< 10 U
ITMW-9	9/27/2005	98.8	54.6	< 10 U
ITMW-9	3/14/2006	101	78.7	< 10 U
ITMW-9	10/11/2006	110	77	6 J
ITMW-9	4/17/2007	79	39.6	< 10 U
ITMW-9	9/20/2007	76	26	< 10 U
ITMW-9	4/28/2008	82	37	< 10 U
ITMW-9	12/9/2008	90	62	< 5 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-9	4/27/2009	110	51	< 5 U
ITMW-9	10/27/2009	120	67	5.7
ITMW-9	10/27/2009	120	71	6.1
ITMW-9	5/11/2010	130	38	< 5 U
ITMW-9	3/22/2011	120	48	2.4 J
ITMW-9	10/25/2011	90	57	< 5 U
ITMW-9	4/17/2012	150	50	2.5 J
ITMW-9	10/18/2012	120	53	5.2
ITMW-9	4/24/2013	140	44	1.6 J
ITMW-9	10/17/2013	83	42	16
ITMW-9	3/8/2014	112	40.4	0.41 J
ITMW-9	5/14/2014	113	42.2	0.64 J
ITMW-9	7/30/2014	143	43.9	0.54 J
ITMW-9	7/30/2014	141	44.4	0.53 J
ITMW-9	10/15/2014	75.3	38.8	1.7 J
ITMW-9	10/15/2014	76.9	39.1	1.8 J
ITMW-9	1/13/2015	89.4	39.1	1.4
ITMW-9	1/13/2015	89.6	39.1	1.4
ITMW-10	1/1/1990	ND	NT	ND
ITMW-10	12/1/1996	4	NT	ND
ITMW-10	2/1/1999	25	13	ND
ITMW-10	3/1/2000	23	17	ND
ITMW-10	9/20/2000	18.1	15.9	< 10 U
ITMW-10	3/28/2001	40	21	< 10 U
ITMW-10	9/13/2001	29	28	< 10 U
ITMW-10	9/13/2001	30	27	< 10 U
ITMW-10	9/10/2002	55	38	< 10 U
ITMW-10	2/28/2003	57.6	50.9	< 10 U
ITMW-10	7/16/2003	55.3	49.2	< 10 U
ITMW-10	9/23/2003	65.9	56.5	< 10 U
ITMW-10	4/14/2004	80	57.4	< 10 U
ITMW-10	9/22/2004	59.6	50	< 10 U
ITMW-10	4/6/2005	72.1	57.7	< 10 U
ITMW-10	9/28/2005	57.6	41.6	< 10 U
ITMW-10	3/14/2006	82	67.2	< 10 U
ITMW-10	10/10/2006	88	54	5 J
ITMW-10	4/17/2007	76	52.4	< 10 U
ITMW-10	9/20/2007	67	48	5 J
ITMW-10	4/28/2008	61	46	< 10 U
ITMW-10	12/9/2008	78	50	< 5 U
ITMW-10	4/27/2009	87	52	4.4 J

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-10	10/27/2009	110	50	4.2 J
ITMW-10	5/11/2010	85	46	2.4 J
ITMW-10	3/22/2011	92	42	2.7 J
ITMW-10	10/25/2011	94	39	2.5 J
ITMW-10	10/18/2012	100	37	2.5
ITMW-10	10/15/2013	100	32	3.1
ITMW-10	3/6/2014	166	32.3	1.2 J
ITMW-10	5/14/2014	184	32.4	1.4 J
ITMW-10	7/30/2014	273	38.3	1.8 J
ITMW-10	10/15/2014	243	32.3	1.7 J
ITMW-10	1/14/2015	403	38.9	1.4
ITMW-11	1/1/1990	19000	NT	180
ITMW-11	11/1/1990	4700	NT	93
ITMW-11	2/1/1991	3400	NT	ND
ITMW-11	11/1/1993	2300	NT	43
ITMW-11	12/1/1996	510	NT	ND
ITMW-11	2/1/1999	650	10	ND
ITMW-11	3/1/2000	3370	206	ND
ITMW-11	9/19/2000	8030	327	11.7
ITMW-11	3/27/2001	7000	200	< 10 U
ITMW-11	9/13/2001	6000	183	< 10 U
ITMW-11	11/20/2001	< 5 U	< 5 U	< 10 U
ITMW-11	9/9/2002	7100	206	10
ITMW-11	9/9/2002	800	72	< 10 U
ITMW-11	2/26/2003	4110	346	58.8
ITMW-11	2/26/2003	3630	306	60.7
ITMW-11	9/24/2003	3990	269	11.8
ITMW-11	4/13/2004	3160	240	37.8
ITMW-11	9/21/2004	3450	204	< 10 U
ITMW-11	4/7/2005	4210	282	66.7
ITMW-11	9/29/2005	3910	199	18
ITMW-11	3/16/2006	14600	1290	482
ITMW-11	3/16/2006	12800	1210	381
ITMW-11	10/13/2006	8000	340	47
ITMW-11	4/19/2007	3970	199	< 200 U
ITMW-11	9/21/2007	7600	180	21
ITMW-11	4/30/2008	4500	210	58
ITMW-11	12/10/2008	5800	190	27
ITMW-11	4/27/2009	2500	200	24
ITMW-11	5/11/2010	6200	290	28
ITMW-11	5/11/2010	6200	290	45

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-11	3/23/2011	9700	520	130
ITMW-11	10/26/2011	8800	310	16
ITMW-11	10/19/2012	1400	34	2.4
ITMW-11	10/17/2013	180	8.7	2.9
ITMW-11	3/8/2014	2980	187 M1	22.5
ITMW-11	5/15/2014	1470	107	4.9
ITMW-11	5/15/2014	1590	99.5	5.5
ITMW-11	7/31/2014	7380	156	6.9
ITMW-11	10/15/2014	2050	70.4	3.5
ITMW-11	12/4/2014	1530	55.0	6.4
ITMW-11	1/15/2015	68.3	9.8	1.9
ITMW-12	11/1/1990	2400	NT	140
ITMW-12	2/1/1991	2100	NT	ND
ITMW-12	11/1/1993	2500	NT	35
ITMW-12	12/1/1996	1200	NT	ND
ITMW-12	2/1/1999	3100	480	34
ITMW-12	3/1/2000	3110	320	19
ITMW-12	9/19/2000	3350	180	12
ITMW-12	3/27/2001	3900	200	20
ITMW-12	9/13/2001	3100	159	< 10 U
ITMW-12	11/20/2001	2400	300	20
ITMW-12	9/11/2002	4200	300	< 10 U
ITMW-12	2/26/2003	3460	287	< 10 U
ITMW-12	2/26/2003	3940	308	< 10 U
ITMW-12	9/24/2003	2920	242	< 10 U
ITMW-12	4/13/2004	2410	245	< 10 U
ITMW-12	9/21/2004	1780	238	< 10 U
ITMW-12	9/29/2005	2120	273	< 10 U
ITMW-12	10/13/2006	3500	310	9 J
ITMW-12	9/21/2007	2100	220	< 10 U
ITMW-12	12/9/2008	1500	180	< 5 U
ITMW-12	10/26/2011	1600	230	1.8 J
ITMW-12	10/19/2012	2500	200	3.6
ITMW-12	10/17/2013	2300	190	3.2
ITMW-12	10/17/2013	2300	160	4.1
ITMW-12	3/8/2014	1910	148	3.4
ITMW-12	3/8/2014	2400	207	3.4
ITMW-12	5/14/2014	2740	164	14.0
ITMW-12	7/31/2014	2710	173	13.6
ITMW-12	10/15/2014	2950	192	3.7
ITMW-12	10/15/2014	2570	188	3.5

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-12	12/4/2014	468	51.1	0.88 J
ITMW-12	1/15/2015	59.3	4.8	< 0.50 U
ITMW-12	1/15/2015	57.1	4.2	< 0.50 U
ITMW-13	11/1/1990	34	NT	18
ITMW-13	2/1/1991	32	NT	35
ITMW-13	11/1/1993	NT	NT	29
ITMW-13	12/1/1996	36	NT	36
ITMW-13	2/1/1999	36	140	48
ITMW-13	3/1/2000	37	121	53
ITMW-13	9/19/2000	22.4	112	50.5
ITMW-13	3/28/2001	44	92	40
ITMW-13	9/13/2001	35	111	80
ITMW-13	9/9/2002	99	110	10
ITMW-13	9/9/2002	81	86	20
ITMW-13	2/26/2003	70.2	85.5	< 10 U
ITMW-13	9/24/2003	159	130	< 10 U
ITMW-13	4/13/2004	48.4	87.2	< 10 U
ITMW-13	9/21/2004	25.5	71.6	< 10 U
ITMW-13	4/7/2005	71.8	103	< 10 U
ITMW-13	9/30/2005	72.7	114	17.9
ITMW-13	3/16/2006	141	187	< 10 U
ITMW-13	10/14/2006	100	150	17
ITMW-13	4/18/2007	83.1	78	4.3 J
ITMW-13	9/20/2007	28	40	< 10 U
ITMW-13	4/29/2008	69	72	< 10 U
ITMW-13	12/10/2008	26	23	< 5 U
ITMW-13	4/27/2009	79	78	< 5 U
ITMW-13	10/27/2009	18	22	< 5 U
ITMW-13	5/12/2010	97	72	< 5 U
ITMW-13	3/23/2011	130	83	< 5 U
ITMW-13	10/27/2011	64	40	< 5 U
ITMW-13	10/27/2011	65	41	< 5 U
ITMW-13	4/19/2012	97	63	< 5 U
ITMW-13	10/18/2012	400	260	1.0 J
ITMW-13	4/25/2013	86	52	0.14 J
ITMW-13	10/16/2013	150	74	< 0.11 U
ITMW-13	3/8/2014	69.3	45.3	< 0.13 U
ITMW-13	5/14/2014	54.0	34.7	0.17 J
ITMW-13	7/30/2014	36.5	27.5	< 0.50 U
ITMW-13	10/15/2014	40.8	25.9	< 0.50 U
ITMW-13	1/14/2015	45.8	28.5	< 0.50 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-14	11/1/1990	ND	NT	13
ITMW-14	2/1/1991	ND	NT	ND
ITMW-14	11/1/1993	6	NT	ND
ITMW-14	12/1/1996	ND	NT	ND
ITMW-14	2/1/1999	ND	29	20
ITMW-14	3/1/2000	ND	24	12
ITMW-14	9/19/2000	< 5 U	13.6	< 10 U
ITMW-14	3/27/2001	< 5 U	24	10
ITMW-14	9/13/2001	< 5 U	5	< 10 U
ITMW-14	9/11/2002	41	6	< 10 U
ITMW-14	2/26/2003	< 5 U	< 5 U	< 10 U
ITMW-14	9/24/2003	< 5 U	< 5 U	< 10 U
ITMW-14	4/13/2004	< 5 U	< 5 U	< 10 U
ITMW-14	9/21/2004	< 5 U	< 5 U	< 10 U
ITMW-14	9/30/2005	< 5 U	< 5 U	< 10 U
ITMW-14	10/14/2006	4 J	8	< 10 UJ
ITMW-14	9/21/2007	5 J	9	< 10 U
ITMW-14	12/10/2008	5.7	9.3	< 5 U
ITMW-14	11/4/2010	110	14	< 5 U
ITMW-14	10/27/2011	6.3	11	< 5 U
ITMW-14	4/19/2012	7.6	16	< 5 U
ITMW-14	10/19/2012	5.4	11	< 0.11 U
ITMW-14	4/25/2013	6.8	14	< 0.11 U
ITMW-14	10/16/2013	2.9 J	4.9 J	< 0.11 U
ITMW-14	3/8/2014	6.1	11.9	< 0.13 U
ITMW-14	5/14/2014	5.3	11.3	< 0.13 U
ITMW-14	7/30/2014	4.0 J	9.2	< 0.50 U
ITMW-14	10/15/2014	4.1 J	9.4	< 0.50 U
ITMW-14	1/14/2015	4.9	11.5	< 0.50 U
ITMW-15	11/1/1990	2500	NT	55
ITMW-15	2/1/1991	1700	NT	ND
ITMW-15	4/15/1991	2000	NT	ND
ITMW-15	4/19/1991	2100	NT	ND
ITMW-15	4/20/1991	2400	NT	ND
ITMW-15	11/1/1993	4300	NT	10
ITMW-15	12/1/1996	240	NT	ND
ITMW-15	2/1/1999	400	120	ND
ITMW-15	3/1/2000	339	97	ND
ITMW-15	9/19/2000	362	92.7	< 10 U
ITMW-15	9/19/2000	376	91	< 10 U
ITMW-15	3/28/2001	290	57	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-15	9/13/2001	380	87	< 10 U
ITMW-15	9/13/2001	370	80	< 10 U
ITMW-15	11/20/2001	157	30	< 10 U
ITMW-15	9/11/2002	320	75	< 10 U
ITMW-15	2/26/2003	301	98.7	< 10 U
ITMW-15	9/25/2003	490	91.9	< 10 U
ITMW-15	4/14/2004	334	126	< 10 U
ITMW-15	9/21/2004	774	118	< 10 U
ITMW-15	4/7/2005	685	133	< 10 U
ITMW-15	9/29/2005	862	189	< 10 U
ITMW-15	3/16/2006	908	183	12
ITMW-15	10/13/2006	680	140	7 J
ITMW-15	4/19/2007	591	110	8.5 J
ITMW-15	9/21/2007	1000	190	27
ITMW-15	4/29/2008	100	18	< 10 U
ITMW-15	12/10/2008	1100	150	< 5 U
ITMW-15	4/27/2009	2800	130	17
ITMW-15	5/11/2010	2800	160	11
ITMW-15	10/26/2011	1100	74	< 5 U
ITMW-15	10/19/2012	240	14	1.1 J
ITMW-15	10/16/2013	2800	170	14
ITMW-15	3/8/2014	1630	152	11.6
ITMW-15	5/14/2014	899	61.7	4.4
ITMW-15	5/14/2014	729	60.7	4.1
ITMW-15	7/30/2014	1850	82.8	3.0
ITMW-15	7/30/2014	1820	82.5	3.1
ITMW-15	10/16/2014	1660	66.4	1.8 J
ITMW-15	10/16/2014	1490	63.0	2.0
ITMW-15	12/5/2014	63.0	< 0.50 U	< 0.50 U
ITMW-15	1/15/2015	61.7	3.8	< 0.50 U
ITMW-15	1/15/2015	56.5	2.9	< 0.50 U
ITMW-16	2/1/1991	31	NT	ND
ITMW-16	11/1/1993	41	NT	7
ITMW-16	12/1/1996	ND	NT	ND
ITMW-16	2/1/1999	ND	ND	ND
ITMW-16	3/1/2000	7	ND	ND
ITMW-16	9/21/2000	< 5 U	< 5 U	< 10 U
ITMW-16	3/26/2001	< 5 U	< 5 U	< 10 U
ITMW-16	9/13/2001	< 5 U	< 5 U	< 10 U
ITMW-16	9/11/2002	< 5 U	< 5 U	< 10 U
ITMW-16	2/27/2003	< 5 U	< 5 U	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-16	9/25/2003	< 5 U	< 5 U	< 10 U
ITMW-16	4/15/2004	< 5 U	< 5 U	< 10 U
ITMW-16	9/23/2004	< 5 U	< 5 U	< 10 U
ITMW-16	9/29/2005	< 5 U	< 5 U	< 10 U
ITMW-16	9/29/2005	< 5 U	< 5 U	< 10 U
ITMW-16	10/14/2006	< 5 U	< 5 U	< 10 U
ITMW-16	9/20/2007	< 5 U	< 5 U	< 10 U
ITMW-16	12/10/2008	< 5 U	< 5 U	< 5 U
ITMW-16	11/6/2010	17	< 5 U	< 5 U
ITMW-16	10/27/2011	< 5 U	< 5 U	< 5 U
ITMW-16	4/18/2012	< 5 U	< 5 U	< 5 U
ITMW-16	10/18/2012	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-16	4/24/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-16	10/16/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-16	3/7/2014	0.30 J	< 0.080 U	< 0.13 U
ITMW-16	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
ITMW-16	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-16	10/15/2014	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-16	1/14/2015	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-17	2/1/1991	21000	NT	ND
ITMW-17	4/15/1991	21000	NT	ND
ITMW-17	4/24/1991	21000	NT	ND
ITMW-17	11/1/1993	18000	NT	15
ITMW-17	12/1/1996	9300	NT	ND
ITMW-17	2/1/1999	11000	240	ND
ITMW-17	3/1/2000	6780	171	ND
ITMW-17	9/19/2000	5500	180	< 10 U
ITMW-17	1/5/2001	8310	179	< 10 U
ITMW-17	3/28/2001	6700	134	< 10 U
ITMW-17	9/13/2001	6300	158	< 10 U
ITMW-17	9/11/2002	6500	153	< 10 U
ITMW-17	2/26/2003	4380	134	< 10 U
ITMW-17	9/25/2003	6090	136	< 10 U
ITMW-17	4/14/2004	5050	184	< 10 U
ITMW-17	4/14/2004	4920	182	< 10 U
ITMW-17	9/21/2004	5760	156	< 10 U
ITMW-17	4/7/2005	5750	156	< 10 U
ITMW-17	9/29/2005	5460	111	< 10 U
ITMW-17	3/15/2006	15900	211 E	26.3
ITMW-17	10/12/2006	19000	220	21
ITMW-17	4/18/2007	13000	298	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-17	9/21/2007	11000	210	3 J
ITMW-17	4/29/2008	6200	140	< 10 U
ITMW-17	12/10/2008	5600	130	< 5 U
ITMW-17	4/27/2009	5200	130	< 5 U
ITMW-17	5/11/2010	4500	85	< 5 U
ITMW-17	11/4/2010	5400	110	< 5 U
ITMW-17	3/22/2011	5300	100	< 5 U
ITMW-17	10/26/2011	4500	98	< 5 U
ITMW-17	4/19/2012	4700	110	< 5 U
ITMW-17	10/19/2012	3500	100	0.48 J
ITMW-17	4/25/2013	5600	130	0.90 J
ITMW-17	10/17/2013	4800	79	< 0.11 U
ITMW-17	3/8/2014	3770	86.1	0.57 J
ITMW-17	3/8/2014	4040	87.3	0.74 J
ITMW-17	5/15/2014	3370	88.5	1.1 J
ITMW-17	5/15/2014	3630	82.9	1.3 J
ITMW-17	7/30/2014	2260	64.7	< 0.50 U
ITMW-17	10/16/2014	3510	70.5	3.2
ITMW-17	12/5/2014	4630	210	7.7
ITMW-17	1/15/2015	3840	110	1.5
ITMW-18	2/1/1991	3700	NT	ND
ITMW-18	11/1/1993	4500	NT	6
ITMW-18	12/1/1996	1600	NT	ND
ITMW-18	2/1/1999	6300	480	ND
ITMW-18	3/1/2000	3560	401	ND
ITMW-18	9/19/2000	4080	409	< 10 U
ITMW-18	3/27/2001	4000	400	< 10 U
ITMW-18	3/27/2001	4200	370	< 100 U
ITMW-18	9/11/2001	4100	300	< 10 U
ITMW-18	9/11/2002	6700	300	< 10 U
ITMW-18	2/26/2003	5110	290	< 10 U
ITMW-18	9/24/2003	7700	415	< 10 U
ITMW-18	4/13/2004	7740	410	< 10 U
ITMW-18	9/21/2004	7050	380	< 10 U
ITMW-18	4/8/2005	7080	389	< 10 U
ITMW-18	9/29/2005	4660	241	< 10 U
ITMW-18	3/15/2006	5750	373	< 50 U
ITMW-18	10/13/2006	6600	300	< 10 U
ITMW-18	4/18/2007	15000	387	< 10 U
ITMW-18	9/21/2007	8300	310	< 100 U
ITMW-18	4/30/2008	9000	350	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-18	12/9/2008	7200	320	< 5 U
ITMW-18	4/27/2009	7100	320	< 5 U
ITMW-18	10/27/2009	7800	360	< 5 U
ITMW-18	5/11/2010	11000	360	< 5 U
ITMW-18	10/26/2011	8500	290	< 5 U
ITMW-18	4/19/2012	9800	360	2.9 J
ITMW-18	10/19/2012	7600	260	1.2 J
ITMW-18	4/25/2013	7200	270	0.90 J
ITMW-18	10/17/2013	7000	280	0.64 J
ITMW-18	3/8/2014	9380	285	< 6.5 U
ITMW-18	3/8/2014	8550	242 J	1.7 J
ITMW-18	5/15/2014	2500	108	< 0.13 U
ITMW-18	5/15/2014	2940	101	< 0.13 U
ITMW-18	7/31/2014	5360	139	1.6 J
ITMW-18	10/15/2014	3540	68.5	< 0.50 U
ITMW-18	12/4/2014	3690	74.3	< 0.50 U
ITMW-18	1/15/2015	488	26.5	< 0.50 U
ITMW-19	2/1/1991	9900	NT	ND
ITMW-19	11/1/1993	27000	NT	7
ITMW-19	12/1/1996	25000	NT	ND
ITMW-19	2/1/1999	33000	150	ND
ITMW-19	3/1/2000	33100	128	ND
ITMW-19	9/19/2000	35700	197	< 10 U
ITMW-19	1/5/2001	34000	166	< 10 U
ITMW-19	3/28/2001	38000	119	< 10 U
ITMW-19	9/13/2001	19000	132	< 10 U
ITMW-19	9/11/2002	27000	167	< 10 U
ITMW-19	2/26/2003	16200	126	< 10 U
ITMW-19	9/24/2003	27300	186	< 10 U
ITMW-19	4/13/2004	19400	186	< 10 U
ITMW-19	9/21/2004	20000	148	< 10 U
ITMW-19	4/7/2005	18300	146	< 10 U
ITMW-19	4/7/2005	16200	145	< 10 U
ITMW-19	9/29/2005	25700	144	< 10 U
ITMW-19	3/15/2006	21300	177	< 100 U
ITMW-19	10/12/2006	16000	150	2 J
ITMW-19	4/18/2007	20000	131	< 10 U
ITMW-19	9/21/2007	19000	110	< 200 U
ITMW-19	4/29/2008	17000	98	< 100 U
ITMW-19	12/10/2008	11000	93	< 5 U
ITMW-19	4/27/2009	13000	100	< 5 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-19	5/11/2010	19000	130	< 5 U
ITMW-19	11/4/2010	19000	150	< 5 U
ITMW-19	11/4/2010	18000	140	< 5 U
ITMW-19	3/22/2011	16000	110	1 J
ITMW-19	10/26/2011	17000	120	< 5 U
ITMW-19	4/19/2012	15000	110	< 5 U
ITMW-19	4/19/2012	18000	110	< 5 U
ITMW-19	10/19/2012	15000	110	0.89 J
ITMW-19	4/25/2013	13000	110	0.57 J
ITMW-19	10/18/2013	16000	91 J	< 0.11 U
ITMW-19	10/18/2013	14000	100 J	< 0.11 U
ITMW-19	3/8/2014	8850	66.7	0.57 J
ITMW-19	3/8/2014	8270	60.8 J	< 6.5 U
ITMW-19	5/15/2014	15300 J	67.2	0.87 J
ITMW-19	5/15/2014	9780 J	65.8	0.85 J
ITMW-19	7/31/2014	13300	85.5	0.96 J
ITMW-19	10/16/2014	12800	76.7	1.9 J
ITMW-19	12/5/2014	33.5	< 0.50 U	< 0.50 U
ITMW-19	1/15/2015	17.4	< 0.50 U	< 0.50 U
ITMW-20	3/1/1991	ND	NT	ND
ITMW-20	11/1/1993	ND	NT	ND
ITMW-20	12/1/1996	290	NT	ND
ITMW-20	5/1/1997	ND	ND	ND
ITMW-20	2/1/1999	ND	ND	ND
ITMW-20	3/1/2000	ND	ND	ND
ITMW-20	9/21/2000	< 5 U	< 5 U	< 10 U
ITMW-20	3/27/2001	< 5 U	< 5 U	< 10 U
ITMW-20	9/11/2001	21	< 5 U	< 10 U
ITMW-20	9/10/2002	< 5 U	< 5 U	< 10 U
ITMW-20	2/27/2003	< 5 U	< 5 U	< 10 U
ITMW-20	9/24/2003	< 5 U	< 5 U	< 10 U
ITMW-20	4/14/2004	< 5 U	< 5 U	< 10 U
ITMW-20	9/22/2004	< 5 U	< 5 U	< 10 U
ITMW-20	9/29/2005	< 5 U	< 5 U	< 10 U
ITMW-20	10/12/2006	< 5 U	< 5 U	< 10 U
ITMW-20	9/19/2007	< 5 U	< 5 U	< 10 U
ITMW-20	12/10/2008	< 5 U	< 5 U	< 5 U
ITMW-20	10/29/2009	< 5 U	< 5 U	< 5 U
ITMW-20	5/12/2010	< 5 U	< 5 U	< 5 U
ITMW-20	11/5/2010	15	< 5 U	< 5 U
ITMW-20	10/26/2011	< 5 U	< 5 U	< 5 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-20	10/26/2011	< 5 U	< 5 U	< 5 U
ITMW-20	4/18/2012	< 5 U	< 5 U	< 5 U
ITMW-20	10/18/2012	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-20	4/23/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-20	10/14/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-20	3/5/2014	< 0.17 U	< 0.080 U	0.15 J
ITMW-20	5/12/2014	0.21 J	< 0.080 U	< 0.13 U
ITMW-20	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-20	10/15/2014	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-20	1/12/2015	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-21	3/1/1991	21	NT	ND
ITMW-21	11/1/1993	37	NT	ND
ITMW-21	12/1/1996	150	NT	ND
ITMW-21	2/1/1999	190	ND	ND
ITMW-21	3/1/2000	196	ND	ND
ITMW-21	9/19/2000	192	< 5 U	< 10 U
ITMW-21	3/28/2001	123	< 5 U	< 10 U
ITMW-21	9/13/2001	116	< 5 U	< 10 U
ITMW-21	9/10/2002	13	< 5 U	< 10 U
ITMW-21	2/26/2003	39.5	< 5 U	< 10 U
ITMW-21	9/23/2003	9.09	< 5 U	< 10 U
ITMW-21	4/14/2004	52.9	< 5 U	< 10 U
ITMW-21	9/22/2004	7.8	< 5 U	< 10 U
ITMW-21	9/28/2005	6.45	< 5 U	< 10 U
ITMW-21	10/12/2006	9	< 5 U	< 10 U
ITMW-21	9/21/2007	10	< 5 U	< 10 U
ITMW-21	12/9/2008	15	< 5 U	< 5 U
ITMW-21	10/27/2009	14	< 5 U	< 5 U
ITMW-21	11/4/2010	1100	4.4 J	< 5 U
ITMW-21	3/22/2011	24	< 5 U	< 5 U
ITMW-21	10/25/2011	11	< 5 U	< 5 U
ITMW-21	4/17/2012	30	< 5 U	< 5 U
ITMW-21	10/19/2012	7.7	< 0.56 U	< 0.11 U
ITMW-21	4/24/2013	18	< 0.56 U	< 0.11 U
ITMW-21	10/15/2013	20	< 0.56 U	< 0.11 U
ITMW-21	3/6/2014	14.8	< 0.080 U	< 0.13 U
ITMW-21	5/14/2014	17.6	< 0.080 U	< 0.13 U
ITMW-21	7/30/2014	9.3	< 0.50 U	< 0.50 U
ITMW-21	7/30/2014	9.4	< 0.50 U	< 0.50 U
ITMW-21	10/15/2014	6.0	< 0.50 U	< 0.50 U
ITMW-21	1/14/2015	10.8	< 0.50 U	< 0.50 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-22	12/1/1996	ND	NT	ND
MW-22	5/1/1997	ND	5	ND
MW-22	2/1/1999	ND	5	ND
MW-22	3/1/2000	ND	ND	ND
MW-22	9/19/2000	< 5 U	< 5 U	< 10 U
MW-22	3/27/2001	< 5 U	< 5 U	< 10 U
MW-22	9/13/2001	< 5 U	< 5 U	< 10 U
MW-22	9/10/2002	9	< 5 U	< 10 U
MW-22	2/27/2003	< 5 U	< 5 U	< 10 U
MW-22	9/23/2003	< 5 U	< 5 U	< 10 U
MW-22	9/23/2003	< 5 U	< 5 U	< 10 U
MW-22	4/13/2004	< 5 U	< 5 U	< 10 U
MW-22	9/21/2004	< 5 U	< 5 U	< 10 U
MW-22	9/30/2005	< 5 U	< 5 U	< 10 U
MW-22	10/14/2006	< 5 U	< 5 U	< 10 UJ
MW-22	9/20/2007	< 5 U	< 5 U	< 10 U
MW-22	12/9/2008	< 5 U	< 5 U	< 5 U
MW-22	10/27/2009	< 5 U	< 5 U	< 5 U
MW-22	11/3/2010	< 5 U	< 5 U	< 5 U
MW-22	10/27/2011	2.1 J	< 5 U	< 5 U
MW-22	4/18/2012	< 5 U	< 5 U	< 5 U
MW-22	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-22	4/23/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-22	10/14/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-22	3/5/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-22	5/12/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-22	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-22	10/15/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-22	1/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-23	12/1/1996	210	NT	ND
MW-23	5/1/1997	2400	NT	ND
MW-23	2/1/1999	350	10	ND
MW-23	2/1/1999	440	10	ND
MW-23	3/1/2000	147	ND	ND
MW-23	9/21/2000	67	< 5 U	< 10 U
MW-23	1/5/2001	137	< 5 U	< 10 U
MW-23	3/26/2001	87	< 5 U	< 10 U
MW-23	9/11/2001	23	< 5 U	< 10 U
MW-23	9/11/2002	111	< 5 U	< 10 U
MW-23	9/11/2002	105	< 5 U	< 10 U
MW-23	2/27/2003	54	< 5 U	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-23	9/25/2003	83.9	< 5 U	< 10 U
MW-23	4/15/2004	70.3	< 5 U	< 10 U
MW-23	9/22/2004	73.4	< 5 U	< 10 U
MW-23	4/5/2005	55.5	< 5 U	< 10 U
MW-23	9/29/2005	65.8	< 5 U	< 10 U
MW-23	3/17/2006	47.1	< 5 U	< 10 U
MW-23	10/14/2006	59	< 5 U	< 10 UJ
MW-23	4/19/2007	39.9	9.79	< 10 U
MW-23	9/19/2007	47	< 5 U	< 10 U
MW-23	4/29/2008	29	< 5 U	< 10 U
MW-23	12/10/2008	69	< 5 U	< 5 U
MW-23	4/27/2009	32	< 5 U	< 5 U
MW-23	10/29/2009	45	< 5 U	< 5 U
MW-23	5/12/2010	55	< 5 U	< 5 U
MW-23	5/12/2010	52	< 5 U	< 5 U
MW-23	11/5/2010	76	< 5 U	< 5 U
MW-23	3/23/2011	46	< 5 U	< 5 U
MW-23	10/27/2011	41	< 5 U	< 5 U
MW-23	4/18/2012	36	< 5 U	< 5 U
MW-23	10/19/2012	43	< 0.56 U	< 0.11 U
MW-23	4/25/2013	20	< 0.56 U	< 0.11 U
MW-23	10/16/2013	54	< 0.56 U	< 0.11 U
MW-23	5/22/2014	22.8	< 0.080 U	< 0.13 U
MW-23	7/8/2014	27.8	0.68 J	< 0.50 U
MW-23	9/12/2014	62.1	1.8 J	< 0.50 U
MW-23	10/23/2014	189	3.5 J	< 0.50 U
MW-23	1/15/2015	115	2.2	< 0.50 U
MW-24	2/1/1999	1400	49	ND
MW-24	3/1/2000	403	25	ND
MW-24	3/1/2000	595	24	ND
MW-24	9/21/2000	128	11	< 10 U
MW-24	1/5/2001	247	12	< 10 U
MW-24	3/26/2001	330	11	< 10 U
MW-24	9/11/2001	124	6	< 10 U
MW-24	9/11/2002	199	6	< 10 U
MW-24	2/27/2003	253	7.01	< 10 U
MW-24	9/25/2003	155	< 5 U	< 10 U
MW-24	4/15/2004	181	5.12	< 10 U
MW-24	9/23/2004	116	< 5 U	< 10 U
MW-24	4/6/2005	152	6.04	< 10 U
MW-24	9/29/2005	161	< 5 U	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-24	3/16/2006	347	7.57	< 10 U
MW-24	10/14/2006	620	11	2 J
MW-24	4/19/2007	196	11.6	< 10 U
MW-24	9/20/2007	140	< 5 U	< 10 U
MW-24	9/20/2007	150	< 5 U	< 10 U
MW-24	4/29/2008	150	3 J	< 10 U
MW-24	12/10/2008	150	3.4 J	< 5 U
MW-24	12/10/2008	130	3.4 J	< 5 U
MW-24	4/27/2009	120	< 5 U	< 5 U
MW-24	10/29/2009	110	2.6 J	< 5 U
MW-24	5/12/2010	150	4.3 J	< 5 U
MW-24	3/23/2011	170	3.6 J	< 5 U
MW-24	10/27/2011	170	1.9 J	< 5 U
MW-24	10/27/2011	170	1.4 J	< 5 U
MW-24	4/18/2012	150	2.9 J	< 5 U
MW-24	10/19/2012	190	3.7 J	< 0.11 U
MW-24	4/25/2013	110	3.5 J	0.23 J
MW-24	5/22/2014	79.7	1.2 J	< 0.13 U
MW-24	7/8/2014	102	1.4 J	< 0.50 U
MW-24	9/12/2014	55.7	0.66 J	< 0.50 U
MW-24	10/23/2014	33.1	< 0.50 U	< 0.50 U
MW-24	1/15/2015	26.9	< 0.50 U	< 0.50 U
MW-25	2/1/1999	29000	170	100
MW-25	2/1/1999	27000	180	110
MW-25	12/1/1999	94500	ND	ND
MW-25	3/1/2000	35900	245	63
MW-25	9/21/2000	59000	300	50
MW-25	3/28/2001	34000	117	60
MW-25	9/13/2001	60000	300	< 200 U
MW-25	9/9/2002	157000	440	180
MW-25	9/9/2002	56000	370	200
MW-25	2/26/2003	45900	557	75.7
MW-25	7/17/2003	62200	621	243
MW-25	9/24/2003	103000	775	< 500 U
MW-25	4/14/2004	25600	255	31.8
MW-25	9/21/2004	85200	819	422
MW-25	4/7/2005	21100	353	61.1
MW-25	9/28/2005	136000	837	< 500 U
MW-25	3/15/2006	36300	774	< 200 U
MW-25	10/12/2006	64000	1300	610
MW-25	10/12/2006	65000	1400	600

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-25	4/18/2007	19000	321	20
MW-25	4/18/2007	18000	319	20
MW-25	9/21/2007	54000	1200	800
MW-25	9/21/2007	55000	1200	780
MW-25	4/29/2008	23000	470	10 J
MW-25	4/29/2008	25000	510	10 J
MW-25	12/10/2008	100000	1200	430
MW-25	4/27/2009	36000	2100	140
MW-25	4/27/2009	39000	2000	190
MW-25	10/27/2009	140000	1500	570
MW-25	5/11/2010	81000	1400	11
MW-25	11/4/2010	270000	1500	400
MW-25	3/22/2011	57000	2400	34
MW-25	10/26/2011	120000	2100	< 250 U
MW-25	4/17/2012	18000	690	18
MW-25	10/19/2012	56000	4200	1500
MW-25	10/19/2012	49000	3600	1500
MW-25	4/25/2013	9100	330	7.9
MW-25	4/25/2013	9500	380	11
MW-25	10/18/2013	43000	2900	1300
MW-25	3/8/2014	14500	625	33.6 J
MW-25	5/15/2014	18500	600 J	30.3
MW-25	7/9/2014	49900	1750	< 0.50 U
MW-25	7/31/2014	71700	2310 J	< 500 U
MW-25	10/16/2014	42500	2870 J	540 J
MW-25	10/24/2014	59800	2650 J	0.66 J
MW-25	12/5/2014	2620 J	31.5	2.1
MW-25	1/15/2015	2510	126	1.6
MW-26	2/1/1999	360	150	ND
MW-26	6/1/1999	ND	ND	ND
MW-26	3/1/2000	ND	ND	ND
MW-26	9/21/2000	< 5 U	< 5 U	< 10 U
MW-26	3/26/2001	< 5 U	< 5 U	< 10 U
MW-26	9/11/2001	< 5 U	< 5 U	< 10 U
MW-26	9/11/2001	< 5 U	< 5 U	< 10 U
MW-26	9/10/2002	< 5 U	< 5 U	< 10 U
MW-26	2/27/2003	< 5 U	< 5 U	< 10 U
MW-26	9/24/2003	< 5 U	< 5 U	< 10 U
MW-26	4/14/2004	< 5 U	< 5 U	< 10 U
MW-26	9/22/2004	< 5 U	< 5 U	< 10 U
MW-26	9/29/2005	< 5 U	< 5 U	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-26	10/12/2006	< 5 U	< 5 U	< 10 U
MW-26	9/19/2007	< 5 U	< 5 U	< 10 U
MW-26	12/10/2008	< 5 U	< 5 U	< 5 U
MW-26	10/29/2009	< 5 U	< 5 U	< 5 U
MW-26	5/12/2010	< 5 U	< 5 U	< 5 U
MW-26	11/5/2010	22	< 5 U	< 5 U
MW-26	10/26/2011	< 5 U	< 5 U	< 5 U
MW-26	4/18/2012	< 5 U	< 5 U	< 5 U
MW-26	10/18/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-26	4/23/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-26	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-26	3/5/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-26	5/12/2014	0.25 J	< 0.080 U	< 0.13 U
MW-26	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-26	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-26	1/14/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-27	12/1/1999	ND	ND	ND
MW-27	12/7/1999	< 5 U	< 5 U	< 10 U
MW-27	12/9/1999	< 5 U	< 5 U	< 10 U
MW-27	3/1/2000	ND	ND	ND
MW-27	9/21/2000	< 5 U	< 5 U	< 10 U
MW-27	1/5/2001	< 5 U	< 5 U	< 10 U
MW-27	1/5/2001	5.55	< 5 U	< 10 U
MW-27	3/26/2001	< 5 U	< 5 U	< 10 U
MW-27	9/11/2001	< 5 U	< 5 U	< 10 U
MW-27	9/11/2002	< 5 U	< 5 U	< 10 U
MW-27	9/11/2002	< 5 U	< 5 U	< 10 U
MW-27	2/27/2003	< 5 U	< 5 U	< 10 U
MW-27	9/25/2003	< 5 U	< 5 U	< 10 U
MW-27	4/15/2004	< 5 U	< 5 U	< 10 U
MW-27	9/22/2004	< 5 U	< 5 U	< 10 U
MW-27	9/29/2005	< 5 U	< 5 U	< 10 U
MW-27	10/14/2006	2 J	< 5 U	< 10 U
MW-27	9/19/2007	< 5 U	< 5 U	< 10 U
MW-27	12/10/2008	< 5 U	< 5 U	< 5 U
MW-27	5/12/2010	3.1 J	< 5 U	< 5 U
MW-27	11/5/2010	42	< 5 U	< 5 U
MW-27	10/27/2011	< 5 U	< 5 U	< 5 U
MW-27	4/18/2012	2.6 J	< 5 U	< 5 U
MW-27	10/18/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-27	4/24/2013	< 1.6 U	< 0.56 U	< 0.11 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-27	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-27	3/7/2014	0.31 J	< 0.080 U	< 0.13 U
MW-27	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-27	7/30/2014	0.63 J	< 0.50 U	< 0.50 U
MW-27	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-27	1/14/2015	0.84 J	0.59 J	< 0.50 U
MW-28	12/1/1999	ND	ND	ND
MW-28	12/9/1999	< 5 U	< 5 U	< 10 U
MW-28	12/9/1999	< 5 U	< 5 U	< 10 U
MW-28	3/1/2000	ND	ND	ND
MW-28	9/21/2000	< 5 U	< 5 U	< 10 U
MW-28	3/27/2001	< 5 U	< 5 U	< 10 U
MW-28	3/27/2001	< 5 U	< 5 U	< 10 U
MW-28	9/11/2001	< 5 U	< 5 U	< 10 U
MW-28	9/11/2002	< 5 U	< 5 U	< 10 U
MW-28	2/27/2003	< 5 U	< 5 U	< 10 U
MW-28	9/25/2003	< 5 U	< 5 U	< 10 U
MW-28	4/15/2004	< 5 U	< 5 U	< 10 U
MW-28	9/22/2004	< 5 U	< 5 U	< 10 U
MW-28	9/30/2005	< 5 U	< 5 U	< 10 U
MW-28	10/14/2006	< 5 U	< 5 U	< 10 UJ
MW-28	9/19/2007	< 5 U	< 5 U	< 10 U
MW-28	12/10/2008	< 5 U	< 5 U	< 5 U
MW-28	10/29/2009	< 5 U	< 5 U	< 5 U
MW-28	5/12/2010	2.6 J	< 5 U	< 5 U
MW-28	11/5/2010	54	< 5 U	< 5 U
MW-28	3/23/2011	1.6 J	< 5 U	< 5 U
MW-28	10/27/2011	< 5 U	< 5 U	< 5 U
MW-28	4/19/2012	< 5 U	< 5 U	< 5 U
MW-28	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-28	4/24/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-28	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-28	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-28	5/13/2014	0.30 J	< 0.080 U	< 0.13 U
MW-28	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-28	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-28	1/14/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-29	12/1/1999	ND	ND	ND
MW-29	12/9/1999	< 5 U	< 5 U	< 10 U
MW-29	3/1/2000	ND	ND	ND
MW-29	9/20/2000	< 5 U	< 5 U	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-29	3/27/2001	< 5 U	< 5 U	< 10 U
MW-29	9/11/2001	< 5 U	< 5 U	< 10 U
MW-29	9/10/2002	< 5 U	< 5 U	< 10 U
MW-29	2/27/2003	< 5 U	< 5 U	< 10 U
MW-29	9/24/2003	< 5 U	< 5 U	< 10 U
MW-29	4/14/2004	< 5 U	< 5 U	< 10 U
MW-29	9/22/2004	< 5 U	< 5 U	< 10 U
MW-29	9/28/2005	< 5 U	< 5 U	< 10 U
MW-29	10/12/2006	< 5 U	< 5 U	< 10 U
MW-29	9/19/2007	< 5 U	< 5 U	< 10 U
MW-29	12/10/2008	< 5 U	< 5 U	< 5 U
MW-29	12/10/2008	< 5 U	< 5 U	< 5 U
MW-29	10/29/2009	< 5 U	< 5 U	< 5 U
MW-29	10/25/2011	< 5 U	< 5 U	< 5 U
MW-29	4/18/2012	< 5 U	< 5 U	< 5 U
MW-29	10/18/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-29	4/23/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-29	10/14/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-29	3/5/2014	0.52 J	< 0.080 U	< 0.13 U
MW-29	5/13/2014	0.18 J	< 0.080 U	< 0.13 U
MW-29	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-29	10/15/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-29	1/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-30	12/1/1999	115	34	ND
MW-30	12/9/1999	115	34	< 10 U
MW-30	3/1/2000	86	25	ND
MW-30	9/20/2000	102	25	< 10 U
MW-30	3/27/2001	43	11	< 10 U
MW-30	9/11/2001	63	18	< 10 U
MW-30	9/10/2002	48	14	< 10 U
MW-30	2/27/2003	60	20.3	< 10 U
MW-30	9/24/2003	46.8	13.7	< 10 U
MW-30	4/14/2004	36.6	11.8	< 10 U
MW-30	9/22/2004	36.2	12.1	< 10 U
MW-30	9/28/2005	59.6	15.6	< 10 U
MW-30	10/12/2006	53	15	< 10 U
MW-30	9/20/2007	39	11	< 10 U
MW-30	12/10/2008	37	11	< 5 U
MW-30	11/3/2010	50	15	< 5 U
MW-30	10/26/2011	57	16	< 5 U
MW-30	4/18/2012	150	32	< 5 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-30	10/18/2012	65	19	< 0.11 U
MW-30	4/25/2013	49	18	0.49 J
MW-30	10/14/2013	40	16	< 0.11 U
MW-31	1/5/2001	< 5 U	< 5 U	< 10 U
MW-31	3/26/2001	< 5 U	< 5 U	< 10 U
MW-31	9/13/2001	< 5 U	< 5 U	< 10 U
MW-31	9/11/2002	< 5 U	< 5 U	< 10 U
MW-31	2/28/2003	< 5 U	< 5 U	< 10 U
MW-31	9/25/2003	< 5 U	< 5 U	< 10 U
MW-31	4/15/2004	< 5 U	< 5 U	< 10 U
MW-31	9/23/2004	< 5 U	< 5 U	< 10 U
MW-31	4/5/2005	< 5 U	< 5 U	< 10 U
MW-31	9/27/2005	< 5 U	< 5 U	< 10 U
MW-31	3/15/2006	< 5 U	< 5 U	< 10 U
MW-31	10/11/2006	3 J	< 5 U	< 10 U
MW-31	4/19/2007	< 5 U	< 5 U	< 10 U
MW-31	9/18/2007	< 5 U	< 5 U	< 10 U
MW-31	4/30/2008	2 J	< 5 U	< 10 U
MW-31	12/11/2008	< 5 U	< 5 U	< 5 U
MW-31	4/25/2009	< 5 U	< 5 U	< 5 U
MW-31	5/12/2010	< 5 U	< 5 U	< 5 U
MW-31	11/7/2010	48	< 5 U	< 5 U
MW-31	3/23/2011	< 5 U	< 5 U	< 5 U
MW-31	10/26/2011	< 5 U	< 5 U	< 5 U
MW-31	10/19/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-31	10/18/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-31	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-31	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-31	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-31	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-31	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-31	1/12/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-31R	1/19/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-32	1/5/2001	108	< 5 U	< 10 U
MW-32	3/27/2001	174	< 5 U	< 10 U
MW-32	9/13/2001	95	< 5 U	< 10 U
MW-32	9/11/2002	109	< 5 U	< 10 U
MW-32	2/28/2003	133	< 5 U	< 10 U
MW-32	9/25/2003	32.3	< 5 U	< 10 U
MW-32	4/15/2004	76.9	< 5 U	< 10 U
MW-32	9/23/2004	51.4	< 5 U	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-32	4/5/2005	158	< 5 U	< 10 U
MW-32	9/27/2005	97.6	< 5 U	< 10 U
MW-32	3/15/2006	111	< 5 U	< 10 U
MW-32	10/12/2006	85	4 J	< 10 U
MW-32	4/19/2007	66.3	10.1	< 10 U
MW-32	9/18/2007	78	< 5 U	< 10 U
MW-32	4/30/2008	70	2 J	< 10 U
MW-32	12/11/2008	60	< 5 U	< 5 U
MW-32	4/25/2009	47	< 5 U	< 5 U
MW-32	10/28/2009	68	1.8 J	< 5 U
MW-32	5/12/2010	58	< 5 U	< 5 U
MW-32	11/6/2010	120	< 5 U	< 5 U
MW-32	3/24/2011	66	1.4 J	< 5 U
MW-32	10/26/2011	73	< 5 U	< 5 U
MW-32	10/19/2012	61	1.2 J	< 0.11 U
MW-32	10/18/2013	48	1.4 J	< 0.11 U
MW-32	3/8/2014	36.8	1.1 J	< 0.13 U
MW-32	5/13/2014	33.1	0.19 J	< 0.13 U
MW-32	7/29/2014	37.2	1.0 J	< 0.50 U
MW-32	10/14/2014	29.7	0.80 J	< 0.50 U
MW-32	1/14/2015	20.2	0.55 J	< 0.50 U
MW-32R	1/19/2015	12.9	< 0.50 U	< 0.50 U
MW-33	1/5/2001	120	< 5 U	< 10 U
MW-33	3/27/2001	260	7	< 10 U
MW-33	9/13/2001	310	8	< 10 U
MW-33	9/11/2002	450	8	< 10 U
MW-33	2/28/2003	274	6.62	< 10 U
MW-33	9/25/2003	198	5.95	< 10 U
MW-33	4/15/2004	871	21.3	< 10 U
MW-33	9/23/2004	798	15.3	< 10 U
MW-33	4/5/2005	1430	24.5	< 10 U
MW-33	9/27/2005	1030	15.2	< 10 U
MW-33	3/15/2006	1610	20.5	< 10 U
MW-33	10/12/2006	1300	19	< 10 U
MW-33	4/19/2007	1430	9.2 J	< 50 U
MW-33	9/18/2007	1700	25	< 10 U
MW-33	4/30/2008	1100	16	< 10 U
MW-33	12/11/2008	1200	18	< 5 U
MW-33	4/25/2009	1200	19	< 5 U
MW-33	5/27/2009	1000	19	< 5 U
MW-33	10/28/2009	1200	20	< 5 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-33	5/12/2010	1100	21	< 5 U
MW-33	11/6/2010	1200	17	< 5 U
MW-33	3/4/2011	500	14	< 0.85 U
MW-33	5/23/2011	1300	18	NT
MW-33	10/26/2011	1000	16	< 5 U
MW-33	10/19/2012	1300	18	0.56 J
MW-33	10/18/2013	1100	19	< 0.11 U
MW-33	3/8/2014	918	15.9	0.56 J
MW-33	5/14/2014	954	15.1	0.56 J
MW-33	7/29/2014	1600	20.8	0.59 J
MW-33	10/15/2014	1290	15.3	< 0.50 U
MW-33	1/14/2015	1080	13.9	< 0.50 U
MW-33R	1/18/2015	799	9.9	< 0.50 U
MW-34	3/28/2001	83	< 5 U	< 10 U
MW-34	9/13/2001	61	< 5 U	< 10 U
MW-34	9/9/2002	84	< 5 U	< 10 U
MW-34	2/28/2003	< 5 U	< 5 U	< 10 U
MW-34	9/25/2003	28.4	< 5 U	< 10 U
MW-34	11/14/2003	121	< 5 U	< 10 U
MW-34	4/15/2004	119	< 5 U	< 10 U
MW-34	9/23/2004	81.1	< 5 U	< 10 U
MW-34	12/9/2004	93.3	< 5 U	< 10 U
MW-34	4/5/2005	65.8	< 5 U	< 10 U
MW-34	9/30/2005	83.7	< 5 U	< 10 U
MW-34	3/14/2006	77.1	< 5 U	< 10 U
MW-34	10/11/2006	63	4 J	< 10 U
MW-34	4/18/2007	41	9.79	< 10 U
MW-34	9/19/2007	61	< 5 U	< 10 U
MW-34	4/30/2008	32	< 5 U	< 10 U
MW-34	12/10/2008	53	< 5 U	< 5 U
MW-34	4/24/2009	43	< 5 U	< 5 U
MW-34	5/27/2009	12	< 5 U	< 5 U
MW-34	10/28/2009	34	< 5 U	< 5 U
MW-34	5/12/2010	38	< 5 U	< 5 U
MW-34	11/7/2010	70	< 5 U	< 5 U
MW-34	11/7/2010	73	< 5 U	< 5 U
MW-34	3/24/2011	40	< 5 U	< 5 U
MW-34	3/24/2011	42	< 5 U	< 5 U
MW-34	10/26/2011	56	< 5 U	< 5 U
MW-34	10/20/2012	90	1.6 J	< 0.11 U
MW-34	10/17/2013	43	0.90 J	< 0.11 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-34	3/8/2014	28.7	0.61 J	< 0.13 U
MW-34	5/13/2014	19.9	< 0.080 U	< 0.13 U
MW-34	7/29/2014	78.2	1.7 J	< 0.50 U
MW-34	10/15/2014	47.7	0.96 J	< 0.50 U
MW-34	1/13/2015	22.0	< 0.50 U	< 0.50 U
MW-35R	3/28/2001	960	34	< 10 U
MW-35R	9/13/2001	1030	40	< 20 U
MW-35R	9/9/2002	900	31	< 10 U
MW-35R	2/28/2003	246	15.1	< 10 U
MW-35R	9/25/2003	297	19.8	< 10 U
MW-35R	11/14/2003	990	34.9	< 10 U
MW-35R	4/15/2004	1150	45.8	< 10 U
MW-35R	9/23/2004	685	28.4	< 10 U
MW-35R	12/9/2004	880	42	< 10 U
MW-35R	4/6/2005	886	35	< 10 U
MW-35R	9/30/2005	804	29.3	< 10 U
MW-35R	3/14/2006	858	24.2	< 10 U
MW-35R	4/6/2006	1540	52.5	< 10 U
MW-35R	10/11/2006	910	29	< 10 U
MW-35R	4/18/2007	900	27.6	< 10 U
MW-35R	9/19/2007	1100	28	< 10 U
MW-35R	4/30/2008	1100	33	< 10 U
MW-35R	12/11/2008	790	27	< 5 U
MW-35R	4/24/2009	1100	37	< 5 U
MW-35R	5/7/2009	< 5 U	< 5 U	< 5 U
MW-35R	5/27/2009	< 5 U	< 5 U	< 5 U
MW-35R	11/5/2010	240	9.9	< 5 U
MW-35R	3/4/2011	180	8.4	< 0.85 U
MW-35R	5/23/2011	260	13	NT
MW-35R	10/25/2011	280	12	< 5 U
MW-35R	10/20/2012	280	10	< 0.11 U
MW-35R	10/17/2013	200	12	< 0.11 U
MW-35R	10/17/2013	220	13	< 0.11 U
MW-35R	3/8/2014	345	14.9	< 0.13 U
MW-35R	5/13/2014	183	6.1	< 0.13 U
MW-35R	7/30/2014	64.7	2.8 J	< 0.50 U
MW-35R	10/14/2014	79.2	2.6 J	< 0.50 U
MW-35R	1/13/2015	10.9	< 0.50 U	< 0.50 U
MW-36	3/28/2001	< 5 U	< 5 U	< 10 U
MW-36	9/13/2001	< 5 U	< 5 U	< 10 U
MW-36	9/9/2002	< 5 U	< 5 U	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-36	2/28/2003	< 5 U	< 5 U	< 10 U
MW-36	9/25/2003	< 5 U	< 5 U	< 10 U
MW-36	11/14/2003	< 5 U	< 5 U	< 10 U
MW-36	4/15/2004	< 5 U	< 5 U	< 10 U
MW-36	9/23/2004	< 5 U	< 5 U	< 10 U
MW-36	4/6/2005	< 5 U	< 5 U	< 10 U
MW-36	9/30/2005	< 5 U	< 5 U	< 10 U
MW-36	3/17/2006	< 5 U	< 5 U	< 10 U
MW-36	10/11/2006	< 5 U	< 5 U	< 10 U
MW-36	4/18/2007	< 5 U	< 5 U	< 10 U
MW-36	9/20/2007	< 5 U	< 5 U	< 10 U
MW-36	4/30/2008	< 5 U	< 5 U	< 10 U
MW-36	12/11/2008	< 5 U	< 5 U	< 5 U
MW-36	4/24/2009	< 5 U	< 5 U	< 5 U
MW-36	5/7/2009	< 5 U	< 5 U	< 5 U
MW-36	5/8/2009	< 5 U	< 5 U	< 5 U
MW-36	5/28/2009	< 5 U	< 5 U	< 5 U
MW-36	10/28/2009	< 5 U	< 5 U	< 5 U
MW-36	5/12/2010	< 5 U	< 5 U	< 5 U
MW-36	11/7/2010	9.9	< 5 U	< 5 U
MW-36	3/24/2011	< 5 U	< 5 U	< 5 U
MW-36	10/26/2011	< 5 U	< 5 U	< 5 U
MW-36	10/19/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-36	10/17/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-36	3/6/2014	0.22 J	< 0.080 U	< 0.13 U
MW-36	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-36	7/29/2014	0.61 J	< 0.50 U	< 0.50 U
MW-36	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-36	1/12/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-37	9/14/2001	5000	340	< 100 U
MW-37	11/20/2001	< 5 U	< 5 U	< 10 U
MW-37	9/11/2002	1400	10000	300
MW-37	2/27/2003	4050	5660	2500
MW-37	7/17/2003	2560	1710	316
MW-37	9/24/2003	3700	7020	973
MW-37	4/13/2004	5190	3160	1180
MW-37	9/21/2004	5030	5650	1370
MW-37	4/5/2005	5310	2360	1030 E
MW-37	9/29/2005	6780	3210	910 E
MW-37	3/16/2006	11200	5020	1730
MW-37	10/13/2006	13000	5300	1200

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-37	10/13/2006	13000	5000	1200
MW-37	4/19/2007	9490	3010	780
MW-37	9/21/2007	22000	9100	2800
MW-37	4/30/2008	16000	3300	1800
MW-37	12/10/2008	24000	6300	1800
MW-37	4/27/2009	11000	3200	1200
MW-37	10/27/2009	37000	7400	2200
MW-37	5/11/2010	33000	7200	2400
MW-37	11/4/2010	54000	10000	2200
MW-37	3/22/2011	36000	6000	2300
MW-37	10/26/2011	57000	9700	2500
MW-37	4/18/2012	29000	5300	2100
MW-37	10/19/2012	4800	1100	230
MW-37	4/25/2013	1700	900	230
MW-37	10/17/2013	1100	1500	1300
MW-38	9/14/2001	620	90	< 20 U
MW-38	9/29/2005	< 5 U	98.9	2150
MW-38	10/13/2006	26	130	2000 J
MW-38	12/10/2008	44	110	1400
MW-38	10/26/2011	580	870	1100
MW-38	10/18/2012	1000	750	700
MW-38	10/16/2013	2300	1200	560
MW-38	3/8/2014	1790	535	68.4
MW-38	5/14/2014	2040	426 J	98.2
MW-38	5/14/2014	1650	428	97.9
MW-38	7/31/2014	1720	637	197
MW-38	10/16/2014	6970	869	370
MW-38	10/16/2014	6750	781	321
MW-38	12/4/2014	3190	697	193
MW-38	1/15/2015	3910	1190	143
MW-38	1/15/2015	5440	1900	133
MW-39	7/18/2003	< 5 U	< 5 U	< 10 U
MW-39	9/25/2003	< 5 U	< 5 U	< 10 U
MW-39	11/14/2003	< 5 U	< 5 U	< 10 U
MW-39	4/15/2004	< 5 U	< 5 U	< 10 U
MW-39	9/23/2004	< 5 U	< 5 U	< 10 U
MW-39	4/8/2005	< 5 U	< 5 U	< 10 U
MW-39	9/30/2005	< 5 U	< 5 U	< 10 U
MW-39	3/17/2006	< 5 U	< 5 U	< 10 U
MW-39	10/11/2006	< 5 U	< 5 U	< 10 U
MW-39	4/18/2007	< 5 U	< 5 U	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-39	9/19/2007	< 5 U	< 5 U	< 10 U
MW-39	4/30/2008	< 5 U	< 5 U	< 10 U
MW-39	12/9/2008	< 5 U	< 5 U	< 5 U
MW-39	4/24/2009	< 5 U	< 5 U	< 5 U
MW-39	10/27/2009	< 5 U	< 5 U	< 5 U
MW-39	5/11/2010	< 5 U	< 5 U	< 5 U
MW-39	11/7/2010	20	< 5 U	< 5 U
MW-39	3/24/2011	< 5 U	< 5 U	< 5 U
MW-39	10/26/2011	< 5 U	< 5 U	< 5 U
MW-39	10/19/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-39	10/18/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-39	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-39	5/13/2014	0.23 J	< 0.080 U	< 0.13 U
MW-39	7/29/2014	0.79 J	< 0.50 U	< 0.50 U
MW-39	10/13/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-39	1/12/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-40	7/18/2003	< 5 U	< 5 U	< 10 U
MW-40	9/25/2003	< 5 U	< 5 U	< 10 U
MW-40	11/14/2003	< 5 U	< 5 U	< 10 U
MW-40	11/14/2003	< 5 U	< 5 U	< 10 U
MW-40	4/15/2004	< 5 U	< 5 U	< 10 U
MW-40	9/23/2004	< 5 U	< 5 U	< 10 U
MW-40	4/7/2005	< 5 U	< 5 U	< 10 U
MW-40	9/29/2005	< 5 U	< 5 U	< 10 U
MW-40	3/14/2006	< 5 U	< 5 U	< 10 U
MW-40	10/10/2006	< 5 U	< 5 U	< 10 U
MW-40	4/18/2007	< 5 U	< 5 U	< 10 U
MW-40	9/18/2007	< 5 U	< 5 U	< 10 U
MW-40	4/28/2008	< 5 U	< 5 U	< 10 U
MW-40	12/11/2008	< 5 U	< 5 U	< 5 U
MW-40	4/24/2009	< 5 U	< 5 U	< 5 U
MW-40	5/27/2009	< 5 U	< 5 U	< 5 U
MW-40	10/29/2009	< 5 U	< 5 U	< 5 U
MW-40	5/12/2010	< 5 U	< 5 U	< 5 U
MW-40	11/4/2010	< 5 U	< 5 U	< 5 U
MW-40	3/23/2011	< 5 U	< 5 U	< 5 U
MW-40	10/26/2011	< 5 U	< 5 U	< 5 U
MW-40	4/18/2012	3.9 J	< 5 U	< 5 U
MW-40	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-40	4/23/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-40	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-40	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-40	5/12/2014	0.76 J	< 0.080 U	< 0.13 U
MW-40	7/29/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-40	10/13/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-40	1/12/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-41	7/18/2003	972	50.6	< 10 U
MW-41	7/18/2003	964	45.5	< 10 U
MW-41	9/25/2003	722	37.8	< 10 U
MW-41	11/14/2003	331	205	< 10 U
MW-41	4/15/2004	760	54.2	< 10 U
MW-41	9/23/2004	1060	48	< 10 U
MW-41	4/7/2005	1170	58	< 10 U
MW-41	9/30/2005	1120	55.8	< 10 U
MW-41	3/17/2006	917	52.5	< 10 U
MW-41	10/13/2006	970	43	< 10 UJ
MW-41	4/18/2007	900	30.1	< 10 U
MW-41	9/20/2007	850	32	< 10 U
MW-41	4/30/2008	730	31	< 10 U
MW-41	12/11/2008	820	29	< 5 U
MW-41	4/24/2009	660	25	< 5 U
MW-41	5/7/2009	180	4.7 J	< 5 U
MW-41	5/8/2009	180	4.7 J	< 5 U
MW-41	5/27/2009	230	16	< 5 U
MW-41	10/28/2009	180	4 J	< 5 U
MW-41	5/13/2010	610	19	< 5 U
MW-41	11/5/2010	930	31	< 5 U
MW-41	3/4/2011	120	20	< 0.85 U
MW-41	5/23/2011	370	15	NT
MW-41	10/25/2011	420	18	< 5 U
MW-41	10/20/2012	620	23	< 0.11 U
MW-41	10/20/2012	550	21	< 0.11 U
MW-41	10/16/2013	520	24	< 0.11 U
MW-41	3/7/2014	501	19.7	0.68 J
MW-41	5/14/2014	518	18.0	0.50 J
MW-41	7/30/2014	511	19.1	< 0.50 U
MW-41	7/30/2014	480	19.7	< 0.50 U
MW-41	10/15/2014	491	16.9	< 0.50 U
MW-41	1/14/2015	425	15.6	< 0.50 U
MW-42B	11/14/2003	481	21.1	< 10 U
MW-42B	4/15/2004	856	29.3	< 10 U
MW-42B	9/23/2004	400	19.8	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-42B	4/5/2005	1310	32	< 10 U
MW-42B	9/27/2005	1470	27.3	< 10 U
MW-42B	3/15/2006	2270	37.2	< 10 U
MW-42B	10/10/2006	2000	35	2 J
MW-42B	4/17/2007	1600	36.8	< 10 U
MW-42B	9/18/2007	2100	39	4 J
MW-42B	4/29/2008	1600	33	3 J
MW-42B	12/9/2008	1100	30	< 5 U
MW-42B	4/25/2009	1500	35	< 5 U
MW-43	11/14/2003	223	18.5	< 10 U
MW-43	4/15/2004	510	12.1	< 10 U
MW-43	9/23/2004	64.7	6.31	< 10 U
MW-43	4/5/2005	304	11.9	< 10 U
MW-43	9/27/2005	518	21.3	< 10 U
MW-43	3/15/2006	1300	35	< 10 U
MW-43	10/11/2006	920	30	< 10 U
MW-43	4/17/2007	220	14.1	< 10 U
MW-43	9/18/2007	350	13	< 10 U
MW-43	4/28/2008	120	4 J	< 10 U
MW-43	12/9/2008	150	5.3	< 5 U
MW-43	4/25/2009	120	< 5 U	< 5 U
MW-43	5/7/2009	180	6	< 5 U
MW-43	5/8/2009	180	6	< 5 U
MW-46R	11/14/2003	39.9	< 5 U	< 10 U
MW-46R	4/15/2004	77.1	27.2	< 10 U
MW-46R	9/23/2004	142	21.2	< 10 U
MW-46R	4/6/2005	210	28.4	< 10 U
MW-46R	9/28/2005	222	15.6	< 10 U
MW-46R	3/16/2006	111	6.37	< 10 U
MW-46R	4/6/2006	300	< 5 U	< 10 U
MW-46R	10/11/2006	450	8	< 10 U
MW-46R	4/17/2007	440	12.5	< 10 U
MW-46R	9/18/2007	420	9	< 10 U
MW-46R	4/29/2008	430	8	< 10 U
MW-46R	12/9/2008	310	19	< 5 U
MW-46R	4/25/2009	460	11	< 5 U
MW-46R	5/27/2009	< 5 U	< 5 U	< 5 U
MW-46R	10/27/2009	390	12	< 5 U
MW-46R	12/21/2009	410	10	< 1.6 U
MW-46R	5/11/2010	610	13	< 5 U
MW-46R	11/5/2010	650	12	< 5 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-46R	3/7/2011	670	14	< 0.85 U
MW-46R	3/22/2011	680	11	< 5 U
MW-46R	5/23/2011	610	13	NT
MW-46R	10/26/2011	460	10	< 5 U
MW-46R	4/18/2012	680	14	< 5 U
MW-46R	10/20/2012	410	7.9	0.44 J
MW-46R	4/23/2013	470	7.6	0.91 J
MW-46R	10/18/2013	410	11	< 0.11 U
MW-46R	3/7/2014	469	12.8	0.46 J
MW-46R	5/14/2014	471	12.8	0.76 J
MW-46R	7/29/2014	472	13.7	0.64 J
MW-46R	10/16/2014	373	25.2	< 0.50 U
MW-46R	10/16/2014	410	24.6	< 0.50 U
MW-46R	1/13/2015	452	11.6	0.71 J
MW-50	4/15/2004	6.51	< 5 U	< 10 U
MW-50	9/23/2004	< 5 U	< 5 U	< 10 U
MW-50	12/10/2004	< 5 U	< 5 U	< 10 U
MW-50	4/6/2005	< 5 U	< 5 U	< 10 U
MW-50	9/28/2005	< 5 U	< 5 U	< 10 U
MW-50	3/17/2006	< 5 U	< 5 U	< 10 U
MW-50	10/12/2006	< 5 U	< 5 U	< 10 U
MW-50	4/19/2007	< 5 U	< 5 U	< 10 U
MW-50	9/19/2007	< 5 U	< 5 U	< 10 U
MW-50	4/29/2008	< 5 U	< 5 U	< 10 U
MW-50	12/10/2008	< 5 U	< 5 U	< 5 U
MW-50	4/24/2009	< 5 U	< 5 U	< 5 U
MW-50	10/27/2009	< 5 U	< 5 U	< 5 U
MW-50	5/11/2010	< 5 U	< 5 U	< 5 U
MW-50	11/5/2010	< 5 U	< 5 U	< 5 U
MW-50	3/23/2011	< 5 U	< 5 U	< 5 U
MW-50	10/25/2011	< 5 U	< 5 U	< 5 U
MW-50	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-50	10/16/2013	1.6 J	< 0.56 U	< 0.11 U
MW-50	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-50	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-50	7/28/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-50	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-50	1/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-55	12/9/2004	< 5 U	< 5 U	< 10 U
MW-55	4/8/2005	< 5 U	< 5 U	< 10 U
MW-55	9/28/2005	< 5 U	< 5 U	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-55	3/16/2006	< 5 U	< 5 U	< 10 U
MW-55	10/13/2006	2 J	< 5 U	< 10 UJ
MW-55	4/19/2007	2.6 J	< 5 U	< 10 U
MW-55	9/19/2007	5 J	< 5 U	< 10 U
MW-55	4/29/2008	< 5 U	< 5 U	< 10 U
MW-55	12/10/2008	< 5 U	< 5 U	< 5 U
MW-55	4/24/2009	< 5 U	< 5 U	< 5 U
MW-55	10/27/2009	3.6 J	< 5 U	< 5 U
MW-55	5/12/2010	4.2 J	< 5 U	< 5 U
MW-55	11/6/2010	14	< 5 U	< 5 U
MW-55	3/23/2011	5.5	< 5 U	< 5 U
MW-55	10/25/2011	7	< 5 U	< 5 U
MW-55	10/20/2012	9.2	< 0.56 U	< 0.11 U
MW-55	10/16/2013	13	< 0.56 U	< 0.11 U
MW-56	12/10/2004	90.2	< 5 U	< 10 U
MW-56	4/8/2005	88.2	< 5 U	< 10 U
MW-56	9/28/2005	207	< 5 U	< 10 U
MW-56	3/16/2006	8.7	< 5 U	< 10 U
MW-56	10/14/2006	110	2 J	< 10 UJ
MW-56	4/19/2007	< 5 U	< 5 U	< 10 U
MW-56	9/19/2007	38	< 5 U	< 10 U
MW-56	4/29/2008	4 J	< 5 U	< 10 U
MW-56	12/10/2008	93	< 5 U	< 5 U
MW-56	4/24/2009	14	< 5 U	< 5 U
MW-56	10/27/2009	8.7	< 5 U	< 5 U
MW-56	5/12/2010	230	6.4	< 5 U
MW-56	3/23/2011	71	2.6 J	< 5 U
MW-56	10/25/2011	150	11	1.9 J
MW-56	10/20/2012	470	11	< 0.11 U
MW-56	10/17/2013	590	17	< 0.11 U
MW-56	3/7/2014	618	15.3	0.15 J
MW-56	6/11/2014	307	17.6	0.16 J
MW-56	7/29/2014	516	19.3	< 0.50 U
MW-56	10/15/2014	408	12.1	< 0.50 U
MW-56	1/13/2015	326	10	< 0.50 U
MW-57	12/10/2004	207	6.72	< 10 U
MW-57	4/8/2005	282	6.83	< 10 U
MW-57	9/28/2005	96	< 5 U	< 10 U
MW-57	3/16/2006	254	7.56	< 10 U
MW-57	10/13/2006	64	< 5 U	< 10 UJ
MW-57	4/19/2007	201	3.77 J	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-57	9/20/2007	250	5 J	< 10 U
MW-57	4/30/2008	14	< 5 U	< 10 U
MW-57	12/10/2008	130	7.4	< 5 U
MW-57	4/24/2009	96	4.2 J	< 5 U
MW-57	10/27/2009	100	2.6 J	< 5 U
MW-57	5/12/2010	210	6	< 5 U
MW-57	3/23/2011	110	2.3 J	< 5 U
MW-57	10/25/2011	59	2 J	< 5 U
MW-57	10/20/2012	120	5.1	< 0.11 U
MW-57	10/17/2013	210	7.4	< 0.11 U
MW-57	3/7/2014	134	3.0 J	0.14 J
MW-57	6/11/2014	167	4.4 J	< 0.13 U
MW-57	7/29/2014	308	8.2	< 0.50 U
MW-57	10/15/2014	172	4.2 J	< 0.50 U
MW-57	1/13/2015	177	5.4	< 0.50 U
MW-58	12/9/2004	526	14.5	< 10 U
MW-58	4/7/2005	809	18.8	< 10 U
MW-58	9/28/2005	486	10.9	< 10 U
MW-58	3/16/2006	421	8.66	< 10 U
MW-58	10/13/2006	620	14	< 10 UJ
MW-58	4/19/2007	784	30.7	< 25 U
MW-58	4/19/2007	717	9.54 J	< 25 U
MW-58	9/19/2007	650	17	< 10 U
MW-58	9/19/2007	640	16	< 10 U
MW-58	4/30/2008	630	15	< 10 U
MW-58	4/30/2008	580	14	< 10 U
MW-58	12/11/2008	530	12	< 5 U
MW-58	12/11/2008	510	13	< 5 U
MW-58	4/25/2009	590	14	< 5 U
MW-58	4/25/2009	580	15	< 5 U
MW-58	10/28/2009	480	11	< 5 U
MW-58	10/28/2009	480	11	< 5 U
MW-58	5/12/2010	660	14	< 5 U
MW-58	11/6/2010	560	11	< 5 U
MW-58	11/6/2010	580	12	< 5 U
MW-58	3/24/2011	710	12	< 5 U
MW-58	3/24/2011	700	14	1.1 J
MW-58	10/20/2012	440	18	0.84 J
MW-58	10/17/2013	410	13	1.5 J
MW-58	10/17/2013	420	12	1.1 J
MW-58	3/7/2014	293	22.3	0.93 J

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-58	5/12/2014	397	12.1	0.72 J
MW-58	7/29/2014	399	12.7	0.76 J
MW-58	10/15/2014	360	10.8	0.68 J
MW-58	1/14/2015	385	14.7	0.71 J
MW-60	4/1/2005	< 5 U	< 5 U	< 10 U
MW-60	9/30/2005	< 5 U	< 5 U	< 10 U
MW-60	3/17/2006	< 5 U	< 5 U	< 10 U
MW-60	10/12/2006	< 5 U	< 5 U	< 10 U
MW-60	4/19/2007	< 5 U	< 5 U	< 10 U
MW-60	9/19/2007	< 5 U	< 5 U	< 10 U
MW-60	4/29/2008	< 5 U	< 5 U	< 10 U
MW-60	12/10/2008	< 5 U	< 5 U	< 5 U
MW-60	4/24/2009	< 5 U	< 5 U	< 5 U
MW-60	10/27/2009	< 5 U	< 5 U	< 5 U
MW-60	5/11/2010	< 5 U	< 5 U	< 5 U
MW-60	11/4/2010	< 5 U	< 5 U	< 5 U
MW-60	3/23/2011	< 5 U	< 5 U	< 5 U
MW-60	10/25/2011	< 5 U	< 5 U	< 5 U
MW-60	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-60	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-60	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-60	5/13/2014	0.21 J	< 0.080 U	< 0.13 U
MW-60	7/28/2014	1.0 J	< 0.50 U	< 0.50 U
MW-60	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-60	1/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-61	4/1/2005	< 5 U	< 5 U	< 10 U
MW-61	4/1/2005	< 5 U	< 5 U	< 10 U
MW-61	9/30/2005	< 5 U	< 5 U	< 10 U
MW-61	3/17/2006	< 5 U	< 5 U	< 10 U
MW-61	10/12/2006	< 5 U	< 5 U	< 10 U
MW-61	4/19/2007	< 5 U	< 5 U	< 10 U
MW-61	9/19/2007	< 5 U	< 5 U	< 10 U
MW-61	4/29/2008	< 5 U	< 5 U	< 10 U
MW-61	12/10/2008	< 5 U	< 5 U	< 5 U
MW-61	4/24/2009	4 J	< 5 U	< 5 U
MW-61	10/27/2009	< 5 U	< 5 U	< 5 U
MW-61	5/11/2010	< 5 U	< 5 U	< 5 U
MW-61	11/4/2010	< 5 U	< 5 U	< 5 U
MW-61	3/23/2011	1.8 J	< 5 U	< 5 U
MW-61	10/25/2011	< 5 U	< 5 U	< 5 U
MW-61	10/17/2012	2.4 J	< 0.56 U	< 0.11 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-61	10/16/2013	4.0 J	< 0.56 U	< 0.11 U
MW-61	3/6/2014	4.7 J	< 0.080 U	< 0.13 U
MW-61	5/13/2014	6.6	< 0.080 U	< 0.13 U
MW-61	7/28/2014	8.1	< 0.50 U	< 0.50 U
MW-61	10/14/2014	7.9	< 0.50 U	< 0.50 U
MW-61	1/13/2015	10.2	< 0.50 U	< 0.50 U
MW-62	4/1/2005	< 5 U	< 5 U	< 10 U
MW-62	9/30/2005	< 5 U	< 5 U	< 10 U
MW-62	3/16/2006	< 5 U	< 5 U	< 10 U
MW-62	10/12/2006	< 5 U	< 5 U	< 10 U
MW-62	4/19/2007	< 5 U	< 5 U	< 10 U
MW-62	9/19/2007	< 5 U	< 5 U	< 10 U
MW-62	4/29/2008	< 5 U	< 5 U	< 10 U
MW-62	12/10/2008	< 5 U	< 5 U	< 5 U
MW-62	4/24/2009	< 5 U	< 5 U	< 5 U
MW-62	10/27/2009	< 5 U	< 5 U	< 5 U
MW-62	5/11/2010	< 5 U	< 5 U	< 5 U
MW-62	3/23/2011	< 5 U	< 5 U	< 5 U
MW-62	10/25/2011	1.9 J	< 5 U	< 5 U
MW-62	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-62	10/17/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-62	3/7/2014	0.18 J	< 0.080 U	< 0.13 U
MW-62	5/14/2014	0.62 J	< 0.080 U	< 0.13 U
MW-62	7/29/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-62	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-62	1/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-63	4/1/2005	8.14	< 5 U	< 10 U
MW-63	9/30/2005	< 5 U	< 5 U	< 10 U
MW-63	3/16/2006	9.76	< 5 U	< 10 U
MW-63	4/6/2006	11.6	< 5 U	< 10 U
MW-63	10/12/2006	4 J	< 5 U	< 10 U
MW-63	4/19/2007	4.08 J	< 5 U	< 10 U
MW-63	9/19/2007	8	< 5 U	< 10 U
MW-63	4/30/2008	3 J	< 5 U	< 10 U
MW-63	12/10/2008	< 5 U	< 5 U	< 5 U
MW-63	4/24/2009	4.3 J	< 5 U	< 5 U
MW-63	10/27/2009	7.7	< 5 U	< 5 U
MW-63	5/11/2010	7.6	< 5 U	< 5 U
MW-63	11/6/2010	11	< 5 U	< 5 U
MW-63	3/23/2011	12	< 5 U	< 5 U
MW-63	10/25/2011	9.8	< 5 U	< 5 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-63	10/19/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-63	10/17/2013	7.5	< 0.56 U	< 0.11 U
MW-63	3/7/2014	9.4	1.3 J	< 0.13 U
MW-63	5/14/2014	12.2	0.61 J	0.13 J
MW-63	7/28/2014	8.3	0.99 J	< 0.50 U
MW-63	10/14/2014	9.4	0.98 J	< 0.50 U
MW-63	1/13/2015	8.2	1.0	< 0.50 U
MW-65	10/11/2006	470	19	< 10 U
MW-65	10/11/2006	560	18	< 10 U
MW-65	4/19/2007	1350	23.4	< 10 U
MW-65	9/20/2007	580	17	< 10 U
MW-65	4/30/2008	570	16	< 10 U
MW-65	12/11/2008	460	11	< 5 U
MW-65	4/24/2009	620	19	< 5 U
MW-65	11/7/2010	400	11	< 5 U
MW-65	3/4/2011	370	13	< 0.85 U
MW-65	10/25/2011	310	10	< 5 U
MW-65	10/20/2012	280	8.9	< 0.11 U
MW-65	10/17/2013	220	8.6	< 0.11 U
MW-65	3/8/2014	199	6.6	< 0.13 U
MW-65	5/14/2014	195	6.9	< 0.13 U
MW-65	7/30/2014	17.1	< 0.50 U	< 0.50 U
MW-65	10/14/2014	30.8	0.54 J	< 0.50 U
MW-65	1/13/2015	19.2	< 0.50 U	< 0.50 U
MW-66	4/6/2006	< 5 U	< 5 U	< 10 U
MW-66	10/12/2006	2 J	< 5 U	< 10 U
MW-66	4/18/2007	< 5 U	< 5 U	< 10 U
MW-66	9/19/2007	4 J	< 5 U	< 10 U
MW-66	4/29/2008	< 5 U	< 5 U	< 10 U
MW-66	12/10/2008	< 5 U	< 5 U	< 5 U
MW-66	4/25/2009	< 5 U	< 5 U	< 5 U
MW-66	10/28/2009	< 5 U	< 5 U	< 5 U
MW-66	5/11/2010	< 5 U	< 5 U	< 5 U
MW-66	11/3/2010	< 5 U	< 5 U	< 5 U
MW-66	3/24/2011	1.6 J	< 5 U	< 5 U
MW-66	10/26/2011	1.8 J	< 5 U	< 5 U
MW-66	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-66	10/17/2013	2.1 J	< 0.56 U	< 0.11 U
MW-66	3/7/2014	3.5 J	< 0.080 U	< 0.13 U
MW-66	5/13/2014	3.1 J	< 0.080 U	< 0.13 U
MW-66	7/28/2014	2.6 J	< 0.50 U	< 0.50 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-66	10/13/2014	2.3 J	< 0.50 U	< 0.50 U
MW-66	1/14/2015	2.4	< 0.50 U	< 0.50 U
MW-67	4/6/2006	< 5 U	< 5 U	< 10 U
MW-67	10/12/2006	1 J	< 5 U	< 10 U
MW-67	4/19/2007	< 5 U	< 5 U	< 10 U
MW-67	9/18/2007	< 5 U	< 5 U	< 10 U
MW-67	4/29/2008	< 5 U	< 5 U	< 10 U
MW-67	12/10/2008	< 5 U	< 5 U	< 5 U
MW-67	4/25/2009	< 5 U	< 5 U	< 5 U
MW-67	10/28/2009	< 5 U	< 5 U	< 5 U
MW-67	5/11/2010	< 5 U	< 5 U	< 5 U
MW-67	11/3/2010	< 5 U	< 5 U	< 5 U
MW-67	3/24/2011	< 5 U	< 5 U	< 5 U
MW-67	10/26/2011	< 5 U	< 5 U	< 5 U
MW-67	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-67	10/17/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-67	3/7/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-67	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-67	7/28/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-67	10/13/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-67	1/12/2015	1.3	< 0.50 U	< 0.50 U
MW-68	1/15/2009	< 5 U	< 5 U	< 5 U
MW-68	4/24/2009	< 5 U	< 5 U	< 5 U
MW-68	10/28/2009	< 5 U	< 5 U	< 5 U
MW-68	5/13/2010	< 5 U	< 5 U	< 5 U
MW-68	11/6/2010	9.5	< 5 U	< 5 U
MW-68	10/26/2011	< 5 U	< 5 U	< 5 U
MW-68	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-68	10/16/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-68	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-68	5/14/2014	0.49 J	< 0.080 U	< 0.13 U
MW-68	7/29/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-68	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-68	1/12/2015	< 0.50 U	< 0.50 U	< 0.50 U
RW-69	1/15/2009	170	7.1	< 5 U
RW-69	4/24/2009	62	< 5 U	< 5 U
RW-69	5/27/2009	290	10	< 5 U
RW-69	12/21/2009	200	6.3	< 1.6 U
RW-69	5/13/2010	170	8.2	< 5 U
RW-69	11/4/2010	320	9	< 5 U
RW-69	3/3/2011	200	7.1	< 0.85 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
RW-69	5/23/2011	130	3.0 J	NT
RW-69	10/26/2011	210	5.7	< 5 U
RW-69	4/18/2012	150	3.6 J	< 5 U
RW-69	10/18/2012	180	5.0	< 0.11 U
RW-69	4/23/2013	190	2.8 J	< 0.11 U
RW-69	10/16/2013	190	7.7	< 0.11 U
RW-69	3/7/2014	105	3.5 J	0.41 J
RW-69	5/13/2014	110	3.3 J	0.30 J
RW-69	7/29/2014	164	5.6	0.50 J
RW-69	10/14/2014	173	6.9	< 0.50 U
RW-69	1/14/2015	115	4.7	< 0.50 U
MW-70	11/4/2010	540	14	< 5 U
MW-70	3/22/2011	170	9.2	1.2 J
MW-70	10/26/2011	320	7.7	< 5 U
MW-70	4/18/2012	330	11	< 5 U
MW-70	10/18/2012	200	11	< 0.11 U
MW-70	4/23/2013	180	3.6 J	0.32 J
MW-70	10/16/2013	270	7.2	0.30 J
MW-71	10/28/2009	190	6.3	< 5 U
MW-71	5/13/2010	160	7.4	< 5 U
MW-71	11/4/2010	250	7.2	< 5 U
MW-71	3/22/2011	76	1.6 J	< 5 U
MW-71	10/26/2011	130	2.7 J	< 5 U
MW-71	4/18/2012	160	5.3	< 5 U
MW-71	10/20/2012	210	7.3	< 0.11 U
MW-71	4/23/2013	220	4.8 J	0.23 J
MW-71	10/16/2013	160	6.1	0.57 J
MW-71	3/7/2014	166	5.8	0.19 J
MW-71	5/13/2014	164	5.3	0.33 J
MW-71	7/29/2014	181	6.4	< 0.50 U
MW-71	10/14/2014	185	6.0	< 0.50 U
MW-71	1/14/2015	170	6.0	< 0.50 U
IW-72	1/16/2009	27	< 5 U	< 5 U
IW-72	4/23/2009	40	< 5 U	< 5 U
IW-72	5/8/2009	40	< 5 U	< 5 U
IW-72	3/3/2011	3.1 J	< 0.56 U	< 0.85 U
IW-72	5/19/2011	< 1.6 U	< 0.56 U	NT
IW-72	10/24/2011	< 5 U	< 5 U	< 5 U
IW-72	4/17/2012	3.8 J	< 5 U	< 5 U
IW-72	10/19/2012	< 1.6 U	< 0.56 U	< 0.11 U
IW-72	4/24/2013	< 1.6 U	< 0.56 U	< 0.11 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
IW-72	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
IW-72	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
IW-72	5/12/2014	< 0.17 U	< 0.080 U	< 0.13 U
IW-72	7/29/2014	< 0.50 U	< 0.50 U	< 0.50 U
IW-72	10/13/2014	< 0.50 U	< 0.50 U	< 0.50 U
IW-72	1/12/2015	< 0.50 U	< 0.50 U	< 0.50 U
IW-73	4/23/2009	400	16	< 5 U
IW-73	5/19/2011	160	3.6 J	NT
IW-73	10/25/2011	250	4.9 J	< 5 U
IW-73	4/17/2012	180	5.8	< 5 U
IW-73	10/20/2012	170	7.0	< 0.11 U
IW-73	4/24/2013	200	6.5	< 0.11 U
IW-73	4/24/2013	180	6.4	< 0.11 U
IW-73	10/15/2013	140	47	6.3
IW-73	3/7/2014	183	20.9	4.6
IW-73	5/14/2014	31.9	0.81 J	< 0.13 U
IW-73	7/29/2014	138	24.3	26.1
IW-73	10/14/2014	8.5	0.84 J	1.1 J
IW-73	1/14/2015	70.8	6.3	4.1
IW-74	4/23/2009	260	8.1	< 5 U
IW-74	5/19/2011	74	< 0.56 U	NT
IW-74	10/25/2011	150	3.1 J	< 5 U
IW-74	4/17/2012	130	2.4 J	< 5 U
IW-74	10/20/2012	160	3.4 J	< 0.11 U
IW-74	4/24/2013	160	4.8 J	< 0.11 U
IW-74	10/15/2013	190	5.7	< 0.11 U
IW-74	3/7/2014	135	4.3 J	1.5 J
IW-74	3/7/2014	151	4.5 J	2.2
IW-74	5/14/2014	169	4.3 J	0.80 J
IW-74	7/29/2014	177	5.8	0.91 J
IW-74	10/14/2014	143	3.3 J	< 0.50 U
IW-74	10/14/2014	144	3.3 J	< 0.50 U
IW-74	1/14/2015	139	3.5	< 0.50 U
IW-74	1/14/2015	141	3.8	< 0.50 U
IW-75	1/16/2009	140	2.4 J	< 5 U
IW-75	10/25/2011	< 5 U	< 5 U	< 5 U
IW-75	4/17/2012	2.9 J	< 5 U	< 5 U
IW-75	10/18/2012	< 1.6 U	< 0.56 U	< 0.11 U
IW-75	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
IW-76	4/23/2009	730	28	< 5 U
IW-76	5/7/2009	460	28	< 5 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
IW-76	3/4/2011	380	11	< 0.85 U
IW-76	5/23/2011	460	12	NT
IW-76	10/25/2011	130	2.2 J	< 5 U
IW-76	4/17/2012	400	8.9	< 5 U
IW-76	10/20/2012	610	16	< 0.11 U
IW-76	4/24/2013	420	13	0.39 J
IW-76	10/15/2013	450	8.7	< 0.11 U
IW-76	3/8/2014	127	1.5 J	< 0.13 U
IW-76	5/14/2014	10.3	< 0.080 U	< 0.13 U
IW-76	7/29/2014	319	2.7 J	< 0.50 U
IW-76	10/15/2014	214	6.7	< 0.50 U
IW-76	1/14/2015	288	8.8	< 0.50 U
IW-77	4/23/2009	570	20	< 5 U
IW-77	5/7/2009	300	17	< 5 U
IW-77	5/27/2009	250	13	< 5 U
IW-77	10/28/2009	380	13	< 5 U
IW-77	12/21/2009	250	12	< 1.6 U
IW-77	5/13/2010	260	11	< 5 U
IW-77	11/5/2010	1400	41	< 5 U
IW-77	3/4/2011	430	14	< 0.85 U
IW-77	5/23/2011	440	15	NT
IW-77	10/25/2011	1400	32	< 5 U
IW-77	4/17/2012	520	20	< 5 U
IW-77	4/17/2012	510	23	< 5 U
IW-77	10/19/2012	1000	32	0.65 J
IW-77	4/24/2013	530	21	< 0.11 U
IW-77	10/16/2013	1000	39	1.6 J
IW-77	10/16/2013	990	39	0.49 J
IW-77	3/8/2014	546	24.4	0.22 J
IW-77	5/14/2014	1460	36.0	0.66 J
IW-77	7/9/2014	1200	21.1	< 0.50 U
IW-77	7/29/2014	1540	35.2	< 0.50 U
IW-77	10/15/2014	741	15.8	< 0.50 U
IW-77	10/23/2014	554	11.9	< 0.50 U
IW-77	1/14/2015	201	4.8	< 0.50 U
IW-78	10/25/2011	350	12	< 5 U
IW-78	4/18/2012	120	2.3 J	< 5 U
IW-78	10/20/2012	310	8.7	< 0.11 U
IW-78	4/24/2013	7.0	< 0.56 U	< 0.11 U
IW-78	10/17/2013	190	4.6 J	< 0.11 U
IW-78	5/28/2014	255	6.2	< 0.13 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
IW-78	9/11/2014	39.6	1.2 J	< 0.50 U
IW-79	10/25/2011	570	13	< 5 U
IW-79	4/17/2012	430	2.1 J	< 5 U
IW-79	10/20/2012	670	20	0.45 J
IW-79	10/20/2012	480	16	< 0.11 U
IW-79	4/24/2013	420	9.0	< 0.11 U
IW-79	10/17/2013	440	12	< 0.11 U
IW-79	5/28/2014	426	6.9	< 0.13 U
IW-79	9/11/2014	105	1.8 J	< 0.50 U
IW-80	4/23/2009	170	4 J	< 5 U
IW-80	5/7/2009	69	< 5 U	< 5 U
IW-80	5/19/2011	27	< 0.56 U	NT
IW-80	10/25/2011	9.7	< 5 U	< 5 U
IW-80	4/17/2012	55	2.2 J	< 5 U
IW-80	10/19/2012	48	< 0.56 U	< 0.11 U
IW-80	4/24/2013	40	< 0.56 U	< 0.11 U
IW-80	10/17/2013	58	2.4 J	< 0.11 U
IW-80	10/17/2013	62	2.4 J	< 0.11 U
IW-80	3/8/2014	79.1 J	2.7 J	< 0.13 U
IW-80	5/13/2014	24.2	< 0.080 U	< 0.13 U
IW-80	7/30/2014	25.6	0.85 J	< 0.50 U
IW-80	10/14/2014	11.8	< 0.50 U	< 0.50 U
IW-80	1/13/2015	7.1	< 0.50 U	< 0.50 U
MW-81	5/29/2014	512	14.3	0.21 J
MW-81	7/9/2014	518	11.4	< 0.50 U
MW-81	9/11/2014	463	13.5	< 0.50 U
MW-81	1/13/2015	385	9.9	< 0.50 U
MW-82	5/28/2014	285	4.8 J	0.14 J
MW-82	7/9/2014	48.2	1.2 J	< 0.50 U
MW-82	9/11/2014	50.0	1.1 J	< 0.50 U
MW-82	1/13/2015	66.0	1.2	< 0.50 U
MW-83	5/23/2014	470	8.3	< 0.13 U
MW-83	9/12/2014	213	4.9 J	< 0.50 U
MW-83	10/23/2014	210	5.2	< 0.50 U
MW-83	1/15/2015	101	1.8	< 0.50 U
MW-84	5/27/2014	214	4.6 J	0.16 J
MW-84	9/12/2014	0.93 J	< 0.50 U	< 0.50 U
MW-84	10/23/2014	0.68 J	< 0.50 U	< 0.50 U
MW-84	1/14/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-85	5/29/2014	1970	99.4	23.1
MW-85	7/8/2014	3780	133	3.9

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-85	9/11/2014	5820	226 J	35.3
MW-85	12/5/2014	27700	280	7.7
MW-85	1/15/2015	5940	167	1.1
MW-86	5/29/2014	533000	1220 J	341 J
MW-86	9/11/2014	129000	91.6	4.1
MW-86	12/5/2014	169000	290 E	24.7
MW-86	1/15/2015	81200	128	4.5
MW-87	6/25/2014	564	41.8	< 0.50 U
MW-87	10/16/2014	594	47.8	< 0.50 U
MW-87	1/14/2015	661	51.3	< 0.50 U
MW-88	6/24/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-88	10/16/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-88	1/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-89	6/24/2014	19.5	< 0.50 U	< 0.50 U
MW-89	10/15/2014	11.3	< 0.50 U	< 0.50 U
MW-89	1/13/2015	11.4	< 0.50 U	< 0.50 U
MW-90	6/25/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-90	10/16/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-90	1/12/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-91	6/25/2014	234	21.7	< 0.50 U
MW-91	10/16/2014	319	28.8	< 0.50 U
MW-91	1/13/2015	354	31.5	< 0.50 U
MW-92	10/22/2014	2160	16.0	7.2
MW-92	12/4/2014	2200	23.4	10.3
MW-92	1/15/2015	1410	10.4	4.6
MW-93	10/22/2014	18200	145	5.0
MW-93	12/4/2014	14600	85.7	2.5
MW-93	1/15/2015	18000	131	3.4
MW-94	10/22/2014	11100	309 J	2.5
MW-94	12/4/2014	9570	250 J	3.0
MW-94	1/15/2015	9530	297	2.4
MW-95	10/22/2014	22300	151	25.7
MW-95	12/4/2014	20900	159	29.9
MW-95	1/15/2015	21100	177	25.6
MW-96	10/22/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-96	1/15/2015	0.59 J	< 0.50 U	< 0.50 U
MW-97	10/22/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-97	1/15/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-98	10/29/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-98	1/15/2015	< 0.50 U	< 0.50 U	< 0.50 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-99	10/22/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-99	1/15/2015	< 0.50 U	< 0.50 U	< 0.50 U
IW-101	3/23/2014	314	7.5	0.21 J
IW-101	4/30/2014	794	18.9	< 0.13 U
IW-101	5/23/2014	509	11.2	< 0.13 U
IW-101	7/8/2014	150	4.5 J	< 0.50 U
IW-101	9/12/2014	139	3.4 J	< 0.50 U
IW-102	3/23/2014	685	14.6	0.45 J
IW-102	4/30/2014	239	5.4	< 0.13 U
IW-103	3/23/2014	692	13.1	0.76 J
IW-103	4/30/2014	729	22.8	0.83 J
IW-104	3/23/2014	637	13.5	0.69 J
IW-104	4/30/2014	527	12.6	< 0.13 U
IW-105	3/23/2014	901	14.4	0.54 J
IW-105	4/30/2014	185	4.9 J	< 0.13 U
IW-106	3/23/2014	198	4.2 J	< 2 U
IW-106	4/30/2014	163	6.8	< 0.13 U
IW-106	5/23/2014	132	2.6 J	< 0.13 U
IW-107	3/23/2014	198	4.3 J	0.14 J
IW-107	4/30/2014	110	3.3 J	< 0.13 U
IW-108	3/23/2014	1280	27.8	0.83 J
IW-108	4/29/2014	72.1	4.1 J	< 0.13 U
IW-108	5/23/2014	59.0	1.5 J	< 0.13 U
IW-109	3/23/2014	362	7.4	0.23 J
IW-109	4/29/2014	91.2	2.5 J	< 0.13 U
IW-109	5/23/2014	110	1.9 J	< 0.13 U
IW-110	3/23/2014	464	9.8	0.5 J
IW-110	4/16/2014	397	9.4	0.17 J
IW-110	4/30/2014	268	8.2	0.33 J
IW-111	3/23/2014	704	14	0.63 J
IW-111	4/29/2014	260	6.4	< 0.13 U
IW-112	3/23/2014	219	4.9 J	0.23 J
IW-112	4/16/2014	200	4.8 J	< 0.13 U
IW-112	4/30/2014	104	3.8 J	< 0.13 U
IW-113	3/24/2014	510	11.1	0.43 J
IW-113	4/14/2014	435	8.7	< 0.13 U
IW-114	3/24/2014	397	9.7	0.25 J
IW-114	4/14/2014	336	8.1	< 0.13 U
IW-115	3/24/2014	622	14	0.25 J
IW-115	4/7/2014	455	9.1 J	< 1.3 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
IW-115	4/14/2014	449	9.3	< 0.13 U
IW-115	5/28/2014	504	11.2	0.27 J
IW-115	7/9/2014	352	7.4	< 0.50 U
IW-115	9/11/2014	355	8.0	< 0.50 U
IW-116	3/24/2014	486	10.9	0.33 J
IW-116	4/15/2014	546	10.8	0.34 J
IW-117	3/24/2014	384	9.1	0.23 J
IW-117	4/15/2014	384	9.9	< 0.13 U
IW-118	3/24/2014	496	11.6	0.34 J
IW-118	4/15/2014	395	9.7	< 0.13 U
IW-118	5/28/2014	437	9.3	< 0.13 U
IW-119	3/24/2014	524	11.5	0.33 J
IW-119	4/7/2014	478	9.1 J	< 1.3 U
IW-119	4/15/2014	509	11.3	< 0.13 U
IW-120	3/24/2014	289	7.9	0.14 J
IW-120	4/15/2014	390	10.2	< 0.13 U
IW-121	3/24/2014	402	8.9 J	< 10 U
IW-121	4/15/2014	445	11.7	< 0.13 U
IW-122	3/24/2014	473	11.5	0.29 J
IW-122	4/15/2014	384	10.0	< 0.13 U
IW-123	3/24/2014	532	12.2	0.40 J
IW-123	4/7/2014	539	8.8 J	< 1.3 U
IW-123	4/15/2014	488	10.0	< 0.13 U
IW-124	3/24/2014	455	6.8 J	< 10 U
IW-124	4/15/2014	448	8.7	0.26 J
IW-125	3/25/2014	2140	207	3.1
IW-125	5/29/2014	17.1	2.9 J	< 0.13 U
IW-125	9/11/2014	7.3	1.0 J	< 0.50 U
IW-126	3/25/2014	2020	197	10.4
IW-126	5/29/2014	787	59.1	< 0.13 U
IW-127	3/24/2014	3700	219 J	7.6
IW-127	5/29/2014	639	34.7	< 0.13 U
IW-127	9/11/2014	1020	38.5	2.6
IW-127	12/4/2014	182	7.2	< 0.50 U
IW-128	3/25/2014	2980	178	11.7
IW-128	4/29/2014	1250	68.4	4.9
IW-128	5/29/2014	1190	62.7	< 0.13 U
IW-129	3/25/2014	2540	192	< 0.13 U
IW-129	5/29/2014	25.8	1.8 J	< 0.13 U
IW-130	3/23/2014	358	7.6 J	< 10 U

TABLE 7
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
IW-130	5/23/2014	75.5	0.78 J	< 0.13 U
IW-131	3/24/2014	526	11.5	0.35 J
IW-131	4/30/2014	318	8.5	0.31 J
IW-131	5/28/2014	443	8.8	0.30 J
IW-132	10/23/2014	714	3.5 J	< 0.50 U
IW-135	10/23/2014	3840	43.3	2.0
IW-141	10/23/2014	368000	< 1000 U	82.6
IW-141	12/5/2014	46300	232 E	31.0
IW-143	10/23/2014	13100	44.8	2.5
IW-147	10/23/2014	199000	1640 J	< 1000 U
IW-147	12/5/2014	91600	1420 J	176
IW-152	10/22/2014	17600	224 J	8.2
IW-152	12/4/2014	< 0.50 U	< 0.50 U	< 0.50 U
IW-153	10/23/2014	293	85.3	12.3
IW-153	12/4/2014	1.6 J	< 0.50 U	< 0.50 U
IW-155	10/23/2014	14600	36.4	5.8
IW-157	10/23/2014	74200	712 J	195
IW-157	12/5/2014	31700	391 E	66.8
IW-169	10/22/2014	163	1.7 J	< 0.50 U
MW-172	10/22/2014	3010	21.4	2.4
MW-172	12/5/2014	1810	15.6	1.3 J
MW-172	1/15/2015	3600	22.4	1.2
MW-174	1/20/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-175	1/20/2015	123	2.0	< 0.50 U
MW-176	1/20/2015	720	16.8	0.57 J
MW-177	1/21/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-178	1/18/2015	5.2	0.99 J	< 0.50 U
MW-180	1/19/2015	23.7	3.4	< 0.50 U
MW-181	1/21/2015	< 0.50 U	< 0.50 U	< 0.50 U

Notes:
µg/L = Micrograms per liter
E,J = Estimated Concentration
F = MS/MSD or RPD out of laboratory control limits
ND = Result is not detected at the associated method quantitation limit
NT = Analyte not tested
U = Not detected (MDL included where available, RDL included for older analyses)
M1 = Matrix

TABLE 8
SUMMARY OF STATISTICAL TEMPORAL TREND ANALYSIS (2009-2015)
Whirpool Facility - Fort Smith, Arkansas

Well ID	Start Date	End Date	Number of Samples	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
Northern Plume Wells						
MW-23	4/27/2009	1/15/2015	16	Stable	Increasing	ND
MW-24	4/27/2009	1/15/2015	13	Decreasing	<PQL	<PQL
MW-27	5/12/2010	1/14/2015	12	No Trend	<PQL	ND
MW-28	10/29/2009	1/14/2015	14	Decreasing	ND	ND
MW-31	4/25/2009	1/19/2015	12	No Trend	ND	ND
MW-32	4/25/2009	1/19/2015	13	Decreasing	<PQL	ND
MW-33	4/25/2009	1/18/2015	15	Stable	Decreasing	<PQL
MW-34	4/24/2009	1/13/2015	14	Stable	<PQL	ND
MW-35R	4/24/2009	1/13/2015	15	No Trend	Stable	ND
MW-36	4/24/2009	1/12/2015	16	No Trend	ND	ND
MW-39	4/24/2009	1/12/2015	13	No Trend	ND	ND
MW-40	4/24/2009	1/12/2015	16	<PQL	ND	ND
MW-41	4/24/2009	1/14/2015	17	Stable	Stable	<PQL
MW-46R	4/25/2009	1/13/2015	19	Stable	Stable	<PQL
MW-50	4/24/2009	1/13/2015	13	<PQL	ND	ND
MW-55	4/24/2009	10/16/2013	8	Increasing	ND	ND
MW-56	4/24/2009	1/13/2015	12	Increasing	Increasing	<PQL
MW-57	4/24/2009	1/13/2015	12	Increasing	Stable	<PQL
MW-58	4/25/2009	1/14/2015	14	Decreasing	Stable	<PQL
MW-60	4/24/2009	1/13/2015	13	<PQL	ND	ND
MW-61	4/24/2009	1/13/2015	13	Increasing	ND	ND
MW-62	4/24/2009	1/13/2015	12	<PQL	ND	ND
MW-63	4/24/2009	1/13/2015	13	Stable	Increasing	<PQL
MW-65	4/24/2009	1/13/2015	11	Decreasing	Decreasing	ND
MW-66	4/25/2009	1/14/2015	13	Increasing	ND	ND
MW-67	4/25/2009	1/12/2015	13	Increasing	ND	ND
MW-68	1/15/2009	1/12/2015	13	No Trend	ND	ND
RW-69	1/15/2009	1/14/2015	18	Stable	Stable	<PQL
MW-70	11/4/2010	10/16/2013	7	Stable	Decreasing	<PQL
MW-71	10/28/2009	1/14/2015	14	Stable	Stable	<PQL
IW-72	1/16/2009	1/12/2015	15	Decreasing	ND	ND
IW-73	4/23/2009	1/14/2015	12	Decreasing	No Trend	Increasing
IW-74	4/23/2009	1/14/2015	12	Stable	Stable	No Trend
IW-75	1/16/2009	10/15/2013	5	No Trend	<PQL	ND
IW-76	4/23/2009	1/14/2015	14	Decreasing	Decreasing	No Trend
IW-77	4/23/2009	1/14/2015	19	Increasing	Stable	<PQL
IW-78	10/25/2011	9/11/2014	7	Stable	Stable	ND
IW-79	10/25/2011	9/11/2014	7	Decreasing	Stable	<PQL
IW-80	4/23/2009	1/13/2015	13	Decreasing	<PQL	ND
MW-81	5/29/2014	1/13/2015	4	Stable	Stable	<PQL
MW-82	5/28/2014	1/13/2015	4	No Trend	Stable	<PQL
MW-83	5/23/2014	1/15/2015	4	Decreasing	Stable	ND
MW-84	5/27/2014	1/14/2015	4	Decreasing	No Trend	<PQL
Southern Plume Wells (includes Source Area Wells as indicated by bold font well ID)						
ITMW-1	10/27/2011	1/14/2015	10	Stable	Stable	ND
ITMW-2	11/3/2010	1/14/2015	12	<PQL	<PQL	ND
ITMW-3	11/3/2010	1/14/2015	12	<PQL	<PQL	ND
ITMW-4	10/25/2011	1/13/2015	8	Stable	Stable	No Trend
ITMW-5	4/27/2009	10/16/2013	10	Stable	Decreasing	<PQL
ITMW-6	10/28/2009	1/13/2015	12	Increasing	Increasing	<PQL
ITMW-7	4/27/2009	1/14/2015	14	Decreasing	Decreasing	No Trend
ITMW-9	4/27/2009	1/13/2015	14	Stable	Decreasing	No Trend
ITMW-10	4/27/2009	1/14/2015	12	Increasing	Decreasing	Decreasing
ITMW-11	4/27/2009	1/15/2015	12	Decreasing	Decreasing	Decreasing
ITMW-12	10/26/2011	1/15/2015	10	Stable	Decreasing	No Trend
ITMW-13	4/27/2009	1/14/2015	14	Stable	Decreasing	<PQL
ITMW-14	11/4/2010	1/14/2015	11	Decreasing	Stable	ND
ITMW-15	4/27/2009	1/15/2015	11	Decreasing	Decreasing	Decreasing
ITMW-16	11/6/2010	1/14/2015	11	No Trend	ND	ND
ITMW-17	4/27/2009	1/15/2015	15	Decreasing	Stable	Increasing
ITMW-18	4/27/2009	1/15/2015	14	Decreasing	Decreasing	<PQL
ITMW-19	4/27/2009	1/15/2015	15	Decreasing	Decreasing	<PQL
ITMW-20	10/29/2009	1/12/2015	13	No Trend	ND	<PQL
ITMW-21	10/27/2009	1/14/2015	13	Decreasing	<PQL	ND
MW-22	10/27/2009	1/13/2015	12	<PQL	ND	ND
MW-25	4/27/2009	1/15/2015	16	Decreasing	Stable	Decreasing
MW-26	10/29/2009	1/14/2015	13	No Trend	ND	ND
MW-29	10/29/2009	1/13/2015	11	<PQL	ND	ND
MW-30	11/3/2010	10/14/2013	6	Stable	Stable	<PQL
MW-37	4/27/2009	10/17/2013	10	Decreasing	Decreasing	Stable
MW-38	10/26/2011	1/15/2015	9	Increasing	Stable	Decreasing
MW-85	5/29/2014	1/15/2015	5	Increasing	Stable	No Trend
MW-86	5/29/2014	1/15/2015	4	Stable	No Trend	No Trend

Notes:
ND = Result is Not Detected at the associated method quantitation limit
<PQL = Analyte qualified as estimated because it was detected
above method detection limit but below reporting limit or mixture

ENVIRON

TABLE 9
SUMMARY OF FIRST QUARTER 2015 TEMPORAL TREND ANALYSIS BY WELL CATEGORY
Whirlpool Facility - Fort Smith, Arkansas

Chemical	Increasing	Decreasing	Stable	No Trend	Not Detected Above the Reporting Limit
Northern Plume Wells					
Trichloroethene	7	12	12	8	4
cis-1,2-Dichloroethene	3	4	14	2	20
Vinyl Chloride	1	0	0	2	40
Southern Plume Wells (includes Source Area Wells)					
Trichloroethene	4	10	8	3	4
cis-1,2-Dichloroethene	1	11	8	1	8
Vinyl Chloride	1	5	1	6	16
Source Area Wells					
Trichloroethene	2	7	2	0	0
cis-1,2-Dichloroethene	0	6	4	1	0
Vinyl Chloride	1	4	1	3	2

ENVIRON

TABLE 10
SUMMARY OF AVERAGE DETECTED CONCENTRATIONS (2009 - 2015)
Whirlpool Facility - Fort Smith, Arkansas

Date	TCE			c-1,2-DCE			VC		
	Concentration (µg/L)	# of Detects	# of Samples	Concentration (µg/L)	# of Detects	# of Samples	Concentration (µg/L)	# of Detects	# of Samples
All Wells									
4/24/2009	2,570	35	46	266	25	46	287	5	46
10/28/2009	8,560	22	38	559	17	38	695	4	38
5/13/2010	5,600	29	43	433	23	43	494	5	43
11/4/2010	10,825	33	41	632	19	41	1,300	2	41
3/22/2011	4,889	26	34	555	17	34	281	9	34
10/26/2011	4,918	46	65	394	36	65	604	6	65
4/18/2012	2,790	30	39	275	25	39	531	4	39
10/18/2012	2,348	43	66	191	39	66	129	19	66
4/23/2013	1,561	26	38	89	23	38	16	16	38
10/16/2013	1,895	46	65	177	39	65	189	17	66
3/7/2014	1,184	43	55	71	35	55	6	25	55
5/15/2014	1,159	46	55	62	31	55	7	23	55
7/30/2014	2,764	41	55	121	33	55	18	14	55
10/16/2014	2,174	37	55	135	33	55	80	11	55
1/12/2015	437	39	55	81	30	55	16	9	55
North Wells									
4/24/2009	384	23	34	19	13	34		0	34
10/28/2009	228	14	25	8	9	25		0	25
5/13/2010	255	17	28	11	10	28		0	28
11/4/2010	333	21	27	16	10	27		0	27
3/22/2011	144	15	23	6	8	23	1	2	23
10/26/2011	262	25	38	10	17	38	2	1	38
4/18/2012	197	17	18	7	12	18		0	18
10/18/2012	328	24	39	11	20	39	1	5	39
4/23/2013	228	13	17	8	10	17	0	5	17
10/16/2013	268	26	38	13	20	38	2	5	38
3/7/2014	214	23	32	10	18	32	1	11	32
5/15/2014	209	25	31	10	15	31	0.5	10	31
7/29/2014	281	23	31	11	16	31	4.9	6	31
10/14/2014	251	19	31	8	16	31	0.9	2	31
1/12/2015	186	21	31	7	15	31	1.8	3	31
South Wells									
4/24/2009	6,760	12	12	535	12	12	287	5	12
10/28/2009	23,140	8	13	1,178	8	13	695	4	13
5/13/2010	13,173	12	15	757	13	15	494	5	15
11/4/2010	29,188	12	14	1,316	9	14	1,300	2	14
3/22/2011	11,360	11	11	944	10	11	361	7	11
10/26/2011	10,461	21	27	739	19	27	724	5	27
4/18/2012	6,181	13	21	523	13	21	531	4	21
10/18/2012	4,899	19	27	380	19	27	175	14	27
4/23/2013	2,893	13	21	151	13	21	22	11	21
10/16/2013	4,010	20	27	350	19	27	291	11	27
3/7/2014	2,300	20	23	135	17	23	10	14	23
5/15/2014	2,404	20	23	111	16	23	12	13	23
7/30/2014	6,280	17	23	237	16	23	28	8	23
10/15/2014	4,449	17	23	270	16	23	110	8	23
1/12/2015	770	17	23	155	15	23	23	6	23
Source Wells									
4/24/2009	11,600	6	6	883	7	7	358	4	7
10/28/2009	73,900	2	2	3,087	3	3	1,385	2	3
5/13/2010	20,750	6	6	1,375	7	7	617	4	7
11/4/2010	98,133	3	3	2,940	4	4	1,300	2	4
3/22/2011	22,000	4	4	1,826	5	5	616	4	5
10/26/2011	20,260	8	8	1,532	9	9	904	4	9
4/18/2012	12,625	4	4	1,314	5	5	707	3	5
10/18/2012	10,905	8	8	752	9	9	271	9	9
4/23/2013	8,825	4	4	358	5	5	49	5	5
10/16/2013	9,798	8	8	714	9	9	455	7	9
3/7/2014	5,696	8	8	268	8	8	18	8	8
5/15/2014	5,955	8	8	203	8	8	22	7	8
7/31/2014	13,281	8	8	456	8	8	37	6	8
10/16/2014	9,401	8	8	524	8	8	146	6	8
1/12/2015	1,560	8	8	311	7	8	35	4	8

Notes:
µg/L: Micrograms per liter

ENVIRON

TABLE 11
SUMMARY OF TCE CONCENTRATIONS (AREA 1)
SEPTEMBER 2014 - JANUARY 2015
Whirlpool Facility - Fort Smith, Arkansas

	TCE Concentrations (µg/L)											
Date(s)	**IW-127**	**IW-141**	**IW-147**	**IW-152**	**IW-153**	**IW-157**	**MW-25**	**MW-38**	**MW-85**	**MW-86**	**MW-92**	**MW-93**
9/11/2014	1020	nm	nm	nm	nm	nm	nm	nm	5820	129000	nm	nm
10/15/2014	nm	nm	nm	nm	nm	nm	nm	6750	nm	nm	nm	nm
10/23/2014	nm	368000	199000	17600	293	74200	59800	nm	nm	nm	2160	18200
12/4/2014	182	46300	91600	5	1.6	31700	2620	3190	27700	169000	2200	14600
1/15/2015	nm	nm	nm	nm	nm	nm	2510	5440	5940	81200	1410	18000
Percent	82.2%	87%	54%	100%	99%	57%	96%	52.7%	-375.9%	-31.0%	-2%	20%
Reduction	-	-	-	-	-	-	96%	19.4%	-2.1%	37.1%	35%	1%

Notes:
nm = not measured
µg/L = micrograms per liter

ENVIRON

TABLE 11
SUMMARY OF TCE CONCENTRATIONS (AREA 1)
SEPTEMBER 2014 - JANUARY 2015
Whirlpool Facility - Fort Smith, Arkansas

	TCE Concentrations (µg/L)										
Date(s)	**MW-94**	**MW-95**	**MW-172**	**ITMW-11**	**ITMW-12**	**ITMW-15**	**ITMW-17**	**ITMW-18**	**ITMW-19**	**Total TCE Reduction (all wells)**	
9/11/2014	nm	nm	nm	nm	nm	nm	nm	nm	nm	944213	
10/15/2014	nm	nm	nm	2050	2570	1490	3510	3540	12800		
10/23/2014	11100	22300	3010	nm	nm	nm	nm	nm	nm		
12/4/2014	9570	20900	1810	1530	468	63	4630	3690	33.5	431793	
1/15/2015	9530	21100	3600	68.3	57.1	56.5	3840	488	17.4	323046	
Percent	14%	6%	40%	25.4%	81.8%	95.8%	-31.9%	-4.2%	99.7%	54.3%	**4th Quarter 2014**
Reduction	14%	5%	-20%	96.7%	97.8%	96.2%	-9.4%	86.2%	99.9%	65.8%	**1st Quarter 2015**

Notes:
nm = not measured
µg/L = micrograms

ENVIRON

TABLE 12
SUMMARY OF TCE CONCENTRATIONS (AREA1/MW-25)
MAY 2014 - JANUARY 2015
Whirlpool Facility - Fort Smith, Arkansas

	TCE Concentrations (µg/L)				
Date(s)	**MW-25**	**MW-85**	**MW-86**	**Total TCE Reduction (all wells)**	
5/15/2014	18500	nm	nm	553470	
5/29/2014	nm	1970	533000		
7/8/2014	49900	3780	nm		
7/31/2014	71700	nm	nm		
9/11/2014	nm	5820	129000		
10/24/2014	59800	nm	nm		
12/5/2014	2620	27700	169000	199320	
1/15/2015	2510	5940	81200	89650	
Percent	85.8%	-1306.1%	68.3%	64.0%	**4th Quarter 2014**
Reduction	86.4%	-201.5%	84.8%	83.8%	**1st Quarter 2015**

Notes:
nm = not measured
µg/L = micrograms per liter

ENVIRON

TABLE 13
SUMMARY OF TCE CONCENTRATIONS (SUPPLEMENTAL NECK AREA)
MAY 2014 - JANUARY 2015
Whirlpool Facility - Fort Smith, Arkansas

	TCE Concentrations (µg/L)						
Date(s)	**IW-101**	**MW-23**	**MW-24**	**MW-83**	**MW-84**	**Total TCE Reduction (all wells)**	
5/22/2014	nm	22.8	79.7	470	214	1296	
5/23/2014	509	nm	nm	nm	nm		
7/8/2014	150	27.8	102	nm	nm		
9/12/2014	139	62.1	55.7	213	0.93	572	
10/23/2014	nm	189	33.1	210	0.68		
1/14-15/2015	nm	115	26.9	101	0.5 U	382	
Percent	72.7%	-728.9%	58.5%	55.3%	99.7%	55.9%	**4th Quarter 2014**
Reduction	-	-404.4%	66.2%	78.5%	99.8%	70.5%	**1st Quarter 2015**

Notes:
nm = Not measured
µg/L = Micrograms per liter

ENVIRON

TABLE 14
SUMMARY OF TCE CONCENTRATIONS (AREAS 2 AND 3)
MAY 2014 - JANUARY 2015
Whirlpool Facility - Fort Smith, Arkansas

	TCE Concentrations (µg/L)												
Date(s)	**IW-115**	**MW-81**	**MW-82**	**IW-77**	**IW-78**	**IW-79**	**MW-34**	**MW-35R**	**MW-36**	**MW-65**	**IW-80**	**Total TCE Reduction (all wells)**	
5/13-14/2014	nm	nm	nm	1460	nm	nm	19.9	183	0.5 U	195	24.2	3864	
5/28-30/2014	504	512	285	nm	255	426	nm	nm	nm	nm	nm		
7/8-7/9/2014	352	518	48.2	1200	nm	nm	nm	nm	nm	nm	nm		
7/29-30/2014	nm	nm	nm	1540	nm	nm	78.2	64.7	0.61	17.1	25.6		
9/11/2014	355	463	50	nm	39.6	105	nm	nm	nm	nm	nm	1736	
10/14-15/2014	nm	nm	nm	741	nm	nm	47.7	79.2	0.5 U	30.8	11.8		
10/23/2014	nm	nm	nm	554	nm	nm	nm	nm	nm	nm	nm		
1/12-14/2015	nm	385	66	201	nm	nm	22	10.9	0.5 U	19.2	7.1	1211	
Percent	29.6%	9.6%	82.5%	62.1%	84.5%	75.4%	-139.7%	56.7%	-	84.2%	51.2%	55.1%	**4th Quarter 2014**
Reduction	-	24.8%	76.8%	86.2%	-	-	-10.6%	94.0%	-	90.2%	70.7%	68.7%	**1st Quarter 2015**

Notes:
nm = not measured
µg/L = micrograms per liter

ENVIRON

Figures

FILE: D:\GIS\PROJECTW\HIRLPOOL\DOCs\2015\2015_Q1_REPORT\Figure 1 - Q1 Potentiometric Surface 20150429.mxd

Brazil Ave

Ferguson St

Brazil Ave

Ingersoll Ave

Jacobs Ave

Jenny Lind Rd

Boys Club Ln

MW-50 457.12'
MW-60 454.44'
MW-61 451.85'
MW-67 454.70'
MW-66 457.64'
MW-55 465.5'
MW-58 461.21'
MW-57 460.92'
MW-68 463.89'
MW-56 461.41'
MW-70 463.81'
MW-71 463.84'
RW-69 463.82'
MW-40 463.80'
MW-46R 463.37'
MW-62 459.33'
MW-63 458.92'
MW-97 448.41'
MW-96 450.13'
MW-98 450.18'
IW-75 463.79'
IW-72 463.63'
IW-74 463.70'
IW-73 463.77'
MW-41 463.81'
IW-76 463.61'
IW-77 463.79'
IW-80 463.66'
MW-36 463.91'
MW-81 463.68'
IW-79 463.80'
MW-81 463.68'
MW-35R 463.76'
MW-39 463.84'
IW-78 463.79'
MW-34 463.85'
MW-65 463.77'
MW-31 463.77'
MW-33 463.77'
MW-32 463.79'
MW-27 463.75'
MW-28 463.51'
MW-90 460.99'
MW-89 458.05'
MW-88 460.80'
MW-26 464.39'
MW-23 463.78'
MW-83 463.67'
MW-84 463.60'
MW-24 463.75'
ITMW-16 463.77'
ITMW-13 463.48'
ITMW-3 462.64'
ITMW-15 463.76'
ITMW-14 463.38'
ITMW-17 463.57'
ITMW-11 463.77'
ITMW-2 463.72'
ITMW-20 464.15'
MW-85 463.61'
MW-25 463.79'
MW-86 463.50'
ITMW-1 462.15'
MW-22 462.34'
MW-87 459.67'
MW-99 458.73'
MW-91 459.04'
ITMW-12 463.57'
MW-94 463.36'
ITMW-21 463.92'
ITMW-18 463.05'
MW-95 463.40'
MW-37 463.77'
MW-92 463.66'
MW-38 463.75'
ITMW-19 463.51'
MW-30 463.29'
MW-29 463.80'
ITMW-7 462.80'
ITMW-4 462.01'
ITMW-5 461.87'
ITMW-10 461.85'
ITMW-9 461.90'
ITMW-6 461.72'

456' 453' 454' 455' 456' 457' 458' 459' 460' 461' 462' 463' 464'

0 260 520
Feet
1 inch = 260 feet

Notes:
- Water levels measured January 12th and 13th 2015
- Jenny Lind Road widening areas based on City of Fort Smith maps presented to the City Directors October 2012 and January-February 2013.

Monitoring Well Location
Groundwater Contour
Groundwater Contour (dashed where inferred)
Approximate Property Boundary (2014)

Jenny Lind Road Widening 2014-2015
New Road
Temp. Construction Easement
Right-of-Way
Drainage Easement

ENVIRON

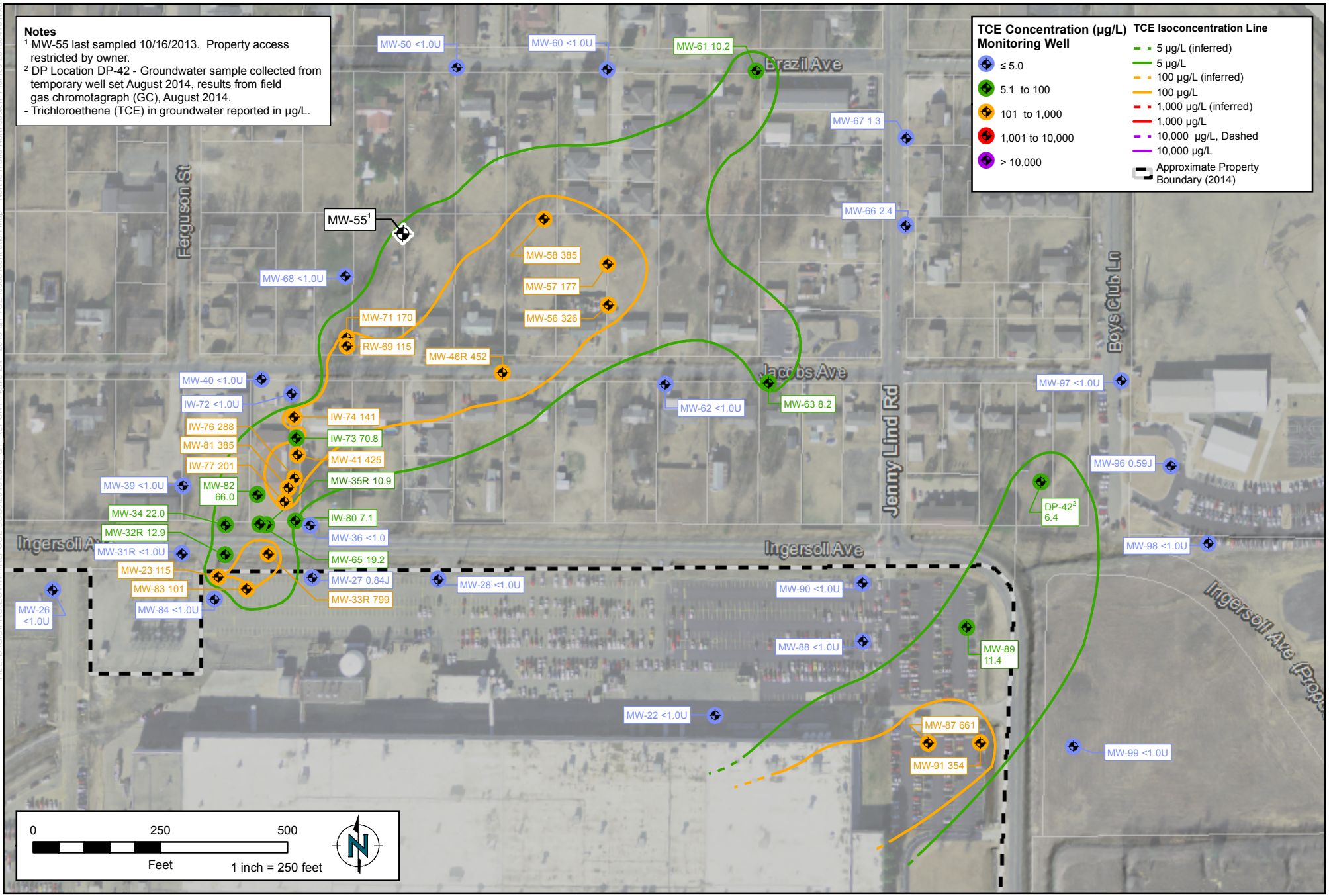
DRAFTED BY: KTS | DATE: 04/29/2015

FIRST QUARTER 2015 POTENTIOMETRIC SURFACE

Whirlpool Facility - Fort Smith, Arkansas

Figure 1

PROJECT: 3434446A



FILE: D:\GIS\PROJECT\WHIRLPOOL\DOCs\20152015_Q1_REPORT\Figure 2A – 2015 Q1 TCE Isoconcentration Map – Northern and Northeastern Plumes 20150410.mxd

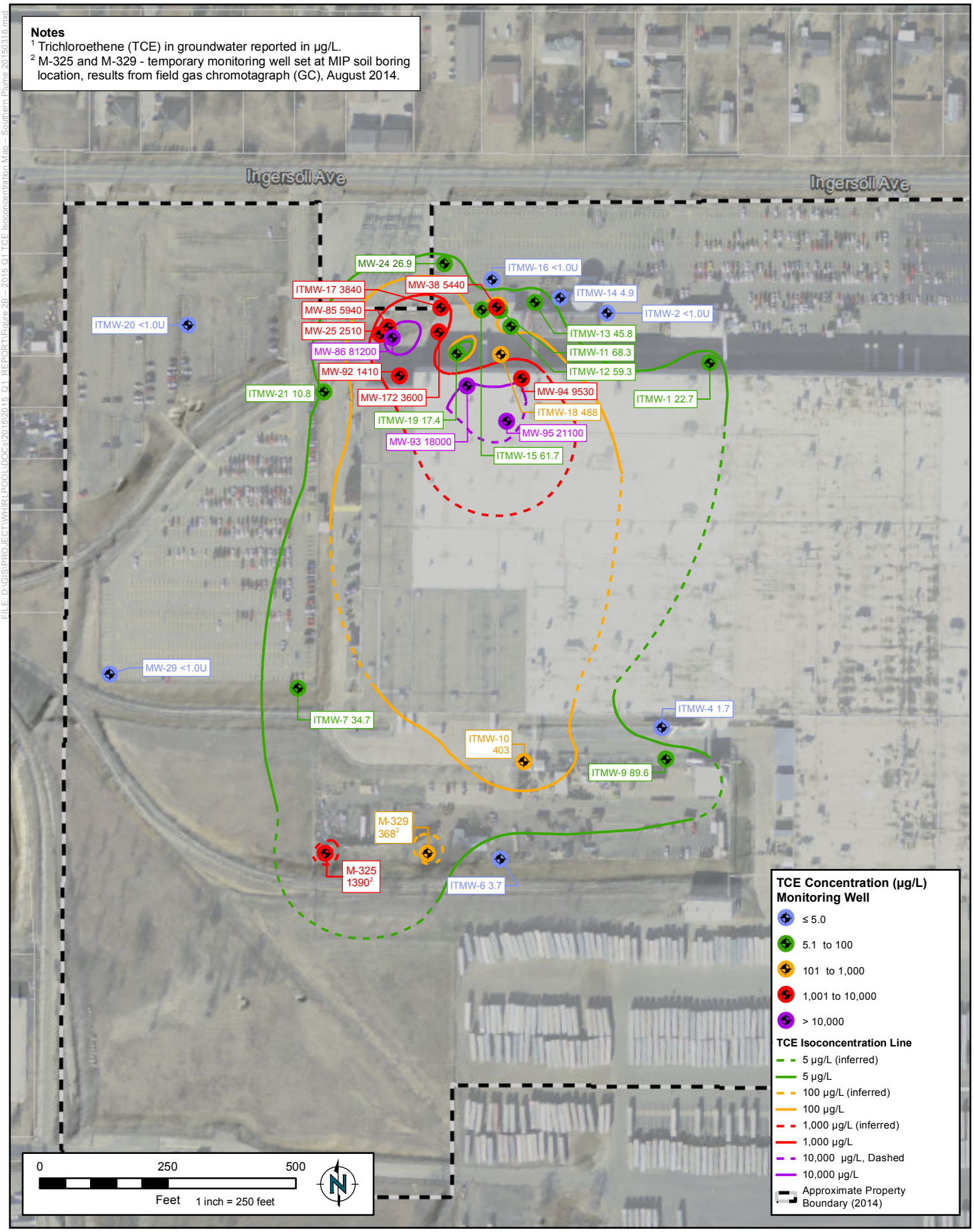
ENVIRON

2015 FIRST QUARTER TCE ISOCONCENTRATION MAP NORTHERN AND NORTHEASTERN PLUMES

Whirlpool Facility - Fort Smith, Arkansas

Figure 2A

DRAFTED BY: KTS	DATE: 05/08/2015	PROJECT: 3437470A



ENVIRON

FIRST QUARTER 2015 TCE ISOCONCENTRATION MAP
SOUTHERN PLUME

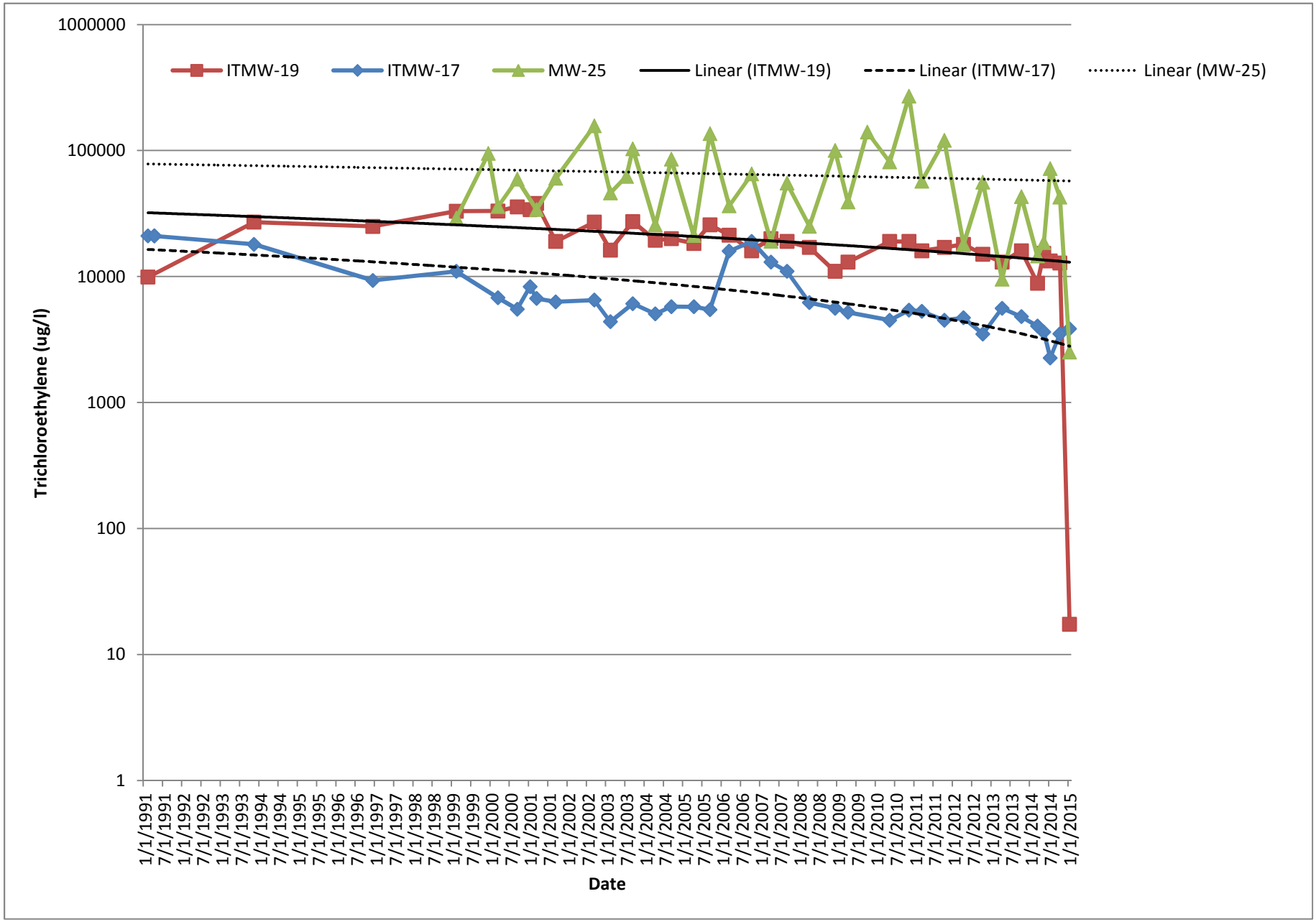
Whirlpool Facility - Fort Smith, Arkansas

Figure 2B

DRAFTED BY: KTS	DATE: 03/16/2015	PROJECT: 3437470A

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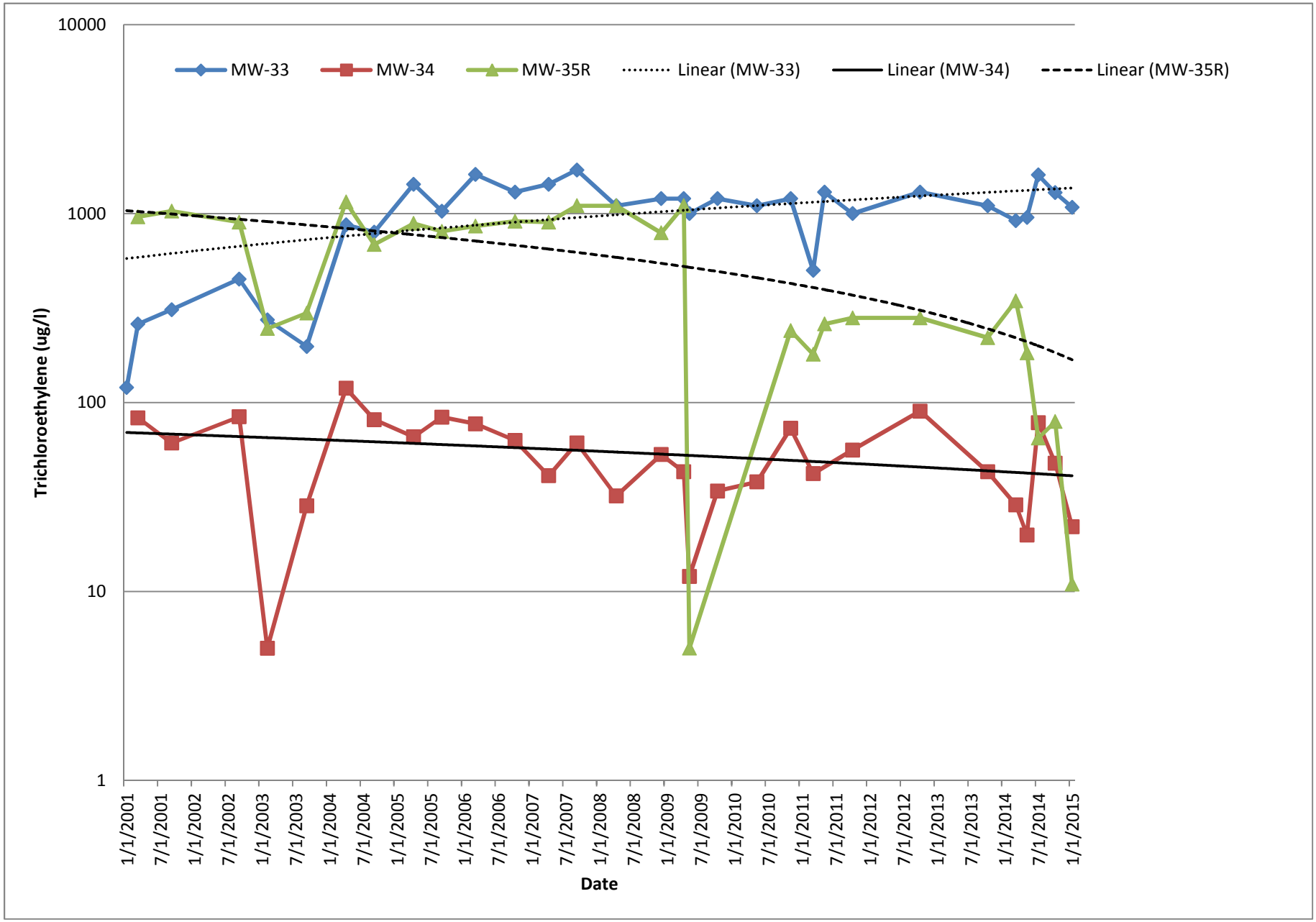
TCE Concentration with Time at Source Area Onsite Wells



ENVIRON

Figure 3
Whirlpool Facility
Fort Smith, Arkansas

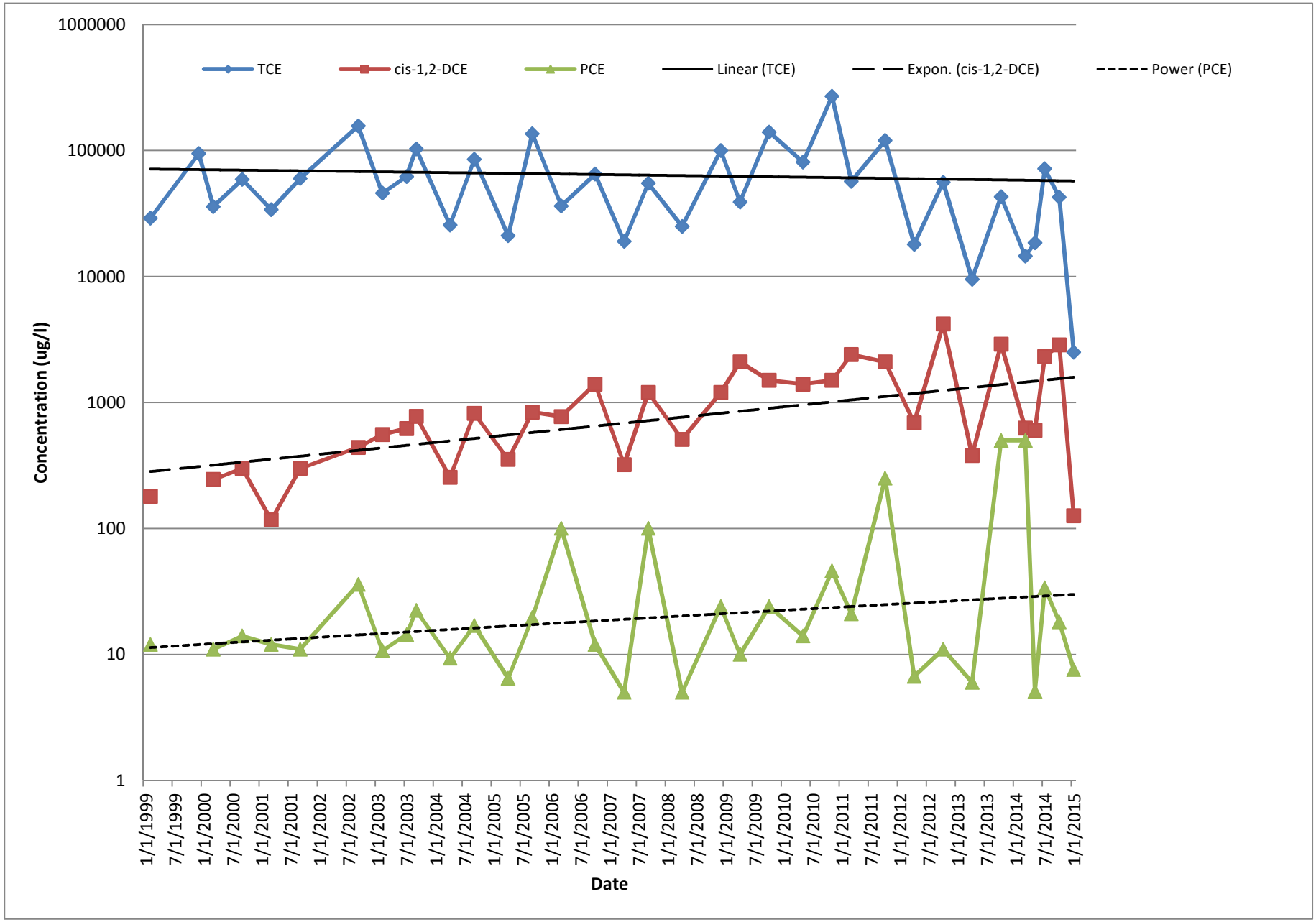
TCE Concentration with Time at Northern Onsite Wells



ENVIRON

Figure 4
Whirlpool Facility
Fort Smith, Arkansas

MW-25 TCE Cis-1,2-DCE Trends



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Figure 5
Whirlpool Facility
Fort Smith, Arkansas

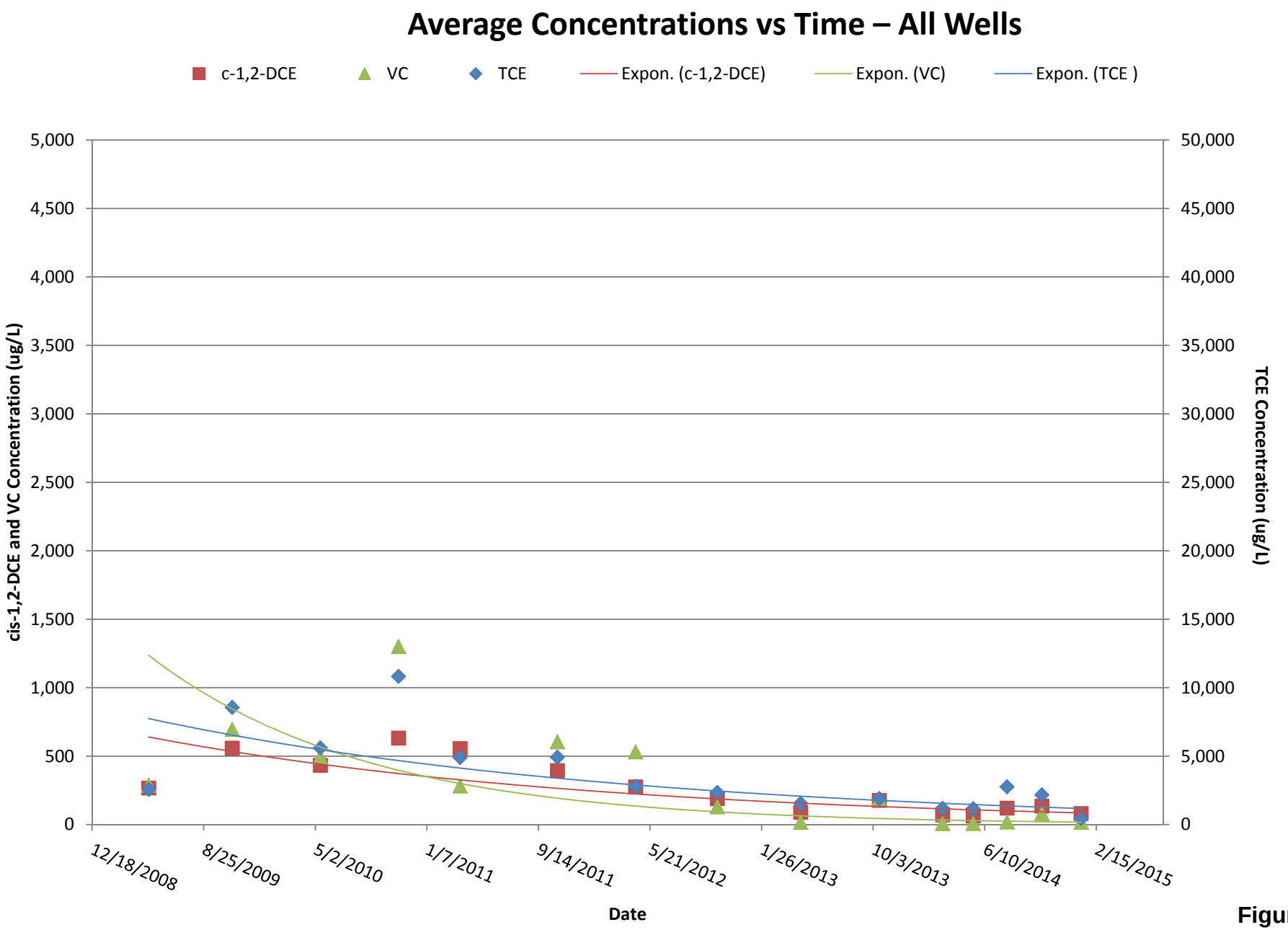


Figure 6
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON

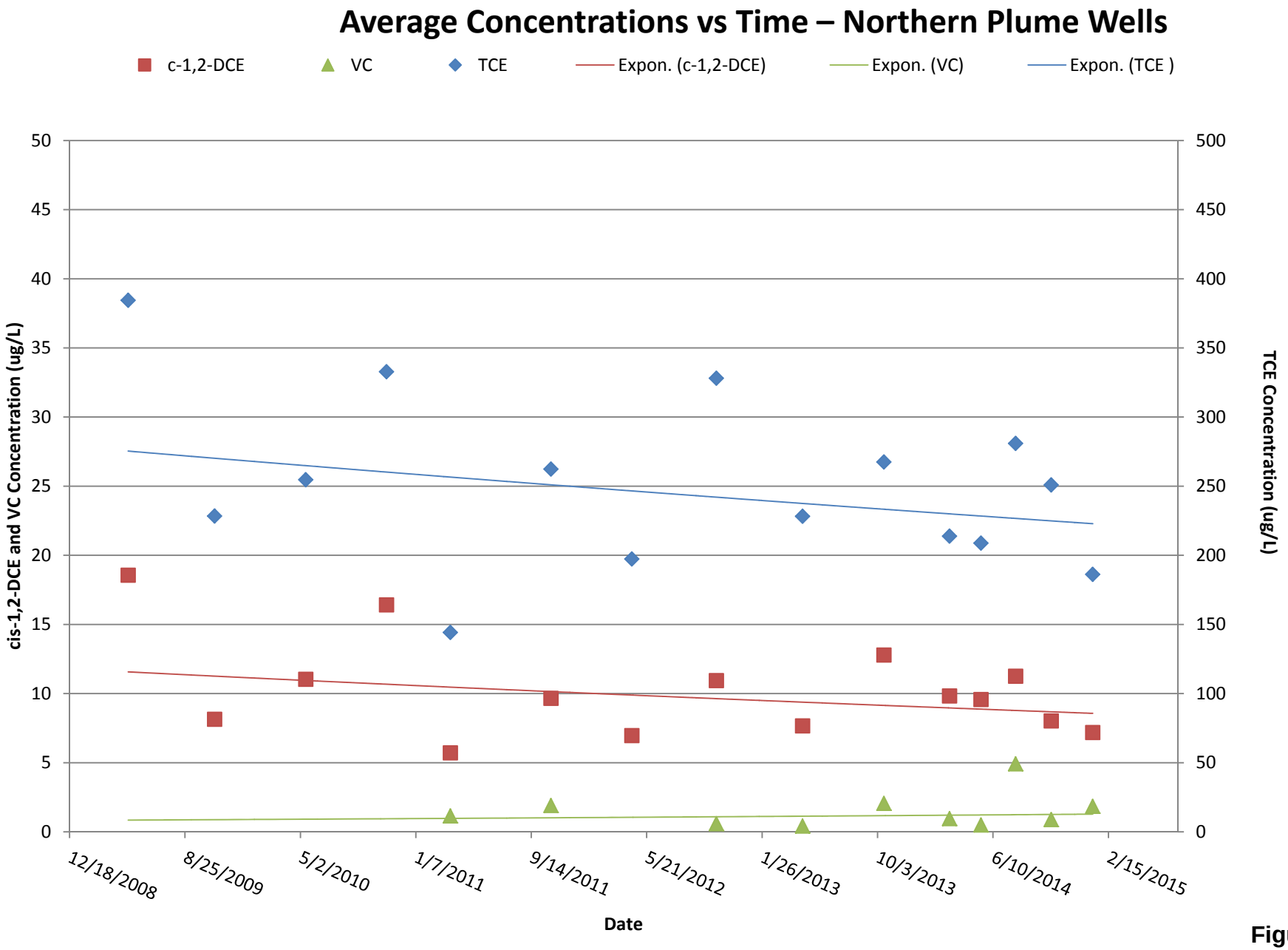


Figure 7
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON

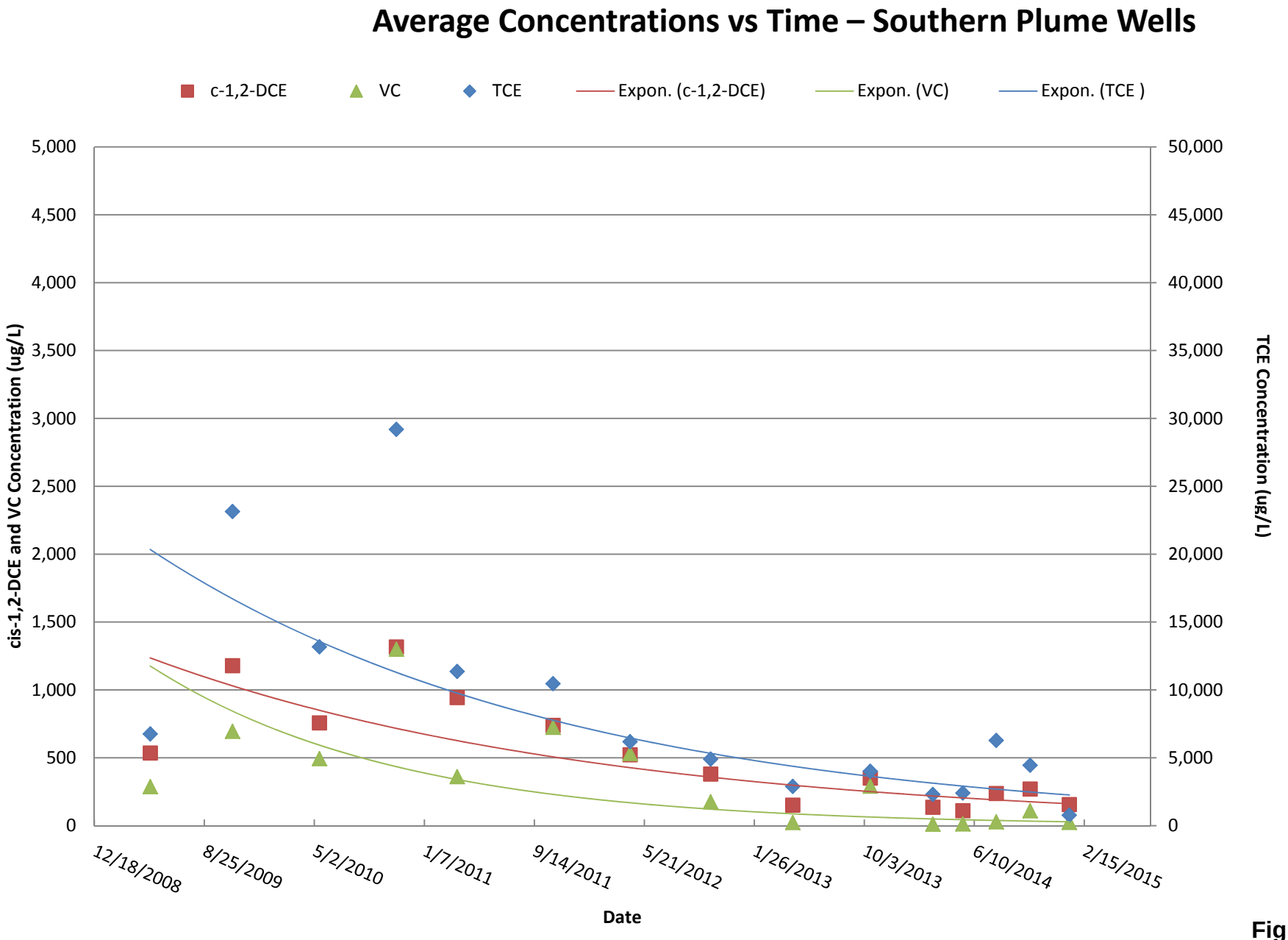


Figure 8
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON

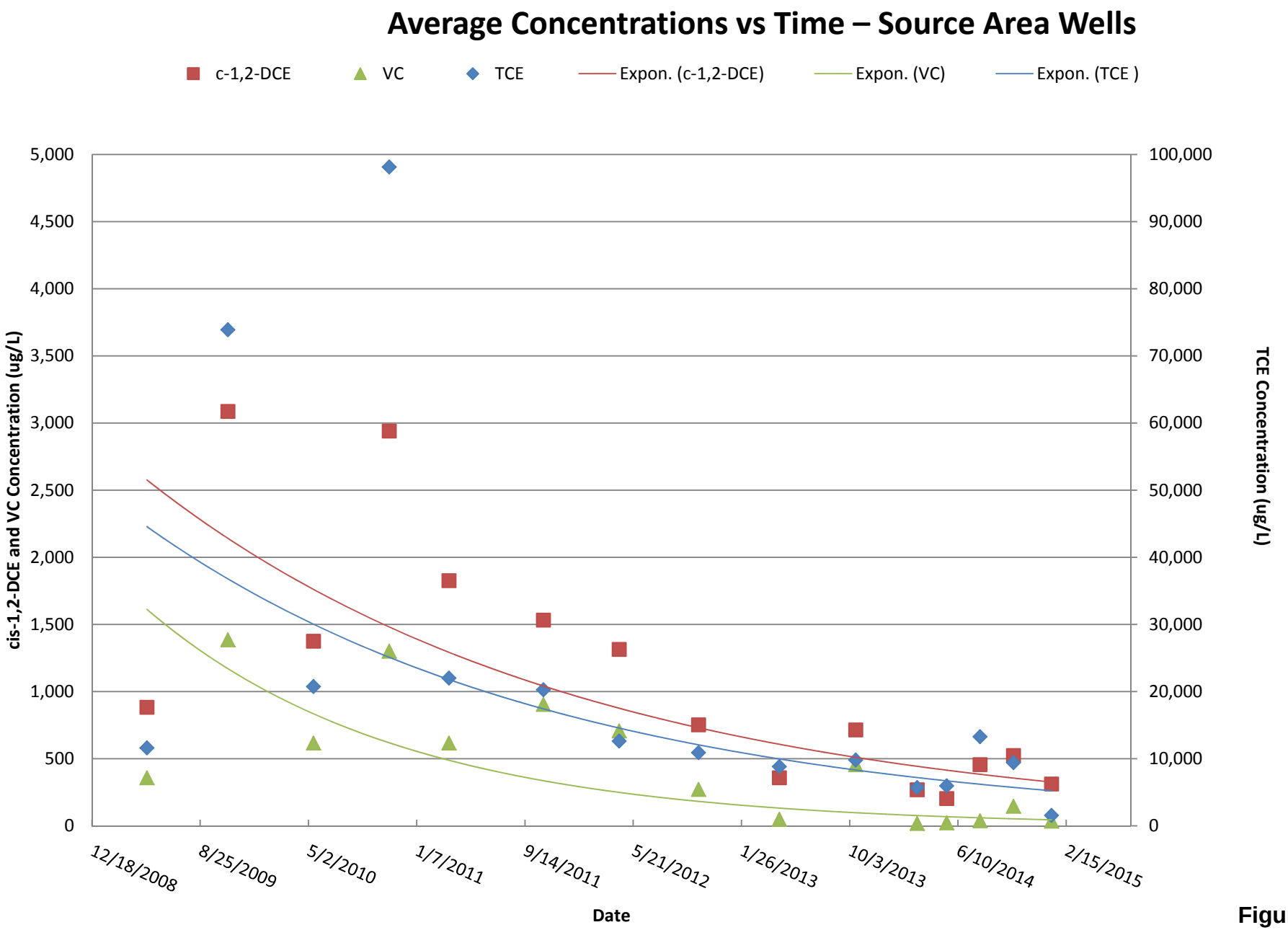
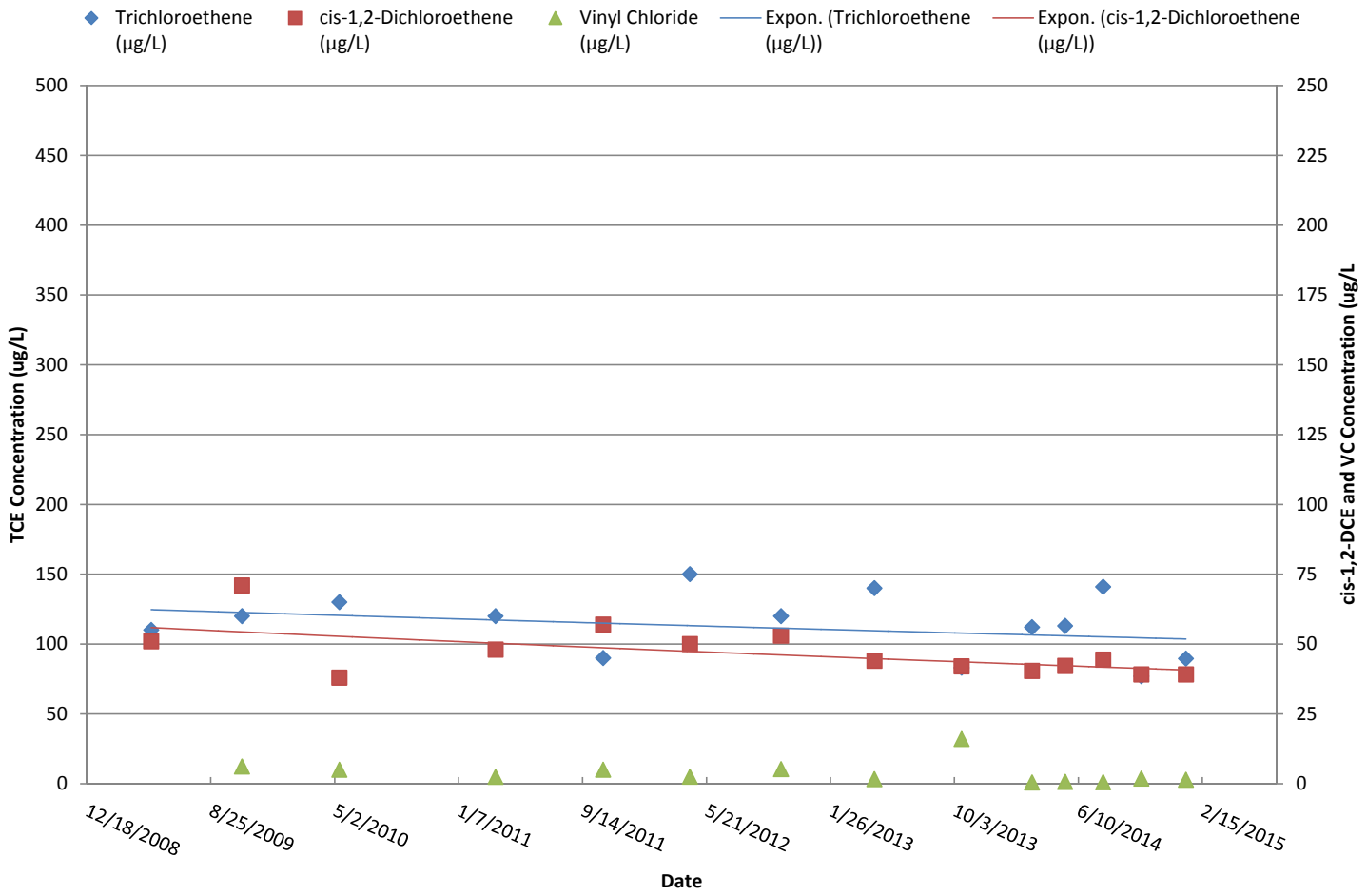


Figure 9
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON

TCE, cis-1,2-DCE and Vinyl Chloride Concentrations vs Time – ITMW-9



TCE, cis-1,2-DCE and Vinyl Chloride Concentrations vs Time – ITMW-10

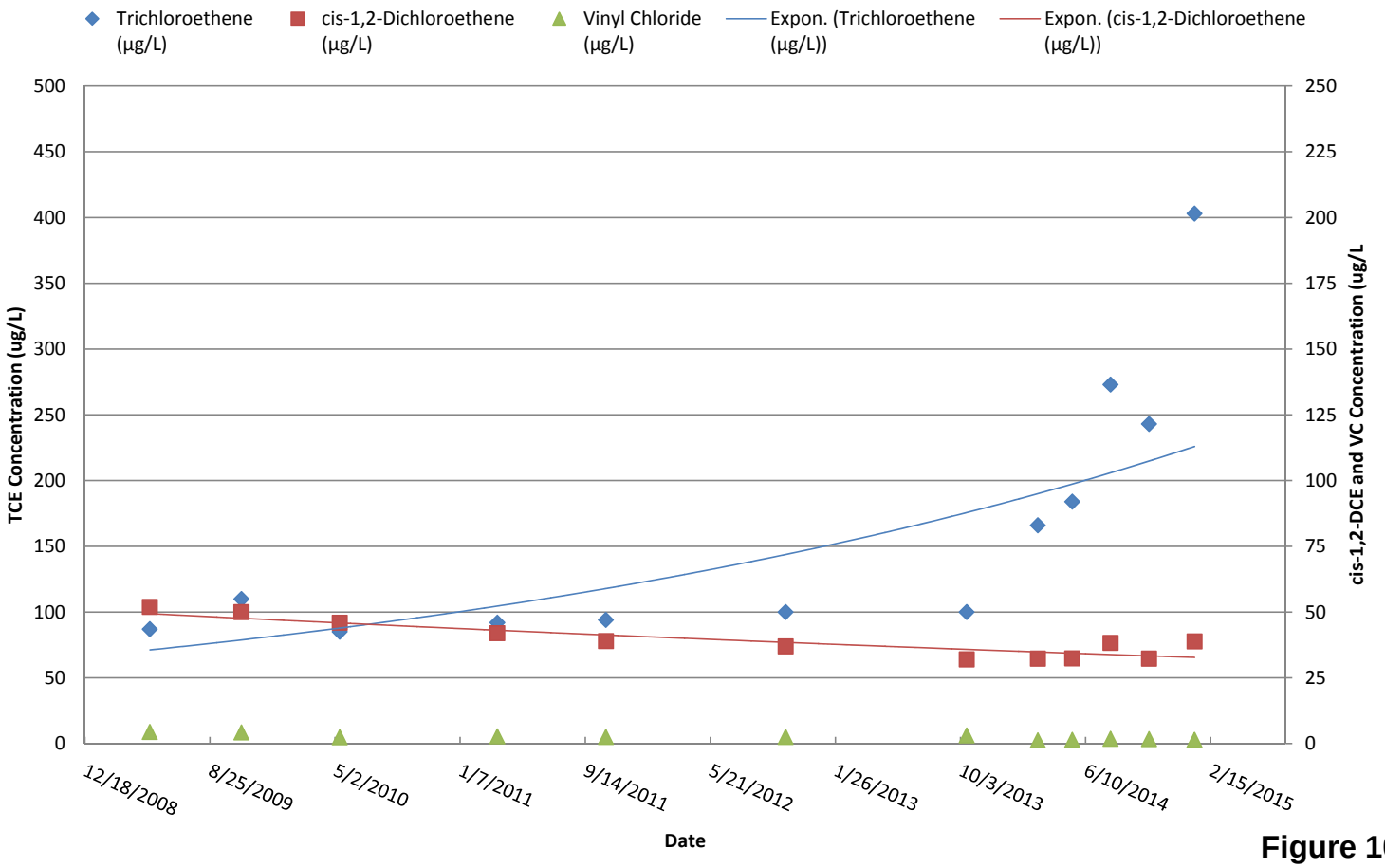
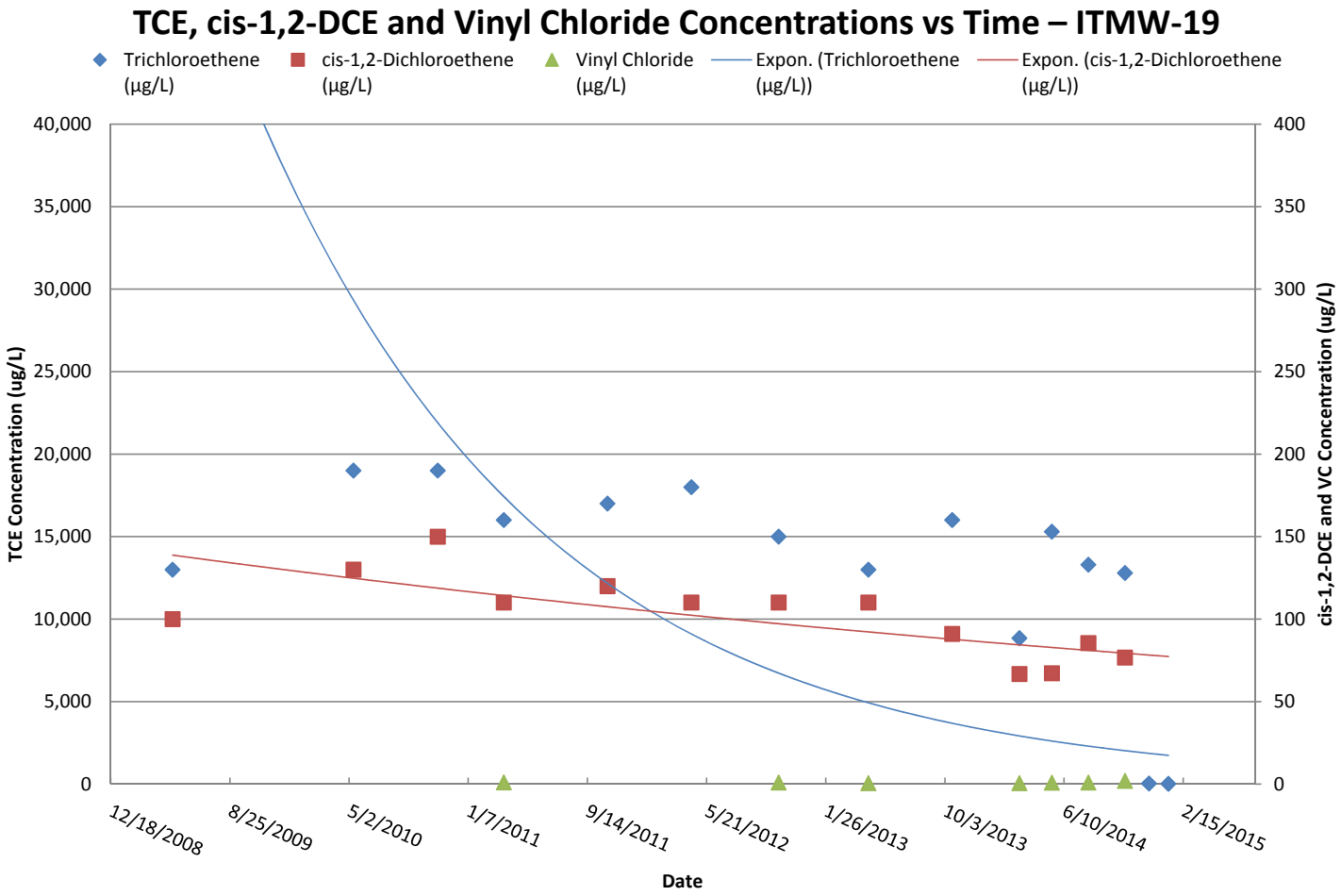


Figure 10
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON



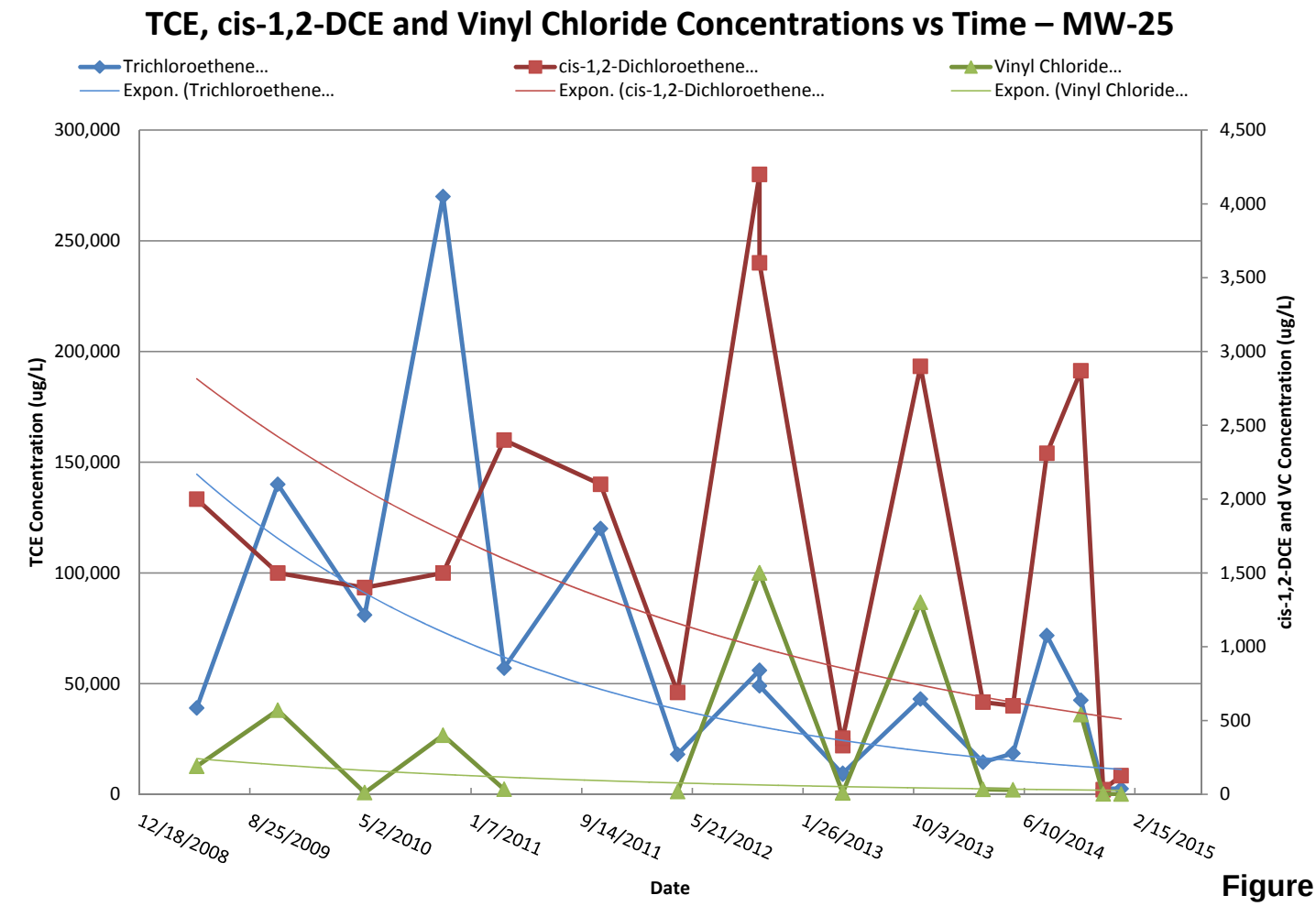
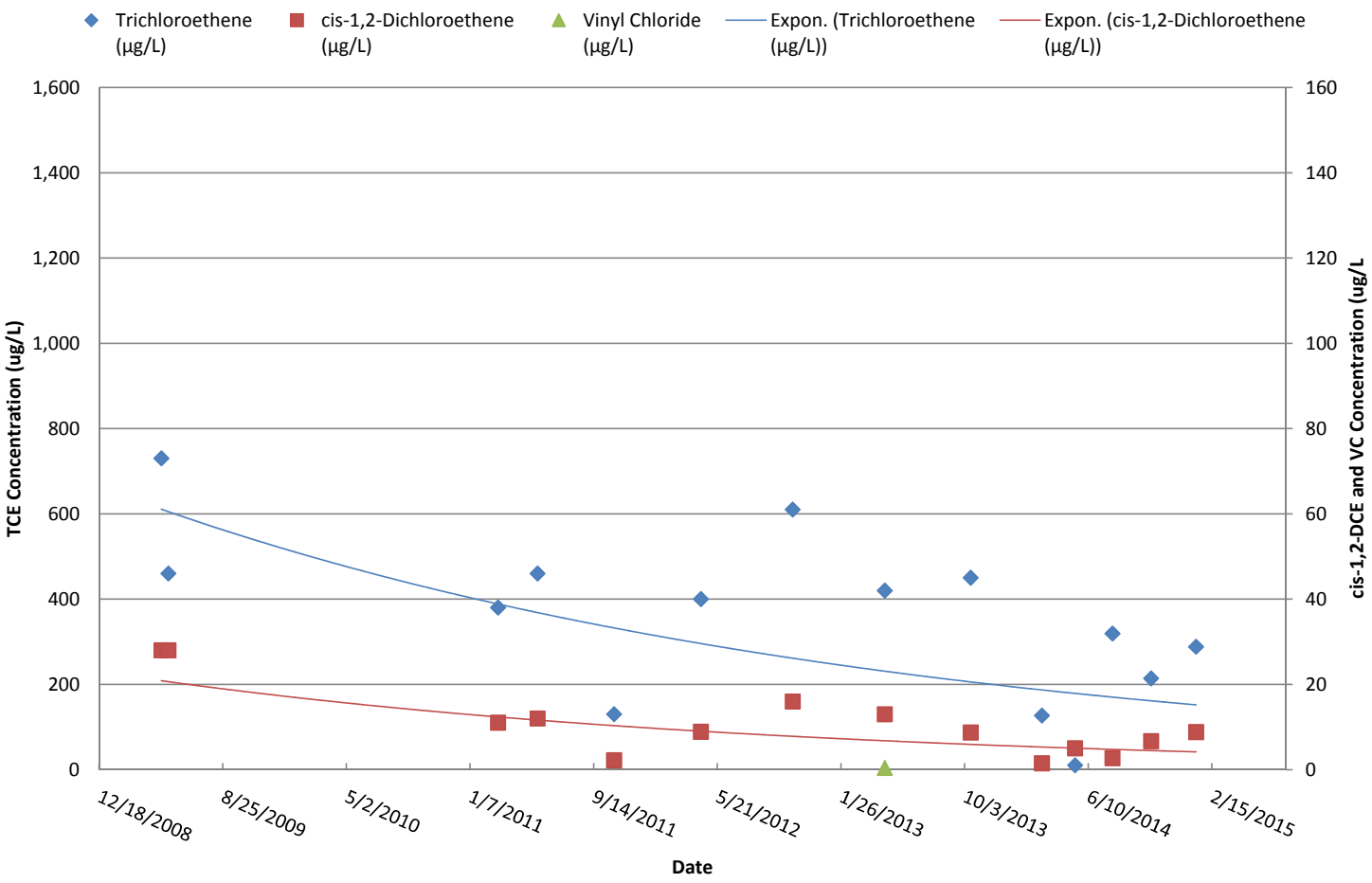


Figure 11
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON



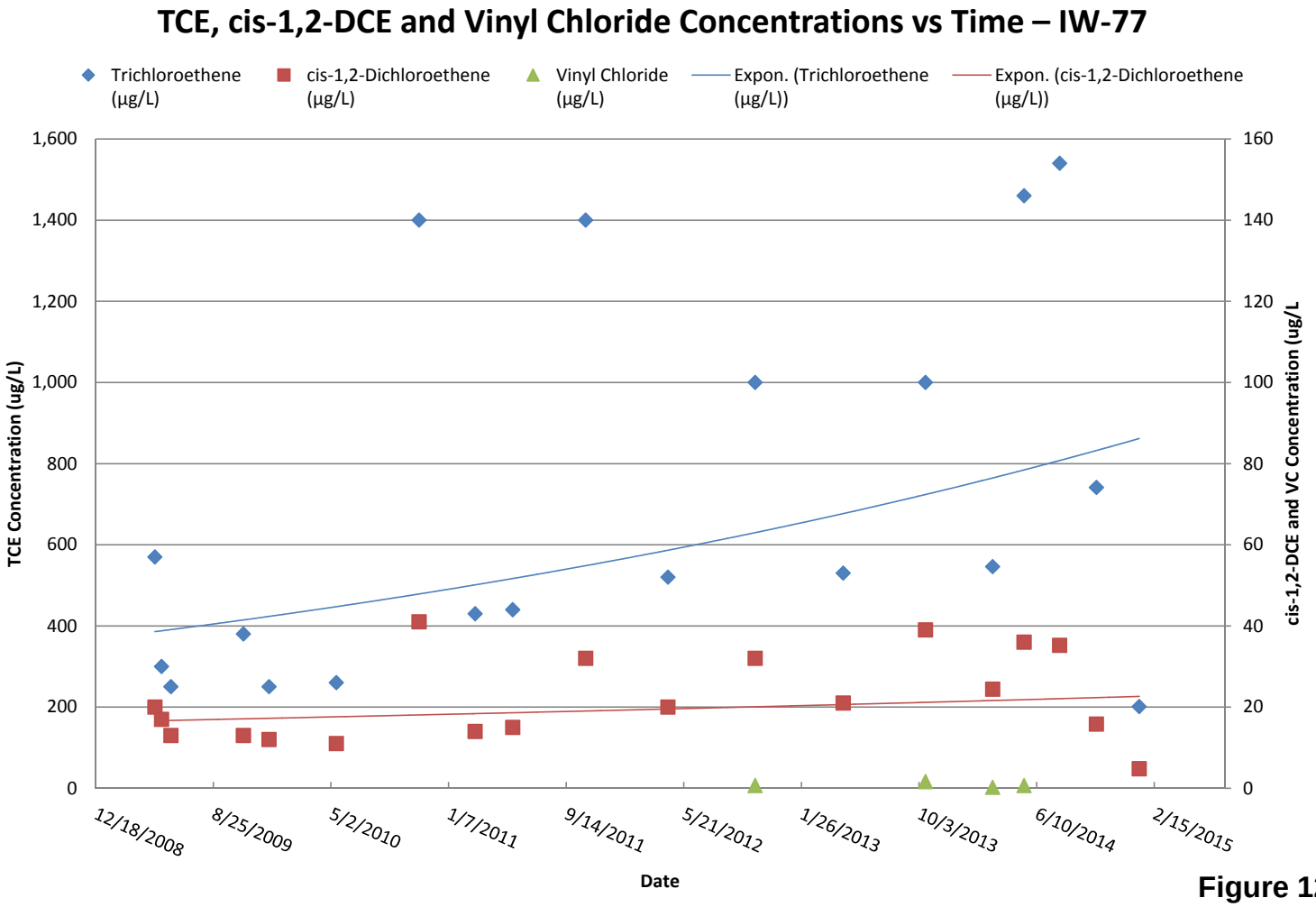


Figure 12
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON

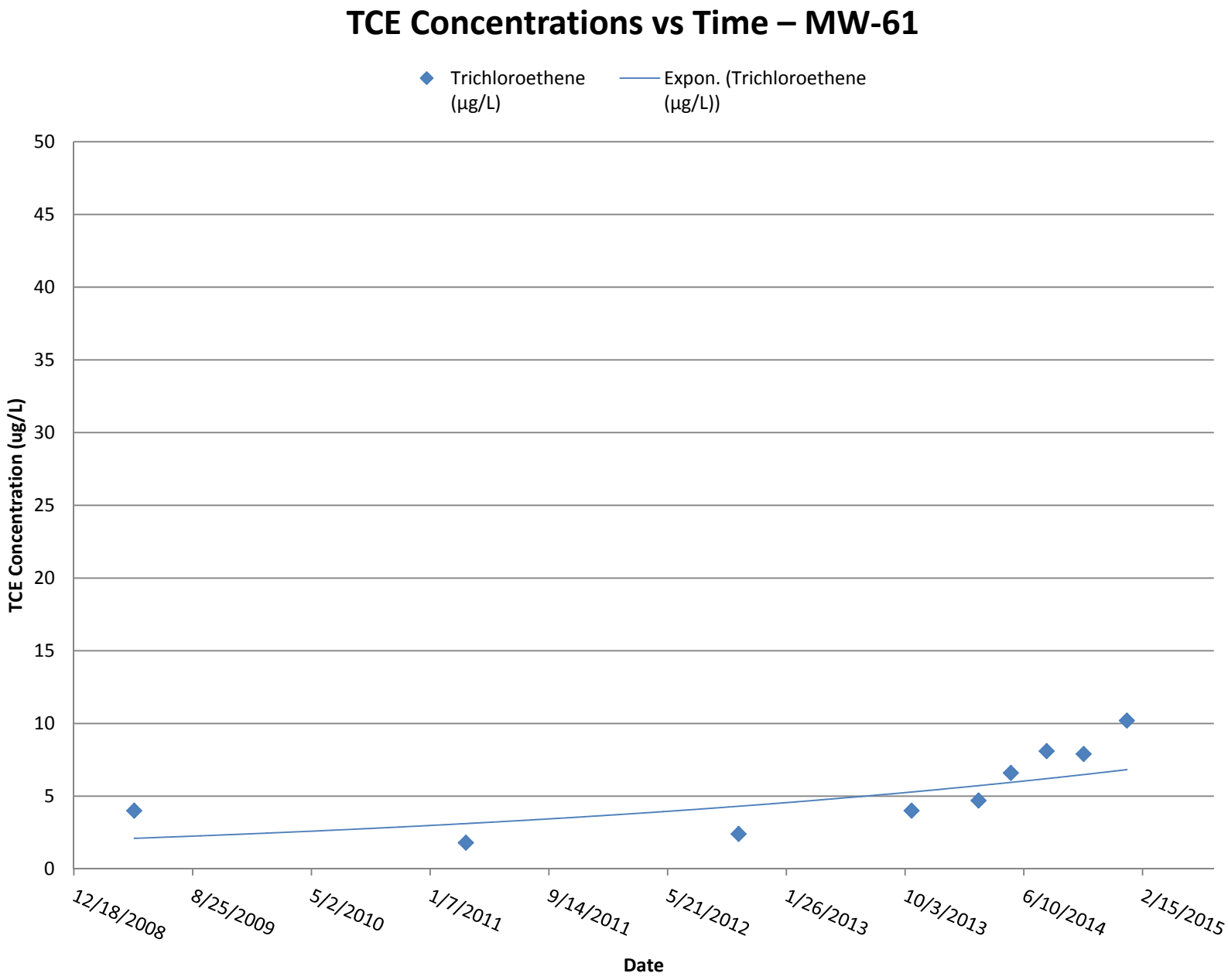


Figure 13
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON

Appendix A

First Quarter 2015 Calibration Logs

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/12/15

Calibrated by: N2

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 1055 + 10min = 1105
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.39 in. x 25.4 = 771.906 mmHg - 15.169 = 756.737 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: 07H102076

1. Specific Conductance: 1.413
2. ORP: 240
3. pH:
   - Point 1: 7.00
   - Point 2: 4.00
   - Point 3: 10.01
4. DO: 99.6%

Colorimeter Model/Serial Number: DR 4000 / 1101900C82460

Turbidity Meter Model/Serial Number: 2020we / 50pq

757.755

30.43

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/12/2015

Calibrated by: WES

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 1020 + 10min = 1030
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.43 in. x 25.4 = 772.922 mmHg - 15.169 = 757.753 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: 13J100680

1. Specific Conductance: 1.413 mS/cm
2. ORP: 240.0
3. pH:
   - Point 1: 7.00
   - Point 2: 9.98
   - Point 3: 4.00
4. DO: 99.7%

Colorimeter Model/Serial Number: 10432

Turbidity Meter Model/Serial Number: 2020 WC/5064

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/12/2015

Calibrated by: WES

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 1102 + 10min = 1112
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.43 in. x 25.4 = 772.922 mmHg - 15.169 = 757.753 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: 10M101289

1. Specific Conductance: 1.413 ms/cm
2. ORP: ~~1.413~~ 240
3. pH:
   - Point 1: 7.00
   - Point 2: 10.00
   - Point 3: 3.99
4. DO: 96.2%

Colorimeter Model/Serial Number: 10432

Turbidity Meter Model/Serial Number: 2020 WC / 5064

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/12/15

Calibrated by: Renee Petersen

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 1228 + 10min = 1238
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.43 in. x 25.4 = 772.922mmHg - 15.169 = 757.753 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number:

1. Specific Conductance: 1.413 ms/cm
2. ORP: 240
3. pH:
   - Point 1: 7
   - Point 2: 10
   - Point 4: 4
4. DO: 99.7

turbidity: 984 NTU

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number: 019321 turbidity 027923

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/12/15

Calibrated by: E. Richter

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 1115 + 10min = 1125
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.38 in. x 25.4 = 771.652mmHg - 15.169 = 756.483 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: 05D2720

1. Specific Conductance: 1.413 mS/cm
2. ORP: 240
3. pH:
   - Point 1: 7.0
   - Point 2: 10.0
   - Point 3: 4.0
4. DO: 99.5%

Colorimeter Model/Serial Number: 110390C82929

Turbidity Meter Model/Serial Number: 976-2111

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Cal Sat Soln
Pine Environmental

Date: 11/2/15

Calibrated by: Victoria Singleton + Rachel ~~Lefore~~ Lafiore

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):
Lot # 411316
Exp 11/30/15

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):
Lot# C3604296
Exp: 9/10/15
Exp: 9/2015
Lot# 0558

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Exp: 10/30/15
Lot# 3010 2113

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Exp 8/28/15
Lot# C3609185

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 1150 + 10min = 1200
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.39 in. x 25.4 = 771.65 mmHg - 15.169 = 756.48 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: 11427

1. Specific Conductance: 1440 ms/cm
2. ORP: 238.2
3. pH:
   - Point 1: 7.11
   - Point 2: 10.01
   - Point 3: 3.82
4. DO: 13.12

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/13/15

Calibrated by: NZ

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 0700 + 10min = 0710
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.53 in. x 25.4 = 775.462 mmHg - 15.169 = 760.293 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: 07H102076

1. Specific Conductance: 1.413 ms/cm
2. ORP: 240 mV
3. pH:
   - Point 1: 7.00
   - Point 2: 10.00
   - Point 3: 4.02
4. DO: 99.7 %

Colorimeter Model/Serial Number: DR890/110190C82460

Turbidity Meter Model/Serial Number: 2020we/5089

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/13/2015

Calibrated by: Lucy Cross

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 7:51 + 10min = 8:01
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.58 in. x 25.4 = 776.732 mmHg - 15.169 = 761.563 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: YSI - 24804

1. Specific Conductance: 1.413
2. ORP: 240.0
3. pH:
   - Point 1: 7.00
   - Point 2: 10.00
   - Point 3: 3.97
4. DO: 12.17

Colorimeter Model/Serial Number: 070590C63690

Turbidity Meter Model/Serial Number: 2020we | 5127-5014

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/13/2015

Calibrated by: WHS

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 16:34 + 10min = 644
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.58 in. x 25.4 = 776.732 mmHg - 15.169 = 761.563 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: 10M101289

1. Specific Conductance: 1414 uS/cm
2. ORP: 240.0
3. pH:
   - Point 1: 7.00
   - Point 2: 3.99
   - Point 3: 10.00
4. DO: ~~30.58~~ 12.32

Colorimeter Model/Serial Number: 10432

Turbidity Meter Model/Serial Number: 2020 WC/5064

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/13/15

Calibrated by: Renee Petersen

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: _____ + 10min =_____
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.58 in. x 25.4 = 776.32 mmHg - 15.169 = 761.563 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: 01 9321

1. Specific Conductance: 1413 u
2. ORP: 240
3. pH:
   - Point 1: 7
   - Point 2: 10
   - Point 3: 4
4. DO: 15 % – would not calibrate after 3 attempts

Colorimeter Model/Serial Number: 15000

Turbidity Meter Model/Serial Number: 0 2 7923

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/13/15

Calibrated by: Renee Peterson

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: _____ + 10min =_____
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   _____ in. x 25.4 = _____ mmHg - 15.169 = _____ mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number:

1. Specific Conductance: 1.413
2. ORP: 240
3. pH:
   - Point 1: 7
   - Point 2: 10
   - Point 3: 4.0
4. DO: 12.04 mg/L

Colorimeter Model/Serial Number: 15060

Turbidity Meter Model/Serial Number: 027923

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/13/15

Calibrated by: ER

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 0705 + 10min = 0715 ✓
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.53 in. x 25.4 = 775.462 mmHg - 15.169 = 760.293 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: 07J101403

1. Specific Conductance: 1.413
2. ORP: 240.0
3. pH:
   - Point 1: 7.0
   - Point 2: 10.0
   - Point 3: 4.0
4. DO: 100%

Colorimeter Model/Serial Number: 121190C93032

Turbidity Meter Model/Serial Number: 5134-5014

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/13/15

Calibrated by: ER

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 7:00 + 10min = 7:10 ✓
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.45 in. x 25.4 = 773.43 mmHg - 15.169 = 758.261 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: 07J101403

1. Specific Conductance: 1.413
2. ORP: 240
3. pH:
   - Point 1: 7.0
   - Point 2: 10.0
   - Point 3: 4.0
4. DO: 99.7

Colorimeter Model/Serial Number: i211900C93032

Turbidity Meter Model/Serial Number: 5134-5014

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1-13-2015

Calibrated by: MICKY SHETTY

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes): ~~0205~~ 0710 MS 0720

1. Ensure unit has been on for at least 10 minutes: Initial time: ~~0215~~ MS + 10min = ~~0215~~ MS
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.58 in. x 25.4 = 776.732 mmHg - 15.169 = 761.563 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: 05D2720 AN

1. Specific Conductance: 1.413 ms/cm
2. ORP: 240
3. pH:
   - Point 1: 7.00
   - Point 2: 10.00
   - Point 3: 4.00
4. DO: 12.29 mg/L pg → calibrated using DO (%)

Colorimeter Model/Serial Number: 19032

Turbidity Meter Model/Serial Number: 20596

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/13/15 YSI # 11427

Calibrated by: Rachel LaFleur

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes): Lot # 4111316 Exp 11/30/15

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes): Lot # 6758 Exp 9/2018

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes): Lot C364296 Exp 9/10/2015

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Lot 3061215 Exp 6/30/15

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Lot C363984 Exp 8/28/15

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 7:05 + 10min = 7:15
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.53 in. x 25.4 = 775.46 mmHg - 15.169 = 760.293 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize. 7:49 start
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number:

1. Specific Conductance: 1400 µs/cm
2. ORP: 258.3
3. pH:
   - Point 1: (7) → 7.00
   - Point 2: (4) → 4.00
   - Point 3: (10) → 10.03
4. DO: 13.12 mg/L

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/14/15

Calibrated by: NZ

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 0630 + 10min = 0640
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.44 in. x 25.4 = 773.176 mmHg - 15.169 = 758.007 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: 07H1620776

1. Specific Conductance: 1.413
2. ORP: 240
3. pH:
   - Point 1: 7.00
   - Point 2: 10.00
   - Point 3: 4.02
4. DO: 99.7%

Colorimeter Model/Serial Number: DR890/1101900824600

Turbidity Meter Model/Serial Number: 2020 we/5089

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/14/2015

Calibrated by: Lucy Cross

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 7:20 + 10min = 7:30
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.45 in. x 25.4 = 773.43 mmHg - 15.169 = 758.261 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: YSI - 24804

1. Specific Conductance: 1.413
2. ORP: 240.0
3. pH:
   - Point 1: 10.00
   - Point 2: 3.98
   - Point 3: 6.99
4. DO: 12.03 mg/L

Colorimeter Model/Serial Number: 070590C63690

Turbidity Meter Model/Serial Number: 2020wc/5127-5014

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/14/15

Calibrated by: WES

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 6'45 + 10min = 655
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   _____ in. x 25.4 = _____ mmHg - 15.169 = 753.943 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: 10M101289

1. Specific Conductance: 1.413 ms/cm
2. ORP: 240.0
3. pH:
   - Point 1: 7.00
   - Point 2: 10.00
   - Point 3: 4.02
4. DO: 11.12

Colorimeter Model/Serial Number: 10432

Turbidity Meter Model/Serial Number: 2020 WC/5064

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/14/2015

Calibrated by: Renee Petersen

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 655 + 10min = 705
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.45 in. x 25.4 = 773.43 mmHg - 15.169 = 758.261 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: 13528

1. Specific Conductance: 1413.2
2. ORP: 240.0
3. pH:
   - Point 1: 7.00
   - Point 2: 10.00
   - Point 3: 9.00
4. DO: 12.04

Colorimeter Model/Serial Number: 15660

Turbidity Meter Model/Serial Number: 027923

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1-14-2015

Calibrated by: MICKY SHETTY

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 0746 + 10min = 0756
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.44 in. x 25.4 = 773.176 mmHg - 15.169 = 758.007 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number:

1. Specific Conductance: 1.413
2. ORP: 240
3. pH:
   - Point 1: 7.0
   - Point 2: 10.0
   - Point 3: 4.03
4. DO: 4 mg 11.89 mg/L

Colorimeter Model/Serial Number: 19032

Turbidity Meter Model/Serial Number: 020596

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 01/14/2015

Calibrated by: Rachel LaFlore

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 6:53 + 10min = 7:03
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.42 in. x 25.4 = 772.668 mmHg - 15.169 = 757.499 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: 11427

1. Specific Conductance: 1400 uS/cm^3
2. ORP: 208.9
3. pH:
   - Point 1: 6.91
   - Point 2: 4.13
   - Point 3: 10.16
4. DO: 11.24 mg/L

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/15/15

Calibrated by: NZ

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 0540 + 10min = 0550
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.27 in. x 25.4 = 768.858 mmHg - 15.169 = 753.689 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: 07H102076

1. Specific Conductance: 1.413
2. ORP: 240
3. pH:
   - Point 1: 7.00
   - Point 2: 10.08
   - Point 3: 4.03
4. DO: 99.2 %

Colorimeter Model/Serial Number: DR890/ 1101900R246 6

Turbidity Meter Model/Serial Number: 2020we / 5089

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/15/2015

Calibrated by: Lucy Cross

YSI - 24804

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 6:57 + 10min = 7:07
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.28 in. x 25.4 = 769.112 mmHg - 15.169 = 753.943 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number:

1. Specific Conductance: 1.413
2. ORP: 240.0
3. pH:
   - Point 1: 7.00
   - Point 2: 10.00
   - Point 3: 4.01
4. DO: 99%, 11.38 mg/L

Colorimeter Model/Serial Number: 070590C63690

Turbidity Meter Model/Serial Number: 2020we / 5127-5014

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/15/2015

Calibrated by: WES

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 634 + 10min = 644
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.45 in. x 25.4 = 773.43 mmHg - 15.169 = 758.201 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: 10M10 1289

1. Specific Conductance: 1.413 mS/cm
2. ORP: 240.1
3. pH:
   - Point 1: 7.00
   - Point 2: 10.01
   - Point 3: 4.03
4. DO: 16.88

Colorimeter Model/Serial Number: 10432

Turbidity Meter Model/Serial Number: 2020 WC/50644

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1/15/15

Calibrated by: RP for BR

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes): LC 6:59

1. Ensure unit has been on for at least 10 minutes: Initial time: 6:5 + 10min = 7:09
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.28 in. x 25.4 = 769.112 mmHg - 15.169 = 753.943 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number:

1. Specific Conductance: 1413 µS/cm
2. ORP: 240
3. pH:
   - Point 1: 7
   - Point 2: 10
   - Point 3: 4.01
4. DO: ~~12.00~~ 11.09 %

Colorimeter Model/Serial Number: 2100692

Turbidity Meter Model/Serial Number: 029749

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 1-15-15

Calibrated by: Micky Shetty

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes):

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes):

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 0645 + 10min = 0655
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.28 in. x 25.4 = 769.112 mmHg - 15.169 = 753.943 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number:

1. Specific Conductance: 1.413
2. ORP: 240
3. pH:
   - Point 1: 7.0
   - Point 2: 4.0
   - Point 3: 10.0
4. DO: 11.28 mg/L → 99.8%

Colorimeter Model/Serial Number: 19032

Turbidity Meter Model/Serial Number: 020596

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 01/15/2015

Calibrated by: Rachel LaFore

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes): Lot # 4AH642 Exp 8/31/2015

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes): Lot # 6448 Exp 7/20/2016

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes): Lot # 4AC064 Exp 3/16

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Lot # 4AC634 Exp 3/31/2016

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Lot # C340-09 Exp 12/9/15

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 0655 + 10min = 0705
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.24 in. x 25.4 = 768.096 mmHg - 15.169 = 752.927 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!) 7:28
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number: 11427

1. Specific Conductance: 1450 uS/cm^3
2. ORP: 234.7
3. pH:
   - Point 1: 6.79
   - Point 2: 4.02
   - Point 3: 10.20
4. DO: 11.22

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: Victoria Sieglen

Calibrated by: 11/5/15

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes): Exp: 8/31/2015 Lot # 4AH6048

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes): Exp: 3/16 Lot # 4AC0064

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Exp: 5/31/18 Lot # 6138

3-Point pH calibration (should take *at least* 4.5 minutes):

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor. Exp 6/30/15
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below. Lot # 3AF820
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):

1. Ensure unit has been on for at least 10 minutes: Initial time: 0722 + 10min = 0732
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.24 in. x 25.4 = 768.50 mmHg - 15.169 = 753.7 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

1. Select "measure" on the main menu, then "Turbidity – With Blank"
2. Scan a sample using the 0.0 NTU Blank solution. "Scan Blank"
3. Scan a sample using the 10 NTU standard. "Scan Sample"
4. Select "Calibrate," then use the arrow buttons to adjust the value to the standard (10.0 NTU).

Field Notebook calibration entry:

YSI – Serial Number:

1. Specific Conductance: 1108
2. ORP: 244.0
3. pH:
   - Point 1: 7.04
   - Point 2: 9.94
   - Point 3: 4.00
4. DO: 10.92

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Appendix B

Laboratory Analytical Data

Pace Analytical Services, Inc.
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(913)599-5665

January 27, 2015

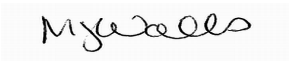
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH, AR
Pace Project No.: 60186000

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on January 13, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

Dallas Certification IDs:
400 West Bethany Dr Suite 190, Allen, TX 75013
EPA# TX00074
Texas Certification #: T104704232-14-8
Kansas Certification #: E-10388
Arkansas Certification #: 88-0647
Oklahoma Certification #: 2014-055
Louisiana Certification #: 02007

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SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60186000

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186000001	**IW-72-201501**	Water	01/12/15 14:00	01/13/15 06:35
60186000002	**MW-67-201501**	Water	01/12/15 14:51	01/13/15 06:35
60186000003	**MW-68-201501**	Water	01/12/15 14:10	01/13/15 06:35
60186000004	**ITMW-20-201501**	Water	01/12/15 16:20	01/13/15 06:35
60186000005	**MW-31-201501**	Water	01/12/15 17:00	01/13/15 06:35
60186000006	**MW-40-201501**	Water	01/12/15 14:45	01/13/15 06:35
60186000007	**MW-36-201501**	Water	01/12/15 16:35	01/13/15 06:35
60186000008	**MW-90-201501**	Water	01/12/15 16:25	01/13/15 06:35
60186000009	**MW-39-201501**	Water	01/12/15 16:25	01/13/15 06:35
60186000010	**EB-05-201501**	Water	01/12/15 16:30	01/13/15 06:35
60186000011	**TB-06-201501**	Water	01/12/15 14:00	01/13/15 06:35
60186000012	**TB-10-201501**	Water	01/12/15 14:00	01/13/15 06:35
60186000013	**TB-05-201501**	Water	01/12/15 14:00	01/13/15 06:35

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60186000

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60186000001	**IW-72-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186000002	**MW-67-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186000003	**MW-68-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60186000

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186000004	**ITMW-20-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186000005	**MW-31-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186000006	**MW-40-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60186000

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186000007	**MW-36-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186000008	**MW-90-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186000009	**MW-39-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60186000

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186000010	**EB-05-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186000011	**TB-06-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186000012	**TB-10-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186000013	**TB-05-201501**	EPA 5030B/8260	PRG	38	PASI-K

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60186000

Method: **EPA 8015 - Alcohol**
Description: Alcohol by Direct Inject GCFID
Client: Environ_AR
Date: January 27, 2015

General Information:
9 samples were analyzed for EPA 8015 - Alcohol. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60186000

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Environ_AR
Date: January 27, 2015

General Information:
9 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60186000

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: January 27, 2015

General Information:
13 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/66988

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186000004

R1: RPD value was outside control limits.

- MSD (Lab ID: 1505788)
  - Vinyl chloride

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60186000

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: Environ_AR
Date: January 27, 2015

General Information:
9 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60186000

Method: **SM 3500-Fe B#4**
Description: Iron, Ferric (Calculation)
Client: Environ_AR
Date: January 27, 2015

General Information:
9 samples were analyzed for SM 3500-Fe B#4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60186000

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: January 27, 2015

General Information:
9 samples were analyzed for SM 4500-H+B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H6: Analysis initiated outside of the 15 minute EPA recommended holding time.
- ITMW-20-201501 (Lab ID: 60186000004)
- IW-72-201501 (Lab ID: 60186000001)
- MW-31-201501 (Lab ID: 60186000005)
- MW-36-201501 (Lab ID: 60186000007)
- MW-39-201501 (Lab ID: 60186000009)
- MW-40-201501 (Lab ID: 60186000006)
- MW-67-201501 (Lab ID: 60186000002)
- MW-68-201501 (Lab ID: 60186000003)
- MW-90-201501 (Lab ID: 60186000008)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: WET/52639

1e: Field pH
- ITMW-20-201501 (Lab ID: 60186000004)
  - pH at 25 Degrees C
- IW-72-201501 (Lab ID: 60186000001)
  - pH at 25 Degrees C
- MW-31-201501 (Lab ID: 60186000005)
  - pH at 25 Degrees C
- MW-36-201501 (Lab ID: 60186000007)
  - pH at 25 Degrees C
- MW-39-201501 (Lab ID: 60186000009)
  - pH at 25 Degrees C
- MW-40-201501 (Lab ID: 60186000006)
  - pH at 25 Degrees C
- MW-67-201501 (Lab ID: 60186000002)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60186000

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: January 27, 2015

Analyte Comments:

QC Batch: WET/52639

1e: Field pH

- MW-68-201501 (Lab ID: 60186000003)
  - pH at 25 Degrees C
- MW-90-201501 (Lab ID: 60186000008)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60186000

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Environ_AR
Date: January 27, 2015

General Information:
9 samples were analyzed for SM 4500-S-2 D. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WET/52468

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186000004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1505686)
  - Sulfide, Total

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60186000

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Environ_AR
Date: January 27, 2015

General Information:
9 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: WETA/32546

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1508567)
  - Sulfate

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/32546

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186000004,60186148001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 1507171)
  - Chloride

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60186000

Method: **EPA 350.1**
Description: 350.1 Ammonia
Client: Environ_AR
Date: January 27, 2015

General Information:
9 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/32560

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186000004,60186274001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1508462)
  - Nitrogen, Ammonia

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60186000

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Environ_AR
Date: January 27, 2015

General Information:
9 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/32510

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60185994002,60186000004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1505531)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrite

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60186000

Method: **SM 4500-CO2 D**
Description: Total Carbon Dioxide Calc
Client: Environ_AR
Date: January 27, 2015

General Information:
9 samples were analyzed for SM 4500-CO2 D. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60186000

Method: **SM 5310C**
Description: 5310C TOC
Client: Environ_AR
Date: January 27, 2015

General Information:
9 samples were analyzed for SM 5310C. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60186000

Method: **SM 4500-P E**
Description: SM4500P-E, Total Phosphorus
Client: Environ_AR
Date: January 27, 2015

General Information:
9 samples were analyzed for SM 4500-P E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with SM4500-P B with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/7050

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186000004,7522296001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MSD (Lab ID: 116793)
  - Phosphate as P04

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: IW-72-201501 **Lab ID: 60186000001** Collected: 01/12/15 14:00 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 12:54	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**114**	ug/L	50.0	24.0	1	01/14/15 09:30	01/14/15 18:04	7439-89-6	
Manganese	**4810**	ug/L	5.0	2.5	1	01/14/15 09:30	01/14/15 18:04	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/14/15 12:05	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/14/15 12:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/14/15 12:05	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/14/15 12:05	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/14/15 12:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/14/15 12:05	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/14/15 12:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/14/15 12:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/14/15 12:05	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:05	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/14/15 12:05	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/14/15 12:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/14/15 12:05	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/14/15 12:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 12:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 12:05	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/14/15 12:05	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/14/15 12:05	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/14/15 12:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/14/15 12:05	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/14/15 12:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:05	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/14/15 12:05	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:05	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:05	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/14/15 12:05	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/14/15 12:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/14/15 12:05	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/14/15 12:05	17060-07-0	
Toluene-d8 (S)	81	%	80-120		1		01/14/15 12:05	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/14/15 12:05		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: IW-72-201501 **Lab ID: 60186000001** Collected: 01/12/15 14:00 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**119**	mg/L	20.0	2.0	1		01/14/15 09:34		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/14/15 09:34		
Alkalinity, Total as CaCO3	**119**	mg/L	20.0	2.0	1		01/14/15 09:34		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/26/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.0**	Std. Units	0.10	0.10	1		01/22/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/14/15 11:17	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**242**	mg/L	20.0	10.0	20		01/19/15 17:51	16887-00-6	
Sulfate	**8.5**	mg/L	1.0	0.50	1		01/19/15 18:39	14808-79-8	L2
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 08:36	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.98**	mg/L	0.10	0.012	1		01/13/15 15:13		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/13/15 15:13		
Nitrogen, NO2 plus NO3	**0.98**	mg/L	0.10	0.012	1		01/13/15 15:13		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**337**	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.53J**	mg/L	1.0	0.50	1		01/14/15 10:48	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.17**	mg/L	0.030	0.010	1	01/20/15 08:47	01/20/15 14:18		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: MW-67-201501 **Lab ID: 60186000002** Collected: 01/12/15 14:51 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 13:05	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**38800**	ug/L	50.0	24.0	1	01/14/15 09:30	01/14/15 18:07	7439-89-6	
Manganese	**300**	ug/L	5.0	2.5	1	01/14/15 09:30	01/14/15 18:07	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/14/15 12:21	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/14/15 12:21	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/14/15 12:21	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/14/15 12:21	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/14/15 12:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/14/15 12:21	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/14/15 12:21	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/14/15 12:21	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/14/15 12:21	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:21	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/14/15 12:21	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/14/15 12:21	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/14/15 12:21	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/14/15 12:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 12:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 12:21	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/14/15 12:21	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/14/15 12:21	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/14/15 12:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/14/15 12:21	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/14/15 12:21	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:21	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:21	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/14/15 12:21	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:21	79-00-5	
Trichloroethene	**1.3**	ug/L	1.0	0.50	1		01/14/15 12:21	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/14/15 12:21	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/14/15 12:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		01/14/15 12:21	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/14/15 12:21	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/14/15 12:21	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/14/15 12:21		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: MW-67-201501 **Lab ID: 60186000002** Collected: 01/12/15 14:51 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**266**	mg/L	20.0	2.0	1		01/14/15 09:38		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/14/15 09:38		
Alkalinity, Total as CaCO3	**266**	mg/L	20.0	2.0	1		01/14/15 09:38		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**38.7**	mg/L	0.20		1		01/26/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.9**	Std. Units	0.10	0.10	1		01/22/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/14/15 11:19	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**119**	mg/L	10.0	5.0	10		01/16/15 20:36	16887-00-6	
Sulfate	**10.2**	mg/L	1.0	0.50	1		01/19/15 18:55	14808-79-8	L2
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 08:37	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.057J**	mg/L	0.10	0.012	1		01/13/15 15:14		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/13/15 15:14		
Nitrogen, NO2 plus NO3	**0.057J**	mg/L	0.10	0.012	1		01/13/15 15:14		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**308**	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.64J**	mg/L	1.0	0.50	1		01/14/15 11:08	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**2.0**	mg/L	0.030	0.010	1	01/20/15 08:47	01/20/15 14:19		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: MW-68-201501 **Lab ID: 60186000003** Collected: 01/12/15 14:10 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 13:17	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**37.3J**	ug/L	50.0	24.0	1	01/14/15 09:30	01/14/15 18:11	7439-89-6	
Manganese	**1020**	ug/L	5.0	2.5	1	01/14/15 09:30	01/14/15 18:11	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/14/15 12:38	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/14/15 12:38	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/14/15 12:38	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/14/15 12:38	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/14/15 12:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/14/15 12:38	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/14/15 12:38	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/14/15 12:38	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/14/15 12:38	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:38	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/14/15 12:38	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/14/15 12:38	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/14/15 12:38	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:38	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:38	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/14/15 12:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 12:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 12:38	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/14/15 12:38	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/14/15 12:38	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/14/15 12:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/14/15 12:38	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/14/15 12:38	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:38	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:38	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/14/15 12:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:38	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:38	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/14/15 12:38	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/14/15 12:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		01/14/15 12:38	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		01/14/15 12:38	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/14/15 12:38	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/14/15 12:38		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: MW-68-201501 **Lab ID: 60186000003** Collected: 01/12/15 14:10 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**8.2J**	mg/L	20.0	2.0	1		01/14/15 09:41		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/14/15 09:41		
Alkalinity, Total as CaCO3	**8.2J**	mg/L	20.0	2.0	1		01/14/15 09:41		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/26/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**4.9**	Std. Units	0.10	0.10	1		01/22/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/14/15 11:20	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**334**	mg/L	20.0	10.0	20		01/19/15 19:11	16887-00-6	
Sulfate	**1.0**	mg/L	1.0	0.50	1		01/19/15 19:26	14808-79-8	L2
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 08:38	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		01/13/15 15:15		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/13/15 15:15		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		01/13/15 15:15		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		01/14/15 11:47	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.066**	mg/L	0.030	0.010	1	01/20/15 08:47	01/20/15 14:19		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: ITMW-20-201501 **Lab ID: 60186000004** Collected: 01/12/15 16:20 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 13:28	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**47.2J**	ug/L	50.0	24.0	1	01/14/15 09:30	01/14/15 18:21	7439-89-6	
Manganese	**7.8**	ug/L	5.0	2.5	1	01/14/15 09:30	01/14/15 18:21	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/14/15 14:16	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/14/15 14:16	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/14/15 14:16	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/14/15 14:16	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/14/15 14:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/14/15 14:16	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/14/15 14:16	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/14/15 14:16	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/14/15 14:16	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/14/15 14:16	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/14/15 14:16	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/14/15 14:16	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/14/15 14:16	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 14:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 14:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 14:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 14:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 14:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/14/15 14:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 14:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 14:16	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/14/15 14:16	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/14/15 14:16	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/14/15 14:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/14/15 14:16	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/14/15 14:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/14/15 14:16	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/14/15 14:16	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/14/15 14:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 14:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 14:16	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 14:16	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/14/15 14:16	75-01-4	R1
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/14/15 14:16	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/14/15 14:16	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/14/15 14:16	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/14/15 14:16	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/14/15 14:16		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: ITMW-20-201501 **Lab ID: 60186000004** Collected: 01/12/15 16:20 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**85.0**	mg/L	20.0	2.0	1		01/14/15 09:45		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/14/15 09:45		
Alkalinity, Total as CaCO3	**85.0**	mg/L	20.0	2.0	1		01/14/15 09:45		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/26/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.3**	Std. Units	0.10	0.10	1		01/22/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/14/15 11:20	18496-25-8	M1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**108**	mg/L	10.0	5.0	10		01/16/15 21:08	16887-00-6	
Sulfate	**16.6**	mg/L	1.0	0.50	1		01/19/15 19:42	14808-79-8	L2
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 08:39	7664-41-7	M1
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.1**	mg/L	0.10	0.012	1		01/13/15 15:17		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/13/15 15:17		
Nitrogen, NO2 plus NO3	**1.1**	mg/L	0.10	0.012	1		01/13/15 15:17		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**158**	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.53J**	mg/L	1.0	0.50	1		01/14/15 12:06	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.066**	mg/L	0.030	0.010	1	01/20/15 08:47	01/20/15 14:19		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: MW-31-201501 **Lab ID: 60186000005** Collected: 01/12/15 17:00 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 13:39	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**199**	ug/L	50.0	24.0	1	01/14/15 09:30	01/14/15 18:31	7439-89-6	
Manganese	**234**	ug/L	5.0	2.5	1	01/14/15 09:30	01/14/15 18:31	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/14/15 12:54	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/14/15 12:54	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/14/15 12:54	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/14/15 12:54	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/14/15 12:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/14/15 12:54	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/14/15 12:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/14/15 12:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/14/15 12:54	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:54	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/14/15 12:54	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/14/15 12:54	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/14/15 12:54	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/14/15 12:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 12:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 12:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/14/15 12:54	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/14/15 12:54	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/14/15 12:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/14/15 12:54	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/14/15 12:54	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:54	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/14/15 12:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 12:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 12:54	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/14/15 12:54	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/14/15 12:54	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/14/15 12:54	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		01/14/15 12:54	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/14/15 12:54	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/14/15 12:54		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: MW-31-201501 **Lab ID: 60186000005** Collected: 01/12/15 17:00 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**16.5J**	mg/L	20.0	2.0	1		01/14/15 10:00		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/14/15 10:00		
Alkalinity, Total as CaCO3	**16.5J**	mg/L	20.0	2.0	1		01/14/15 10:00		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/26/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.3**	Std. Units	0.10	0.10	1		01/22/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/14/15 11:21	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**97.8**	mg/L	10.0	5.0	10		01/16/15 22:12	16887-00-6	
Sulfate	**31.7**	mg/L	2.0	1.0	2		01/19/15 20:14	14808-79-8	L2
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 14:53	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.16**	mg/L	0.10	0.012	1		01/13/15 15:19		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/13/15 15:19		
Nitrogen, NO2 plus NO3	**0.16**	mg/L	0.10	0.012	1		01/13/15 15:19		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.75J**	mg/L	1.0	0.50	1		01/14/15 12:45	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.066**	mg/L	0.030	0.010	1	01/20/15 08:47	01/20/15 14:20		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: MW-40-201501 **Lab ID: 60186000006** Collected: 01/12/15 14:45 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 13:50	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	01/14/15 09:30	01/14/15 18:34	7439-89-6	
Manganese	**192**	ug/L	5.0	2.5	1	01/14/15 09:30	01/14/15 18:34	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/14/15 13:11	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/14/15 13:11	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/14/15 13:11	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/14/15 13:11	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/14/15 13:11	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/14/15 13:11	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/14/15 13:11	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/14/15 13:11	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/14/15 13:11	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/14/15 13:11	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/14/15 13:11	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/14/15 13:11	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/14/15 13:11	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 13:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 13:11	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 13:11	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 13:11	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 13:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/14/15 13:11	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 13:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 13:11	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/14/15 13:11	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/14/15 13:11	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/14/15 13:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/14/15 13:11	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/14/15 13:11	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/14/15 13:11	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/14/15 13:11	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/14/15 13:11	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 13:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 13:11	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 13:11	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/14/15 13:11	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/14/15 13:11	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/14/15 13:11	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		01/14/15 13:11	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/14/15 13:11	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/14/15 13:11		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: MW-40-201501 **Lab ID: 60186000006** Collected: 01/12/15 14:45 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**12.2J**	mg/L	20.0	2.0	1		01/14/15 10:03		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/14/15 10:03		
Alkalinity, Total as CaCO3	**12.2J**	mg/L	20.0	2.0	1		01/14/15 10:03		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/26/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.1**	Std. Units	0.10	0.10	1		01/22/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/14/15 11:22	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**237**	mg/L	20.0	10.0	20		01/19/15 20:30	16887-00-6	
Sulfate	**2.8**	mg/L	1.0	0.50	1		01/19/15 20:46	14808-79-8	L2
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 14:55	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		01/13/15 15:20		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/13/15 15:20		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		01/13/15 15:20		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		01/15/15 10:37	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	01/20/15 08:47	01/20/15 14:21		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: MW-36-201501 **Lab ID: 60186000007** Collected: 01/12/15 16:35 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 14:01	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**112**	ug/L	50.0	24.0	1	01/14/15 09:30	01/14/15 18:38	7439-89-6	
Manganese	**470**	ug/L	5.0	2.5	1	01/14/15 09:30	01/14/15 18:38	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/14/15 13:27	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/14/15 13:27	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/14/15 13:27	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/14/15 13:27	75-25-2	
Bromomethane	**16.4**	ug/L	5.0	2.5	1		01/14/15 13:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/14/15 13:27	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/14/15 13:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/14/15 13:27	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/14/15 13:27	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/14/15 13:27	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/14/15 13:27	67-66-3	
Chloromethane	**1.2**	ug/L	1.0	0.50	1		01/14/15 13:27	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/14/15 13:27	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 13:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 13:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 13:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 13:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 13:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/14/15 13:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 13:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 13:27	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/14/15 13:27	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/14/15 13:27	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/14/15 13:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/14/15 13:27	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/14/15 13:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/14/15 13:27	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/14/15 13:27	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/14/15 13:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 13:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 13:27	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 13:27	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/14/15 13:27	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/14/15 13:27	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/14/15 13:27	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		01/14/15 13:27	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/14/15 13:27	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/14/15 13:27		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: MW-36-201501 **Lab ID: 60186000007** Collected: 01/12/15 16:35 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**13.1J**	mg/L	20.0	2.0	1		01/14/15 10:06		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/14/15 10:06		
Alkalinity, Total as CaCO3	**13.1J**	mg/L	20.0	2.0	1		01/14/15 10:06		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/26/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.1**	Std. Units	0.10	0.10	1		01/22/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/14/15 11:22	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**251**	mg/L	20.0	10.0	20		01/19/15 21:02	16887-00-6	
Sulfate	**77.8**	mg/L	10.0	5.0	10		01/16/15 22:44	14808-79-8	L2
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 14:56	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		01/13/15 15:21		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/13/15 15:21		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		01/13/15 15:21		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		01/15/15 10:56	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	ND	mg/L	0.030	0.010	1	01/20/15 08:47	01/20/15 14:21		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: MW-90-201501 **Lab ID: 60186000008** Collected: 01/12/15 16:25 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 14:13	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**4500**	ug/L	50.0	24.0	1	01/14/15 09:30	01/14/15 18:41	7439-89-6	
Manganese	**505**	ug/L	5.0	2.5	1	01/14/15 09:30	01/14/15 18:41	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/14/15 13:43	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/14/15 13:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/14/15 13:43	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/14/15 13:43	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/14/15 13:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/14/15 13:43	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/14/15 13:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/14/15 13:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/14/15 13:43	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/14/15 13:43	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/14/15 13:43	67-66-3	
Chloromethane	**1.4**	ug/L	1.0	0.50	1		01/14/15 13:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/14/15 13:43	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 13:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 13:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 13:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 13:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 13:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/14/15 13:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 13:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 13:43	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/14/15 13:43	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/14/15 13:43	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/14/15 13:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/14/15 13:43	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/14/15 13:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/14/15 13:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/14/15 13:43	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/14/15 13:43	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 13:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 13:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 13:43	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/14/15 13:43	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/14/15 13:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/14/15 13:43	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		01/14/15 13:43	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/14/15 13:43	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/14/15 13:43		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: MW-90-201501 **Lab ID: 60186000008** Collected: 01/12/15 16:25 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**300**	mg/L	20.0	2.0	1		01/14/15 10:12		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/14/15 10:12		
Alkalinity, Total as CaCO3	**300**	mg/L	20.0	2.0	1		01/14/15 10:12		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**1.2**	mg/L	0.20		1		01/26/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.5**	Std. Units	0.10	0.10	1		01/22/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	**1.2**	mg/L	0.050	0.0092	1		01/14/15 11:22	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**91.8**	mg/L	10.0	5.0	10		01/16/15 19:15	16887-00-6	
Sulfate	**89.0**	mg/L	10.0	5.0	10		01/16/15 19:15	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.049J**	mg/L	0.10	0.023	1		01/20/15 14:57	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		01/13/15 15:22		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/13/15 15:22		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		01/13/15 15:22		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**441**	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**20.1**	mg/L	2.0	1.0	2		01/15/15 11:35	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	01/20/15 08:47	01/20/15 14:21		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: MW-39-201501 **Lab ID: 60186000009** Collected: 01/12/15 16:25 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 14:24	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**44.1J**	ug/L	50.0	24.0	1	01/14/15 09:30	01/14/15 18:45	7439-89-6	
Manganese	**402**	ug/L	5.0	2.5	1	01/14/15 09:30	01/14/15 18:45	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/14/15 14:00	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/14/15 14:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/14/15 14:00	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/14/15 14:00	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/14/15 14:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/14/15 14:00	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/14/15 14:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/14/15 14:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/14/15 14:00	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/14/15 14:00	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/14/15 14:00	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/14/15 14:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/14/15 14:00	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 14:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 14:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 14:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 14:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 14:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/14/15 14:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 14:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 14:00	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/14/15 14:00	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/14/15 14:00	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/14/15 14:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/14/15 14:00	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/14/15 14:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/14/15 14:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/14/15 14:00	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/14/15 14:00	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 14:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 14:00	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 14:00	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/14/15 14:00	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/14/15 14:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/14/15 14:00	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/14/15 14:00	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/14/15 14:00	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/14/15 14:00		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: MW-39-201501 **Lab ID: 60186000009** Collected: 01/12/15 16:25 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**9.9J**	mg/L	20.0	2.0	1		01/14/15 10:15		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/14/15 10:15		
Alkalinity, Total as CaCO3	**9.9J**	mg/L	20.0	2.0	1		01/14/15 10:15		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/26/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.1**	Std. Units	0.10	0.10	1		01/22/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/14/15 11:23	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**332**	mg/L	20.0	10.0	20		01/19/15 15:23	16887-00-6	
Sulfate	**6.5**	mg/L	1.0	0.50	1		01/19/15 16:22	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 15:02	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		01/13/15 15:23		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/13/15 15:23		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		01/13/15 15:23		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		01/15/15 11:54	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	01/20/15 08:47	01/20/15 14:21		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: EB-05-201501 **Lab ID: 60186000010** Collected: 01/12/15 16:30 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/14/15 10:59	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/14/15 10:59	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/14/15 10:59	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/14/15 10:59	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/14/15 10:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/14/15 10:59	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/14/15 10:59	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/14/15 10:59	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/14/15 10:59	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/14/15 10:59	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/14/15 10:59	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/14/15 10:59	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/14/15 10:59	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 10:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 10:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 10:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 10:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 10:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/14/15 10:59	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 10:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 10:59	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/14/15 10:59	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/14/15 10:59	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/14/15 10:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/14/15 10:59	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/14/15 10:59	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/14/15 10:59	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/14/15 10:59	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/14/15 10:59	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 10:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 10:59	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 10:59	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/14/15 10:59	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/14/15 10:59	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		01/14/15 10:59	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/14/15 10:59	17060-07-0	
Toluene-d8 (S)	103	%	80-120		1		01/14/15 10:59	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/14/15 10:59		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: TB-06-201501 **Lab ID: 60186000011** Collected: 01/12/15 14:00 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/14/15 11:15	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/14/15 11:15	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/14/15 11:15	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/14/15 11:15	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/14/15 11:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/14/15 11:15	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/14/15 11:15	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/14/15 11:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/14/15 11:15	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/14/15 11:15	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/14/15 11:15	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/14/15 11:15	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/14/15 11:15	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 11:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 11:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 11:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 11:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 11:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/14/15 11:15	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 11:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 11:15	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/14/15 11:15	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/14/15 11:15	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/14/15 11:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/14/15 11:15	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/14/15 11:15	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/14/15 11:15	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/14/15 11:15	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/14/15 11:15	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 11:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 11:15	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 11:15	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/14/15 11:15	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/14/15 11:15	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/14/15 11:15	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		01/14/15 11:15	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/14/15 11:15	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/14/15 11:15		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: TB-10-201501 **Lab ID: 60186000012** Collected: 01/12/15 14:00 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/14/15 11:32	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/14/15 11:32	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/14/15 11:32	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/14/15 11:32	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/14/15 11:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/14/15 11:32	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/14/15 11:32	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/14/15 11:32	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/14/15 11:32	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/14/15 11:32	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/14/15 11:32	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/14/15 11:32	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/14/15 11:32	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 11:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 11:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 11:32	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 11:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 11:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/14/15 11:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 11:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 11:32	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/14/15 11:32	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/14/15 11:32	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/14/15 11:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/14/15 11:32	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/14/15 11:32	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/14/15 11:32	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/14/15 11:32	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/14/15 11:32	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 11:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 11:32	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 11:32	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/14/15 11:32	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/14/15 11:32	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/14/15 11:32	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		01/14/15 11:32	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		01/14/15 11:32	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/14/15 11:32		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60186000

Sample: TB-05-201501 **Lab ID: 60186000013** Collected: 01/12/15 14:00 Received: 01/13/15 06:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/14/15 11:48	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/14/15 11:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/14/15 11:48	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/14/15 11:48	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/14/15 11:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/14/15 11:48	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/14/15 11:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/14/15 11:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/14/15 11:48	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/14/15 11:48	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/14/15 11:48	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/14/15 11:48	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/14/15 11:48	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 11:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 11:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 11:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 11:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 11:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/14/15 11:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 11:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/14/15 11:48	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/14/15 11:48	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/14/15 11:48	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/14/15 11:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/14/15 11:48	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/14/15 11:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/14/15 11:48	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/14/15 11:48	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/14/15 11:48	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 11:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/14/15 11:48	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/14/15 11:48	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/14/15 11:48	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/14/15 11:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		01/14/15 11:48	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		01/14/15 11:48	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/14/15 11:48	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/14/15 11:48		

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60186000

QC Batch: GCSV/3343 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004, 60186000005, 60186000006, 60186000007, 60186000008, 60186000009

METHOD BLANK: 116416 Matrix: Water
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004, 60186000005, 60186000006, 60186000007, 60186000008, 60186000009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	01/16/15 12:32	

LABORATORY CONTROL SAMPLE: 116417

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	102000	102	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 116418 116419

Parameter	Units	60186000004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2-Chloroethanol	ug/L	ND	100000	100000	99900	98800	100	99	40-140	1	40	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60186000

QC Batch: MPRP/30462 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004, 60186000005, 60186000006, 60186000007, 60186000008, 60186000009

METHOD BLANK: 1505664 Matrix: Water
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004, 60186000005, 60186000006, 60186000007, 60186000008, 60186000009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	01/14/15 18:00	
Manganese	ug/L	ND	5.0	01/14/15 18:00	

LABORATORY CONTROL SAMPLE: 1505665

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9700	97	80-120	
Manganese	ug/L	1000	943	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1505666 1505667

Parameter	Units	60186000004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	47.2J	10000	10000	9920	9920	99	99	75-125	0	20	
Manganese	ug/L	7.8	1000	1000	974	967	97	96	75-125	1	20	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60186000

QC Batch: MSV/66988 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004, 60186000005, 60186000006, 60186000007, 60186000008, 60186000009, 60186000010, 60186000011, 60186000012, 60186000013

METHOD BLANK: 1505785 Matrix: Water
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004, 60186000005, 60186000006, 60186000007, 60186000008, 60186000009, 60186000010, 60186000011, 60186000012, 60186000013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/14/15 08:48	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/14/15 08:48	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/14/15 08:48	
1,1-Dichloroethane	ug/L	ND	1.0	01/14/15 08:48	
1,1-Dichloroethene	ug/L	ND	1.0	01/14/15 08:48	
1,2-Dichloroethane	ug/L	ND	1.0	01/14/15 08:48	
1,2-Dichloropropane	ug/L	ND	1.0	01/14/15 08:48	
2-Butanone (MEK)	ug/L	ND	10.0	01/14/15 08:48	
2-Hexanone	ug/L	ND	10.0	01/14/15 08:48	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/14/15 08:48	
Acetone	ug/L	ND	10.0	01/14/15 08:48	
Benzene	ug/L	ND	1.0	01/14/15 08:48	
Bromodichloromethane	ug/L	ND	1.0	01/14/15 08:48	
Bromoform	ug/L	ND	1.0	01/14/15 08:48	
Bromomethane	ug/L	ND	5.0	01/14/15 08:48	
Carbon disulfide	ug/L	ND	5.0	01/14/15 08:48	
Carbon tetrachloride	ug/L	ND	1.0	01/14/15 08:48	
Chlorobenzene	ug/L	ND	1.0	01/14/15 08:48	
Chloroethane	ug/L	ND	1.0	01/14/15 08:48	
Chloroform	ug/L	ND	1.0	01/14/15 08:48	
Chloromethane	ug/L	ND	1.0	01/14/15 08:48	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/14/15 08:48	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/14/15 08:48	
Dibromochloromethane	ug/L	ND	1.0	01/14/15 08:48	
Ethylbenzene	ug/L	ND	1.0	01/14/15 08:48	
Methylene chloride	ug/L	ND	1.0	01/14/15 08:48	
Styrene	ug/L	ND	1.0	01/14/15 08:48	
Tetrachloroethene	ug/L	ND	1.0	01/14/15 08:48	
Toluene	ug/L	ND	1.0	01/14/15 08:48	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/14/15 08:48	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/14/15 08:48	
Trichloroethene	ug/L	ND	1.0	01/14/15 08:48	
Vinyl chloride	ug/L	ND	1.0	01/14/15 08:48	
Xylene (Total)	ug/L	ND	3.0	01/14/15 08:48	
1,2-Dichloroethane-d4 (S)	%	100	80-120	01/14/15 08:48	
4-Bromofluorobenzene (S)	%	97	80-120	01/14/15 08:48	
Toluene-d8 (S)	%	102	80-120	01/14/15 08:48	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60186000

LABORATORY CONTROL SAMPLE: 1505786

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.5	108	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	21.3	107	73-121	
1,1,2-Trichloroethane	ug/L	20	19.9	100	80-120	
1,1-Dichloroethane	ug/L	20	19.5	97	80-120	
1,1-Dichloroethene	ug/L	20	19.9	99	80-120	
1,2-Dichloroethane	ug/L	20	20.5	103	81-120	
1,2-Dichloropropane	ug/L	20	20.5	102	80-120	
2-Butanone (MEK)	ug/L	100	85.6	86	67-122	
2-Hexanone	ug/L	100	90.0	90	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	93.0	93	76-120	
Acetone	ug/L	100	88.5	88	72-120	
Benzene	ug/L	20	20.4	102	80-120	
Bromodichloromethane	ug/L	20	20.7	104	80-120	
Bromoform	ug/L	20	18.3	92	73-138	
Bromomethane	ug/L	20	20.4	102	38-137	
Carbon disulfide	ug/L	20	18.9	94	71-129	
Carbon tetrachloride	ug/L	20	19.7	99	67-146	
Chlorobenzene	ug/L	20	20.9	105	80-120	
Chloroethane	ug/L	20	16.7	84	76-120	
Chloroform	ug/L	20	20.2	101	80-120	
Chloromethane	ug/L	20	15.4	77	34-165	
cis-1,2-Dichloroethene	ug/L	20	19.8	99	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.4	102	80-120	
Dibromochloromethane	ug/L	20	21.0	105	80-126	
Ethylbenzene	ug/L	20	21.1	106	80-120	
Methylene chloride	ug/L	20	20.3	101	80-120	
Styrene	ug/L	20	20.4	102	80-123	
Tetrachloroethene	ug/L	20	22.8	114	80-123	
Toluene	ug/L	20	20.0	100	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.7	98	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.9	104	80-129	
Trichloroethene	ug/L	20	20.5	103	80-120	
Vinyl chloride	ug/L	20	19.0	95	62-125	
Xylene (Total)	ug/L	60	59.9	100	80-120	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1505787 1505788

Parameter	Units	60186000004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	22.0	22.1	110	110	88-124	1	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	20.9	21.3	105	106	78-116	2	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	19.9	19.9	100	100	84-112	0	10	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60186000

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1505787 1505788

Parameter	Units	60186000004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	ND	20	20	18.9	19.0	94	95	82-121	1	9	
1,1-Dichloroethene	ug/L	ND	20	20	19.8	20.8	99	104	78-124	5	12	
1,2-Dichloroethane	ug/L	ND	20	20	20.1	20.7	100	104	79-121	3	12	
1,2-Dichloropropane	ug/L	ND	20	20	20.7	20.5	104	103	82-119	1	10	
2-Butanone (MEK)	ug/L	ND	100	100	79.7	80.2	80	80	66-114	1	13	
2-Hexanone	ug/L	ND	100	100	87.3	89.1	87	89	71-116	2	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	92.1	93.0	92	93	72-122	1	12	
Acetone	ug/L	ND	100	100	81.4	81.9	81	82	65-113	1	27	
Benzene	ug/L	ND	20	20	20.8	21.1	104	106	46-155	2	13	
Bromodichloromethane	ug/L	ND	20	20	20.6	20.8	103	104	77-127	1	10	
Bromoform	ug/L	ND	20	20	18.1	18.1	90	90	70-125	0	11	
Bromomethane	ug/L	ND	20	20	10.5	14.0	52	70	41-140	29	30	
Carbon disulfide	ug/L	ND	20	20	20.6	22.0	103	110	68-140	6	10	
Carbon tetrachloride	ug/L	ND	20	20	19.2	19.4	96	97	68-147	1	11	
Chlorobenzene	ug/L	ND	20	20	21.4	21.5	107	108	83-121	0	9	
Chloroethane	ug/L	ND	20	20	16.6	18.2	83	91	69-126	9	19	
Chloroform	ug/L	ND	20	20	20.5	20.5	102	103	86-119	0	9	
Chloromethane	ug/L	ND	20	20	11.9	13.1	60	65	23-168	9	49	
cis-1,2-Dichloroethene	ug/L	ND	20	20	19.9	19.7	100	98	85-117	1	10	
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.9	20.4	100	102	74-115	3	12	
Dibromochloromethane	ug/L	ND	20	20	21.6	22.3	108	111	65-134	3	11	
Ethylbenzene	ug/L	ND	20	20	21.3	21.4	106	107	51-148	1	14	
Methylene chloride	ug/L	ND	20	20	19.3	19.5	96	98	75-118	1	11	
Styrene	ug/L	ND	20	20	15.4	16.5	77	83	17-174	7	10	
Tetrachloroethene	ug/L	ND	20	20	23.2	23.9	116	119	78-127	3	9	
Toluene	ug/L	ND	20	20	20.2	20.7	101	103	47-149	2	16	
trans-1,2-Dichloroethene	ug/L	ND	20	20	19.6	20.5	98	103	84-119	4	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	20.2	20.8	101	104	71-120	3	10	
Trichloroethene	ug/L	ND	20	20	20.6	21.2	103	106	70-135	3	10	
Vinyl chloride	ug/L	ND	20	20	15.7	17.7	79	89	58-130	12	11	R1
Xylene (Total)	ug/L	ND	60	60	60.0	62.2	100	104	39-158	3	15	
1,2-Dichloroethane-d4 (S)	%						100	100	80-120			
4-Bromofluorobenzene (S)	%						101	101	80-120			
Toluene-d8 (S)	%						101	100	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60186000

QC Batch: WET/52465 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004, 60186000005, 60186000006, 60186000007, 60186000008, 60186000009

METHOD BLANK: 1505644 Matrix: Water
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004, 60186000005, 60186000006, 60186000007, 60186000008, 60186000009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	01/14/15 09:11	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	01/14/15 09:11	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	01/14/15 09:11	

LABORATORY CONTROL SAMPLE: 1505645

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	510	102	90-110	

SAMPLE DUPLICATE: 1505646

Parameter	Units	60186000004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	85.0	84.8	0	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	85.0	84.8	0	10	

SAMPLE DUPLICATE: 1505647

Parameter	Units	60185943006 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	103	102	1	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	103	102	1	10	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60186000

QC Batch: WET/52468 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004, 60186000005, 60186000006, 60186000007, 60186000008, 60186000009

METHOD BLANK: 1505683 Matrix: Water
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004, 60186000005, 60186000006, 60186000007, 60186000008, 60186000009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	01/14/15 11:14	

LABORATORY CONTROL SAMPLE: 1505684

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.50	99	80-120	

MATRIX SPIKE SAMPLE: 1505686

Parameter	Units	60186000004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.36	71	75-125	M1

SAMPLE DUPLICATE: 1505685

Parameter	Units	60185943001 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60186000

QC Batch: WETA/32546 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004, 60186000005, 60186000006, 60186000007

METHOD BLANK: 1507168 Matrix: Water
Associated Lab Samples: 60186000002, 60186000004, 60186000005, 60186000007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/16/15 16:06	
Sulfate	mg/L	ND	1.0	01/16/15 16:06	

METHOD BLANK: 1508566 Matrix: Water
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004, 60186000005, 60186000006, 60186000007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/19/15 14:24	
Sulfate	mg/L	ND	1.0	01/19/15 14:24	

LABORATORY CONTROL SAMPLE: 1507169

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.6	92	90-110	
Sulfate	mg/L	5	5.0	99	90-110	

LABORATORY CONTROL SAMPLE: 1508567

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	93	90-110	
Sulfate	mg/L	5	ND	0	90-110	L0

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1507170 1507171

Parameter	Units	60186148001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1630	500	500	2190	2240	113	123	80-120	2	15	M1
Sulfate	mg/L	129	500	500	637	641	102	103	80-120	1	15	

MATRIX SPIKE SAMPLE: 1507172

Parameter	Units	60186000004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	108	50	163	110	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60186000

MATRIX SPIKE SAMPLE: 1507172

Parameter	Units	60186000004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	16.6	5	21.5	98	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60186000

QC Batch: WETA/32547 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60186000008, 60186000009

METHOD BLANK: 1507177 Matrix: Water
Associated Lab Samples: 60186000008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/16/15 18:15	
Sulfate	mg/L	ND	1.0	01/16/15 18:15	

METHOD BLANK: 1508541 Matrix: Water
Associated Lab Samples: 60186000009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/19/15 14:53	
Sulfate	mg/L	ND	1.0	01/19/15 14:53	

LABORATORY CONTROL SAMPLE: 1507178

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	98	90-110	
Sulfate	mg/L	5	4.6	92	90-110	

LABORATORY CONTROL SAMPLE: 1508542

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	96	90-110	
Sulfate	mg/L	5	4.7	94	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1507179 1507180

Parameter	Units	60186000008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	91.8	50	50	149	142	115	101	80-120	5	15	
Sulfate	mg/L	89.0	50	50	145	140	112	101	80-120	4	15	

MATRIX SPIKE SAMPLE: 1507181

Parameter	Units	60186000009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	332	100	431	99	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60186000

MATRIX SPIKE SAMPLE: 1507181

Parameter	Units	60186000009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	6.5	5	11.5	100	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60186000

QC Batch: WETA/32560 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004

METHOD BLANK: 1508458 Matrix: Water
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	01/20/15 08:19	

LABORATORY CONTROL SAMPLE: 1508459

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.1	107	90-110	

MATRIX SPIKE SAMPLE: 1508460

Parameter	Units	60186274001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.48	2	2.5	102	90-110	

MATRIX SPIKE SAMPLE: 1508462

Parameter	Units	60186000004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.6	78	90-110	M1

SAMPLE DUPLICATE: 1508461

Parameter	Units	60185762002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	ND	ND		18	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60186000

QC Batch: WETA/32579 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60186000005, 60186000006, 60186000007, 60186000008, 60186000009

METHOD BLANK: 1508911 Matrix: Water
Associated Lab Samples: 60186000005, 60186000006, 60186000007, 60186000008, 60186000009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	01/20/15 14:50	

LABORATORY CONTROL SAMPLE: 1508912

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.1	106	90-110	

MATRIX SPIKE SAMPLE: 1508913

Parameter	Units	60186000005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	2.0	99	90-110	

SAMPLE DUPLICATE: 1508914

Parameter	Units	60186000008 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	0.049J	0.057J		18	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60186000

QC Batch: WETA/32510 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004, 60186000005, 60186000006, 60186000007, 60186000008, 60186000009

METHOD BLANK: 1505529 Matrix: Water
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004, 60186000005, 60186000006, 60186000007, 60186000008, 60186000009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	01/13/15 15:07	
Nitrogen, Nitrite	mg/L	ND	0.10	01/13/15 15:07	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	01/13/15 15:07	

LABORATORY CONTROL SAMPLE: 1505530

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.7	109	85-115	
Nitrogen, Nitrite	mg/L	.4	0.37	93	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	106	90-110	

MATRIX SPIKE SAMPLE: 1505531

Parameter	Units	60185994002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	19.3	16	36.6	108	85-115	
Nitrogen, Nitrite	mg/L	ND	4	5.0	126	90-110	M1
Nitrogen, NO2 plus NO3	mg/L	19.3	20	41.6	111	90-110	M1

MATRIX SPIKE SAMPLE: 1505532

Parameter	Units	60186000004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.1	1.6	2.7	103	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.38	94	90-110	
Nitrogen, NO2 plus NO3	mg/L	1.1	2	3.1	101	90-110	

SAMPLE DUPLICATE: 1505533

Parameter	Units	60185981001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.92	0.93	0	20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	0.92	0.93	0	20	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60186000

QC Batch: WETA/32517 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004, 60186000005

METHOD BLANK: 1505668 Matrix: Water
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004, 60186000005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	01/14/15 10:09	

LABORATORY CONTROL SAMPLE: 1505669

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.5	110	80-120	

MATRIX SPIKE SAMPLE: 1505671

Parameter	Units	60186000004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	0.53J	5	5.0	89	80-120	

SAMPLE DUPLICATE: 1505670

Parameter	Units	60186000001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	0.53J	0.64J		25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60186000

QC Batch: WETA/32532 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60186000006, 60186000007, 60186000008, 60186000009

METHOD BLANK: 1506199 Matrix: Water
Associated Lab Samples: 60186000006, 60186000007, 60186000008, 60186000009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	01/15/15 09:58	

LABORATORY CONTROL SAMPLE: 1506200

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.4	109	80-120	

MATRIX SPIKE SAMPLE: 1506202

Parameter	Units	60186097005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	ND	5	4.6	82	80-120	

SAMPLE DUPLICATE: 1506201

Parameter	Units	60186000007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	ND		25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60186000

QC Batch: WETA/7050 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004, 60186000005, 60186000006, 60186000007, 60186000008, 60186000009

METHOD BLANK: 116776 Matrix: Water
Associated Lab Samples: 60186000001, 60186000002, 60186000003, 60186000004, 60186000005, 60186000006, 60186000007, 60186000008, 60186000009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	01/20/15 14:16	

LABORATORY CONTROL SAMPLE: 116777

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.6	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 116780 116781

Parameter	Units	60186000004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphate as P04	mg/L	0.066	1.5	1.5	1.4	1.5	86	96	80-120	10	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 116792 116793

Parameter	Units	7522296001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphate as P04	mg/L	1.4	1.5	1.5	2.6	2.6	80	77	80-120	2	20	M1

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60186000

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-D	Pace Analytical Services - Dallas
PASI-K	Pace Analytical Services - Kansas City

ANALYTE QUALIFIERS

1e	Field pH
H6	Analysis initiated outside of the 15 minute EPA recommended holding time.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60186000

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186000001	**IW-72-201501**	EPA 8015 - Alcohol	GCSV/3343		
60186000002	**MW-67-201501**	EPA 8015 - Alcohol	GCSV/3343		
60186000003	**MW-68-201501**	EPA 8015 - Alcohol	GCSV/3343		
60186000004	**ITMW-20-201501**	EPA 8015 - Alcohol	GCSV/3343		
60186000005	**MW-31-201501**	EPA 8015 - Alcohol	GCSV/3343		
60186000006	**MW-40-201501**	EPA 8015 - Alcohol	GCSV/3343		
60186000007	**MW-36-201501**	EPA 8015 - Alcohol	GCSV/3343		
60186000008	**MW-90-201501**	EPA 8015 - Alcohol	GCSV/3343		
60186000009	**MW-39-201501**	EPA 8015 - Alcohol	GCSV/3343		
60186000001	**IW-72-201501**	EPA 3010	MPRP/30462	EPA 6010	ICP/22761
60186000002	**MW-67-201501**	EPA 3010	MPRP/30462	EPA 6010	ICP/22761
60186000003	**MW-68-201501**	EPA 3010	MPRP/30462	EPA 6010	ICP/22761
60186000004	**ITMW-20-201501**	EPA 3010	MPRP/30462	EPA 6010	ICP/22761
60186000005	**MW-31-201501**	EPA 3010	MPRP/30462	EPA 6010	ICP/22761
60186000006	**MW-40-201501**	EPA 3010	MPRP/30462	EPA 6010	ICP/22761
60186000007	**MW-36-201501**	EPA 3010	MPRP/30462	EPA 6010	ICP/22761
60186000008	**MW-90-201501**	EPA 3010	MPRP/30462	EPA 6010	ICP/22761
60186000009	**MW-39-201501**	EPA 3010	MPRP/30462	EPA 6010	ICP/22761
60186000001	**IW-72-201501**	EPA 5030B/8260	MSV/66988		
60186000002	**MW-67-201501**	EPA 5030B/8260	MSV/66988		
60186000003	**MW-68-201501**	EPA 5030B/8260	MSV/66988		
60186000004	**ITMW-20-201501**	EPA 5030B/8260	MSV/66988		
60186000005	**MW-31-201501**	EPA 5030B/8260	MSV/66988		
60186000006	**MW-40-201501**	EPA 5030B/8260	MSV/66988		
60186000007	**MW-36-201501**	EPA 5030B/8260	MSV/66988		
60186000008	**MW-90-201501**	EPA 5030B/8260	MSV/66988		
60186000009	**MW-39-201501**	EPA 5030B/8260	MSV/66988		
60186000010	**EB-05-201501**	EPA 5030B/8260	MSV/66988		
60186000011	**TB-06-201501**	EPA 5030B/8260	MSV/66988		
60186000012	**TB-10-201501**	EPA 5030B/8260	MSV/66988		
60186000013	**TB-05-201501**	EPA 5030B/8260	MSV/66988		
60186000001	**IW-72-201501**	SM 2320B	WET/52465		
60186000002	**MW-67-201501**	SM 2320B	WET/52465		
60186000003	**MW-68-201501**	SM 2320B	WET/52465		
60186000004	**ITMW-20-201501**	SM 2320B	WET/52465		
60186000005	**MW-31-201501**	SM 2320B	WET/52465		
60186000006	**MW-40-201501**	SM 2320B	WET/52465		
60186000007	**MW-36-201501**	SM 2320B	WET/52465		
60186000008	**MW-90-201501**	SM 2320B	WET/52465		
60186000009	**MW-39-201501**	SM 2320B	WET/52465		
60186000001	**IW-72-201501**	SM 3500-Fe B#4	WET/52637		
60186000002	**MW-67-201501**	SM 3500-Fe B#4	WET/52637		
60186000003	**MW-68-201501**	SM 3500-Fe B#4	WET/52637		
60186000004	**ITMW-20-201501**	SM 3500-Fe B#4	WET/52637		
60186000005	**MW-31-201501**	SM 3500-Fe B#4	WET/52637		
60186000006	**MW-40-201501**	SM 3500-Fe B#4	WET/52637		
60186000007	**MW-36-201501**	SM 3500-Fe B#4	WET/52637		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60186000

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186000008	**MW-90-201501**	SM 3500-Fe B#4	WET/52637		
60186000009	**MW-39-201501**	SM 3500-Fe B#4	WET/52637		
60186000001	**IW-72-201501**	SM 4500-H+B	WET/52639		
60186000002	**MW-67-201501**	SM 4500-H+B	WET/52639		
60186000003	**MW-68-201501**	SM 4500-H+B	WET/52639		
60186000004	**ITMW-20-201501**	SM 4500-H+B	WET/52639		
60186000005	**MW-31-201501**	SM 4500-H+B	WET/52639		
60186000006	**MW-40-201501**	SM 4500-H+B	WET/52639		
60186000007	**MW-36-201501**	SM 4500-H+B	WET/52639		
60186000008	**MW-90-201501**	SM 4500-H+B	WET/52639		
60186000009	**MW-39-201501**	SM 4500-H+B	WET/52639		
60186000001	**IW-72-201501**	SM 4500-S-2 D	WET/52468		
60186000002	**MW-67-201501**	SM 4500-S-2 D	WET/52468		
60186000003	**MW-68-201501**	SM 4500-S-2 D	WET/52468		
60186000004	**ITMW-20-201501**	SM 4500-S-2 D	WET/52468		
60186000005	**MW-31-201501**	SM 4500-S-2 D	WET/52468		
60186000006	**MW-40-201501**	SM 4500-S-2 D	WET/52468		
60186000007	**MW-36-201501**	SM 4500-S-2 D	WET/52468		
60186000008	**MW-90-201501**	SM 4500-S-2 D	WET/52468		
60186000009	**MW-39-201501**	SM 4500-S-2 D	WET/52468		
60186000001	**IW-72-201501**	EPA 300.0	WETA/32546		
60186000002	**MW-67-201501**	EPA 300.0	WETA/32546		
60186000003	**MW-68-201501**	EPA 300.0	WETA/32546		
60186000004	**ITMW-20-201501**	EPA 300.0	WETA/32546		
60186000005	**MW-31-201501**	EPA 300.0	WETA/32546		
60186000006	**MW-40-201501**	EPA 300.0	WETA/32546		
60186000007	**MW-36-201501**	EPA 300.0	WETA/32546		
60186000008	**MW-90-201501**	EPA 300.0	WETA/32547		
60186000009	**MW-39-201501**	EPA 300.0	WETA/32547		
60186000001	**IW-72-201501**	EPA 350.1	WETA/32560		
60186000002	**MW-67-201501**	EPA 350.1	WETA/32560		
60186000003	**MW-68-201501**	EPA 350.1	WETA/32560		
60186000004	**ITMW-20-201501**	EPA 350.1	WETA/32560		
60186000005	**MW-31-201501**	EPA 350.1	WETA/32579		
60186000006	**MW-40-201501**	EPA 350.1	WETA/32579		
60186000007	**MW-36-201501**	EPA 350.1	WETA/32579		
60186000008	**MW-90-201501**	EPA 350.1	WETA/32579		
60186000009	**MW-39-201501**	EPA 350.1	WETA/32579		
60186000001	**IW-72-201501**	EPA 353.2	WETA/32510		
60186000002	**MW-67-201501**	EPA 353.2	WETA/32510		
60186000003	**MW-68-201501**	EPA 353.2	WETA/32510		
60186000004	**ITMW-20-201501**	EPA 353.2	WETA/32510		
60186000005	**MW-31-201501**	EPA 353.2	WETA/32510		
60186000006	**MW-40-201501**	EPA 353.2	WETA/32510		
60186000007	**MW-36-201501**	EPA 353.2	WETA/32510		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60186000

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186000008	**MW-90-201501**	EPA 353.2	WETA/32510		
60186000009	**MW-39-201501**	EPA 353.2	WETA/32510		
60186000001	**IW-72-201501**	SM 4500-CO2 D	WETA/32649		
60186000002	**MW-67-201501**	SM 4500-CO2 D	WETA/32649		
60186000003	**MW-68-201501**	SM 4500-CO2 D	WETA/32649		
60186000004	**ITMW-20-201501**	SM 4500-CO2 D	WETA/32649		
60186000005	**MW-31-201501**	SM 4500-CO2 D	WETA/32649		
60186000006	**MW-40-201501**	SM 4500-CO2 D	WETA/32649		
60186000007	**MW-36-201501**	SM 4500-CO2 D	WETA/32649		
60186000008	**MW-90-201501**	SM 4500-CO2 D	WETA/32649		
60186000009	**MW-39-201501**	SM 4500-CO2 D	WETA/32649		
60186000001	**IW-72-201501**	SM 5310C	WETA/32517		
60186000002	**MW-67-201501**	SM 5310C	WETA/32517		
60186000003	**MW-68-201501**	SM 5310C	WETA/32517		
60186000004	**ITMW-20-201501**	SM 5310C	WETA/32517		
60186000005	**MW-31-201501**	SM 5310C	WETA/32517		
60186000006	**MW-40-201501**	SM 5310C	WETA/32532		
60186000007	**MW-36-201501**	SM 5310C	WETA/32532		
60186000008	**MW-90-201501**	SM 5310C	WETA/32532		
60186000009	**MW-39-201501**	SM 5310C	WETA/32532		
60186000001	**IW-72-201501**	SM4500-P B	WETA/7050	SM 4500-P E	WETA/7058
60186000002	**MW-67-201501**	SM4500-P B	WETA/7050	SM 4500-P E	WETA/7058
60186000003	**MW-68-201501**	SM4500-P B	WETA/7050	SM 4500-P E	WETA/7058
60186000004	**ITMW-20-201501**	SM4500-P B	WETA/7050	SM 4500-P E	WETA/7058
60186000005	**MW-31-201501**	SM4500-P B	WETA/7050	SM 4500-P E	WETA/7058
60186000006	**MW-40-201501**	SM4500-P B	WETA/7050	SM 4500-P E	WETA/7058
60186000007	**MW-36-201501**	SM4500-P B	WETA/7050	SM 4500-P E	WETA/7058
60186000008	**MW-90-201501**	SM4500-P B	WETA/7050	SM 4500-P E	WETA/7058
60186000009	**MW-39-201501**	SM4500-P B	WETA/7050	SM 4500-P E	WETA/7058

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Sample Condition Upon Receipt

WO# : 60186000

60186000

Client Name: Enviros

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☒ VIA

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☐ None ☐ Other ☑ Zip/c

Thermometer Used: T-239 / T-194 **Type of Ice:** Wet Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 0.5/1.7/3.7

Date and initials of person examining contents: PV 1/13/15

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes	☐No	☐N/A	1.
Chain of Custody filled out:	☑Yes	☐No	☐N/A	2.
Chain of Custody relinquished:	☑Yes	☐No	☐N/A	3. Samples received with TB.
Sampler name & signature on COC:	☑Yes	☐No	☐N/A	4. TB 6 - MW-90, 72, 20, 68, EB-05
Samples arrived within holding time:	☑Yes	☐No	☐N/A	5. TB 10 - MW-31, 67, 39, 36
Short Hold Time analyses (<72hr): NO2NO3 PH	☑Yes	☐No	☐N/A	6. TB 5 - MW40
Rush Turn Around Time requested:	☐Yes	☑No	☐N/A	7.
Sufficient volume:	☑Yes	☐No	☐N/A	8.
Correct containers used:	☑Yes	☐No	☐N/A	
Pace containers used:	☑Yes	☐No	☐N/A	9.
Containers intact:	☑Yes	☐No	☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes	☐No	☑N/A	11.
Filtered volume received for dissolved tests?	☐Yes	☐No	☑N/A	12.
Sample labels match COC:	☑Yes	☐No	☐N/A	
Includes date/time/ID/analyses Matrix: WT				13.
All containers needing preservation have been checked.	☐Yes	☐No	☑N/A	Added 2.5 mL of HNO3 to MW-67 BRBN. PH 6.0/1.5
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	☑Yes	☐No		Initial when completed PV / Lot # of added preservative 12573-77-10
Trip Blank present:	☑Yes	☐No	☐N/A	
Pace Trip Blank lot # (if purchased): Cover				15.
Headspace in VOA vials (>6mm):	☐Yes	☑No	☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes	☐No	☑N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [signature] Date: 1/12

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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.

Page: 1 of 2

Section A Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-72-20150[illegible]	WT	G	1/6/15		1/12/15	1400	-	11	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	N	60186000
2	MW-67-20150[illegible]	WT	G		1451	1/12/15	1451	-	11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	X	N	
3	MW-68-20150[illegible]	WT	G			1/12/15	1410	-	11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	X	N	
4	TMW-20-20150[illegible]	WT	G		1620	1/12/15	1620	-	11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	X	N	MS/MSD
5	MW-31-20150[illegible]	WT	G			1/12/15	1700		11	X	X	X	X	X	↓		X												N	
6	~~MW-73-20150[illegible]~~	WT	G			1/12/15																								
7	MW-~~40~~-20150[illegible]	WT	G			1/12/15	1445		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	X	N	
8	MW-36-20150[illegible]	WT	G			1/12/15	1635	-	11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	X	N	
9	MW-90-20150[illegible]	WT	G		1625	1/12/15	1625	-	11	X	X	X	X	X	↓		X		X	X	X	X	X	X	X	X	X	X	N	
10	EB-05-201501	WT	G			1/12/15	1630	-	3					X					X										N	
11	MW-39-201501	WT	G			1/12/15	1430	-	11	X	X	X	X	X	↓		X		X	X	X	X	X	X	X	X	X	X	N	
12	TB-06-201501	WT	G			1/12/15	—	-	3										X										N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Level IV data package required	Victoria Siegler/ ENVIRON	1/12/15			1/13/15	0635

SAMPLE CONDITIONS

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
0.5	X	X	X
1.7	X	X	X
3.7	X	X	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Siegler

SIGNATURE of SAMPLER: Victoria Siegler DATE Signed (MM/DD/YY): 1/12/15

*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.

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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.

Section A Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	Sample ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
				DATE	TIME	DATE	TIME											Y/N	22											
1	TB-10-201501	WT	G		1/12/15	1/12/15	—	-	3				X						X											30614 002
2	TB-05-201501	WT	G		1/12/15	1/12/15	—	-	3				X						X											↓ 617
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Level IV data package required	Victoria Stegall ENVIRON	1/12/15		PURPASE	1/13/15	0635	0.5	X	Y	Y
							1.7	Y	Y	Y
							3.7	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Stegall

SIGNATURE of SAMPLER: Victoria Stegall DATE Signed (MM/DD/YY): 1/12/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*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

Pace Analytical®
www.pacelabs.com

Workorder: 60186000 **Workorder Name:** FORT SMITH, AR **Owner Received Date:** 1/13/2015 **Results Requested By:** 1/23/2015

Report To	Subcontract To
Mary Jane Walls Pace Analytical Services, Inc. 9608 Loiret Blvd. Lenexa, KS 66219 Phone (913)599-5665 Fax (913)599-1759	Pace Analytical Dallas 400 West Bethany Drive Suite 190 Allen, TX 75013 Phone (972)727-1123

WO# : 7522333

7522333

						Preserved Containers						Requested Analysis												
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	H2SO4	none					Total Phosphate	8015 Chloroethanol											LAB USE ONLY
1	IW-72-201 501	PS	1/12/2015 14:00	60186000001	Water	1	3					X	X											001
2	MW-67-201501	PS	1/12/2015 14:51	60186000002	Water	1	3					X	X											002
3	MW-68-201501	PS	1/12/2015 14:10	60186000003	Water	1	3					X	X											003
4	ITMW-20-201501	RQS	1/12/2015 16:20	60186000004	Water	1	3					X	X											004
5	MW-31-201501	PS	1/12/2015 17:00	60186000005	Water	1	3					X	X											005
6	MW-40-201501	PS	1/12/2015 14:45	60186000006	Water	1	3					X	X											006
7	MW-36-201501	PS	1/12/2015 16:35	60186000007	Water	1	3					X	X											007
8	MW-90-201501	PS	1/12/2015 16:25	60186000008	Water	1	3					X	X											008
9	MW-39-201501	PS	1/12/2015 16:25	60186000009	Water	1	3					X	X											009

Comments

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	1/13/15 700	Kathy Wiemann Pace	1/14/15 1345
2				
3				

Cooler Temperature on Receipt +2.0 5.2 °C Custody Seal Y or N Received on Ice (Y) or N Samples Intact (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*

This chain of custody is considered complete as is since this information is available in the owner laboratory.

Pace Analytical

Sample Condition Upon Receipt
Dallas

Client Name: Pace Kansas Project Work order: 7522333

Courier: FedEX ☒ UPS ☐ USPS ☐ Client ☐ Courier ☐ LSO ☐ PACE ☐ Other:_____

Tracking#: 6262 7065 7493

Custody Seal on Cooler/Box: Yes ☒ No ☐ **Seals Intact:** Yes ☒ No ☐ NA ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☒ None ☐ Other ☒

Thermometer Used: IR-01 Type of Ice: Wet ☒ Blue ☐ None ☐ Sample Received on ice, cooling process has begun ☒

Cooler Temp: 5.20 C (Temp should be above freezing to 6°C)

Chain of Custody Present	Yes ☒ No ☐ NA ☐	1
Chain of Custody filled out	Yes ☒ No ☐ NA ☐	2
Chain of Custody relinquished	Yes ☒ No ☐ NA ☐	3
Sampler name & signature on COC	Yes ☐ No ☒ NA ☐	4
Sample received within HT	Yes ☒ No ☐ NA ☐	5
Short HT analyses (<72 hrs)	Yes ☐ No ☒ NA ☐	6
Rush TAT requested	Yes ☐ No ☒ NA ☐	7
Sufficient Volume received	Yes ☒ No ☐ NA ☐	8
Correct Container used Pace Container used	Yes ☒ No ☐ NA ☐ Yes ☒ No ☐ NA ☐	9
Container Intact	Yes ☒ No ☐ NA ☐	10
Unpreserved 5035A soil frozen within 48 hrs	Yes ☐ No ☐ NA ☒	11
Filtered volume received for Dissolved tests	Yes ☐ No ☐ NA ☒	12
Sample labels match COC Include date/time/ID/analyses Matrix:_____	Yes ☒ No ☐ NA ☐	13
All containers needing preservation have been checked	Yes ☒ No ☐ NA ☐	14a. Lot# of pH strip: 6040 3001 pH checked Yes ☒ No ☐ pH<2 ☒ pH>9 ☐ pH>12 ☐ Lot# of Iodine strip:_____ Lot# of Lead Acetate strip:_____
Do containers require preservation at the lab	Yes ☐ No ☒ NA ☐	14b. Preservation: / Lot#:
All containers needing preservation are found to be in Compliance with EPA recommendation **Exception**: VOA, coliform, O&G	Yes ☒ No ☐ NA ☐ Yes ☐ No ☒	14c.
Are soil samples (volatiles) received in	Bulk ☐ Terracore ☐ EnCore ☐ NA ☒	15.
Trip Blank present Trip Blank Custody Seals Intact Pace Trip Blank Lot# (if purchased):_____	Yes ☐ No ☐ NA ☒ Yes ☐ No ☐ NA ☒	16.
Headspace in VOA (>6mm)	Yes ☐ No ☐ NA ☒	17.
Project sampled in USDA Regulated Area:	Yes ☐ No ☐ NA ☒	18. List State _____

Client Notification/Resolution/Comments:

Person Contacted:_____ Date:_____

Comments/Resolution:_____

Person Examining Contents: KLa Date: 1/14/15

Pace Analytical Services - Dallas

Sample Container Count-

COC PAGE 1 of 1

COC ID# _____

Pace Project # 7522333

Sample Line Item	AG1S	AG1U	AG3S	BG1H	BG1S	BP1U	BP2N	BP2S	BP2U	BP20	SP5T	VG9H	VG9M	VG9T	VG9U	VG9W	WGFU	WGKU			
1								1							3						
2								1							3						
3								1							3						
4								1							3						
5								1							3						
6								1							3						
7								1							3						
8								1							3						
9								1							3						
10																					
11																					
12																					

Container Codes

DG9H	40mL HCL amber voa vial	AF	Air Filter	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	BP3A	250mL NaOh, Asc Acid plastic	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag
WGKU	8oz wide jar upreserved	SP5T	120mL Coliform Na Thiosulfate	SP5U	120mL Coliform unpreserved	GN	General unpreserved
Other	Other						

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

February 05, 2015

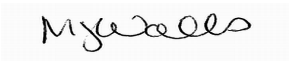
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory between January 14, 2015 and January 15, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

Dallas Certification IDs:
400 West Bethany Dr Suite 190, Allen, TX 75013
EPA# TX00074
Texas Certification #: T104704232-14-8
Kansas Certification #: E-10388
Arkansas Certification #: 88-0647
Oklahoma Certification #: 2014-055
Louisiana Certification #: 02007

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SAMPLE SUMMARY

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186097001	MW-57-201501	Water	01/13/15 14:37	01/14/15 08:50
60186097002	ITMW-9-201501	Water	01/13/15 09:20	01/14/15 08:50
60186097003	MW-35R-201501	Water	01/13/15 10:35	01/14/15 08:50
60186097004	MW-65-201501	Water	01/13/15 10:40	01/14/15 08:50
60186097005	ITMW-6-201501	Water	01/13/15 11:48	01/14/15 08:50
60186097006	ITMW-4-201501	Water	01/13/15 09:30	01/14/15 08:50
60186097007	MW-62-201501	Water	01/13/15 11:20	01/14/15 08:50
60186097008	MW-29-201501	Water	01/13/15 14:23	01/14/15 08:50
60186097009	ITMW-2-201501	Water	01/13/15 16:20	01/14/15 08:50
60186097010	MW-22-201501	Water	01/13/15 09:45	01/14/15 08:50
60186097011	MW-46R-201501	Water	01/13/15 14:55	01/14/15 08:50
60186097012	DUP-03-201501	Water	01/13/15 14:55	01/14/15 08:50
60186097013	MW-91-201501	Water	01/13/15 16:31	01/14/15 08:50
60186097014	DUP-07-201501	Water	01/13/15 16:31	01/14/15 08:50
60186097015	MW-89-201501	Water	01/13/15 14:41	01/14/15 08:50
60186097016	MW-82-201501	Water	01/13/15 16:00	01/14/15 08:50
60186097017	MW-61-201501	Water	01/13/15 16:00	01/14/15 08:50
60186097018	MW-50-201501	Water	01/13/15 14:30	01/14/15 08:50
60186097019	MW-60-201501	Water	01/13/15 13:00	01/14/15 08:50
60186097020	MW-81-201501	Water	01/13/15 16:15	01/14/15 08:50
60186097021	MW-63-201501	Water	01/13/15 16:25	01/14/15 08:50
60186097022	TB-02-201501	Water	01/13/15 09:20	01/14/15 08:50
60186097023	TB-01-201501	Water	01/13/15 09:20	01/14/15 08:50
60186097024	EB-01-201501	Water	01/13/15 18:00	01/14/15 08:50
60186097025	TB-08-201501	Water	01/13/15 09:20	01/14/15 08:50
60186097026	DUP-02-201501	Water	01/13/15 09:20	01/14/15 08:50
60186097027	TB-06-201501	Water	01/13/15 09:20	01/14/15 08:50
60186097028	EB-02-201501	Water	01/13/15 18:02	01/14/15 08:50
60186097029	TB-03-201501	Water	01/13/15 09:20	01/14/15 08:50
60186097030	TB-04-201501	Water	01/13/15 09:20	01/14/15 08:50
60186097031	TB-09-201501	Water	01/13/15 09:20	01/14/15 08:50
60186097032	TB-10-201501	Water	01/13/15 09:20	01/14/15 08:50
60186097033	MW-56-201501	Water	01/13/15 11:15	01/15/15 08:20
60186097034	IW-80-201501	Water	01/13/15 13:35	01/15/15 08:20
60186097035	MW-34-201501	Water	01/13/15 13:20	01/15/15 08:20
60186097036	MW-88-201501	Water	01/13/15 11:58	01/15/15 08:20
60186097037	TB-07-201501	Water	01/13/15 09:20	01/15/15 08:20

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SAMPLE ANALYTE COUNT

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60186097001	**MW-57-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097002	**ITMW-9-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097003	**MW-35R-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-P E	BAF	1	PASI-D
60186097004	**MW-65-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097005	**ITMW-6-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097006	**ITMW-4-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K

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SAMPLE ANALYTE COUNT

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097007	**MW-62-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097008	**MW-29-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097009	**ITMW-2-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K

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SAMPLE ANALYTE COUNT

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097010	**MW-22-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097011	**MW-46R-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097012	**DUP-03-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186097013	**MW-91-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	CRT	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097014	**DUP-07-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186097015	**MW-89-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097016	**MW-82-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097017	**MW-61-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K

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SAMPLE ANALYTE COUNT

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097018	**MW-50-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097019	**MW-60-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D

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SAMPLE ANALYTE COUNT

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60186097020	**MW-81-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097021	**MW-63-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097022	**TB-02-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186097023	**TB-01-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186097024	**EB-01-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186097025	**TB-08-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186097026	**DUP-02-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186097027	**TB-06-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186097028	**EB-02-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186097029	**TB-03-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186097030	**TB-04-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186097031	**TB-09-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186097032	**TB-10-201501**	EPA 5030B/8260	PRG	38	PASI-K

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SAMPLE ANALYTE COUNT

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60186097033	**MW-56-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097034	**IW-80-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097035	**MW-34-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-P E	BAF	1	PASI-D
60186097036	**MW-88-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186097037	**TB-07-201501**	EPA 5030B/8260	PRG	38	PASI-K

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PROJECT NARRATIVE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Method: **EPA 8015 - Alcohol**
Description: Alcohol by Direct Inject GCFID
Client: Environ_AR
Date: February 05, 2015

General Information:
23 samples were analyzed for EPA 8015 - Alcohol. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Environ_AR
Date: February 05, 2015

General Information:
23 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: February 05, 2015

General Information:
37 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

pH: Post-analysis pH measurement indicates insufficient VOA sample preservation.
- MW-50-201501 (Lab ID: 60186097018)

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/67002
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/67007
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/67012
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/67027
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/67033
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/67064
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

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PROJECT NARRATIVE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: February 05, 2015

QC Batch: MSV/67070

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/67103

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: Environ_AR
Date: February 05, 2015

General Information:
23 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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(913)599-5665

PROJECT NARRATIVE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Method: **SM 3500-Fe B#4**
Description: Iron, Ferric (Calculation)
Client: Environ_AR
Date: February 05, 2015

General Information:
21 samples were analyzed for SM 3500-Fe B#4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: February 05, 2015

General Information:
23 samples were analyzed for SM 4500-H+B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H6: Analysis initiated outside of the 15 minute EPA recommended holding time.
- ITMW-2-201501 (Lab ID: 60186097009)
- ITMW-4-201501 (Lab ID: 60186097006)
- ITMW-6-201501 (Lab ID: 60186097005)
- ITMW-9-201501 (Lab ID: 60186097002)
- IW-80-201501 (Lab ID: 60186097034)
- MW-22-201501 (Lab ID: 60186097010)
- MW-29-201501 (Lab ID: 60186097008)
- MW-34-201501 (Lab ID: 60186097035)
- MW-35R-201501 (Lab ID: 60186097003)
- MW-46R-201501 (Lab ID: 60186097011)
- MW-50-201501 (Lab ID: 60186097018)
- MW-56-201501 (Lab ID: 60186097033)
- MW-57-201501 (Lab ID: 60186097001)
- MW-60-201501 (Lab ID: 60186097019)
- MW-61-201501 (Lab ID: 60186097017)
- MW-62-201501 (Lab ID: 60186097007)
- MW-63-201501 (Lab ID: 60186097021)
- MW-65-201501 (Lab ID: 60186097004)
- MW-81-201501 (Lab ID: 60186097020)
- MW-82-201501 (Lab ID: 60186097016)
- MW-88-201501 (Lab ID: 60186097036)
- MW-89-201501 (Lab ID: 60186097015)
- MW-91-201501 (Lab ID: 60186097013)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: February 05, 2015

Analyte Comments:

QC Batch: WET/52650

1e: Field pH

- ITMW-4-201501 (Lab ID: 60186097006)
  - pH at 25 Degrees C
- ITMW-6-201501 (Lab ID: 60186097005)
  - pH at 25 Degrees C
- ITMW-9-201501 (Lab ID: 60186097002)
  - pH at 25 Degrees C
- IW-80-201501 (Lab ID: 60186097034)
  - pH at 25 Degrees C
- MW-22-201501 (Lab ID: 60186097010)
  - pH at 25 Degrees C
- MW-29-201501 (Lab ID: 60186097008)
  - pH at 25 Degrees C
- MW-34-201501 (Lab ID: 60186097035)
  - pH at 25 Degrees C
- MW-35R-201501 (Lab ID: 60186097003)
  - pH at 25 Degrees C
- MW-50-201501 (Lab ID: 60186097018)
  - pH at 25 Degrees C
- MW-56-201501 (Lab ID: 60186097033)
  - pH at 25 Degrees C
- MW-60-201501 (Lab ID: 60186097019)
  - pH at 25 Degrees C
- MW-62-201501 (Lab ID: 60186097007)
  - pH at 25 Degrees C
- MW-65-201501 (Lab ID: 60186097004)
  - pH at 25 Degrees C
- MW-88-201501 (Lab ID: 60186097036)
  - pH at 25 Degrees C

QC Batch: WET/52651

1e: Field pH

- ITMW-2-201501 (Lab ID: 60186097009)
  - pH at 25 Degrees C
- MW-46R-201501 (Lab ID: 60186097011)
  - pH at 25 Degrees C
- MW-57-201501 (Lab ID: 60186097001)
  - pH at 25 Degrees C
- MW-61-201501 (Lab ID: 60186097017)
  - pH at 25 Degrees C
- MW-63-201501 (Lab ID: 60186097021)
  - pH at 25 Degrees C
- MW-81-201501 (Lab ID: 60186097020)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: February 05, 2015

Analyte Comments:

QC Batch: WET/52651

1e: Field pH

- MW-82-201501 (Lab ID: 60186097016)
  - pH at 25 Degrees C
- MW-89-201501 (Lab ID: 60186097015)
  - pH at 25 Degrees C
- MW-91-201501 (Lab ID: 60186097013)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Environ_AR
Date: February 05, 2015

General Information:
23 samples were analyzed for SM 4500-S-2 D. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WET/52537

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186183016

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1508450)
  - Sulfide, Total

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Environ_AR
Date: February 05, 2015

General Information:
23 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Method: **EPA 350.1**
Description: 350.1 Ammonia
Client: Environ_AR
Date: February 05, 2015

General Information:
23 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/32561

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186097005,60186103002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1508467)
  - Nitrogen, Ammonia

QC Batch: WETA/32562

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186064001,60186097013

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1508472)
  - Nitrogen, Ammonia

QC Batch: WETA/32588

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186138001,60186183016

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1509156)
  - Nitrogen, Ammonia

QC Batch: WETA/32589

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186097034,60186183031

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1509159)
  - Nitrogen, Ammonia
- MS (Lab ID: 1509161)

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PROJECT NARRATIVE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Method: **EPA 350.1**
Description: 350.1 Ammonia
Client: Environ_AR
Date: February 05, 2015

QC Batch: WETA/32589

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186097034,60186183031

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- Nitrogen, Ammonia

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Environ_AR
Date: February 05, 2015

General Information:
23 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/32528

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186097005,60186097008

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1506100)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrate

QC Batch: WETA/32533

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186068003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1506232)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrate
  - Nitrogen, Nitrite

QC Batch: WETA/32536

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186167001,60186183021

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1506408)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrate
- MS (Lab ID: 1506450)
  - Nitrogen, NO2 plus NO3

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PROJECT NARRATIVE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Environ_AR
Date: February 05, 2015

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Method: **SM 4500-CO2 D**
Description: Total Carbon Dioxide Calc
Client: Environ_AR
Date: February 05, 2015

General Information:
23 samples were analyzed for SM 4500-CO2 D. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Method: **SM 5310C**
Description: 5310C TOC
Client: Environ_AR
Date: February 05, 2015

General Information:
23 samples were analyzed for SM 5310C. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Method: **SM 4500-P E**
Description: SM4500P-E, Total Phosphorus
Client: Environ_AR
Date: February 05, 2015

General Information:
23 samples were analyzed for SM 4500-P E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with SM4500-P B with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/7090

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7522299003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 117353)
  - Phosphate as P04

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-57-201501 **Lab ID: 60186097001** Collected: 01/13/15 14:37 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 14:35	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**14600**	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 14:45	7439-89-6	
Manganese	**379**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 14:45	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 13:29	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 13:29	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 13:29	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 13:29	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 13:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 13:29	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 13:29	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 13:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 13:29	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:29	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 13:29	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 13:29	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 13:29	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:29	107-06-2	
1,1-Dichloroethene	**0.77J**	ug/L	1.0	0.50	1		01/15/15 13:29	75-35-4	
cis-1,2-Dichloroethene	**5.4**	ug/L	1.0	0.50	1		01/15/15 13:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 13:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 13:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 13:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 13:29	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 13:29	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 13:29	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 13:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 13:29	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 13:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:29	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 13:29	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 13:29	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:29	79-00-5	
Trichloroethene	**177**	ug/L	1.0	0.50	1		01/15/15 13:29	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 13:29	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 13:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/15/15 13:29	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/15/15 13:29	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/15/15 13:29	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 13:29		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-57-201501 **Lab ID: 60186097001** Collected: 01/13/15 14:37 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**23.5**	mg/L	20.0	2.0	1		01/15/15 09:32		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 09:32		
Alkalinity, Total as CaCO3	**23.5**	mg/L	20.0	2.0	1		01/15/15 09:32		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.5**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:07	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**331**	mg/L	20.0	10.0	20		01/26/15 13:12	16887-00-6	
Sulfate	**7.4**	mg/L	1.0	0.50	1		01/22/15 14:35	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 12:47	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		01/15/15 08:01		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 08:01		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		01/15/15 08:01		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**173**	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.3**	mg/L	1.0	0.50	1		01/15/15 13:52	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.28**	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:48		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: ITMW-9-201501 **Lab ID: 60186097002** Collected: 01/13/15 09:20 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 14:46	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 14:48	7439-89-6	
Manganese	**407**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 14:48	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 13:14	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 13:14	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 13:14	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 13:14	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 13:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 13:14	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 13:14	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 13:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 13:14	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:14	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 13:14	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 13:14	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 13:14	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:14	107-06-2	
1,1-Dichloroethene	**1.4**	ug/L	1.0	0.50	1		01/15/15 13:14	75-35-4	
cis-1,2-Dichloroethene	**39.1**	ug/L	1.0	0.50	1		01/15/15 13:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 13:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 13:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 13:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 13:14	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 13:14	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 13:14	591-78-6	
Methylene chloride	**1.0**	ug/L	1.0	0.50	1		01/15/15 13:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 13:14	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 13:14	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:14	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 13:14	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 13:14	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:14	79-00-5	
Trichloroethene	**89.6**	ug/L	1.0	0.50	1		01/15/15 13:14	79-01-6	
Vinyl chloride	**1.4**	ug/L	1.0	0.50	1		01/15/15 13:14	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 13:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/15/15 13:14	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/15/15 13:14	17060-07-0	
Toluene-d8 (S)	103	%	80-120		1		01/15/15 13:14	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 13:14		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: ITMW-9-201501 **Lab ID: 60186097002** Collected: 01/13/15 09:20 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**100**	mg/L	20.0	2.0	1		01/15/15 09:36		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 09:36		
Alkalinity, Total as CaCO3	**100**	mg/L	20.0	2.0	1		01/15/15 09:36		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.1**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:07	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**56.7**	mg/L	10.0	5.0	10		01/21/15 21:31	16887-00-6	
Sulfate	**37.5**	mg/L	2.0	1.0	2		01/26/15 13:28	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 12:49	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**10.3**	mg/L	0.50	0.058	5		01/15/15 07:50		
Nitrogen, Nitrite	ND	mg/L	0.50	0.058	5		01/15/15 07:50		
Nitrogen, NO2 plus NO3	**10.3**	mg/L	0.50	0.058	5		01/15/15 07:50		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**263**	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**3.2**	mg/L	1.0	0.50	1		01/15/15 17:45	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.17**	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:48		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-35R-201501 **Lab ID: 60186097003** Collected: 01/13/15 10:35 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 14:57	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**104**	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 15:35	7439-89-6	
Manganese	**161**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 15:35	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**56.6**	ug/L	10.0	5.0	1		01/15/15 09:51	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 09:51	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 09:51	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 09:51	75-25-2	
Bromomethane	**40.0**	ug/L	5.0	2.5	1		01/15/15 13:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 09:51	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 09:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 09:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 09:51	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 09:51	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 09:51	67-66-3	
Chloromethane	**46.2**	ug/L	1.0	0.50	1		01/15/15 09:51	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 09:51	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 09:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 09:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 09:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 09:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 09:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 09:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 09:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 09:51	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 09:51	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 09:51	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 09:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 09:51	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 09:51	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 09:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 09:51	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 09:51	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 09:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 09:51	79-00-5	
Trichloroethene	**10.9**	ug/L	1.0	0.50	1		01/15/15 09:51	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 09:51	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 09:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		01/15/15 09:51	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/15/15 09:51	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/15/15 09:51	2037-26-5	
Preservation pH	**7.0**		0.10	0.10	1		01/15/15 09:51		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-35R-201501 **Lab ID: 60186097003** Collected: 01/13/15 10:35 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**461**	mg/L	20.0	2.0	1		01/15/15 09:41		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 09:41		
Alkalinity, Total as CaCO3	**461**	mg/L	20.0	2.0	1		01/15/15 09:41		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**8.3**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:07	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**308**	mg/L	20.0	10.0	20		01/26/15 13:44	16887-00-6	
Sulfate	**7410**	mg/L	500	250	500		01/22/15 15:20	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.87**	mg/L	0.10	0.023	1		01/20/15 12:52	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**2.7**	mg/L	0.10	0.012	1		01/15/15 07:52		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 07:52		
Nitrogen, NO2 plus NO3	**2.7**	mg/L	0.10	0.012	1		01/15/15 07:52		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**410**	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**2.2**	mg/L	1.0	0.50	1		01/15/15 18:05	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**1.1**	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:49		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-65-201501 **Lab ID: 60186097004** Collected: 01/13/15 10:40 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 15:09	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**247**	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 15:38	7439-89-6	
Manganese	**102**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 15:38	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**38.7**	ug/L	10.0	5.0	1		01/15/15 09:36	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 09:36	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 09:36	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 09:36	75-25-2	
Bromomethane	**3.0J**	ug/L	5.0	2.5	1		01/15/15 09:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 09:36	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 09:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 09:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 09:36	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 09:36	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 09:36	67-66-3	
Chloromethane	**3.5**	ug/L	1.0	0.50	1		01/15/15 09:36	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 09:36	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 09:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 09:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 09:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 09:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 09:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 09:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 09:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 09:36	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 09:36	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 09:36	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 09:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 09:36	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 09:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 09:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 09:36	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 09:36	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 09:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 09:36	79-00-5	
Trichloroethene	**19.2**	ug/L	1.0	0.50	1		01/15/15 09:36	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 09:36	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 09:36	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/15/15 09:36	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/15/15 09:36	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		01/15/15 09:36	2037-26-5	
Preservation pH	**7.0**		0.10	0.10	1		01/15/15 09:36		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-65-201501 **Lab ID: 60186097004** Collected: 01/13/15 10:40 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 09:49		
Alkalinity, Carbonate (CaCO3)	**452**	mg/L	20.0	2.0	1		01/15/15 09:49		
Alkalinity, Total as CaCO3	**689**	mg/L	20.0	2.0	1		01/15/15 09:49		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**11.7**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:08	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**356**	mg/L	50.0	25.0	50		01/27/15 17:15	16887-00-6	
Sulfate	**3370**	mg/L	500	250	500		01/28/15 10:44	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.64**	mg/L	0.10	0.023	1		01/20/15 12:53	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**2.8**	mg/L	0.10	0.012	1		01/15/15 07:53		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 07:53		
Nitrogen, NO2 plus NO3	**2.8**	mg/L	0.10	0.012	1		01/15/15 07:53		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**199**	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**6.4**	mg/L	1.0	0.50	1		01/15/15 18:24	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**2.1**	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:49		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: ITMW-6-201501 **Lab ID: 60186097005** Collected: 01/13/15 11:48 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 19:04	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 14:55	7439-89-6	
Manganese	**110**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 14:55	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 10:34	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 10:34	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 10:34	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 10:34	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 10:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 10:34	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 10:34	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 10:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 10:34	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 10:34	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 10:34	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 10:34	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 10:34	124-48-1	
1,1-Dichloroethane	**4.9**	ug/L	1.0	0.50	1		01/15/15 10:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 10:34	107-06-2	
1,1-Dichloroethene	**0.65J**	ug/L	1.0	0.50	1		01/15/15 10:34	75-35-4	
cis-1,2-Dichloroethene	**5.7**	ug/L	1.0	0.50	1		01/15/15 10:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 10:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 10:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 10:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 10:34	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 10:34	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 10:34	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 10:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 10:34	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 10:34	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 10:34	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 10:34	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 10:34	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 10:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 10:34	79-00-5	
Trichloroethene	**3.7**	ug/L	1.0	0.50	1		01/15/15 10:34	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 10:34	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 10:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/15/15 10:34	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/15/15 10:34	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/15/15 10:34	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 10:34		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: ITMW-6-201501 **Lab ID: 60186097005** Collected: 01/13/15 11:48 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**145**	mg/L	20.0	2.0	1		01/15/15 09:53		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 09:53		
Alkalinity, Total as CaCO3	**145**	mg/L	20.0	2.0	1		01/15/15 09:53		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.1**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:19	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**158**	mg/L	10.0	5.0	10		01/21/15 22:16	16887-00-6	
Sulfate	**102**	mg/L	10.0	5.0	10		01/21/15 22:16	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 12:55	7664-41-7	M1
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**28.1**	mg/L	1.0	0.12	10		01/15/15 07:36		M1
Nitrogen, Nitrite	ND	mg/L	1.0	0.12	10		01/15/15 07:36		
Nitrogen, NO2 plus NO3	**28.1**	mg/L	1.0	0.12	10		01/15/15 07:36		M1
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**337**	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		01/15/15 18:43	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.077**	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:50		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: ITMW-4-201501 **Lab ID: 60186097006** Collected: 01/13/15 09:30 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 15:20	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**2550**	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 15:01	7439-89-6	
Manganese	**3300**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 15:01	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 10:49	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 10:49	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 10:49	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 10:49	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 10:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 10:49	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 10:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 10:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 10:49	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 10:49	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 10:49	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 10:49	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 10:49	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 10:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 10:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 10:49	75-35-4	
cis-1,2-Dichloroethene	**2.3**	ug/L	1.0	0.50	1		01/15/15 10:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 10:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 10:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 10:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 10:49	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 10:49	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 10:49	591-78-6	
Methylene chloride	**3.0**	ug/L	1.0	0.50	1		01/15/15 10:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 10:49	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 10:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 10:49	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 10:49	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 10:49	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 10:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 10:49	79-00-5	
Trichloroethene	**1.7**	ug/L	1.0	0.50	1		01/15/15 10:49	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 10:49	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 10:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/15/15 10:49	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/15/15 10:49	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/15/15 10:49	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 10:49		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: ITMW-4-201501 **Lab ID: 60186097006** Collected: 01/13/15 09:30 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**91.7**	mg/L	20.0	2.0	1		01/15/15 10:01		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 10:01		
Alkalinity, Total as CaCO3	**91.7**	mg/L	20.0	2.0	1		01/15/15 10:01		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**2.0**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.4**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:19	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**8.8**	mg/L	1.0	0.50	1		01/26/15 14:32	16887-00-6	
Sulfate	**19.8**	mg/L	1.0	0.50	1		01/26/15 14:32	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.25**	mg/L	0.10	0.023	1		01/20/15 12:57	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		01/15/15 07:50		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 07:50		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		01/15/15 07:50		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**149**	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**9.1**	mg/L	1.0	0.50	1		01/15/15 19:22	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:51		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-62-201501 **Lab ID: 60186097007** Collected: 01/13/15 11:20 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 15:31	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**356**	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 15:08	7439-89-6	
Manganese	**33.7**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 15:08	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 11:04	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 11:04	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 11:04	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 11:04	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 11:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 11:04	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 11:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 11:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 11:04	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:04	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 11:04	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 11:04	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 11:04	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 11:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 11:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 11:04	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 11:04	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 11:04	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 11:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 11:04	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 11:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:04	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:04	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 11:04	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:04	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:04	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 11:04	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 11:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/15/15 11:04	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/15/15 11:04	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/15/15 11:04	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 11:04		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-62-201501 **Lab ID: 60186097007** Collected: 01/13/15 11:20 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**40.1**	mg/L	20.0	2.0	1		01/15/15 10:12		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 10:12		
Alkalinity, Total as CaCO3	**40.1**	mg/L	20.0	2.0	1		01/15/15 10:12		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.36**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.5**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:20	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**157**	mg/L	10.0	5.0	10		01/21/15 23:30	16887-00-6	
Sulfate	**4.4**	mg/L	1.0	0.50	1		01/22/15 16:19	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 12:58	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.69**	mg/L	0.10	0.012	1		01/15/15 07:56		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 07:56		
Nitrogen, NO2 plus NO3	**0.69**	mg/L	0.10	0.012	1		01/15/15 07:56		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**289**	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		01/15/15 19:42	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.066**	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:52		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-29-201501 **Lab ID: 60186097008** Collected: 01/13/15 14:23 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 15:42	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**2770**	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 15:10	7439-89-6	
Manganese	**188**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 15:10	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 11:18	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 11:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 11:18	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 11:18	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 11:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 11:18	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 11:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 11:18	56-23-5	
Chlorobenzene	**6.1**	ug/L	1.0	0.50	1		01/15/15 11:18	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:18	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 11:18	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 11:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 11:18	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 11:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 11:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 11:18	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 11:18	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 11:18	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 11:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 11:18	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 11:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:18	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:18	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 11:18	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:18	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 11:18	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 11:18	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/15/15 11:18	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/15/15 11:18	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/15/15 11:18	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 11:18		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-29-201501 **Lab ID: 60186097008** Collected: 01/13/15 14:23 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**13.0J**	mg/L	20.0	2.0	1		01/15/15 10:16		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 10:16		
Alkalinity, Total as CaCO3	**13.0J**	mg/L	20.0	2.0	1		01/15/15 10:16		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**2.8**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.2**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	**0.020J**	mg/L	0.050	0.0092	1		01/20/15 10:21	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**95.9**	mg/L	10.0	5.0	10		01/21/15 23:45	16887-00-6	
Sulfate	**53.5**	mg/L	10.0	5.0	10		01/21/15 23:45	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 12:59	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.6**	mg/L	0.10	0.012	1		01/15/15 07:57		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 07:57		
Nitrogen, NO2 plus NO3	**1.6**	mg/L	0.10	0.012	1		01/15/15 07:57		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.2**	mg/L	1.0	0.50	1		01/15/15 20:01	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.17**	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:52		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: ITMW-2-201501 **Lab ID: 60186097009** Collected: 01/13/15 16:20 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 15:53	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**208**	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 15:13	7439-89-6	
Manganese	**9.5**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 15:13	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 11:33	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 11:33	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 11:33	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 11:33	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 11:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 11:33	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 11:33	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 11:33	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 11:33	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:33	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 11:33	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 11:33	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 11:33	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 11:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 11:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 11:33	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 11:33	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 11:33	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 11:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 11:33	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 11:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:33	79-34-5	
Tetrachloroethene	**0.54J**	ug/L	1.0	0.50	1		01/15/15 11:33	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 11:33	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:33	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:33	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 11:33	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 11:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/15/15 11:33	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/15/15 11:33	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/15/15 11:33	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 11:33		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: ITMW-2-201501 **Lab ID: 60186097009** Collected: 01/13/15 16:20 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**53.1**	mg/L	20.0	2.0	1		01/15/15 10:23		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 10:23		
Alkalinity, Total as CaCO3	**53.1**	mg/L	20.0	2.0	1		01/15/15 10:23		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.21**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.0**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:21	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**57.3**	mg/L	10.0	5.0	10		01/22/15 00:00	16887-00-6	
Sulfate	**16.8**	mg/L	1.0	0.50	1		01/22/15 16:34	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 13:00	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.1**	mg/L	0.10	0.012	1		01/15/15 08:08		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 08:08		
Nitrogen, NO2 plus NO3	**1.1**	mg/L	0.10	0.012	1		01/15/15 08:08		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**150**	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		01/15/15 16:47	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.066**	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:52		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-22-201501 **Lab ID: 60186097010** Collected: 01/13/15 09:45 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 16:05	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 15:15	7439-89-6	
Manganese	**100**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 15:15	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 11:47	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 11:47	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 11:47	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 11:47	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 11:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 11:47	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 11:47	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 11:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 11:47	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:47	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 11:47	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 11:47	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 11:47	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 11:47	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 11:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 11:47	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 11:47	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 11:47	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 11:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 11:47	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 11:47	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:47	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:47	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 11:47	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 11:47	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 11:47	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 11:47	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 11:47	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		01/15/15 11:47	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		01/15/15 11:47	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/15/15 11:47	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 11:47		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-22-201501 **Lab ID: 60186097010** Collected: 01/13/15 09:45 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**47.9**	mg/L	20.0	2.0	1		01/15/15 10:26		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 10:26		
Alkalinity, Total as CaCO3	**47.9**	mg/L	20.0	2.0	1		01/15/15 10:26		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.6**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:22	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**16.4**	mg/L	1.0	0.50	1		01/26/15 14:48	16887-00-6	
Sulfate	**15.2**	mg/L	1.0	0.50	1		01/26/15 14:48	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 13:01	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		01/15/15 07:51		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 07:51		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		01/15/15 07:51		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**289**	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		01/15/15 20:21	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:52		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-46R-201501 **Lab ID: 60186097011** Collected: 01/13/15 14:55 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 16:16	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**104**	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 15:17	7439-89-6	
Manganese	**101**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 15:17	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 14:38	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 14:38	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 14:38	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 14:38	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 14:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 14:38	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 14:38	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 14:38	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 14:38	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 14:38	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 14:38	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 14:38	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 14:38	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 14:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 14:38	107-06-2	
1,1-Dichloroethene	**1.3**	ug/L	1.0	0.50	1		01/15/15 14:38	75-35-4	
cis-1,2-Dichloroethene	**11.6**	ug/L	1.0	0.50	1		01/15/15 14:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 14:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 14:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 14:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 14:38	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 14:38	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 14:38	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 14:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 14:38	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 14:38	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 14:38	79-34-5	
Tetrachloroethene	**0.90J**	ug/L	1.0	0.50	1		01/15/15 14:38	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 14:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 14:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 14:38	79-00-5	
Trichloroethene	**452**	ug/L	10.0	5.0	10		01/15/15 13:43	79-01-6	
Vinyl chloride	**0.71J**	ug/L	1.0	0.50	1		01/15/15 14:38	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 14:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/15/15 14:38	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/15/15 14:38	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/15/15 14:38	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 14:38		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-46R-201501 **Lab ID: 60186097011** Collected: 01/13/15 14:55 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**10.6J**	mg/L	20.0	2.0	1		01/15/15 10:30		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 10:30		
Alkalinity, Total as CaCO3	**10.6J**	mg/L	20.0	2.0	1		01/15/15 10:30		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**4.9**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:22	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**280**	mg/L	20.0	10.0	20		01/26/15 15:04	16887-00-6	
Sulfate	**0.67J**	mg/L	1.0	0.50	1		01/26/15 15:19	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 13:03	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		01/15/15 08:03		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 08:03		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		01/15/15 08:03		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		01/27/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		01/15/15 20:40	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:52		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: DUP-03-201501 **Lab ID: 60186097012** Collected: 01/13/15 14:55 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 12:45	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 12:45	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 12:45	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 12:45	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 12:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 12:45	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 12:45	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 12:45	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 12:45	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:45	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 12:45	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 12:45	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 12:45	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:45	107-06-2	
1,1-Dichloroethene	**1.3**	ug/L	1.0	0.50	1		01/15/15 12:45	75-35-4	
cis-1,2-Dichloroethene	**12.0**	ug/L	1.0	0.50	1		01/15/15 12:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 12:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 12:45	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 12:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 12:45	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 12:45	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 12:45	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 12:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 12:45	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 12:45	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:45	79-34-5	
Tetrachloroethene	**0.88J**	ug/L	1.0	0.50	1		01/15/15 12:45	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 12:45	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:45	79-00-5	
Trichloroethene	**428**	ug/L	5.0	2.5	5		01/17/15 07:16	79-01-6	
Vinyl chloride	**0.90J**	ug/L	1.0	0.50	1		01/15/15 12:45	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 12:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/15/15 12:45	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/15/15 12:45	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/15/15 12:45	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 12:45		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-91-201501 **Lab ID: 60186097013** Collected: 01/13/15 16:31 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 19:16	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**627**	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 15:19	7439-89-6	
Manganese	**488**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 15:19	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 14:54	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 14:54	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 14:54	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 14:54	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 14:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 14:54	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 14:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 14:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 14:54	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 14:54	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 14:54	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 14:54	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 14:54	124-48-1	
1,1-Dichloroethane	**1.1**	ug/L	1.0	0.50	1		01/15/15 14:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 14:54	107-06-2	
1,1-Dichloroethene	**3.0**	ug/L	1.0	0.50	1		01/15/15 14:54	75-35-4	
cis-1,2-Dichloroethene	**31.5**	ug/L	1.0	0.50	1		01/15/15 14:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 14:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 14:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 14:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 14:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 14:54	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 14:54	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 14:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 14:54	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 14:54	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 14:54	79-34-5	
Tetrachloroethene	**1.6**	ug/L	1.0	0.50	1		01/15/15 14:54	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 14:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 14:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 14:54	79-00-5	
Trichloroethene	**354**	ug/L	5.0	2.5	5		01/15/15 13:58	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 14:54	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 14:54	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/15/15 14:54	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/15/15 14:54	17060-07-0	
Toluene-d8 (S)	103	%	80-120		1		01/15/15 14:54	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 14:54		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-91-201501 **Lab ID: 60186097013** Collected: 01/13/15 16:31 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**63.8**	mg/L	20.0	2.0	1		01/15/15 10:34		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 10:34		
Alkalinity, Total as CaCO3	**63.8**	mg/L	20.0	2.0	1		01/15/15 10:34		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.63**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.0**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:25	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**48.4**	mg/L	5.0	2.5	5		01/26/15 16:07	16887-00-6	
Sulfate	**14.8**	mg/L	1.0	0.50	1		01/26/15 16:23	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 13:08	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**2.7**	mg/L	0.10	0.012	1		01/15/15 09:45		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 09:45		
Nitrogen, NO2 plus NO3	**2.7**	mg/L	0.10	0.012	1		01/15/15 09:45		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**178**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.56J**	mg/L	1.0	0.50	1		01/15/15 21:00	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	ND	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:53		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: DUP-07-201501 **Lab ID: 60186097014** Collected: 01/13/15 16:31 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 13:00	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 13:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 13:00	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 13:00	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 13:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 13:00	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 13:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 13:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 13:00	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:00	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 13:00	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 13:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 13:00	124-48-1	
1,1-Dichloroethane	**1.2**	ug/L	1.0	0.50	1		01/15/15 13:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:00	107-06-2	
1,1-Dichloroethene	**3.1**	ug/L	1.0	0.50	1		01/15/15 13:00	75-35-4	
cis-1,2-Dichloroethene	**31.0**	ug/L	1.0	0.50	1		01/15/15 13:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 13:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 13:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 13:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 13:00	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 13:00	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 13:00	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 13:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 13:00	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 13:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:00	79-34-5	
Tetrachloroethene	**1.2**	ug/L	1.0	0.50	1		01/15/15 13:00	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 13:00	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:00	79-00-5	
Trichloroethene	**317**	ug/L	5.0	2.5	5		01/17/15 07:31	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 13:00	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 13:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		01/15/15 13:00	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		01/15/15 13:00	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/15/15 13:00	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 13:00		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-89-201501 **Lab ID: 60186097015** Collected: 01/13/15 14:41 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 19:27	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**74.4**	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 15:22	7439-89-6	
Manganese	**618**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 15:22	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 12:02	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 12:02	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 12:02	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 12:02	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 12:02	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 12:02	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 12:02	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 12:02	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 12:02	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:02	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 12:02	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 12:02	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 12:02	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:02	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 12:02	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 12:02	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 12:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 12:02	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 12:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 12:02	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 12:02	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 12:02	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 12:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 12:02	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 12:02	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:02	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 12:02	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 12:02	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:02	79-00-5	
Trichloroethene	**11.4**	ug/L	1.0	0.50	1		01/15/15 12:02	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 12:02	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 12:02	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/15/15 12:02	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/15/15 12:02	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/15/15 12:02	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 12:02		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-89-201501 **Lab ID: 60186097015** Collected: 01/13/15 14:41 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**32.3**	mg/L	20.0	2.0	1		01/15/15 10:38		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 10:38		
Alkalinity, Total as CaCO3	**32.3**	mg/L	20.0	2.0	1		01/15/15 10:38		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.4**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:26	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**51.6**	mg/L	5.0	2.5	5		01/26/15 16:39	16887-00-6	
Sulfate	**4.8**	mg/L	1.0	0.50	1		01/26/15 16:55	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 13:10	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**105**	mg/L	5.0	0.58	50		01/15/15 08:02		
Nitrogen, Nitrite	ND	mg/L	5.0	0.58	50		01/15/15 08:02		
Nitrogen, NO2 plus NO3	**105**	mg/L	5.0	0.58	50		01/15/15 08:02		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**310**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.68J**	mg/L	1.0	0.50	1		01/23/15 11:16	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:53		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-82-201501 **Lab ID: 60186097016** Collected: 01/13/15 16:00 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 19:38	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**200**	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 15:40	7439-89-6	
Manganese	**148**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 15:40	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**88.0**	ug/L	10.0	5.0	1		01/15/15 13:48	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 13:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 13:48	75-27-4	
Bromoform	**4.0**	ug/L	1.0	0.50	1		01/15/15 13:48	75-25-2	
Bromomethane	**9.7**	ug/L	5.0	2.5	1		01/15/15 13:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 13:48	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 13:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 13:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 13:48	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:48	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 13:48	67-66-3	
Chloromethane	**1.0**	ug/L	1.0	0.50	1		01/15/15 13:48	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 13:48	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 13:48	75-35-4	
cis-1,2-Dichloroethene	**1.2**	ug/L	1.0	0.50	1		01/15/15 13:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 13:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 13:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 13:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 13:48	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 13:48	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 13:48	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 13:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 13:48	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 13:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:48	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 13:48	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 13:48	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 13:48	79-00-5	
Trichloroethene	**66.0**	ug/L	1.0	0.50	1		01/15/15 13:48	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 13:48	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 13:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/15/15 13:48	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/15/15 13:48	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/15/15 13:48	2037-26-5	
Preservation pH	**2.0**		0.10	0.10	1		01/15/15 13:48		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-82-201501 **Lab ID: 60186097016** Collected: 01/13/15 16:00 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**69.7**	mg/L	20.0	2.0	1		01/15/15 10:42		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 10:42		
Alkalinity, Total as CaCO3	**69.7**	mg/L	20.0	2.0	1		01/15/15 10:42		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.9**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:26	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**178**	mg/L	10.0	5.0	10		01/22/15 01:15	16887-00-6	
Sulfate	**1460**	mg/L	10.0	5.0	10		01/22/15 01:15	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.32**	mg/L	0.10	0.023	1		01/20/15 13:13	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.5**	mg/L	0.10	0.012	1		01/15/15 08:04		
Nitrogen, Nitrite	**0.34**	mg/L	0.10	0.012	1		01/15/15 08:04		
Nitrogen, NO2 plus NO3	**1.8**	mg/L	0.10	0.012	1		01/15/15 08:04		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**254**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**3.9**	mg/L	1.0	0.50	1		01/23/15 11:42	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.98**	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:53		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-61-201501 **Lab ID: 60186097017** Collected: 01/13/15 16:00 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 19:49	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**13000**	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 15:26	7439-89-6	
Manganese	**104**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 15:26	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 12:16	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 12:16	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 12:16	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 12:16	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 12:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 12:16	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 12:16	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 12:16	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 12:16	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:16	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 12:16	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 12:16	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 12:16	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 12:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 12:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 12:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 12:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 12:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 12:16	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 12:16	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 12:16	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 12:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 12:16	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 12:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:16	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 12:16	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 12:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:16	79-00-5	
Trichloroethene	**10.2**	ug/L	1.0	0.50	1		01/15/15 12:16	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 12:16	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 12:16	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/15/15 12:16	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		01/15/15 12:16	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/15/15 12:16	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 12:16		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-61-201501 **Lab ID: 60186097017** Collected: 01/13/15 16:00 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**131**	mg/L	20.0	2.0	1		01/15/15 10:46		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 10:46		
Alkalinity, Total as CaCO3	**131**	mg/L	20.0	2.0	1		01/15/15 10:46		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**12.9**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.5**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:27	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**102**	mg/L	10.0	5.0	10		01/22/15 01:59	16887-00-6	
Sulfate	**17.2**	mg/L	2.0	1.0	2		01/27/15 17:46	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 13:14	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.5**	mg/L	0.10	0.012	1		01/15/15 08:06		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 08:06		
Nitrogen, NO2 plus NO3	**1.5**	mg/L	0.10	0.012	1		01/15/15 08:06		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**192**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		01/23/15 12:09	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.074**	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:53		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-50-201501 **Lab ID: 60186097018** Collected: 01/13/15 14:30 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 20:01	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**19400**	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 15:28	7439-89-6	
Manganese	**272**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 15:28	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 09:22	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 09:22	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 09:22	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 09:22	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 09:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 09:22	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 09:22	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 09:22	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 09:22	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 09:22	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 09:22	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 09:22	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 09:22	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 09:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 09:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 09:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 09:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 09:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 09:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 09:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 09:22	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 09:22	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 09:22	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 09:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 09:22	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 09:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 09:22	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 09:22	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 09:22	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 09:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 09:22	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 09:22	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 09:22	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 09:22	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/15/15 09:22	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/15/15 09:22	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/15/15 09:22	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 09:22		pH

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-50-201501 **Lab ID: 60186097018** Collected: 01/13/15 14:30 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**218**	mg/L	20.0	2.0	1		01/15/15 10:58		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 10:58		
Alkalinity, Total as CaCO3	**218**	mg/L	20.0	2.0	1		01/15/15 10:58		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**18.6**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.7**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:27	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**261**	mg/L	20.0	10.0	20		01/23/15 18:33	16887-00-6	
Sulfate	**2.0**	mg/L	1.0	0.50	1		01/26/15 17:43	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 13:15	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		01/15/15 08:00		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 08:00		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		01/15/15 08:00		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**278**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		01/23/15 12:22	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.28**	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:53		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-60-201501 **Lab ID: 60186097019** Collected: 01/13/15 13:00 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 20:12	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**7920**	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 14:50	7439-89-6	
Manganese	**894**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 14:50	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 12:31	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 12:31	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 12:31	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 12:31	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 12:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 12:31	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 12:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 12:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 12:31	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:31	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 12:31	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 12:31	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 12:31	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 12:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 12:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 12:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 12:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 12:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 12:31	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 12:31	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 12:31	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 12:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 12:31	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 12:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 12:31	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 12:31	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 12:31	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 12:31	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 12:31	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 12:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/15/15 12:31	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		01/15/15 12:31	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		01/15/15 12:31	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 12:31		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-60-201501 **Lab ID: 60186097019** Collected: 01/13/15 13:00 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**404**	mg/L	20.0	2.0	1		01/15/15 11:04		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 11:04		
Alkalinity, Total as CaCO3	**404**	mg/L	20.0	2.0	1		01/15/15 11:04		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**7.8**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.9**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:30	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**139**	mg/L	10.0	5.0	10		01/22/15 02:29	16887-00-6	
Sulfate	**32.6**	mg/L	2.0	1.0	2		01/26/15 17:58	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 13:16	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		01/15/15 07:57		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 07:57		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		01/15/15 07:57		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**455**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.73J**	mg/L	1.0	0.50	1		01/23/15 13:01	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.17**	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:54		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-81-201501 **Lab ID: 60186097020** Collected: 01/13/15 16:15 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 20:23	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**32.9J**	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 14:52	7439-89-6	
Manganese	**279**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 14:52	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**110**	ug/L	10.0	5.0	1		01/15/15 14:05	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 14:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 14:05	75-27-4	
Bromoform	**11.2**	ug/L	1.0	0.50	1		01/15/15 14:05	75-25-2	
Bromomethane	**38.2**	ug/L	5.0	2.5	1		01/15/15 14:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 14:05	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 14:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 14:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 14:05	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 14:05	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 14:05	67-66-3	
Chloromethane	**2.4**	ug/L	1.0	0.50	1		01/15/15 14:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 14:05	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 14:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 14:05	107-06-2	
1,1-Dichloroethene	**0.94J**	ug/L	1.0	0.50	1		01/15/15 14:05	75-35-4	
cis-1,2-Dichloroethene	**9.9**	ug/L	1.0	0.50	1		01/15/15 14:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 14:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 14:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 14:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 14:05	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 14:05	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 14:05	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 14:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 14:05	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 14:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 14:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 14:05	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 14:05	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 14:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 14:05	79-00-5	
Trichloroethene	**385**	ug/L	5.0	2.5	5		01/15/15 14:21	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 14:05	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 14:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/15/15 14:05	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/15/15 14:05	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/15/15 14:05	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		01/15/15 14:05		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-81-201501 **Lab ID: 60186097020** Collected: 01/13/15 16:15 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**20.4**	mg/L	20.0	2.0	1		01/15/15 11:07		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 11:07		
Alkalinity, Total as CaCO3	**20.4**	mg/L	20.0	2.0	1		01/15/15 11:07		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.1**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:30	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**303**	mg/L	20.0	10.0	20		01/23/15 19:20	16887-00-6	
Sulfate	**472**	mg/L	50.0	25.0	50		01/26/15 18:14	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 13:20	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.64**	mg/L	0.10	0.012	1		01/15/15 08:07		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 08:07		
Nitrogen, NO2 plus NO3	**0.64**	mg/L	0.10	0.012	1		01/15/15 08:07		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**357**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.51J**	mg/L	1.0	0.50	1		01/23/15 13:14	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.21**	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:54		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-63-201501 **Lab ID: 60186097021** Collected: 01/13/15 16:25 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 20:34	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**27600**	ug/L	50.0	24.0	1	01/15/15 09:15	01/16/15 15:24	7439-89-6	
Manganese	**207**	ug/L	5.0	2.5	1	01/15/15 09:15	01/16/15 15:24	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 18:04	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 18:04	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 18:04	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 18:04	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 18:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 18:04	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 18:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 18:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 18:04	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 18:04	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 18:04	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 18:04	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 18:04	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 18:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 18:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 18:04	75-35-4	
cis-1,2-Dichloroethene	**1.0**	ug/L	1.0	0.50	1		01/15/15 18:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 18:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 18:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 18:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 18:04	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 18:04	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 18:04	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 18:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 18:04	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 18:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 18:04	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 18:04	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 18:04	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 18:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 18:04	79-00-5	
Trichloroethene	**8.2**	ug/L	1.0	0.50	1		01/15/15 18:04	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 18:04	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 18:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/15/15 18:04	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/15/15 18:04	17060-07-0	
Toluene-d8 (S)	104	%	80-120		1		01/15/15 18:04	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 18:04		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-63-201501 **Lab ID: 60186097021** Collected: 01/13/15 16:25 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**43.5**	mg/L	20.0	2.0	1		01/15/15 11:10		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/15/15 11:10		
Alkalinity, Total as CaCO3	**43.5**	mg/L	20.0	2.0	1		01/15/15 11:10		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**27.6**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.8**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:31	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**152**	mg/L	10.0	5.0	10		01/23/15 19:52	16887-00-6	
Sulfate	**9.5**	mg/L	1.0	0.50	1		01/26/15 18:30	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/20/15 13:22	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.27**	mg/L	0.10	0.012	1		01/15/15 09:45		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 09:45		
Nitrogen, NO2 plus NO3	**0.27**	mg/L	0.10	0.012	1		01/15/15 09:45		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**176**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.70J**	mg/L	1.0	0.50	1		01/23/15 13:27	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**1.3**	mg/L	0.030	0.010	1	01/21/15 07:35	01/21/15 10:55		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: TB-02-201501 **Lab ID: 60186097022** Collected: 01/13/15 09:20 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 15:39	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 15:39	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 15:39	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 15:39	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 15:39	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 15:39	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 15:39	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 15:39	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 15:39	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:39	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 15:39	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 15:39	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 15:39	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:39	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:39	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 15:39	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 15:39	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 15:39	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 15:39	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 15:39	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 15:39	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 15:39	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 15:39	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 15:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 15:39	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 15:39	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:39	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 15:39	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 15:39	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:39	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:39	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 15:39	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 15:39	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 15:39	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/15/15 15:39	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/15/15 15:39	17060-07-0	
Toluene-d8 (S)	103	%	80-120		1		01/15/15 15:39	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 15:39		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: TB-01-201501 **Lab ID: 60186097023** Collected: 01/13/15 09:20 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 15:53	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 15:53	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 15:53	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 15:53	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 15:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 15:53	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 15:53	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 15:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 15:53	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:53	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 15:53	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 15:53	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 15:53	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 15:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 15:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 15:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 15:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 15:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 15:53	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 15:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 15:53	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 15:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 15:53	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 15:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:53	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 15:53	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 15:53	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:53	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 15:53	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 15:53	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 15:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/15/15 15:53	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/15/15 15:53	17060-07-0	
Toluene-d8 (S)	103	%	80-120		1		01/15/15 15:53	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 15:53		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: EB-01-201501 **Lab ID: 60186097024** Collected: 01/13/15 18:00 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 17:35	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 17:35	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 17:35	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 17:35	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 17:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 17:35	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 17:35	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 17:35	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 17:35	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:35	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 17:35	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 17:35	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 17:35	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 17:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 17:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 17:35	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 17:35	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 17:35	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 17:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 17:35	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 17:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:35	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:35	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 17:35	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:35	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:35	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 17:35	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 17:35	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/15/15 17:35	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/15/15 17:35	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/15/15 17:35	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 17:35		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: TB-08-201501 **Lab ID: 60186097025** Collected: 01/13/15 09:20 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 16:08	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 16:08	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:08	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 16:08	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 16:08	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 16:08	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 16:08	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 16:08	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 16:08	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:08	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 16:08	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:08	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:08	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:08	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:08	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 16:08	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 16:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 16:08	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 16:08	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 16:08	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 16:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 16:08	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 16:08	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:08	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:08	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 16:08	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:08	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:08	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 16:08	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 16:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/15/15 16:08	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		01/15/15 16:08	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		01/15/15 16:08	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 16:08		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: DUP-02-201501 **Lab ID: 60186097026** Collected: 01/13/15 09:20 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 18:18	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 18:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 18:18	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 18:18	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 18:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 18:18	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 18:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 18:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 18:18	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 18:18	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 18:18	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 18:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 18:18	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 18:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 18:18	107-06-2	
1,1-Dichloroethene	**1.4**	ug/L	1.0	0.50	1		01/15/15 18:18	75-35-4	
cis-1,2-Dichloroethene	**39.1**	ug/L	1.0	0.50	1		01/15/15 18:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 18:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 18:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 18:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 18:18	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 18:18	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 18:18	591-78-6	
Methylene chloride	**1.1**	ug/L	1.0	0.50	1		01/15/15 18:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 18:18	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 18:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 18:18	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 18:18	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 18:18	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 18:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 18:18	79-00-5	
Trichloroethene	**89.4**	ug/L	1.0	0.50	1		01/15/15 18:18	79-01-6	
Vinyl chloride	**1.4**	ug/L	1.0	0.50	1		01/15/15 18:18	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 18:18	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/15/15 18:18	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/15/15 18:18	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/15/15 18:18	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 18:18		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: TB-06-201501 **Lab ID: 60186097027** Collected: 01/13/15 09:20 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 16:22	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 16:22	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:22	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 16:22	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 16:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 16:22	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 16:22	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 16:22	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 16:22	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:22	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 16:22	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:22	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:22	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 16:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 16:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 16:22	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 16:22	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 16:22	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 16:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 16:22	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 16:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:22	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:22	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 16:22	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:22	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:22	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 16:22	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 16:22	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/15/15 16:22	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		01/15/15 16:22	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/15/15 16:22	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 16:22		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: EB-02-201501 **Lab ID: 60186097028** Collected: 01/13/15 18:02 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 17:49	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 17:49	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 17:49	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 17:49	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 17:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 17:49	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 17:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 17:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 17:49	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:49	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 17:49	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 17:49	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 17:49	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 17:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 17:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 17:49	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 17:49	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 17:49	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 17:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 17:49	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 17:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:49	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:49	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 17:49	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:49	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:49	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 17:49	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 17:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/15/15 17:49	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		01/15/15 17:49	17060-07-0	
Toluene-d8 (S)	104	%	80-120		1		01/15/15 17:49	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 17:49		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: TB-03-201501 **Lab ID: 60186097029** Collected: 01/13/15 09:20 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 16:37	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 16:37	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:37	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 16:37	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 16:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 16:37	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 16:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 16:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 16:37	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:37	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 16:37	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:37	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:37	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 16:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 16:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 16:37	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 16:37	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 16:37	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 16:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 16:37	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 16:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:37	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 16:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:37	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:37	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 16:37	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 16:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/15/15 16:37	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/15/15 16:37	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/15/15 16:37	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 16:37		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: TB-04-201501 **Lab ID: 60186097030** Collected: 01/13/15 09:20 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 16:51	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 16:51	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:51	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 16:51	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 16:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 16:51	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 16:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 16:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 16:51	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:51	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 16:51	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:51	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:51	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 16:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 16:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 16:51	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 16:51	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 16:51	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 16:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 16:51	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 16:51	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:51	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 16:51	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:51	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:51	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 16:51	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 16:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/15/15 16:51	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/15/15 16:51	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/15/15 16:51	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 16:51		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: TB-09-201501 **Lab ID: 60186097031** Collected: 01/13/15 09:20 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 17:06	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 17:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 17:06	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 17:06	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 17:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 17:06	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 17:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 17:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 17:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:06	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 17:06	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 17:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 17:06	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 17:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 17:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 17:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 17:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 17:06	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 17:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 17:06	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 17:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:06	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 17:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:06	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:06	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 17:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 17:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/15/15 17:06	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/15/15 17:06	17060-07-0	
Toluene-d8 (S)	103	%	80-120		1		01/15/15 17:06	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 17:06		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: TB-10-201501 **Lab ID: 60186097032** Collected: 01/13/15 09:20 Received: 01/14/15 08:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 17:20	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 17:20	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 17:20	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 17:20	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 17:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 17:20	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 17:20	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 17:20	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 17:20	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:20	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 17:20	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 17:20	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 17:20	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:20	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 17:20	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 17:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 17:20	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 17:20	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 17:20	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 17:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 17:20	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 17:20	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:20	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:20	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 17:20	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 17:20	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 17:20	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 17:20	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 17:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/15/15 17:20	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		01/15/15 17:20	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/15/15 17:20	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 17:20		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-56-201501 **Lab ID: 60186097033** Collected: 01/13/15 11:15 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 20:45	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**2210**	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 13:13	7439-89-6	
Manganese	**154**	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 13:13	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/20/15 12:45	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 12:45	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 12:45	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 12:45	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/20/15 12:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 12:45	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 12:45	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 12:45	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 12:45	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:45	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 12:45	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/20/15 12:45	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 12:45	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:45	107-06-2	
1,1-Dichloroethene	**0.79J**	ug/L	1.0	0.50	1		01/20/15 12:45	75-35-4	
cis-1,2-Dichloroethene	**10**	ug/L	1.0	0.50	1		01/20/15 12:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 12:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 12:45	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 12:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 12:45	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 12:45	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 12:45	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/20/15 12:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 12:45	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 12:45	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:45	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 12:45	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 12:45	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:45	79-00-5	
Trichloroethene	**326**	ug/L	5.0	2.5	5		01/20/15 15:57	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 12:45	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 12:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/20/15 12:45	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/20/15 12:45	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/20/15 12:45	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 12:45		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-56-201501 **Lab ID: 60186097033** Collected: 01/13/15 11:15 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**11.2J**	mg/L	20.0	2.0	1		01/21/15 15:52		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/21/15 15:52		
Alkalinity, Total as CaCO3	**11.2J**	mg/L	20.0	2.0	1		01/21/15 15:52		
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.5**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:31	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**95.5**	mg/L	10.0	5.0	10		01/24/15 04:21	16887-00-6	
Sulfate	**22.8**	mg/L	2.0	1.0	2		01/27/15 19:22	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 11:24	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.022J**	mg/L	0.10	0.012	1		01/15/15 11:10		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 11:10		
Nitrogen, NO2 plus NO3	**0.022J**	mg/L	0.10	0.012	1		01/15/15 11:10		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.5**	mg/L	1.0	0.50	1		02/04/15 12:58	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.17**	mg/L	0.030	0.010	1	01/22/15 08:43	01/22/15 11:59		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: IW-80-201501 **Lab ID: 60186097034** Collected: 01/13/15 13:35 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 20:57	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**121**	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 13:22	7439-89-6	
Manganese	**39.0**	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 13:22	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**8.3J**	ug/L	10.0	5.0	1		01/20/15 14:01	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 14:01	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 14:01	75-27-4	
Bromoform	**0.51J**	ug/L	1.0	0.50	1		01/20/15 14:01	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/20/15 14:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 14:01	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 14:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 14:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 14:01	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:01	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 14:01	67-66-3	
Chloromethane	**0.79J**	ug/L	1.0	0.50	1		01/20/15 14:01	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 14:01	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 14:01	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 14:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 14:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 14:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 14:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 14:01	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 14:01	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 14:01	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/20/15 14:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 14:01	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 14:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:01	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 14:01	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 14:01	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:01	79-00-5	
Trichloroethene	**7.1**	ug/L	1.0	0.50	1		01/20/15 14:01	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 14:01	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 14:01	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/20/15 14:01	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/20/15 14:01	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		01/20/15 14:01	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 14:01		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: IW-80-201501 **Lab ID: 60186097034** Collected: 01/13/15 13:35 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**140**	mg/L	20.0	2.0	1		01/22/15 10:03		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 10:03		
Alkalinity, Total as CaCO3	**140**	mg/L	20.0	2.0	1		01/22/15 10:03		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.3**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:29	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**206**	mg/L	20.0	10.0	20		01/27/15 05:38	16887-00-6	
Sulfate	**474**	mg/L	50.0	25.0	50		01/27/15 05:54	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.066J**	mg/L	0.10	0.023	1		01/21/15 12:38	7664-41-7	M1
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.79**	mg/L	0.10	0.012	1		01/15/15 11:15		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 11:15		
Nitrogen, NO2 plus NO3	**0.79**	mg/L	0.10	0.012	1		01/15/15 11:15		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**261**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.53J**	mg/L	1.0	0.50	1		02/04/15 13:37	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.70**	mg/L	0.030	0.010	1	01/22/15 08:43	01/22/15 11:59		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-34-201501 **Lab ID: 60186097035** Collected: 01/13/15 13:20 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 21:08	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**188**	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 13:24	7439-89-6	
Manganese	**59.9**	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 13:24	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**42.7**	ug/L	10.0	5.0	1		01/20/15 14:15	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 14:15	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 14:15	75-27-4	
Bromoform	**2.2**	ug/L	1.0	0.50	1		01/20/15 14:15	75-25-2	
Bromomethane	**18.1**	ug/L	5.0	2.5	1		01/20/15 14:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 14:15	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 14:15	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 14:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 14:15	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:15	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 14:15	67-66-3	
Chloromethane	**7.4**	ug/L	1.0	0.50	1		01/20/15 14:15	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 14:15	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 14:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 14:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 14:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 14:15	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 14:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 14:15	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 14:15	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 14:15	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/20/15 14:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 14:15	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 14:15	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:15	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 14:15	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 14:15	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:15	79-00-5	
Trichloroethene	**22.0**	ug/L	1.0	0.50	1		01/20/15 14:15	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 14:15	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 14:15	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/20/15 14:15	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		01/20/15 14:15	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/20/15 14:15	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 14:15		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-34-201501 **Lab ID: 60186097035** Collected: 01/13/15 13:20 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 10:10		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 10:10		
Alkalinity, Total as CaCO3	ND	mg/L	20.0	2.0	1		01/22/15 10:10		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**4.6**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:32	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**286**	mg/L	20.0	10.0	20		01/27/15 06:10	16887-00-6	
Sulfate	**478**	mg/L	50.0	25.0	50		01/27/15 06:26	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 12:41	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.47**	mg/L	0.10	0.012	1		01/15/15 11:14		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 11:14		
Nitrogen, NO2 plus NO3	**0.47**	mg/L	0.10	0.012	1		01/15/15 11:14		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		02/04/15 14:16	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	ND	mg/L	0.030	0.010	1	01/22/15 08:43	01/22/15 11:59		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-88-201501 **Lab ID: 60186097036** Collected: 01/13/15 11:58 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/16/15 21:19	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**1810**	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 13:29	7439-89-6	
Manganese	**114**	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 13:29	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/20/15 16:12	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 16:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 16:12	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 16:12	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/20/15 16:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 16:12	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 16:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 16:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 16:12	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 16:12	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 16:12	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/20/15 16:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 16:12	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 16:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 16:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 16:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 16:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 16:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 16:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 16:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 16:12	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 16:12	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 16:12	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/20/15 16:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 16:12	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 16:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 16:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 16:12	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 16:12	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 16:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 16:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 16:12	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 16:12	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 16:12	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/20/15 16:12	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		01/20/15 16:12	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/20/15 16:12	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 16:12		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: MW-88-201501 **Lab ID: 60186097036** Collected: 01/13/15 11:58 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**95.6**	mg/L	20.0	2.0	1		01/22/15 10:16		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 10:16		
Alkalinity, Total as CaCO3	**95.6**	mg/L	20.0	2.0	1		01/22/15 10:16		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**1.8**	mg/L	0.20		1		01/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**8.8**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:32	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**15.9**	mg/L	1.0	0.50	1		01/27/15 06:58	16887-00-6	
Sulfate	**7.6**	mg/L	1.0	0.50	1		01/27/15 06:58	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 12:43	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.35**	mg/L	0.10	0.012	1		01/15/15 11:13		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 11:13		
Nitrogen, NO2 plus NO3	**0.35**	mg/L	0.10	0.012	1		01/15/15 11:13		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**84.4**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**4.9**	mg/L	1.0	0.50	1		02/04/15 14:35	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	ND	mg/L	0.030	0.010	1	01/22/15 08:43	01/22/15 11:59		

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ANALYTICAL RESULTS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Sample: TB-07-201501 **Lab ID: 60186097037** Collected: 01/13/15 09:20 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/20/15 15:42	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 15:42	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 15:42	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 15:42	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/20/15 15:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 15:42	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 15:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 15:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 15:42	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 15:42	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 15:42	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/20/15 15:42	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 15:42	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 15:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 15:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 15:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 15:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 15:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 15:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 15:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 15:42	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 15:42	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 15:42	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/20/15 15:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 15:42	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 15:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 15:42	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 15:42	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 15:42	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 15:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 15:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 15:42	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 15:42	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 15:42	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/20/15 15:42	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		01/20/15 15:42	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/20/15 15:42	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 15:42		

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: GCSV/3343 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60186097001, 60186097002, 60186097003, 60186097004, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011

METHOD BLANK: 116416 Matrix: Water
Associated Lab Samples: 60186097001, 60186097002, 60186097003, 60186097004, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	01/16/15 12:32	

LABORATORY CONTROL SAMPLE: 116417

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	102000	102	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 116418 116419

Parameter	Units	60186000004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2-Chloroethanol	ug/L	ND	100000	100000	99900	98800	100	99	40-140	1	40	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: GCSV/3349 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60186097005, 60186097013, 60186097015, 60186097016, 60186097017, 60186097018, 60186097019, 60186097020, 60186097021, 60186097033, 60186097034, 60186097035, 60186097036

METHOD BLANK: 116657 Matrix: Water
Associated Lab Samples: 60186097005, 60186097013, 60186097015, 60186097016, 60186097017, 60186097018, 60186097019, 60186097020, 60186097021, 60186097033, 60186097034, 60186097035, 60186097036

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	01/16/15 18:20	

LABORATORY CONTROL SAMPLE: 116658

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	99700	100	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 116659 116660

Parameter	Units	60186097005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2-Chloroethanol	ug/L	ND	100000	100000	94000	100000	94	100	40-140	6	40	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: MPRP/30475 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60186097001, 60186097002, 60186097003, 60186097004, 60186097005, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011, 60186097013, 60186097015, 60186097016, 60186097017, 60186097018, 60186097019, 60186097020, 60186097021

METHOD BLANK: 1506126 Matrix: Water
Associated Lab Samples: 60186097001, 60186097002, 60186097003, 60186097004, 60186097005, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011, 60186097013, 60186097015, 60186097016, 60186097017, 60186097018, 60186097019, 60186097020, 60186097021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	01/16/15 14:41	
Manganese	ug/L	ND	5.0	01/16/15 14:41	

LABORATORY CONTROL SAMPLE: 1506127

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	10000	100	80-120	
Manganese	ug/L	1000	971	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1506128 1506129

Parameter	Units	60186097005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	ND	10000	10000	9890	9840	99	98	75-125	0	20	
Manganese	ug/L	110	1000	1000	1050	1040	94	93	75-125	1	20	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: MPRP/30489 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60186097033, 60186097034, 60186097035, 60186097036

METHOD BLANK: 1507164 Matrix: Water
Associated Lab Samples: 60186097033, 60186097034, 60186097035, 60186097036

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	01/20/15 12:30	
Manganese	ug/L	ND	5.0	01/20/15 12:30	

LABORATORY CONTROL SAMPLE: 1507165

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9630	96	80-120	
Manganese	ug/L	1000	960	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1507166 1507167

Parameter	Units	60186183016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	184	10000	10000	9740	9760	96	96	75-125	0	20	
Manganese	ug/L	32.6	1000	1000	986	985	95	95	75-125	0	20	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: MSV/67003 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186097001, 60186097002, 60186097005, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011, 60186097012, 60186097013, 60186097014, 60186097015, 60186097017, 60186097019

METHOD BLANK: 1506238 Matrix: Water
Associated Lab Samples: 60186097001, 60186097002, 60186097005, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011, 60186097012, 60186097013, 60186097014, 60186097015, 60186097017, 60186097019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/15/15 09:07	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/15/15 09:07	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/15/15 09:07	
1,1-Dichloroethane	ug/L	ND	1.0	01/15/15 09:07	
1,1-Dichloroethene	ug/L	ND	1.0	01/15/15 09:07	
1,2-Dichloroethane	ug/L	ND	1.0	01/15/15 09:07	
1,2-Dichloropropane	ug/L	ND	1.0	01/15/15 09:07	
2-Butanone (MEK)	ug/L	ND	10.0	01/15/15 09:07	
2-Hexanone	ug/L	ND	10.0	01/15/15 09:07	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/15/15 09:07	
Acetone	ug/L	ND	10.0	01/15/15 09:07	
Benzene	ug/L	ND	1.0	01/15/15 09:07	
Bromodichloromethane	ug/L	ND	1.0	01/15/15 09:07	
Bromoform	ug/L	ND	1.0	01/15/15 09:07	
Bromomethane	ug/L	ND	5.0	01/15/15 09:07	
Carbon disulfide	ug/L	ND	5.0	01/15/15 09:07	
Carbon tetrachloride	ug/L	ND	1.0	01/15/15 09:07	
Chlorobenzene	ug/L	ND	1.0	01/15/15 09:07	
Chloroethane	ug/L	ND	1.0	01/15/15 09:07	
Chloroform	ug/L	ND	1.0	01/15/15 09:07	
Chloromethane	ug/L	ND	1.0	01/15/15 09:07	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/15/15 09:07	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/15/15 09:07	
Dibromochloromethane	ug/L	ND	1.0	01/15/15 09:07	
Ethylbenzene	ug/L	ND	1.0	01/15/15 09:07	
Methylene chloride	ug/L	ND	1.0	01/15/15 09:07	
Styrene	ug/L	ND	1.0	01/15/15 09:07	
Tetrachloroethene	ug/L	ND	1.0	01/15/15 09:07	
Toluene	ug/L	ND	1.0	01/15/15 09:07	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/15/15 09:07	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/15/15 09:07	
Trichloroethene	ug/L	ND	1.0	01/15/15 09:07	
Vinyl chloride	ug/L	ND	1.0	01/15/15 09:07	
Xylene (Total)	ug/L	ND	3.0	01/15/15 09:07	
1,2-Dichloroethane-d4 (S)	%	99	80-120	01/15/15 09:07	
4-Bromofluorobenzene (S)	%	100	80-120	01/15/15 09:07	
Toluene-d8 (S)	%	102	80-120	01/15/15 09:07	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

LABORATORY CONTROL SAMPLE: 1506239

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.4	102	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.3	102	73-121	
1,1,2-Trichloroethane	ug/L	20	20.8	104	80-120	
1,1-Dichloroethane	ug/L	20	20.8	104	80-120	
1,1-Dichloroethene	ug/L	20	20.0	100	80-120	
1,2-Dichloroethane	ug/L	20	20.3	102	81-120	
1,2-Dichloropropane	ug/L	20	20.3	101	80-120	
2-Butanone (MEK)	ug/L	100	97.8	98	67-122	
2-Hexanone	ug/L	100	89.1	89	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	85.0	85	76-120	
Acetone	ug/L	100	99.0	99	72-120	
Benzene	ug/L	20	20.6	103	80-120	
Bromodichloromethane	ug/L	20	19.8	99	80-120	
Bromoform	ug/L	20	19.5	97	73-138	
Bromomethane	ug/L	20	20.1	100	38-137	
Carbon disulfide	ug/L	20	21.5	108	71-129	
Carbon tetrachloride	ug/L	20	20.3	102	67-146	
Chlorobenzene	ug/L	20	19.9	99	80-120	
Chloroethane	ug/L	20	19.2	96	76-120	
Chloroform	ug/L	20	20.2	101	80-120	
Chloromethane	ug/L	20	19.4	97	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.3	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.4	102	80-120	
Dibromochloromethane	ug/L	20	19.2	96	80-126	
Ethylbenzene	ug/L	20	20.4	102	80-120	
Methylene chloride	ug/L	20	19.7	99	80-120	
Styrene	ug/L	20	19.9	100	80-123	
Tetrachloroethene	ug/L	20	20.6	103	80-123	
Toluene	ug/L	20	21.4	107	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.3	102	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.4	97	80-129	
Trichloroethene	ug/L	20	19.6	98	80-120	
Vinyl chloride	ug/L	20	20.0	100	62-125	
Xylene (Total)	ug/L	60	60.9	101	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1506240 1506241

Parameter	Units	60186097005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	21.6	21.4	108	107	88-124	1	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.4	19.2	92	96	78-116	4	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	19.1	19.0	96	95	84-112	1	10	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1506240 1506241

Parameter	Units	60186097005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	4.9	20	20	26.2	26.3	106	107	82-121	1	9	
1,1-Dichloroethene	ug/L	0.65J	20	20	21.9	22.4	106	109	78-124	2	12	
1,2-Dichloroethane	ug/L	ND	20	20	19.5	20.0	97	100	79-121	3	12	
1,2-Dichloropropane	ug/L	ND	20	20	20.0	20.1	100	101	82-119	1	10	
2-Butanone (MEK)	ug/L	ND	100	100	82.8	89.2	83	89	66-114	8	13	
2-Hexanone	ug/L	ND	100	100	78.4	83.1	78	83	71-116	6	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	81.4	80.5	81	80	72-122	1	12	
Acetone	ug/L	ND	100	100	82.4	85.1	82	85	65-113	3	27	
Benzene	ug/L	ND	20	20	21.0	21.1	105	105	46-155	1	13	
Bromodichloromethane	ug/L	ND	20	20	19.4	20.0	97	100	77-127	3	10	
Bromoform	ug/L	ND	20	20	18.7	19.1	94	96	70-125	2	11	
Bromomethane	ug/L	ND	20	20	26.9	24.4	127	114	41-140	10	30	
Carbon disulfide	ug/L	ND	20	20	23.5	23.7	117	118	68-140	1	10	
Carbon tetrachloride	ug/L	ND	20	20	22.6	22.7	113	113	68-147	0	11	
Chlorobenzene	ug/L	ND	20	20	19.7	19.6	98	98	83-121	0	9	
Chloroethane	ug/L	ND	20	20	20.4	20.4	102	102	69-126	0	19	
Chloroform	ug/L	ND	20	20	20.1	20.5	101	103	86-119	2	9	
Chloromethane	ug/L	ND	20	20	22.6	22.0	113	110	23-168	3	49	
cis-1,2-Dichloroethene	ug/L	5.7	20	20	26.4	26.2	103	103	85-117	0	10	
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.9	19.9	99	99	74-115	0	12	
Dibromochloromethane	ug/L	ND	20	20	18.4	18.6	92	93	65-134	1	11	
Ethylbenzene	ug/L	ND	20	20	20.6	20.6	103	103	51-148	0	14	
Methylene chloride	ug/L	ND	20	20	20.0	20.2	97	98	75-118	1	11	
Styrene	ug/L	ND	20	20	10.2	11.3	51	57	17-174	10	10	
Tetrachloroethene	ug/L	ND	20	20	20.5	20.9	103	105	78-127	2	9	
Toluene	ug/L	ND	20	20	21.1	21.2	106	106	47-149	0	16	
trans-1,2-Dichloroethene	ug/L	ND	20	20	21.0	21.4	105	107	84-119	2	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.5	18.8	92	94	71-120	2	10	
Trichloroethene	ug/L	3.7	20	20	24.0	23.7	102	100	70-135	1	10	
Vinyl chloride	ug/L	ND	20	20	22.7	22.1	112	109	58-130	3	11	
Xylene (Total)	ug/L	ND	60	60	60.8	61.6	101	103	39-158	1	15	
1,2-Dichloroethane-d4 (S)	%						100	103	80-120			
4-Bromofluorobenzene (S)	%						96	98	80-120			
Toluene-d8 (S)	%						100	99	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: MSV/67007 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186097021, 60186097022, 60186097023, 60186097024, 60186097025, 60186097026, 60186097027, 60186097028, 60186097029, 60186097030, 60186097031, 60186097032

METHOD BLANK: 1506374 Matrix: Water
Associated Lab Samples: 60186097021, 60186097022, 60186097023, 60186097024, 60186097025, 60186097026, 60186097027, 60186097028, 60186097029, 60186097030, 60186097031, 60186097032

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/15/15 15:24	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/15/15 15:24	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/15/15 15:24	
1,1-Dichloroethane	ug/L	ND	1.0	01/15/15 15:24	
1,1-Dichloroethene	ug/L	ND	1.0	01/15/15 15:24	
1,2-Dichloroethane	ug/L	ND	1.0	01/15/15 15:24	
1,2-Dichloropropane	ug/L	ND	1.0	01/15/15 15:24	
2-Butanone (MEK)	ug/L	ND	10.0	01/15/15 15:24	
2-Hexanone	ug/L	ND	10.0	01/15/15 15:24	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/15/15 15:24	
Acetone	ug/L	ND	10.0	01/15/15 15:24	
Benzene	ug/L	ND	1.0	01/15/15 15:24	
Bromodichloromethane	ug/L	ND	1.0	01/15/15 15:24	
Bromoform	ug/L	ND	1.0	01/15/15 15:24	
Bromomethane	ug/L	ND	5.0	01/15/15 15:24	
Carbon disulfide	ug/L	ND	5.0	01/15/15 15:24	
Carbon tetrachloride	ug/L	ND	1.0	01/15/15 15:24	
Chlorobenzene	ug/L	ND	1.0	01/15/15 15:24	
Chloroethane	ug/L	ND	1.0	01/15/15 15:24	
Chloroform	ug/L	ND	1.0	01/15/15 15:24	
Chloromethane	ug/L	ND	1.0	01/15/15 15:24	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/15/15 15:24	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/15/15 15:24	
Dibromochloromethane	ug/L	ND	1.0	01/15/15 15:24	
Ethylbenzene	ug/L	ND	1.0	01/15/15 15:24	
Methylene chloride	ug/L	ND	1.0	01/15/15 15:24	
Styrene	ug/L	ND	1.0	01/15/15 15:24	
Tetrachloroethene	ug/L	ND	1.0	01/15/15 15:24	
Toluene	ug/L	ND	1.0	01/15/15 15:24	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/15/15 15:24	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/15/15 15:24	
Trichloroethene	ug/L	ND	1.0	01/15/15 15:24	
Vinyl chloride	ug/L	ND	1.0	01/15/15 15:24	
Xylene (Total)	ug/L	ND	3.0	01/15/15 15:24	
1,2-Dichloroethane-d4 (S)	%	101	80-120	01/15/15 15:24	
4-Bromofluorobenzene (S)	%	99	80-120	01/15/15 15:24	
Toluene-d8 (S)	%	100	80-120	01/15/15 15:24	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

LABORATORY CONTROL SAMPLE: 1506375

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.6	103	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.3	96	73-121	
1,1,2-Trichloroethane	ug/L	20	20.7	103	80-120	
1,1-Dichloroethane	ug/L	20	20.6	103	80-120	
1,1-Dichloroethene	ug/L	20	19.8	99	80-120	
1,2-Dichloroethane	ug/L	20	20.6	103	81-120	
1,2-Dichloropropane	ug/L	20	20.1	101	80-120	
2-Butanone (MEK)	ug/L	100	102	102	67-122	
2-Hexanone	ug/L	100	91.5	92	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	92.5	92	76-120	
Acetone	ug/L	100	101	101	72-120	
Benzene	ug/L	20	20.7	104	80-120	
Bromodichloromethane	ug/L	20	20.2	101	80-120	
Bromoform	ug/L	20	20.0	100	73-138	
Bromomethane	ug/L	20	23.5	118	38-137	
Carbon disulfide	ug/L	20	21.3	107	71-129	
Carbon tetrachloride	ug/L	20	20.3	101	67-146	
Chlorobenzene	ug/L	20	19.8	99	80-120	
Chloroethane	ug/L	20	19.2	96	76-120	
Chloroform	ug/L	20	20.5	102	80-120	
Chloromethane	ug/L	20	20.7	103	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.4	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.4	102	80-120	
Dibromochloromethane	ug/L	20	19.1	95	80-126	
Ethylbenzene	ug/L	20	20.0	100	80-120	
Methylene chloride	ug/L	20	20.2	101	80-120	
Styrene	ug/L	20	20.2	101	80-123	
Tetrachloroethene	ug/L	20	19.9	99	80-123	
Toluene	ug/L	20	20.9	105	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.8	99	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.3	97	80-129	
Trichloroethene	ug/L	20	20.9	104	80-120	
Vinyl chloride	ug/L	20	20.3	102	62-125	
Xylene (Total)	ug/L	60	60.0	100	80-120	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			100	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: MSV/67027 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186097011, 60186097013

METHOD BLANK: 1507198 Matrix: Water
Associated Lab Samples: 60186097011, 60186097013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,1-Dichloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,1-Dichloroethene	ug/L	ND	1.0	01/15/15 12:26	
1,2-Dichloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,2-Dichloropropane	ug/L	ND	1.0	01/15/15 12:26	
2-Butanone (MEK)	ug/L	ND	10.0	01/15/15 12:26	
2-Hexanone	ug/L	ND	10.0	01/15/15 12:26	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/15/15 12:26	
Acetone	ug/L	ND	10.0	01/15/15 12:26	
Benzene	ug/L	ND	1.0	01/15/15 12:26	
Bromodichloromethane	ug/L	ND	1.0	01/15/15 12:26	
Bromoform	ug/L	ND	1.0	01/15/15 12:26	
Bromomethane	ug/L	ND	5.0	01/15/15 12:26	
Carbon disulfide	ug/L	ND	5.0	01/15/15 12:26	
Carbon tetrachloride	ug/L	ND	1.0	01/15/15 12:26	
Chlorobenzene	ug/L	ND	1.0	01/15/15 12:26	
Chloroethane	ug/L	ND	1.0	01/15/15 12:26	
Chloroform	ug/L	ND	1.0	01/15/15 12:26	
Chloromethane	ug/L	ND	1.0	01/15/15 12:26	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/15/15 12:26	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/15/15 12:26	
Dibromochloromethane	ug/L	ND	1.0	01/15/15 12:26	
Ethylbenzene	ug/L	ND	1.0	01/15/15 12:26	
Methylene chloride	ug/L	ND	1.0	01/15/15 12:26	
Styrene	ug/L	ND	1.0	01/15/15 12:26	
Tetrachloroethene	ug/L	ND	1.0	01/15/15 12:26	
Toluene	ug/L	ND	1.0	01/15/15 12:26	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/15/15 12:26	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/15/15 12:26	
Vinyl chloride	ug/L	ND	1.0	01/15/15 12:26	
Xylene (Total)	ug/L	ND	3.0	01/15/15 12:26	
1,2-Dichloroethane-d4 (S)	%	97	80-120	01/15/15 12:26	
4-Bromofluorobenzene (S)	%	96	80-120	01/15/15 12:26	
Toluene-d8 (S)	%	102	80-120	01/15/15 12:26	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

LABORATORY CONTROL SAMPLE: 1507199

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.7	109	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	21.0	105	73-121	
1,1,2-Trichloroethane	ug/L	20	19.7	99	80-120	
1,1-Dichloroethane	ug/L	20	18.4	92	80-120	
1,1-Dichloroethene	ug/L	20	19.1	96	80-120	
1,2-Dichloroethane	ug/L	20	21.0	105	81-120	
1,2-Dichloropropane	ug/L	20	20.5	102	80-120	
2-Butanone (MEK)	ug/L	100	82.4	82	67-122	
2-Hexanone	ug/L	100	90.2	90	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	94.1	94	76-120	
Acetone	ug/L	100	79.4	79	72-120	
Benzene	ug/L	20	20.7	103	80-120	
Bromodichloromethane	ug/L	20	21.2	106	80-120	
Bromoform	ug/L	20	19.4	97	73-138	
Bromomethane	ug/L	20	13.7	68	38-137	
Carbon disulfide	ug/L	20	18.5	92	71-129	
Carbon tetrachloride	ug/L	20	20.1	100	67-146	
Chlorobenzene	ug/L	20	21.1	105	80-120	
Chloroethane	ug/L	20	15.4	77	76-120	
Chloroform	ug/L	20	20.6	103	80-120	
Chloromethane	ug/L	20	11.5	58	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.0	100	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.2	106	80-120	
Dibromochloromethane	ug/L	20	21.3	106	80-126	
Ethylbenzene	ug/L	20	21.1	105	80-120	
Methylene chloride	ug/L	20	19.2	96	80-120	
Styrene	ug/L	20	20.9	104	80-123	
Tetrachloroethene	ug/L	20	22.2	111	80-123	
Toluene	ug/L	20	20.0	100	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.0	95	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.2	106	80-129	
Vinyl chloride	ug/L	20	17.4	87	62-125	
Xylene (Total)	ug/L	60	60.4	101	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: MSV/67033
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186097012, 60186097014

METHOD BLANK: 1507256
Matrix: Water
Associated Lab Samples: 60186097012, 60186097014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	ug/L	ND	1.0	01/17/15 03:24	
1,2-Dichloroethane-d4 (S)	%	104	80-120	01/17/15 03:24	
4-Bromofluorobenzene (S)	%	98	80-120	01/17/15 03:24	
Toluene-d8 (S)	%	100	80-120	01/17/15 03:24	

LABORATORY CONTROL SAMPLE: 1507257

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	20	22.0	110	80-120	
1,2-Dichloroethane-d4 (S)	%			103	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: MSV/67064 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186097034, 60186097035

METHOD BLANK: 1508614 Matrix: Water
Associated Lab Samples: 60186097034, 60186097035

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/20/15 09:24	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/20/15 09:24	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/20/15 09:24	
1,1-Dichloroethane	ug/L	ND	1.0	01/20/15 09:24	
1,1-Dichloroethene	ug/L	ND	1.0	01/20/15 09:24	
1,2-Dichloroethane	ug/L	ND	1.0	01/20/15 09:24	
1,2-Dichloropropane	ug/L	ND	1.0	01/20/15 09:24	
2-Butanone (MEK)	ug/L	ND	10.0	01/20/15 09:24	
2-Hexanone	ug/L	ND	10.0	01/20/15 09:24	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/20/15 09:24	
Acetone	ug/L	ND	10.0	01/20/15 09:24	
Benzene	ug/L	ND	1.0	01/20/15 09:24	
Bromodichloromethane	ug/L	ND	1.0	01/20/15 09:24	
Bromoform	ug/L	ND	1.0	01/20/15 09:24	
Bromomethane	ug/L	ND	5.0	01/20/15 09:24	
Carbon disulfide	ug/L	ND	5.0	01/20/15 09:24	
Carbon tetrachloride	ug/L	ND	1.0	01/20/15 09:24	
Chlorobenzene	ug/L	ND	1.0	01/20/15 09:24	
Chloroethane	ug/L	ND	1.0	01/20/15 09:24	
Chloroform	ug/L	ND	1.0	01/20/15 09:24	
Chloromethane	ug/L	ND	1.0	01/20/15 09:24	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/20/15 09:24	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/20/15 09:24	
Dibromochloromethane	ug/L	ND	1.0	01/20/15 09:24	
Ethylbenzene	ug/L	ND	1.0	01/20/15 09:24	
Methylene chloride	ug/L	ND	1.0	01/20/15 09:24	
Styrene	ug/L	ND	1.0	01/20/15 09:24	
Tetrachloroethene	ug/L	ND	1.0	01/20/15 09:24	
Toluene	ug/L	ND	1.0	01/20/15 09:24	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/20/15 09:24	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/20/15 09:24	
Trichloroethene	ug/L	ND	1.0	01/20/15 09:24	
Vinyl chloride	ug/L	ND	1.0	01/20/15 09:24	
Xylene (Total)	ug/L	ND	3.0	01/20/15 09:24	
1,2-Dichloroethane-d4 (S)	%	103	80-120	01/20/15 09:24	
4-Bromofluorobenzene (S)	%	101	80-120	01/20/15 09:24	
Toluene-d8 (S)	%	101	80-120	01/20/15 09:24	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

LABORATORY CONTROL SAMPLE: 1508615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.7	104	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.5	98	73-121	
1,1,2-Trichloroethane	ug/L	20	20.1	101	80-120	
1,1-Dichloroethane	ug/L	20	21.4	107	80-120	
1,1-Dichloroethene	ug/L	20	21.3	107	80-120	
1,2-Dichloroethane	ug/L	20	20.5	103	81-120	
1,2-Dichloropropane	ug/L	20	20.7	103	80-120	
2-Butanone (MEK)	ug/L	100	107	107	67-122	
2-Hexanone	ug/L	100	88.8	89	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	89.4	89	76-120	
Acetone	ug/L	100	97.6	98	72-120	
Benzene	ug/L	20	20.9	104	80-120	
Bromodichloromethane	ug/L	20	19.9	100	80-120	
Bromoform	ug/L	20	18.9	94	73-138	
Bromomethane	ug/L	20	14.6	73	38-137	
Carbon disulfide	ug/L	20	22.1	111	71-129	
Carbon tetrachloride	ug/L	20	21.6	108	67-146	
Chlorobenzene	ug/L	20	20.0	100	80-120	
Chloroethane	ug/L	20	20.0	100	76-120	
Chloroform	ug/L	20	20.9	104	80-120	
Chloromethane	ug/L	20	14.5	73	34-165	
cis-1,2-Dichloroethene	ug/L	20	21.2	106	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.9	105	80-120	
Dibromochloromethane	ug/L	20	18.8	94	80-126	
Ethylbenzene	ug/L	20	20.1	100	80-120	
Methylene chloride	ug/L	20	19.8	99	80-120	
Styrene	ug/L	20	19.7	99	80-123	
Tetrachloroethene	ug/L	20	20.2	101	80-123	
Toluene	ug/L	20	21.2	106	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.8	104	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.0	95	80-129	
Trichloroethene	ug/L	20	20.1	100	80-120	
Vinyl chloride	ug/L	20	20.9	104	62-125	
Xylene (Total)	ug/L	60	60.1	100	80-120	
1,2-Dichloroethane-d4 (S)	%			104	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			100	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: MSV/67070 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186097033, 60186097036, 60186097037

METHOD BLANK: 1508635 Matrix: Water
Associated Lab Samples: 60186097033, 60186097036, 60186097037

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/20/15 15:13	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/20/15 15:13	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/20/15 15:13	
1,1-Dichloroethane	ug/L	ND	1.0	01/20/15 15:13	
1,1-Dichloroethene	ug/L	ND	1.0	01/20/15 15:13	
1,2-Dichloroethane	ug/L	ND	1.0	01/20/15 15:13	
1,2-Dichloropropane	ug/L	ND	1.0	01/20/15 15:13	
2-Butanone (MEK)	ug/L	ND	10.0	01/20/15 15:13	
2-Hexanone	ug/L	ND	10.0	01/20/15 15:13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/20/15 15:13	
Acetone	ug/L	ND	10.0	01/20/15 15:13	
Benzene	ug/L	ND	1.0	01/20/15 15:13	
Bromodichloromethane	ug/L	ND	1.0	01/20/15 15:13	
Bromoform	ug/L	ND	1.0	01/20/15 15:13	
Bromomethane	ug/L	ND	5.0	01/20/15 15:13	
Carbon disulfide	ug/L	ND	5.0	01/20/15 15:13	
Carbon tetrachloride	ug/L	ND	1.0	01/20/15 15:13	
Chlorobenzene	ug/L	ND	1.0	01/20/15 15:13	
Chloroethane	ug/L	ND	1.0	01/20/15 15:13	
Chloroform	ug/L	ND	1.0	01/20/15 15:13	
Chloromethane	ug/L	ND	1.0	01/20/15 15:13	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/20/15 15:13	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/20/15 15:13	
Dibromochloromethane	ug/L	ND	1.0	01/20/15 15:13	
Ethylbenzene	ug/L	ND	1.0	01/20/15 15:13	
Methylene chloride	ug/L	ND	1.0	01/20/15 15:13	
Styrene	ug/L	ND	1.0	01/20/15 15:13	
Tetrachloroethene	ug/L	ND	1.0	01/20/15 15:13	
Toluene	ug/L	ND	1.0	01/20/15 15:13	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/20/15 15:13	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/20/15 15:13	
Trichloroethene	ug/L	ND	1.0	01/20/15 15:13	
Vinyl chloride	ug/L	ND	1.0	01/20/15 15:13	
Xylene (Total)	ug/L	ND	3.0	01/20/15 15:13	
1,2-Dichloroethane-d4 (S)	%	101	80-120	01/20/15 15:13	
4-Bromofluorobenzene (S)	%	100	80-120	01/20/15 15:13	
Toluene-d8 (S)	%	99	80-120	01/20/15 15:13	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

LABORATORY CONTROL SAMPLE: 1508636

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.5	108	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.1	101	73-121	
1,1,2-Trichloroethane	ug/L	20	20.0	100	80-120	
1,1-Dichloroethane	ug/L	20	21.2	106	80-120	
1,1-Dichloroethene	ug/L	20	21.8	109	80-120	
1,2-Dichloroethane	ug/L	20	21.4	107	81-120	
1,2-Dichloropropane	ug/L	20	21.8	109	80-120	
2-Butanone (MEK)	ug/L	100	111	111	67-122	
2-Hexanone	ug/L	100	94.5	94	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	96.6	97	76-120	
Acetone	ug/L	100	102	102	72-120	
Benzene	ug/L	20	21.5	108	80-120	
Bromodichloromethane	ug/L	20	21.0	105	80-120	
Bromoform	ug/L	20	19.2	96	73-138	
Bromomethane	ug/L	20	17.2	86	38-137	
Carbon disulfide	ug/L	20	22.6	113	71-129	
Carbon tetrachloride	ug/L	20	21.3	106	67-146	
Chlorobenzene	ug/L	20	20.4	102	80-120	
Chloroethane	ug/L	20	20.7	104	76-120	
Chloroform	ug/L	20	21.5	107	80-120	
Chloromethane	ug/L	20	16.1	80	34-165	
cis-1,2-Dichloroethene	ug/L	20	21.7	109	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.7	103	80-120	
Dibromochloromethane	ug/L	20	19.3	96	80-126	
Ethylbenzene	ug/L	20	20.7	103	80-120	
Methylene chloride	ug/L	20	20.8	104	80-120	
Styrene	ug/L	20	20.4	102	80-123	
Tetrachloroethene	ug/L	20	19.4	97	80-123	
Toluene	ug/L	20	21.4	107	80-120	
trans-1,2-Dichloroethene	ug/L	20	21.2	106	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.7	93	80-129	
Trichloroethene	ug/L	20	20.6	103	80-120	
Vinyl chloride	ug/L	20	20.7	104	62-125	
Xylene (Total)	ug/L	60	61.3	102	80-120	
1,2-Dichloroethane-d4 (S)	%			104	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			100	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: MSV/67103 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186097033

METHOD BLANK: 1509254 Matrix: Water
Associated Lab Samples: 60186097033

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1-Dichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1-Dichloroethene	ug/L	ND	1.0	01/20/15 11:37	
1,2-Dichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,2-Dichloropropane	ug/L	ND	1.0	01/20/15 11:37	
2-Butanone (MEK)	ug/L	ND	10.0	01/20/15 11:37	
2-Hexanone	ug/L	ND	10.0	01/20/15 11:37	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/20/15 11:37	
Acetone	ug/L	ND	10.0	01/20/15 11:37	
Benzene	ug/L	ND	1.0	01/20/15 11:37	
Bromodichloromethane	ug/L	ND	1.0	01/20/15 11:37	
Bromoform	ug/L	ND	1.0	01/20/15 11:37	
Bromomethane	ug/L	ND	5.0	01/20/15 11:37	
Carbon disulfide	ug/L	ND	5.0	01/20/15 11:37	
Carbon tetrachloride	ug/L	ND	1.0	01/20/15 11:37	
Chlorobenzene	ug/L	ND	1.0	01/20/15 11:37	
Chloroethane	ug/L	ND	1.0	01/20/15 11:37	
Chloroform	ug/L	ND	1.0	01/20/15 11:37	
Chloromethane	ug/L	ND	1.0	01/20/15 11:37	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/20/15 11:37	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/20/15 11:37	
Dibromochloromethane	ug/L	ND	1.0	01/20/15 11:37	
Ethylbenzene	ug/L	ND	1.0	01/20/15 11:37	
Methylene chloride	ug/L	ND	1.0	01/20/15 11:37	
Styrene	ug/L	ND	1.0	01/20/15 11:37	
Tetrachloroethene	ug/L	ND	1.0	01/20/15 11:37	
Toluene	ug/L	ND	1.0	01/20/15 11:37	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/20/15 11:37	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/20/15 11:37	
Vinyl chloride	ug/L	ND	1.0	01/20/15 11:37	
Xylene (Total)	ug/L	ND	3.0	01/20/15 11:37	
1,2-Dichloroethane-d4 (S)	%	101	80-120	01/20/15 11:37	
4-Bromofluorobenzene (S)	%	98	80-120	01/20/15 11:37	
Toluene-d8 (S)	%	102	80-120	01/20/15 11:37	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

LABORATORY CONTROL SAMPLE: 1509255

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.5	107	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.5	102	73-121	
1,1,2-Trichloroethane	ug/L	20	20.0	100	80-120	
1,1-Dichloroethane	ug/L	20	17.8	89	80-120	
1,1-Dichloroethene	ug/L	20	19.2	96	80-120	
1,2-Dichloroethane	ug/L	20	21.1	105	81-120	
1,2-Dichloropropane	ug/L	20	20.7	104	80-120	
2-Butanone (MEK)	ug/L	100	86.2	86	67-122	
2-Hexanone	ug/L	100	92.1	92	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	96.4	96	76-120	
Acetone	ug/L	100	83.1	83	72-120	
Benzene	ug/L	20	20.2	101	80-120	
Bromodichloromethane	ug/L	20	21.7	108	80-120	
Bromoform	ug/L	20	20.2	101	73-138	
Bromomethane	ug/L	20	16.0	80	38-137	
Carbon disulfide	ug/L	20	18.5	92	71-129	
Carbon tetrachloride	ug/L	20	19.6	98	67-146	
Chlorobenzene	ug/L	20	20.7	104	80-120	
Chloroethane	ug/L	20	16.2	81	76-120	
Chloroform	ug/L	20	20.3	102	80-120	
Chloromethane	ug/L	20	11.9	59	34-165	
cis-1,2-Dichloroethene	ug/L	20	18.7	93	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.3	106	80-120	
Dibromochloromethane	ug/L	20	20.5	102	80-126	
Ethylbenzene	ug/L	20	20.5	102	80-120	
Methylene chloride	ug/L	20	18.7	94	80-120	
Styrene	ug/L	20	20.2	101	80-123	
Tetrachloroethene	ug/L	20	22.0	110	80-123	
Toluene	ug/L	20	20.0	100	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.6	93	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.0	105	80-129	
Vinyl chloride	ug/L	20	17.8	89	62-125	
Xylene (Total)	ug/L	60	59.2	99	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			102	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: MSV/67002 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60186097003, 60186097004, 60186097018

METHOD BLANK: 1506236 Matrix: Water
Associated Lab Samples: 60186097003, 60186097004, 60186097018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/15/15 09:07	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/15/15 09:07	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/15/15 09:07	
1,1-Dichloroethane	ug/L	ND	1.0	01/15/15 09:07	
1,1-Dichloroethene	ug/L	ND	1.0	01/15/15 09:07	
1,2-Dichloroethane	ug/L	ND	1.0	01/15/15 09:07	
1,2-Dichloropropane	ug/L	ND	1.0	01/15/15 09:07	
2-Butanone (MEK)	ug/L	ND	10.0	01/15/15 09:07	
2-Hexanone	ug/L	ND	10.0	01/15/15 09:07	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/15/15 09:07	
Acetone	ug/L	ND	10.0	01/15/15 09:07	
Benzene	ug/L	ND	1.0	01/15/15 09:07	
Bromodichloromethane	ug/L	ND	1.0	01/15/15 09:07	
Bromoform	ug/L	ND	1.0	01/15/15 09:07	
Bromomethane	ug/L	ND	5.0	01/15/15 09:07	
Carbon disulfide	ug/L	ND	5.0	01/15/15 09:07	
Carbon tetrachloride	ug/L	ND	1.0	01/15/15 09:07	
Chlorobenzene	ug/L	ND	1.0	01/15/15 09:07	
Chloroethane	ug/L	ND	1.0	01/15/15 09:07	
Chloroform	ug/L	ND	1.0	01/15/15 09:07	
Chloromethane	ug/L	ND	1.0	01/15/15 09:07	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/15/15 09:07	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/15/15 09:07	
Dibromochloromethane	ug/L	ND	1.0	01/15/15 09:07	
Ethylbenzene	ug/L	ND	1.0	01/15/15 09:07	
Methylene chloride	ug/L	ND	1.0	01/15/15 09:07	
Styrene	ug/L	ND	1.0	01/15/15 09:07	
Tetrachloroethene	ug/L	ND	1.0	01/15/15 09:07	
Toluene	ug/L	ND	1.0	01/15/15 09:07	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/15/15 09:07	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/15/15 09:07	
Trichloroethene	ug/L	ND	1.0	01/15/15 09:07	
Vinyl chloride	ug/L	ND	1.0	01/15/15 09:07	
Xylene (Total)	ug/L	ND	3.0	01/15/15 09:07	
1,2-Dichloroethane-d4 (S)	%	99	80-120	01/15/15 09:07	
4-Bromofluorobenzene (S)	%	100	80-120	01/15/15 09:07	
Toluene-d8 (S)	%	102	80-120	01/15/15 09:07	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

LABORATORY CONTROL SAMPLE: 1506237

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.4	102	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.3	102	73-121	
1,1,2-Trichloroethane	ug/L	20	20.8	104	80-120	
1,1-Dichloroethane	ug/L	20	20.8	104	80-120	
1,1-Dichloroethene	ug/L	20	20.0	100	80-120	
1,2-Dichloroethane	ug/L	20	20.3	102	81-120	
1,2-Dichloropropane	ug/L	20	20.3	101	80-120	
2-Butanone (MEK)	ug/L	100	97.8	98	67-122	
2-Hexanone	ug/L	100	89.1	89	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	85.0	85	76-120	
Acetone	ug/L	100	99.0	99	72-120	
Benzene	ug/L	20	20.6	103	80-120	
Bromodichloromethane	ug/L	20	19.8	99	80-120	
Bromoform	ug/L	20	19.5	97	73-138	
Bromomethane	ug/L	20	20.1	100	38-137	
Carbon disulfide	ug/L	20	21.5	108	71-129	
Carbon tetrachloride	ug/L	20	20.3	102	67-146	
Chlorobenzene	ug/L	20	19.9	99	80-120	
Chloroethane	ug/L	20	19.2	96	76-120	
Chloroform	ug/L	20	20.2	101	80-120	
Chloromethane	ug/L	20	19.4	97	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.3	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.4	102	80-120	
Dibromochloromethane	ug/L	20	19.2	96	80-126	
Ethylbenzene	ug/L	20	20.4	102	80-120	
Methylene chloride	ug/L	20	19.7	99	80-120	
Styrene	ug/L	20	19.9	100	80-123	
Tetrachloroethene	ug/L	20	20.6	103	80-123	
Toluene	ug/L	20	21.4	107	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.3	102	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.4	97	80-129	
Trichloroethene	ug/L	20	19.6	98	80-120	
Vinyl chloride	ug/L	20	20.0	100	62-125	
Xylene (Total)	ug/L	60	60.9	101	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: MSV/67012 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60186097003, 60186097016, 60186097020

METHOD BLANK: 1506485 Matrix: Water
Associated Lab Samples: 60186097003, 60186097016, 60186097020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,1-Dichloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,1-Dichloroethene	ug/L	ND	1.0	01/15/15 12:26	
1,2-Dichloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,2-Dichloropropane	ug/L	ND	1.0	01/15/15 12:26	
2-Butanone (MEK)	ug/L	ND	10.0	01/15/15 12:26	
2-Hexanone	ug/L	ND	10.0	01/15/15 12:26	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/15/15 12:26	
Acetone	ug/L	ND	10.0	01/15/15 12:26	
Benzene	ug/L	ND	1.0	01/15/15 12:26	
Bromodichloromethane	ug/L	ND	1.0	01/15/15 12:26	
Bromoform	ug/L	ND	1.0	01/15/15 12:26	
Bromomethane	ug/L	ND	5.0	01/15/15 12:26	
Carbon disulfide	ug/L	ND	5.0	01/15/15 12:26	
Carbon tetrachloride	ug/L	ND	1.0	01/15/15 12:26	
Chlorobenzene	ug/L	ND	1.0	01/15/15 12:26	
Chloroethane	ug/L	ND	1.0	01/15/15 12:26	
Chloroform	ug/L	ND	1.0	01/15/15 12:26	
Chloromethane	ug/L	ND	1.0	01/15/15 12:26	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/15/15 12:26	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/15/15 12:26	
Dibromochloromethane	ug/L	ND	1.0	01/15/15 12:26	
Ethylbenzene	ug/L	ND	1.0	01/15/15 12:26	
Methylene chloride	ug/L	ND	1.0	01/15/15 12:26	
Styrene	ug/L	ND	1.0	01/15/15 12:26	
Tetrachloroethene	ug/L	ND	1.0	01/15/15 12:26	
Toluene	ug/L	ND	1.0	01/15/15 12:26	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/15/15 12:26	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/15/15 12:26	
Trichloroethene	ug/L	ND	1.0	01/15/15 12:26	
Vinyl chloride	ug/L	ND	1.0	01/15/15 12:26	
Xylene (Total)	ug/L	ND	3.0	01/15/15 12:26	
1,2-Dichloroethane-d4 (S)	%	97	80-120	01/15/15 12:26	
4-Bromofluorobenzene (S)	%	96	80-120	01/15/15 12:26	
Toluene-d8 (S)	%	102	80-120	01/15/15 12:26	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

LABORATORY CONTROL SAMPLE: 1506486

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.7	109	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	21.0	105	73-121	
1,1,2-Trichloroethane	ug/L	20	19.7	99	80-120	
1,1-Dichloroethane	ug/L	20	18.4	92	80-120	
1,1-Dichloroethene	ug/L	20	19.1	96	80-120	
1,2-Dichloroethane	ug/L	20	21.0	105	81-120	
1,2-Dichloropropane	ug/L	20	20.5	102	80-120	
2-Butanone (MEK)	ug/L	100	82.4	82	67-122	
2-Hexanone	ug/L	100	90.2	90	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	94.1	94	76-120	
Acetone	ug/L	100	79.4	79	72-120	
Benzene	ug/L	20	20.7	103	80-120	
Bromodichloromethane	ug/L	20	21.2	106	80-120	
Bromoform	ug/L	20	19.4	97	73-138	
Bromomethane	ug/L	20	13.7	68	38-137	
Carbon disulfide	ug/L	20	18.5	92	71-129	
Carbon tetrachloride	ug/L	20	20.1	100	67-146	
Chlorobenzene	ug/L	20	21.1	105	80-120	
Chloroethane	ug/L	20	15.4	77	76-120	
Chloroform	ug/L	20	20.6	103	80-120	
Chloromethane	ug/L	20	11.5	58	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.0	100	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.2	106	80-120	
Dibromochloromethane	ug/L	20	21.3	106	80-126	
Ethylbenzene	ug/L	20	21.1	105	80-120	
Methylene chloride	ug/L	20	19.2	96	80-120	
Styrene	ug/L	20	20.9	104	80-123	
Tetrachloroethene	ug/L	20	22.2	111	80-123	
Toluene	ug/L	20	20.0	100	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.0	95	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.2	106	80-129	
Trichloroethene	ug/L	20	20.6	103	80-120	
Vinyl chloride	ug/L	20	17.4	87	62-125	
Xylene (Total)	ug/L	60	60.4	101	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WET/52486 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60186097001, 60186097002, 60186097003, 60186097004, 60186097005, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011, 60186097013, 60186097015, 60186097016, 60186097017, 60186097018, 60186097019, 60186097020, 60186097021

METHOD BLANK: 1506142 Matrix: Water
Associated Lab Samples: 60186097001, 60186097002, 60186097003, 60186097004, 60186097005, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011, 60186097013, 60186097015, 60186097016, 60186097017, 60186097018, 60186097019, 60186097020, 60186097021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	01/15/15 09:24	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	01/15/15 09:24	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	01/15/15 09:24	

LABORATORY CONTROL SAMPLE: 1506143

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	494	99	90-110	

SAMPLE DUPLICATE: 1506144

Parameter	Units	60186097005 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	145	147	1	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	145	147	1	10	

SAMPLE DUPLICATE: 1506145

Parameter	Units	60186097008 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	13.0J	15.3J		10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	13.0J	15.3J		10	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WET/52570
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60186097033

METHOD BLANK: 1509614
Matrix: Water
Associated Lab Samples: 60186097033

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	01/21/15 14:14	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	01/21/15 14:14	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	01/21/15 14:14	

LABORATORY CONTROL SAMPLE: 1509615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	507	101	90-110	

SAMPLE DUPLICATE: 1509616

Parameter	Units	60186367004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	461	462	0	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	461	462	0	10	

SAMPLE DUPLICATE: 1509617

Parameter	Units	60186183016 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	92.0	91.5	1	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	92.0	91.5	1	10	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WET/52576 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60186097034, 60186097035, 60186097036

METHOD BLANK: 1509750 Matrix: Water
Associated Lab Samples: 60186097034, 60186097035, 60186097036

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	01/22/15 09:56	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	01/22/15 09:56	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	01/22/15 09:56	

LABORATORY CONTROL SAMPLE: 1509751

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	521	104	90-110	

SAMPLE DUPLICATE: 1509752

Parameter	Units	60186097034 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	140	140	0	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	140	140	0	10	

SAMPLE DUPLICATE: 1509753

Parameter	Units	60186183024 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	8.8J	8.5J		10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	8.8J	8.5J		10	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WET/52536 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60186097001, 60186097002, 60186097003, 60186097004, 60186097005, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011, 60186097013, 60186097015, 60186097016, 60186097017, 60186097018, 60186097019, 60186097020, 60186097021, 60186097033

METHOD BLANK: 1508443 Matrix: Water
Associated Lab Samples: 60186097001, 60186097002, 60186097003, 60186097004, 60186097005, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011, 60186097013, 60186097015, 60186097016, 60186097017, 60186097018, 60186097019, 60186097020, 60186097021, 60186097033

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	01/20/15 10:06	

LABORATORY CONTROL SAMPLE: 1508444

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.52	104	80-120	

MATRIX SPIKE SAMPLE: 1508446

Parameter	Units	60186097005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.51	102	75-125	

SAMPLE DUPLICATE: 1508445

Parameter	Units	60186097002 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WET/52537 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60186097034, 60186097035, 60186097036

METHOD BLANK: 1508447 Matrix: Water
Associated Lab Samples: 60186097034, 60186097035, 60186097036

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	01/20/15 10:29	

LABORATORY CONTROL SAMPLE: 1508448

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.52	103	80-120	

MATRIX SPIKE SAMPLE: 1508450

Parameter	Units	60186183016 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.34	67	75-125	M1

SAMPLE DUPLICATE: 1508449

Parameter	Units	60186097035 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WETA/32574 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60186097001, 60186097002, 60186097003, 60186097004, 60186097005, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011, 60186097013, 60186097015, 60186097016, 60186097017, 60186097018, 60186097019, 60186097020, 60186097021

METHOD BLANK: 1508641 Matrix: Water
Associated Lab Samples: 60186097002, 60186097005, 60186097007, 60186097008, 60186097009, 60186097016, 60186097017, 60186097019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/21/15 20:02	
Sulfate	mg/L	ND	1.0	01/21/15 20:02	

METHOD BLANK: 1510500 Matrix: Water
Associated Lab Samples: 60186097001, 60186097003, 60186097004, 60186097006, 60186097007, 60186097009, 60186097010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	01/22/15 10:43	

METHOD BLANK: 1511800 Matrix: Water
Associated Lab Samples: 60186097018, 60186097020, 60186097021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/23/15 09:47	

METHOD BLANK: 1512173 Matrix: Water
Associated Lab Samples: 60186097001, 60186097002, 60186097003, 60186097004, 60186097006, 60186097010, 60186097011, 60186097013, 60186097015, 60186097018, 60186097019, 60186097020, 60186097021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/26/15 11:38	
Sulfate	mg/L	ND	1.0	01/26/15 11:38	

METHOD BLANK: 1512695 Matrix: Water
Associated Lab Samples: 60186097004, 60186097016, 60186097017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/27/15 16:43	
Sulfate	mg/L	ND	1.0	01/27/15 16:43	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

LABORATORY CONTROL SAMPLE: 1508642

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	99	90-110	
Sulfate	mg/L	5	5.0	99	90-110	

LABORATORY CONTROL SAMPLE: 1510501

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	5.0	99	90-110	

LABORATORY CONTROL SAMPLE: 1511801

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	94	90-110	

LABORATORY CONTROL SAMPLE: 1512174

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	97	90-110	
Sulfate	mg/L	5	5.0	99	90-110	

LABORATORY CONTROL SAMPLE: 1512696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	98	90-110	
Sulfate	mg/L	5	5.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1508643 1508644

Parameter	Units	60185981001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	30.0	25	25	55.4	54.7	102	99	80-120	1	15	
Sulfate	mg/L	192	100	100	295	287	103	94	80-120	3	15	

MATRIX SPIKE SAMPLE: 1508645

Parameter	Units	60186097005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	158	50	211	106	80-120	
Sulfate	mg/L	102	50	150	97	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WETA/32610 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60186097033, 60186097034, 60186097035, 60186097036

METHOD BLANK: 1510635 Matrix: Water
Associated Lab Samples: 60186097033, 60186097034, 60186097035, 60186097036

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/23/15 22:47	
Sulfate	mg/L	ND	1.0	01/23/15 22:47	

METHOD BLANK: 1512177 Matrix: Water
Associated Lab Samples: 60186097033, 60186097034, 60186097035, 60186097036

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/26/15 20:38	
Sulfate	mg/L	ND	1.0	01/26/15 20:38	

METHOD BLANK: 1512703 Matrix: Water
Associated Lab Samples: 60186097033, 60186097034, 60186097035, 60186097036

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/27/15 18:02	
Sulfate	mg/L	ND	1.0	01/27/15 18:02	

METHOD BLANK: 1513337 Matrix: Water
Associated Lab Samples: 60186097033, 60186097034, 60186097035, 60186097036

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/28/15 12:58	
Sulfate	mg/L	ND	1.0	01/28/15 12:58	

LABORATORY CONTROL SAMPLE: 1510636

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	94	90-110	
Sulfate	mg/L	5	5.1	101	90-110	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

LABORATORY CONTROL SAMPLE: 1512178

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	99	90-110	
Sulfate	mg/L	5	5.0	100	90-110	

LABORATORY CONTROL SAMPLE: 1512704

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	98	90-110	
Sulfate	mg/L	5	5.0	100	90-110	

LABORATORY CONTROL SAMPLE: 1513338

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.6	91	90-110	
Sulfate	mg/L	5	4.8	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1510637 1510638

Parameter	Units	60186183001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	105	50	50	161	159	111	107	80-120	1	15	
Sulfate	mg/L	15.9	5	5	21.0	21.0	101	102	80-120	0	15	

MATRIX SPIKE SAMPLE: 1510639

Parameter	Units	60186183002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	342	100	460	118	80-120	
Sulfate	mg/L	268	100	373	105	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WETA/32561 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60186097001, 60186097002, 60186097003, 60186097004, 60186097005, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011

METHOD BLANK: 1508463 Matrix: Water
Associated Lab Samples: 60186097001, 60186097002, 60186097003, 60186097004, 60186097005, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	01/20/15 12:30	

LABORATORY CONTROL SAMPLE: 1508464

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.2	109	90-110	

MATRIX SPIKE SAMPLE: 1508465

Parameter	Units	60186103002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	364	500	870	101	90-110	

MATRIX SPIKE SAMPLE: 1508467

Parameter	Units	60186097005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.6	78	90-110	M1

SAMPLE DUPLICATE: 1508466

Parameter	Units	60186052002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	1.1	1.1	3	18	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WETA/32562 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60186097013, 60186097015, 60186097016, 60186097017, 60186097018, 60186097019, 60186097020, 60186097021

METHOD BLANK: 1508468 Matrix: Water
Associated Lab Samples: 60186097013, 60186097015, 60186097016, 60186097017, 60186097018, 60186097019, 60186097020, 60186097021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	01/20/15 13:06	

LABORATORY CONTROL SAMPLE: 1508469

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.2	109	90-110	

MATRIX SPIKE SAMPLE: 1508470

Parameter	Units	60186097013 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.9	96	90-110	

MATRIX SPIKE SAMPLE: 1508472

Parameter	Units	60186064001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	2.6	129	90-110	M1

SAMPLE DUPLICATE: 1508471

Parameter	Units	60186097020 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	ND	ND		18	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WETA/32588
QC Batch Method: EPA 350.1
Analysis Method: EPA 350.1
Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60186097033

METHOD BLANK: 1509152 Matrix: Water
Associated Lab Samples: 60186097033

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	01/21/15 10:54	

LABORATORY CONTROL SAMPLE: 1509153

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.2	110	90-110	

MATRIX SPIKE SAMPLE: 1509154

Parameter	Units	60186138001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	2.0	98	90-110	

MATRIX SPIKE SAMPLE: 1509156

Parameter	Units	60186183016 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.6	79	90-110	M1

SAMPLE DUPLICATE: 1509155

Parameter	Units	60186169002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	ND	ND		18	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WETA/32589 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60186097034, 60186097035, 60186097036

METHOD BLANK: 1509157 Matrix: Water
Associated Lab Samples: 60186097034, 60186097035, 60186097036

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	01/21/15 12:36	

LABORATORY CONTROL SAMPLE: 1509158

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.0	102	90-110	

MATRIX SPIKE SAMPLE: 1509159

Parameter	Units	60186097034 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.066J	2	1.7	83	90-110	M1

MATRIX SPIKE SAMPLE: 1509161

Parameter	Units	60186183031 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.4	70	90-110	M1

SAMPLE DUPLICATE: 1509160

Parameter	Units	60186097036 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	ND	ND		18	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WETA/32528 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60186097001, 60186097002, 60186097003, 60186097004, 60186097005, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011, 60186097015, 60186097016, 60186097017, 60186097018, 60186097019, 60186097020

METHOD BLANK: 1506097 Matrix: Water
Associated Lab Samples: 60186097001, 60186097002, 60186097003, 60186097004, 60186097005, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011, 60186097015, 60186097016, 60186097017, 60186097018, 60186097019, 60186097020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	01/15/15 07:24	
Nitrogen, Nitrite	mg/L	ND	0.10	01/15/15 07:24	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	01/15/15 07:24	

LABORATORY CONTROL SAMPLE: 1506098

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.7	108	85-115	
Nitrogen, Nitrite	mg/L	.4	0.36	91	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	104	90-110	

MATRIX SPIKE SAMPLE: 1506100

Parameter	Units	60186097005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	28.1	16	41.1	81	85-115	M1
Nitrogen, Nitrite	mg/L	ND	4	4.3	106	90-110	
Nitrogen, NO2 plus NO3	mg/L	28.1	20	45.3	86	90-110	M1

MATRIX SPIKE SAMPLE: 1506101

Parameter	Units	60186097008 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.6	3.2	100	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.40	100	90-110	
Nitrogen, NO2 plus NO3	mg/L	1.6	2	3.6	100	90-110	

SAMPLE DUPLICATE: 1506099

Parameter	Units	60186085001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	23.8	23.7	1	20	
Nitrogen, Nitrite	mg/L	6.3	6.6	4	20	
Nitrogen, NO2 plus NO3	mg/L	30.2	30.2	0	20	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WETA/32533
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60186097013, 60186097021

METHOD BLANK: 1506230 Matrix: Water
Associated Lab Samples: 60186097013, 60186097021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	01/15/15 09:40	
Nitrogen, Nitrite	mg/L	ND	0.10	01/15/15 09:40	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	01/15/15 09:40	

LABORATORY CONTROL SAMPLE: 1506231

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.7	108	85-115	
Nitrogen, Nitrite	mg/L	.4	0.36	90	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	104	90-110	

MATRIX SPIKE SAMPLE: 1506232

Parameter	Units	60186068003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	15.6	8	20.9	66	85-115	M1
Nitrogen, Nitrite	mg/L	ND	2	2.6	120	90-110	M1
Nitrogen, NO2 plus NO3	mg/L	15.8	10	23.5	77	90-110	M1

SAMPLE DUPLICATE: 1506233

Parameter	Units	60186115003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	12.6	12.4	2	20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	12.6	12.4	2	20	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WETA/32536 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60186097033, 60186097034, 60186097035, 60186097036

METHOD BLANK: 1506406 Matrix: Water
Associated Lab Samples: 60186097033, 60186097034, 60186097035, 60186097036

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	01/15/15 11:11	
Nitrogen, Nitrite	mg/L	ND	0.10	01/15/15 11:11	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	01/15/15 11:11	

LABORATORY CONTROL SAMPLE: 1506407

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.7	109	85-115	
Nitrogen, Nitrite	mg/L	.4	0.38	95	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	106	90-110	

MATRIX SPIKE SAMPLE: 1506408

Parameter	Units	60186167001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	13.4	8	20.0	82	85-115	M1
Nitrogen, Nitrite	mg/L	ND	2	1.9	96	90-110	
Nitrogen, NO2 plus NO3	mg/L	13.4	10	21.9	85	90-110	M1

MATRIX SPIKE SAMPLE: 1506450

Parameter	Units	60186183021 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	0.16	1.6	2.0	114	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.39	98	90-110	
Nitrogen, NO2 plus NO3	mg/L	0.16	2	2.4	111	90-110	M1

SAMPLE DUPLICATE: 1506409

Parameter	Units	60186176002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.58	0.58	0	20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	0.58	0.58	0	20	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WETA/32532 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60186097001, 60186097002, 60186097003, 60186097004, 60186097005, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011, 60186097013

METHOD BLANK: 1506199 Matrix: Water
Associated Lab Samples: 60186097001, 60186097002, 60186097003, 60186097004, 60186097005, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011, 60186097013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	01/15/15 09:58	

LABORATORY CONTROL SAMPLE: 1506200

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.4	109	80-120	

MATRIX SPIKE SAMPLE: 1506202

Parameter	Units	60186097005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	ND	5	4.6	82	80-120	

SAMPLE DUPLICATE: 1506201

Parameter	Units	60186000007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	ND		25	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WETA/32591 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60186097015, 60186097016, 60186097017, 60186097018, 60186097019, 60186097020, 60186097021

METHOD BLANK: 1509233 Matrix: Water
Associated Lab Samples: 60186097015, 60186097016, 60186097017, 60186097018, 60186097019, 60186097020, 60186097021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	01/23/15 10:24	

LABORATORY CONTROL SAMPLE: 1509234

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.8	116	80-120	

MATRIX SPIKE SAMPLE: 1509235

Parameter	Units	60186204001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	0.97J	5	6.6	112	80-120	

SAMPLE DUPLICATE: 1509236

Parameter	Units	60186097015 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	0.68J	0.68J		25	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WETA/32747 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60186097033, 60186097034, 60186097035, 60186097036

METHOD BLANK: 1515980 Matrix: Water
Associated Lab Samples: 60186097033, 60186097034, 60186097035, 60186097036

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	02/04/15 12:19	

LABORATORY CONTROL SAMPLE: 1515981

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.0	101	80-120	

MATRIX SPIKE SAMPLE: 1515982

Parameter	Units	60186097033 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	1.5	5	6.7	104	80-120	

SAMPLE DUPLICATE: 1515983

Parameter	Units	60186097034 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	0.53J	0.54J		25	

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WETA/7063 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60186097001, 60186097002, 60186097003, 60186097004, 60186097005, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011, 60186097013, 60186097015, 60186097016, 60186097017, 60186097018, 60186097019, 60186097020, 60186097021

METHOD BLANK: 117043 Matrix: Water
Associated Lab Samples: 60186097001, 60186097002, 60186097003, 60186097004, 60186097005, 60186097006, 60186097007, 60186097008, 60186097009, 60186097010, 60186097011, 60186097013, 60186097015, 60186097016, 60186097017, 60186097018, 60186097019, 60186097020, 60186097021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	01/21/15 10:47	

LABORATORY CONTROL SAMPLE: 117044

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.6	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 117045 117046

Parameter	Units	7522318001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphate as P04	mg/L	1.3	1.5	1.5	2.7	2.8	91	94	80-120	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 117049 117050

Parameter	Units	60186097005 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphate as P04	mg/L	0.077	1.5	1.5	1.4	1.6	89	97	80-120	9	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

QC Batch: WETA/7090 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60186097033, 60186097034, 60186097035, 60186097036

METHOD BLANK: 117351 Matrix: Water
Associated Lab Samples: 60186097033, 60186097034, 60186097035, 60186097036

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	01/22/15 11:47	

LABORATORY CONTROL SAMPLE: 117352

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.6	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 117353 117354

Parameter	Units	7522299003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphate as P04	mg/L	12.5	1.5	1.5	14.8	14.3	152	118	80-120	4	20	M1

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QUALIFIERS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-D	Pace Analytical Services - Dallas
PASI-K	Pace Analytical Services - Kansas City

BATCH QUALIFIERS

Batch: MSV/67002
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/67007
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/67012
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/67027
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/67033
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/67064
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/67070
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/67103
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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QUALIFIERS

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

ANALYTE QUALIFIERS

1e	Field pH
H6	Analysis initiated outside of the 15 minute EPA recommended holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
pH	Post-analysis pH measurement indicates insufficient VOA sample preservation.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186097001	MW-57-201501	EPA 8015 - Alcohol	GCSV/3343		
60186097002	ITMW-9-201501	EPA 8015 - Alcohol	GCSV/3343		
60186097003	MW-35R-201501	EPA 8015 - Alcohol	GCSV/3343		
60186097004	MW-65-201501	EPA 8015 - Alcohol	GCSV/3343		
60186097005	ITMW-6-201501	EPA 8015 - Alcohol	GCSV/3349		
60186097006	ITMW-4-201501	EPA 8015 - Alcohol	GCSV/3343		
60186097007	MW-62-201501	EPA 8015 - Alcohol	GCSV/3343		
60186097008	MW-29-201501	EPA 8015 - Alcohol	GCSV/3343		
60186097009	ITMW-2-201501	EPA 8015 - Alcohol	GCSV/3343		
60186097010	MW-22-201501	EPA 8015 - Alcohol	GCSV/3343		
60186097011	MW-46R-201501	EPA 8015 - Alcohol	GCSV/3343		
60186097013	MW-91-201501	EPA 8015 - Alcohol	GCSV/3349		
60186097015	MW-89-201501	EPA 8015 - Alcohol	GCSV/3349		
60186097016	MW-82-201501	EPA 8015 - Alcohol	GCSV/3349		
60186097017	MW-61-201501	EPA 8015 - Alcohol	GCSV/3349		
60186097018	MW-50-201501	EPA 8015 - Alcohol	GCSV/3349		
60186097019	MW-60-201501	EPA 8015 - Alcohol	GCSV/3349		
60186097020	MW-81-201501	EPA 8015 - Alcohol	GCSV/3349		
60186097021	MW-63-201501	EPA 8015 - Alcohol	GCSV/3349		
60186097033	MW-56-201501	EPA 8015 - Alcohol	GCSV/3349		
60186097034	IW-80-201501	EPA 8015 - Alcohol	GCSV/3349		
60186097035	MW-34-201501	EPA 8015 - Alcohol	GCSV/3349		
60186097036	MW-88-201501	EPA 8015 - Alcohol	GCSV/3349		
60186097001	MW-57-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097002	ITMW-9-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097003	MW-35R-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097004	MW-65-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097005	ITMW-6-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097006	ITMW-4-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097007	MW-62-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097008	MW-29-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097009	ITMW-2-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097010	MW-22-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097011	MW-46R-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097013	MW-91-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097015	MW-89-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097016	MW-82-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097017	MW-61-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097018	MW-50-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097019	MW-60-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097020	MW-81-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097021	MW-63-201501	EPA 3010	MPRP/30475	EPA 6010	ICP/22770
60186097033	MW-56-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186097034	IW-80-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186097035	MW-34-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186097036	MW-88-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186097001	MW-57-201501	EPA 5030B/8260	MSV/67003		
60186097002	ITMW-9-201501	EPA 5030B/8260	MSV/67003		
60186097005	ITMW-6-201501	EPA 5030B/8260	MSV/67003		
60186097006	ITMW-4-201501	EPA 5030B/8260	MSV/67003		
60186097007	MW-62-201501	EPA 5030B/8260	MSV/67003		
60186097008	MW-29-201501	EPA 5030B/8260	MSV/67003		
60186097009	ITMW-2-201501	EPA 5030B/8260	MSV/67003		
60186097010	MW-22-201501	EPA 5030B/8260	MSV/67003		
60186097011	MW-46R-201501	EPA 5030B/8260	MSV/67003		
60186097011	MW-46R-201501	EPA 5030B/8260	MSV/67027		
60186097012	DUP-03-201501	EPA 5030B/8260	MSV/67003		
60186097012	DUP-03-201501	EPA 5030B/8260	MSV/67033		
60186097013	MW-91-201501	EPA 5030B/8260	MSV/67003		
60186097013	MW-91-201501	EPA 5030B/8260	MSV/67027		
60186097014	DUP-07-201501	EPA 5030B/8260	MSV/67003		
60186097014	DUP-07-201501	EPA 5030B/8260	MSV/67033		
60186097015	MW-89-201501	EPA 5030B/8260	MSV/67003		
60186097017	MW-61-201501	EPA 5030B/8260	MSV/67003		
60186097019	MW-60-201501	EPA 5030B/8260	MSV/67003		
60186097021	MW-63-201501	EPA 5030B/8260	MSV/67007		
60186097022	TB-02-201501	EPA 5030B/8260	MSV/67007		
60186097023	TB-01-201501	EPA 5030B/8260	MSV/67007		
60186097024	EB-01-201501	EPA 5030B/8260	MSV/67007		
60186097025	TB-08-201501	EPA 5030B/8260	MSV/67007		
60186097026	DUP-02-201501	EPA 5030B/8260	MSV/67007		
60186097027	TB-06-201501	EPA 5030B/8260	MSV/67007		
60186097028	EB-02-201501	EPA 5030B/8260	MSV/67007		
60186097029	TB-03-201501	EPA 5030B/8260	MSV/67007		
60186097030	TB-04-201501	EPA 5030B/8260	MSV/67007		
60186097031	TB-09-201501	EPA 5030B/8260	MSV/67007		
60186097032	TB-10-201501	EPA 5030B/8260	MSV/67007		
60186097033	MW-56-201501	EPA 5030B/8260	MSV/67070		
60186097033	MW-56-201501	EPA 5030B/8260	MSV/67103		
60186097034	IW-80-201501	EPA 5030B/8260	MSV/67064		
60186097035	MW-34-201501	EPA 5030B/8260	MSV/67064		
60186097036	MW-88-201501	EPA 5030B/8260	MSV/67070		
60186097037	TB-07-201501	EPA 5030B/8260	MSV/67070		
60186097003	MW-35R-201501	EPA 5030B/8260	MSV/67002		
60186097003	MW-35R-201501	EPA 5030B/8260	MSV/67012		
60186097004	MW-65-201501	EPA 5030B/8260	MSV/67002		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186097016	MW-82-201501	EPA 5030B/8260	MSV/67012		
60186097018	MW-50-201501	EPA 5030B/8260	MSV/67002		
60186097020	MW-81-201501	EPA 5030B/8260	MSV/67012		
60186097001	MW-57-201501	SM 2320B	WET/52486		
60186097002	ITMW-9-201501	SM 2320B	WET/52486		
60186097003	MW-35R-201501	SM 2320B	WET/52486		
60186097004	MW-65-201501	SM 2320B	WET/52486		
60186097005	ITMW-6-201501	SM 2320B	WET/52486		
60186097006	ITMW-4-201501	SM 2320B	WET/52486		
60186097007	MW-62-201501	SM 2320B	WET/52486		
60186097008	MW-29-201501	SM 2320B	WET/52486		
60186097009	ITMW-2-201501	SM 2320B	WET/52486		
60186097010	MW-22-201501	SM 2320B	WET/52486		
60186097011	MW-46R-201501	SM 2320B	WET/52486		
60186097013	MW-91-201501	SM 2320B	WET/52486		
60186097015	MW-89-201501	SM 2320B	WET/52486		
60186097016	MW-82-201501	SM 2320B	WET/52486		
60186097017	MW-61-201501	SM 2320B	WET/52486		
60186097018	MW-50-201501	SM 2320B	WET/52486		
60186097019	MW-60-201501	SM 2320B	WET/52486		
60186097020	MW-81-201501	SM 2320B	WET/52486		
60186097021	MW-63-201501	SM 2320B	WET/52486		
60186097033	MW-56-201501	SM 2320B	WET/52570		
60186097034	IW-80-201501	SM 2320B	WET/52576		
60186097035	MW-34-201501	SM 2320B	WET/52576		
60186097036	MW-88-201501	SM 2320B	WET/52576		
60186097002	ITMW-9-201501	SM 3500-Fe B#4	WET/52648		
60186097003	MW-35R-201501	SM 3500-Fe B#4	WET/52648		
60186097004	MW-65-201501	SM 3500-Fe B#4	WET/52648		
60186097005	ITMW-6-201501	SM 3500-Fe B#4	WET/52648		
60186097006	ITMW-4-201501	SM 3500-Fe B#4	WET/52648		
60186097007	MW-62-201501	SM 3500-Fe B#4	WET/52648		
60186097008	MW-29-201501	SM 3500-Fe B#4	WET/52648		
60186097009	ITMW-2-201501	SM 3500-Fe B#4	WET/52648		
60186097010	MW-22-201501	SM 3500-Fe B#4	WET/52648		
60186097011	MW-46R-201501	SM 3500-Fe B#4	WET/52649		
60186097013	MW-91-201501	SM 3500-Fe B#4	WET/52649		
60186097015	MW-89-201501	SM 3500-Fe B#4	WET/52649		
60186097016	MW-82-201501	SM 3500-Fe B#4	WET/52649		
60186097017	MW-61-201501	SM 3500-Fe B#4	WET/52649		
60186097018	MW-50-201501	SM 3500-Fe B#4	WET/52649		
60186097019	MW-60-201501	SM 3500-Fe B#4	WET/52649		
60186097020	MW-81-201501	SM 3500-Fe B#4	WET/52649		
60186097021	MW-63-201501	SM 3500-Fe B#4	WET/52649		
60186097034	IW-80-201501	SM 3500-Fe B#4	WET/52732		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186097035	MW-34-201501	SM 3500-Fe B#4	WET/52732		
60186097036	MW-88-201501	SM 3500-Fe B#4	WET/52732		
60186097001	MW-57-201501	SM 4500-H+B	WET/52651		
60186097002	ITMW-9-201501	SM 4500-H+B	WET/52650		
60186097003	MW-35R-201501	SM 4500-H+B	WET/52650		
60186097004	MW-65-201501	SM 4500-H+B	WET/52650		
60186097005	ITMW-6-201501	SM 4500-H+B	WET/52650		
60186097006	ITMW-4-201501	SM 4500-H+B	WET/52650		
60186097007	MW-62-201501	SM 4500-H+B	WET/52650		
60186097008	MW-29-201501	SM 4500-H+B	WET/52650		
60186097009	ITMW-2-201501	SM 4500-H+B	WET/52651		
60186097010	MW-22-201501	SM 4500-H+B	WET/52650		
60186097011	MW-46R-201501	SM 4500-H+B	WET/52651		
60186097013	MW-91-201501	SM 4500-H+B	WET/52651		
60186097015	MW-89-201501	SM 4500-H+B	WET/52651		
60186097016	MW-82-201501	SM 4500-H+B	WET/52651		
60186097017	MW-61-201501	SM 4500-H+B	WET/52651		
60186097018	MW-50-201501	SM 4500-H+B	WET/52650		
60186097019	MW-60-201501	SM 4500-H+B	WET/52650		
60186097020	MW-81-201501	SM 4500-H+B	WET/52651		
60186097021	MW-63-201501	SM 4500-H+B	WET/52651		
60186097033	MW-56-201501	SM 4500-H+B	WET/52650		
60186097034	IW-80-201501	SM 4500-H+B	WET/52650		
60186097035	MW-34-201501	SM 4500-H+B	WET/52650		
60186097036	MW-88-201501	SM 4500-H+B	WET/52650		
60186097001	MW-57-201501	SM 4500-S-2 D	WET/52536		
60186097002	ITMW-9-201501	SM 4500-S-2 D	WET/52536		
60186097003	MW-35R-201501	SM 4500-S-2 D	WET/52536		
60186097004	MW-65-201501	SM 4500-S-2 D	WET/52536		
60186097005	ITMW-6-201501	SM 4500-S-2 D	WET/52536		
60186097006	ITMW-4-201501	SM 4500-S-2 D	WET/52536		
60186097007	MW-62-201501	SM 4500-S-2 D	WET/52536		
60186097008	MW-29-201501	SM 4500-S-2 D	WET/52536		
60186097009	ITMW-2-201501	SM 4500-S-2 D	WET/52536		
60186097010	MW-22-201501	SM 4500-S-2 D	WET/52536		
60186097011	MW-46R-201501	SM 4500-S-2 D	WET/52536		
60186097013	MW-91-201501	SM 4500-S-2 D	WET/52536		
60186097015	MW-89-201501	SM 4500-S-2 D	WET/52536		
60186097016	MW-82-201501	SM 4500-S-2 D	WET/52536		
60186097017	MW-61-201501	SM 4500-S-2 D	WET/52536		
60186097018	MW-50-201501	SM 4500-S-2 D	WET/52536		
60186097019	MW-60-201501	SM 4500-S-2 D	WET/52536		
60186097020	MW-81-201501	SM 4500-S-2 D	WET/52536		
60186097021	MW-63-201501	SM 4500-S-2 D	WET/52536		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186097033	MW-56-201501	SM 4500-S-2 D	WET/52536		
60186097034	IW-80-201501	SM 4500-S-2 D	WET/52537		
60186097035	MW-34-201501	SM 4500-S-2 D	WET/52537		
60186097036	MW-88-201501	SM 4500-S-2 D	WET/52537		
60186097001	MW-57-201501	EPA 300.0	WETA/32574		
60186097002	ITMW-9-201501	EPA 300.0	WETA/32574		
60186097003	MW-35R-201501	EPA 300.0	WETA/32574		
60186097004	MW-65-201501	EPA 300.0	WETA/32574		
60186097005	ITMW-6-201501	EPA 300.0	WETA/32574		
60186097006	ITMW-4-201501	EPA 300.0	WETA/32574		
60186097007	MW-62-201501	EPA 300.0	WETA/32574		
60186097008	MW-29-201501	EPA 300.0	WETA/32574		
60186097009	ITMW-2-201501	EPA 300.0	WETA/32574		
60186097010	MW-22-201501	EPA 300.0	WETA/32574		
60186097011	MW-46R-201501	EPA 300.0	WETA/32574		
60186097013	MW-91-201501	EPA 300.0	WETA/32574		
60186097015	MW-89-201501	EPA 300.0	WETA/32574		
60186097016	MW-82-201501	EPA 300.0	WETA/32574		
60186097017	MW-61-201501	EPA 300.0	WETA/32574		
60186097018	MW-50-201501	EPA 300.0	WETA/32574		
60186097019	MW-60-201501	EPA 300.0	WETA/32574		
60186097020	MW-81-201501	EPA 300.0	WETA/32574		
60186097021	MW-63-201501	EPA 300.0	WETA/32574		
60186097033	MW-56-201501	EPA 300.0	WETA/32610		
60186097034	IW-80-201501	EPA 300.0	WETA/32610		
60186097035	MW-34-201501	EPA 300.0	WETA/32610		
60186097036	MW-88-201501	EPA 300.0	WETA/32610		
60186097001	MW-57-201501	EPA 350.1	WETA/32561		
60186097002	ITMW-9-201501	EPA 350.1	WETA/32561		
60186097003	MW-35R-201501	EPA 350.1	WETA/32561		
60186097004	MW-65-201501	EPA 350.1	WETA/32561		
60186097005	ITMW-6-201501	EPA 350.1	WETA/32561		
60186097006	ITMW-4-201501	EPA 350.1	WETA/32561		
60186097007	MW-62-201501	EPA 350.1	WETA/32561		
60186097008	MW-29-201501	EPA 350.1	WETA/32561		
60186097009	ITMW-2-201501	EPA 350.1	WETA/32561		
60186097010	MW-22-201501	EPA 350.1	WETA/32561		
60186097011	MW-46R-201501	EPA 350.1	WETA/32561		
60186097013	MW-91-201501	EPA 350.1	WETA/32562		
60186097015	MW-89-201501	EPA 350.1	WETA/32562		
60186097016	MW-82-201501	EPA 350.1	WETA/32562		
60186097017	MW-61-201501	EPA 350.1	WETA/32562		
60186097018	MW-50-201501	EPA 350.1	WETA/32562		
60186097019	MW-60-201501	EPA 350.1	WETA/32562		
60186097020	MW-81-201501	EPA 350.1	WETA/32562		
60186097021	MW-63-201501	EPA 350.1	WETA/32562		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186097033	MW-56-201501	EPA 350.1	WETA/32588		
60186097034	IW-80-201501	EPA 350.1	WETA/32589		
60186097035	MW-34-201501	EPA 350.1	WETA/32589		
60186097036	MW-88-201501	EPA 350.1	WETA/32589		
60186097001	MW-57-201501	EPA 353.2	WETA/32528		
60186097002	ITMW-9-201501	EPA 353.2	WETA/32528		
60186097003	MW-35R-201501	EPA 353.2	WETA/32528		
60186097004	MW-65-201501	EPA 353.2	WETA/32528		
60186097005	ITMW-6-201501	EPA 353.2	WETA/32528		
60186097006	ITMW-4-201501	EPA 353.2	WETA/32528		
60186097007	MW-62-201501	EPA 353.2	WETA/32528		
60186097008	MW-29-201501	EPA 353.2	WETA/32528		
60186097009	ITMW-2-201501	EPA 353.2	WETA/32528		
60186097010	MW-22-201501	EPA 353.2	WETA/32528		
60186097011	MW-46R-201501	EPA 353.2	WETA/32528		
60186097013	MW-91-201501	EPA 353.2	WETA/32533		
60186097015	MW-89-201501	EPA 353.2	WETA/32528		
60186097016	MW-82-201501	EPA 353.2	WETA/32528		
60186097017	MW-61-201501	EPA 353.2	WETA/32528		
60186097018	MW-50-201501	EPA 353.2	WETA/32528		
60186097019	MW-60-201501	EPA 353.2	WETA/32528		
60186097020	MW-81-201501	EPA 353.2	WETA/32528		
60186097021	MW-63-201501	EPA 353.2	WETA/32533		
60186097033	MW-56-201501	EPA 353.2	WETA/32536		
60186097034	IW-80-201501	EPA 353.2	WETA/32536		
60186097035	MW-34-201501	EPA 353.2	WETA/32536		
60186097036	MW-88-201501	EPA 353.2	WETA/32536		
60186097001	MW-57-201501	SM 4500-CO2 D	WETA/32650		
60186097002	ITMW-9-201501	SM 4500-CO2 D	WETA/32650		
60186097003	MW-35R-201501	SM 4500-CO2 D	WETA/32650		
60186097004	MW-65-201501	SM 4500-CO2 D	WETA/32650		
60186097005	ITMW-6-201501	SM 4500-CO2 D	WETA/32650		
60186097006	ITMW-4-201501	SM 4500-CO2 D	WETA/32650		
60186097007	MW-62-201501	SM 4500-CO2 D	WETA/32650		
60186097008	MW-29-201501	SM 4500-CO2 D	WETA/32650		
60186097009	ITMW-2-201501	SM 4500-CO2 D	WETA/32650		
60186097010	MW-22-201501	SM 4500-CO2 D	WETA/32650		
60186097011	MW-46R-201501	SM 4500-CO2 D	WETA/32650		
60186097013	MW-91-201501	SM 4500-CO2 D	WETA/32668		
60186097015	MW-89-201501	SM 4500-CO2 D	WETA/32668		
60186097016	MW-82-201501	SM 4500-CO2 D	WETA/32668		
60186097017	MW-61-201501	SM 4500-CO2 D	WETA/32668		
60186097018	MW-50-201501	SM 4500-CO2 D	WETA/32668		
60186097019	MW-60-201501	SM 4500-CO2 D	WETA/32668		
60186097020	MW-81-201501	SM 4500-CO2 D	WETA/32668		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186097021	MW-63-201501	SM 4500-CO2 D	WETA/32668		
60186097033	MW-56-201501	SM 4500-CO2 D	WETA/32673		
60186097034	IW-80-201501	SM 4500-CO2 D	WETA/32673		
60186097035	MW-34-201501	SM 4500-CO2 D	WETA/32673		
60186097036	MW-88-201501	SM 4500-CO2 D	WETA/32673		
60186097001	MW-57-201501	SM 5310C	WETA/32532		
60186097002	ITMW-9-201501	SM 5310C	WETA/32532		
60186097003	MW-35R-201501	SM 5310C	WETA/32532		
60186097004	MW-65-201501	SM 5310C	WETA/32532		
60186097005	ITMW-6-201501	SM 5310C	WETA/32532		
60186097006	ITMW-4-201501	SM 5310C	WETA/32532		
60186097007	MW-62-201501	SM 5310C	WETA/32532		
60186097008	MW-29-201501	SM 5310C	WETA/32532		
60186097009	ITMW-2-201501	SM 5310C	WETA/32532		
60186097010	MW-22-201501	SM 5310C	WETA/32532		
60186097011	MW-46R-201501	SM 5310C	WETA/32532		
60186097013	MW-91-201501	SM 5310C	WETA/32532		
60186097015	MW-89-201501	SM 5310C	WETA/32591		
60186097016	MW-82-201501	SM 5310C	WETA/32591		
60186097017	MW-61-201501	SM 5310C	WETA/32591		
60186097018	MW-50-201501	SM 5310C	WETA/32591		
60186097019	MW-60-201501	SM 5310C	WETA/32591		
60186097020	MW-81-201501	SM 5310C	WETA/32591		
60186097021	MW-63-201501	SM 5310C	WETA/32591		
60186097033	MW-56-201501	SM 5310C	WETA/32747		
60186097034	IW-80-201501	SM 5310C	WETA/32747		
60186097035	MW-34-201501	SM 5310C	WETA/32747		
60186097036	MW-88-201501	SM 5310C	WETA/32747		
60186097001	MW-57-201501	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064
60186097002	ITMW-9-201501	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064
60186097003	MW-35R-201501	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064
60186097004	MW-65-201501	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064
60186097005	ITMW-6-201501	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064
60186097006	ITMW-4-201501	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064
60186097007	MW-62-201501	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064
60186097008	MW-29-201501	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064
60186097009	ITMW-2-201501	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064
60186097010	MW-22-201501	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064
60186097011	MW-46R-201501	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064
60186097013	MW-91-201501	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064
60186097015	MW-89-201501	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064
60186097016	MW-82-201501	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064
60186097017	MW-61-201501	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064
60186097018	MW-50-201501	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064
60186097019	MW-60-201501	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064
60186097020	MW-81-201501	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith, AR 1st Quarter
Pace Project No.: 60186097

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186097021	**MW-63-201501**	SM4500-P B	WETA/7063	SM 4500-P E	WETA/7064
60186097033	**MW-56-201501**	SM4500-P B	WETA/7090	SM 4500-P E	WETA/7092
60186097034	**IW-80-201501**	SM4500-P B	WETA/7090	SM 4500-P E	WETA/7092
60186097035	**MW-34-201501**	SM4500-P B	WETA/7090	SM 4500-P E	WETA/7092
60186097036	**MW-88-201501**	SM4500-P B	WETA/7090	SM 4500-P E	WETA/7092

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Sample Condition Upon Receipt

WO# : 60186097

60186097

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 6113 5277 3460 Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☑ None ☐ Other ☐

Thermometer Used: T-239 / T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 5.3

Temperature should be above freezing to 6°C

Date and initials of person examining contents: BB 1/15/15

Chain of Custody present:	☑Yes	☐No	☐N/A
Chain of Custody filled out:	☑Yes	☐No	☐N/A
Chain of Custody relinquished:	☑Yes	☐No	☐N/A
Sampler name & signature on COC:	☑Yes	☐No	☐N/A
Samples arrived within holding time:	☑Yes	☐No	☐N/A
Short Hold Time analyses (<72hr):	☑Yes	☐No	☐N/A
Rush Turn Around Time requested:	☐Yes	☑No	☐N/A
Sufficient volume:	☑Yes	☐No	☐N/A
Correct containers used:	☑Yes	☐No	☐N/A
Pace containers used:	☑Yes	☐No	☐N/A
Containers intact:	☑Yes	☐No	☐N/A
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes	☐No	☑N/A
Filtered volume received for dissolved tests?	☐Yes	☐No	☑N/A
Sample labels match COC:	☑Yes	☐No	☐N/A
Includes date/time/ID/analyses Y Matrix: water			
All containers needing preservation have been checked.	☑Yes	☐No	☐N/A
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes	☐No	☐N/A
Exceptions: VOA coliform, TOC, O&G, WI-DRO (water), Phenolics	☑Yes	☐No	
Trip Blank present:	☑Yes	☐No	☐N/A
Pace Trip Blank lot # (if purchased): Covered			
Headspace in VOA vials (>6mm):	☐Yes	☑No	☐N/A
Project sampled in USDA Regulated Area:	☐Yes	☐No	☑N/A

1. received samples in missing cooler
2. (1) MW-56
3. (4) IW-80
4. (7) MW-34
5. (10) MW-88
6. NO_2 NO_3 And pg 3, item (5) TB-07
7.
8.
9.
10.
11.
12.
13.

Initial when completed	Lot # of added preservative

14.
15.
16.
17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MW Date: 1/16/15

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Sample Condition Upon Receipt

WO# : 60186097

60186097

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: Attached Sheet Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☑ None ☐ Other ☐

Thermometer Used: T-239 / T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 3.3 / 2.1 / 3.9 / 4.7 / 2.5
TB1 / 2 / 3 / NTB / 5

Temperature should be above freezing to 6°C

Date and initials of person examining contents: BB 1/14/15

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2. NOT on COC Also received 1DG9H for following
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3. TB03, TB04, TB09, TB10
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☑Yes ☐No ☐N/A	6. NO2 NO3
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	7.
Sufficient volume:	☑Yes ☐No ☐N/A	8.
Correct containers used:	☑Yes ☐No ☐N/A	9. Did not receive following MW-56
Pace containers used:	☑Yes ☐No ☐N/A	IW-80
Containers intact:	☑Yes ☐No ☐N/A	10. MW-34
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11. MW-88
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	12.
Sample labels match COC: Includes date/time/ID/analyses Y Matrix: water	☑Yes ☐No ☐N/A	13.
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
Exceptions: (VOA) coliform, TOC, O&G, WI-DRO (water), Phenolics	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present: Pace Trip Blank lot # (if purchased): covered	☑Yes ☐No ☐N/A	15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution:

1 cooler missing - in Memphis per FedEx - MW 1/14/15

Project Manager Review: MW Date: 1/14/15

	16.
Project sampled in USDA Regulated Area: ☐Yes ☐No ☑N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: ① 6133 5281 8172, ② 6113 5281 8183, ③ 6113 5281 6684
④ 6113 5277 3450 ⑤ 6113 5281 6673

Project Manager Review: _____ Date: _____

F-KS-C-003-Rev.7, 04December2012

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: of 3

Section A Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

TB# ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH + Zn Acetate	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010 Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N												6018609 7
1	MW-36-201501	WT	G				1115		11		X	X	X	X	X				X												
2	MW-57-201501	WT	G				1437		11							BP3U															
3	TMW-9-201501	WT	G				0920		11																						
4	MW-80-201501	WT	G				1335		11																						
5	MW-35R-201501	WT	G				1035		11																						
6	MW-45-201501	WT	G				1040		11																						
7	MW-34-201501	WT	G				1320		11																						
8	TMW-10-201501	WT	G				1148		11																						
9	TMW-4-201501	WT	G				0930		11																						
10	MW-88-201501	WT	G				1158		11																						
11	MW-62-201501	WT	G				1120		11																						
12	MW-29-201501	WT	G				1423		11																						

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Level IV data package required				Ben Bruff Pace	1/14/15	0850	3.3	Y	Y	Y
							2.1 3.9			
							4.7 → NTB			
	missing cooler from 1/14 → Ben Bruff Pace				1/15/15	0820	2.5 5.3			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Tamara R. House-Knight

SIGNATURE of SAMPLER: Tamara R. House-Knight DATE Signed (MM/DD/YY): 01/13/15

*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.

F-ALL-Q-020rev.07, 15-Feb-2007

CHAIN-OF-CUSTODY / Analytical Request Document

Pace Analytical
www.pacelabs.com

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Environ	Report To:	Wendy Stonestreet	Attention:	Tammy Gleason
Address:	7500 College Blvd., Ste. 925	Copy To:	Tammy Gleason	Company Name:	Environ
	Overland Park, KS 66210			Address:	250 Monroe Ave. NW Grand Rapids
Email To:	wstonestreet@environcorp.com	Purchase Order No.:	NA	Pace Quote Reference:	Michigan, 49503
Phone:	913-553-5926 Fax:	Project Name:	Fort Smith, AR	Pace Project Manager:	MJ Walls
Requested Due Date/TAT:		Project Number:		Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Pace Project No./ Lab I.D.: 60186097

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH + Zinc Acetate	$Na_2S_2O_3$	Methanol	Other Ascorbic	Analysis Test Y/N	8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	ITMW-2-201501 BP32 13.0	WT	G	BP3S 1.0		BP3N 1.0	1/13/15	1620	11	X	X	X	X	X	BP3		U		X	X	X	X	X	X	X	X	X	X	N	AG3S 3DG9H 3DG9U 009
2	MW-22-201501	WT	G	"	"	"	1/13/15	0945	11	X	X	X	X	X		"			X	X	X	X	X	X	X	X	X	X	N	" " " 010
V50	~~MW-62-201501~~	WT	G				1/13/15																						N	
4	MW-46R-201501	WT	G	"	"	"	1/13/15	1455	11	X	X	X	X	X		"			X	X	X	X	X	X	X	X	X	X	X	N	" " " 011
5	DUP-03-201501	WT	G				1/13/15	1455	3				X						X										N	3DG9H 012
6	MW-91-201501	WT	G	"	"	"	1/13/15	1631	11	X	X	X	X	X		"			X	X	X	X	X	X	X	X	X	X	X	N	" " " 013
7	DUP-07-201501	WT	G				1/13/15	1631	3				X						X										N	014
8	MW-89-201501	WT	G	"	"	"	1/13/15	1441	11	X	X	X	X	X		"			X	X	X	X	X	X	X	X	X	X	X	N	" " " 015
9	MW-81-201501	WT	G	"	"	"	1/13/15	1600	11	X	X	X	[illegible]	X		"		X	X	X	X	X	X	X	X	X	X	X	X	N	7 Day Hold 016
10	MW-61-201501	WT	G	"	"	"	1/13/15	1600	11	X	X	X	X	X		"			X	X	X	X	X	X	X	X	X	X	V	N	017
11	MW-50-201501	WT	G	"	"	"	1/13/15	1430	11	X	X	X	X	X		"		X	X	X	X	X	X	X	X	X	X	X	X	N	7 DAY HOLD 018 OTHER
12	MW-60-201501	WT	G	"	"	"	1/13/15	1300	11	X	X	X	X	X		"			X	X	X	X	X	X	X	X	X	X	X	N	" " " 019

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Level IV data package required				Ben Knight Pace	1/14/15	0850	3.3 2.1	Y	Y	Y
							3.9			
							4.7 → NTB			
				Ben Knight Pace	1/15/15	0820 →	3.5 3.3			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Tamara R. House-Knight

SIGNATURE of SAMPLER: Tamara R. House-Knight DATE Signed (MM/DD/YY): 01/13/15

*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

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Pace Analytical™ www.pacelabs.com

Section A Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: 8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-82-201501 BP32 BP35	WT	G	BP3N	BP3U	1/13/15	1615		11	X	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	N	6DG9U 020
2	MW-63-201501 ↓ ↓	WT	G	↓	↓	1/13/15	1625		11	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	N	3DG9H 3DG9U 021
3	TB-02-201501	WT	G			1/13/15	—		3				X						X					1	DG	9H					022
4	TB-01-201501	WT	G			1/13/15	—		3				X						X					↓							023
5	TB-07-201501	WT	G			1/13/15	—		3				X						X					↓							—
6	EB-01-201501	WT	G			1/13/15	1800		3				X						X					3	D	G	9	H			024
7	TB-08-201501	WT	G			1/13/15	—		3				X						X					1	D	G	9	H			025
8	DUP-02-201501	WT	G			1/13/15	920		3				X						X					3	D	G	9	H			026
9	TB-06-201501	WT	G			1/13/15	—		3				X						X					1	D	G	9	H			027
10	EB-02-201501	WT	G			1/13/15	1802		3				X						X					3	D	G	9H				028
11																															
12																															

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Level IV data package required				Ben Bruff Pace	1/14/15	0850
				Ben Bruff Pace	1/15/15	0820

SAMPLE CONDITIONS

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
3.3	Y	Y	Y
2.1 3.9			
4.7 → NTB			
2.5 2.3			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Tamara R. House-Knight

SIGNATURE of SAMPLER: Tamara R. House-Knight DATE Signed (MM/DD/YY): 01/13/15

*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

Pace Analytical®
www.pacelabs.com

Workorder: 60186097 **Workorder Name:** Fort Smith, AR **Owner Received Date:** 1/14/2015 **Results Requested By:** 1/26/2015

Report To	Subcontract To
Mary Jane Walls Pace Analytical Services, Inc. 9608 Loiret Blvd. Lenexa, KS 66219 Phone (913)599-5665 Fax (913)599-1759	Pace Analytical Dallas 400 West Bethany Drive Suite 190 Allen, TX 75013 Phone (972)727-1123

WO# : 7522353

7522353

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: H2SO4	Preserved Containers: none	Requested Analysis: Total Phosphate	Requested Analysis: 8015 Chloroethanol	LAB USE ONLY
1	MW-57-201501	PS	1/13/2015 14:37	60186097001	Water	1	3	X	X	001
2	ITMW-9-201 501	PS	1/13/2015 09:20	60186097002	Water	1	3	X	X	002
3	MW-35R-201501	PS	1/13/2015 10:35	60186097003	Water	1	3	X	X	003
4	MW-65-201501	PS	1/13/2015 10:40	60186097004	Water	1	3	X	X	004
5	ITMW-6-201501	RQS	1/13/2015 11:48	60186097005	Water	1	3	X	X	005
6	ITMW-4-201 501	PS	1/13/2015 09:30	60186097006	Water	1	3	X	X	006
7	MW-62-201501	PS	1/13/2015 11:20	60186097007	Water	1	3	X	X	007
8	MW-29-201501	PS	1/13/2015 14:23	60186097008	Water	1	3	X	X	008
9	ITMW-2-201501	PS	1/13/2015 16:20	60186097009	Water	1	3	X	X	009
10	MW-22-201501	PS	1/13/2015 09:45	60186097010	Water	1	3	X	X	010
11	MW-46R-201501	PS	1/13/2015 14:55	60186097011	Water	1	3	X	X	011
12	MW-91-201501	PS	1/13/2015 16:31	60186097013	Water	1	3	X	X	012
13	MW-89-201501	PS	1/13/2015 14:41	60186097015	Water	1	3	X	X	013
14	MW-81-201501	PS	1/13/2015 16:00	60186097016	Water	1	3	X	X	014
15	MW-61-201501	PS	1/13/2015 16:00	60186097017	Water	1	3	X	X	015
16	MW-50-201501	PS	1/13/2015 14:30	60186097018	Water	1	3	X	X	016
17	MW-60-201501	PS	1/13/2015 13:00	60186097019	Water	1	3	X	X	017
18	MW-82-201501	PS	1/13/2015 16:15	60186097020	Water	1	3	X	X	018
19	MW-63-201501	PS	1/13/2015 16:25	60186097021	Water	1	3	X	X	019

Page 150 of 157

WO# 15223553

Transfers	Released By	Date/Time	Received By	Date/Time	Comments
1	[signature]	1/14/15 1900	[signature]	1/15/15 0907	
2					
3					

Cooler Temperature on Receipt 0.8 °C **Custody Seal** Y or N **Received on Ice** Y or N **Samples Intact** Y or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*
This chain of custody is considered complete as is since this information is available in the owner laboratory.

Pace Analytical

Sample Condition Upon Receipt
Dallas

Client Name: Pace - Kansas Project Work order: 7522353

Courier: FedEX ☒ UPS ☐ USPS ☐ Client ☐ Courier ☐ LSO ☐ PACE ☐ Other: _____

Tracking#: 6262 7065 7920

Custody Seal on Cooler/Box: Yes ☒ No ☐ **Seals Intact:** Yes ☒ No ☐ NA ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☐ None ☐ Other ☒

Thermometer Used: IR-01 Type of Ice: Wet ☒ Blue ☐ None ☐ Sample Received on ice, cooling process has begun ☒

Cooler Temp: 0.8° (Temp should be above freezing to 6°C)

Chain of Custody Present	Yes ☒ No ☐ NA ☐	1
Chain of Custody filled out	Yes ☒ No ☐ NA ☐	2
Chain of Custody relinquished	Yes ☒ No ☐ NA ☐	3
Sampler name & signature on COC	Yes ☐ No ☒ NA ☐	4
Sample received within HT	Yes ☒ No ☐ NA ☐	5
Short HT analyses (<72 hrs)	Yes ☐ No ☒ NA ☐	6
Rush TAT requested	Yes ☐ No ☒ NA ☐	7
Sufficient Volume received	Yes ☒ No ☐ NA ☐	8
Correct Container used Pace Container used	Yes ☒ No ☐ NA ☐ Yes ☒ No ☐ NA ☐	9
Container Intact	Yes ☒ No ☐ NA ☐	10
Unpreserved 5035A soil frozen within 48 hrs	Yes ☐ No ☐ NA ☒	11
Filtered volume received for Dissolved tests	Yes ☐ No ☐ NA ☒	12
Sample labels match COC Include date/time/ID/analyses Matrix: Water	Yes ☒ No ☐ NA ☐	13
All containers needing preservation have been checked	Yes ☒ No ☐ NA ☐	14a. Lot# of pH strip: 640800 1 pH checked Yes ☒ No ☐ pH<2 ☒ pH>9 ☐ pH>12 ☐ Lot# of Iodine strip: _____ Lot# of Lead Acetate strip: _____
Do containers require preservation at the lab Sulfuric Acid was added to sample 008	Yes ☒ No ☐ NA ☐	14b. Preservation: Sulfuric Acid Lot#: 34649
All containers needing preservation are found to be in Compliance with EPA recommendation **Exception**: VOA, coliform, O&G	Yes ☒ No ☐ NA ☐ Yes ☐ No ☒	14c.
Are soil samples (volatiles) received in	Bulk ☐ Terracore ☐ EnCore ☐ NA ☒	15.
Trip Blank present Trip Blank Custody Seals Intact Pace Trip Blank Lot# (if purchased): _____	Yes ☐ No ☐ NA ☒ Yes ☐ No ☐ NA ☒	16.
Headspace in VOA (>6mm)	Yes ☐ No ☐ NA ☒	17.
Project sampled in USDA Regulated Area:	Yes ☐ No ☐ NA ☒	18. List State _____

Client Notification/Resolution/Comments:

Person Contacted: _____ Date: _____

Comments/Resolution: _____

Person Examining Contents: KLW Date: 11-5-15

Pace Analytical Services - Dallas

Sample Container Count-

COC PAGE 1 of 2

COC ID# _____

Pace Project # 7522353

Sample Line Item	AG1S	AG1U	AG3S	BG1H	BG1S	BP1U	BP2N	BP2S	BP2U	BP20	SP5T	VG9H	VG9M	VG9T	VG9U	VG9W	WGFU	WGKU	BP3S		
1															3				1		
2															3				1		
3															3				1		
4															3				1		
5															3				1		
6															3				1		
7															3				1		
8															3				1		
9															3				1		
10															3				1		
11															3				1		
12															3				1		

Container Codes

DG9H	40mL HCL amber voa vial
AG1U	1liter unpreserved amber glass
WGFU	4oz clear soil jar
R	terra core kit
BP2N	500mL HNO3 plastic
BP2U	500mL unpreserved plastic
BP2S	500mL H2SO4 plastic
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
AG3S	250mL H2SO4 glass amber
AG1S	1 liter H2SO4 amber glass
BP1U	1 liter unpreserved plastic
WGKU	8oz wide jar upreserved
Other	Other

AF	Air Filter
AG1H	1 liter HCL amber glass
AG1S	1 liter H2SO4 amber glass
AG1T	1 liter Na Thiosulfate amber gl
AG2N	500mL HNO3 amber glass
AG2S	500mL H2SO4 amber glass
AG2U	500mL unpreserved amber gla
AG3U	250mL unpreserved amber gla
BG1H	1 liter HCL clear glass
BG1S	1 liter H2SO4 clear glass
BG1T	1 liter Na Thiosulfate clear gla
BG1U	1 liter unpreserved glass
BP1A	1 liter NaOH, Asc Acid plastic
SP5T	120mL Coliform Na Thiosulfate

BP1N	1 liter HNO3 plastic
BP1S	1 liter H2SO4 plastic
BP1U	1 liter unpreserved plastic
BP1Z	1 liter NaOH, Zn, Ac
BP2A	500mL NaOH, Asc Acid plastic
BP2O	500mL NaOH plastic
BP2Z	500mL NaOH, Zn Ac
BP3A	250mL NaOh, Asc Acid plastic
BP3C	250mL NaOH plastic
BP3Z	250mL NaOH, Zn Ac plastic
C	Air Cassettes
DG9B	40mL Na Bisulfate amber vial
DG9M	40mL MeOH clear vial
SP5U	120mL Coliform unpreserved

DG9P	40mL TSP amber vial
DG9S	40mL H2SO4 amber vial
DG9T	40mL Na Thio amber vial
DG9U	40mL unpreserved **amber** vial
I	Wipe/Swab
JGFU	4oz unpreserved amber wide
U	Summa Can
VG9H	40mL HCL clear vial
VG9T	40mL Na Thio. clear vial
VG9U	40mL unpreserved **clear** vial
VSG	Headspace septa vial & HCL
WGFX	4oz wide jar w/hexane wipe
ZPLC	Ziploc Bag
GN	General unpreserved

Pace Analytical Services - Dallas

Sample Container Count-

COC PAGE 2 of 2

COC ID# _____

Pace Project # 7522353

Sample Line Item	AG1S	AG1U	AG3S	BG1H	BG1S	BP1U	BP2N	BP2S	BP2U	BP20	SP5T	VG9H	VG9M	VG9T	VG9U	VG9W	WGFU	WGKU	BP3S		
1															3				1		
2															3				1		
3															3				1		
4															3				1		
5															3				1		
6															3				1		
7															3				1		
8																					
9																					
10																					
11																					
12																					

Container Codes

DG9H	40mL HCL amber voa vial	AF	Air Filter	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	J	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	BP3A	250mL NaOh, Asc Acid plastic	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag
WGKU	8oz wide jar upreserved	SP5T	120mL Coliform Na Thiosulfate	SP5U	120mL Coliform unpreserved	GN	General unpreserved
Other	Other						

Chain of Custody

Pace Analytical®
www.pacelabs.com

Workorder: 60186097 **Workorder Name:** Fort Smith, AR **Owner Received Date:** 1/14/2015 **Results Requested By:** 1/26/2015

Report To	Subcontract To
Mary Jane Walls Pace Analytical Services, Inc. 9608 Loiret Blvd. Lenexa, KS 66219 Phone (913)599-5665 Fax (913)599-1759	Pace Analytical Dallas 400 West Bethany Drive Suite 190 Allen, TX 75013 Phone (972)727-1123

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: H2SO4	Preserved Containers: none					Requested Analysis: Total Phosphate	Requested Analysis: 8015 Chloroethanol										LAB USE ONLY
20	MW-56-201501	PS	1/13/2015 11:15	60186097033	Water	1	3					X	X										001
21	IW-80-201501	PS	1/13/2015 13:35	60186097034	Water	1	3					X	X										002
22	MW-34-201501	PS	1/13/2015 13:20	60186097035	Water	1	3					X	X										003
23	MW-88-201501	PS	1/13/2015 11:58	60186097036	Water	1	3					X	X										004
24																							

Transfers	Released By	Date/Time	Received By	Date/Time
1			Melvin McCuiston	1-16-15 0835
2				
3	IR01			

Comments

Cooler Temperature on Receipt 0.0 °C **Custody Seal** (Y) or N **Received on Ice** (Y) or N **Samples Intact** (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*
This chain of custody is considered complete as is since this information is available in the owner laboratory.

WO# : 7522394

7522394

Pace Analytical

Sample Condition Upon Receipt
Dallas

Client Name: Pace Kansas Project Work order: 7522394

Courier: FedEX ☒ UPS ☐ USPS ☐ Client ☐ Courier ☐ LSO ☐ PACE ☐ Other: _____

Tracking#: 6262 7065 8375

Custody Seal on Cooler/Box: Yes ☒ No ☐ **Seals Intact:** Yes ☒ No ☐ NA ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☒ None ☐ Other ☐

Thermometer Used: IR-01 Type of Ice: Wet ☒ Blue ☐ None ☐ Sample Received on ice, cooling process has begun ☒

Cooler Temp: 0.0°C (Temp should be above freezing to 6°C)

Chain of Custody Present	Yes ☒ No ☐ NA ☐	1
Chain of Custody filled out	Yes ☒ No ☐ NA ☐	2
Chain of Custody relinquished	Yes ☒ No ☐ NA ☐	3
Sampler name & signature on COC	Yes ☐ No ☒ NA ☐	4
Sample received within HT	Yes ☒ No ☐ NA ☐	5
Short HT analyses (<72 hrs)	Yes ☐ No ☒ NA ☐	6
Rush TAT requested	Yes ☐ No ☒ NA ☐	7
Sufficient Volume received	Yes ☒ No ☐ NA ☐	8
Correct Container used Pace Container used	Yes ☒ No ☐ NA ☐ Yes ☒ No ☐ NA ☐	9
Container Intact	Yes ☒ No ☐ NA ☐	10
Unpreserved 5035A soil frozen within 48 hrs	Yes ☐ No ☐ NA ☒	11
Filtered volume received for Dissolved tests	Yes ☐ No ☐ NA ☒	12
Sample labels match COC Include date/time/ID/analyses Matrix: Water	Yes ☒ No ☐ NA ☐	13
All containers needing preservation have been checked	Yes ☒ No ☐ NA ☐	14a. Lot# of pH strip: 164230001 pH checked Yes ☒ No ☐ pH<2 ☒ pH>9 ☐ pH>12 ☐ Lot# of Iodine strip: _____ Lot# of Lead Acetate strip: _____
Do containers require preservation at the lab	Yes ☐ No ☒ NA ☐	14b. Preservation: / Lot#:
All containers needing preservation are found to be in Compliance with EPA recommendation **Exception:** VOA, coliform, O&G	Yes ☒ No ☐ NA ☐ Yes ☐ No ☒	14c.
Are soil samples (volatiles) received in	Bulk ☐ Terracore ☐ EnCore ☐ NA ☒	15.
Trip Blank present Trip Blank Custody Seals Intact Pace Trip Blank Lot# (if purchased): _____	Yes ☐ No ☐ NA ☒ Yes ☐ No ☐ NA ☒	16.
Headspace in VOA (>6mm)	Yes ☐ No ☐ NA ☒	17.
Project sampled in USDA Regulated Area:	Yes ☐ No ☐ NA ☒	18. List State _____

Client Notification/Resolution/Comments:

Person Contacted: _____ Date: _____

Comments/Resolution: _____

Person Examining Contents: KLM Date: 1/16/15

Pace Analytical Services - Dallas

Sample Container Count-

COC PAGE 1 of 1

COC ID# _____

Pace Project # 7522394

Sample Line Item	AG1S	AG1U	AG3S	BG1H	BG1S	BP1U	BP2N	BP2S	BP2U	BP20	SP5T	VG9H	VG9M	VG9T	VG9U	VG9W	WGFU	WGKU	BP3S		
1															3				1		
2															3				1		
3															3				1		
4															3				1		
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Container Codes

DG9H	40mL HCL amber voa vial	AF	Air Filter	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	BP3A	250mL NaOh, Asc Acid plastic	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag
WGKU	8oz wide jar upreserved	SP5T	120mL Coliform Na Thiosulfate	SP5U	120mL Coliform unpreserved	GN	General unpreserved
Other	Other						

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February 06, 2015

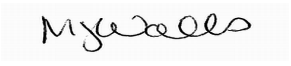
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on January 15, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

Dallas Certification IDs:
400 West Bethany Dr Suite 190, Allen, TX 75013
EPA# TX00074
Texas Certification #: T104704232-14-8
Kansas Certification #: E-10388
Arkansas Certification #: 88-0647
Oklahoma Certification #: 2014-055
Louisiana Certification #: 02007

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SAMPLE SUMMARY

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186183001	ITMW-1-201501	Water	01/14/15 15:20	01/15/15 08:20
60186183002	MW-32-201501	Water	01/14/15 14:50	01/15/15 08:20
60186183003	ITMW-21-201501	Water	01/14/15 13:50	01/15/15 08:20
60186183004	ITMW-16-201501	Water	01/14/15 12:35	01/15/15 08:20
60186183005	MW-66-201501	Water	01/14/15 10:20	01/15/15 08:20
60186183006	ITMW-14-201501	Water	01/14/15 14:35	01/15/15 08:20
60186183007	MW-87-201501	Water	01/14/15 15:13	01/15/15 08:20
60186183008	TB-15-201501	Water	01/14/15 09:08	01/15/15 08:20
60186183009	IW-77-201501	Water	01/14/15 15:05	01/15/15 08:20
60186183010	IW-73-201501	Water	01/14/15 10:40	01/15/15 08:20
60186183011	TB-16-201501	Water	01/14/15 09:08	01/15/15 08:20
60186183012	DUP-01-201501	Water	01/14/15 12:10	01/15/15 08:20
60186183013	IW-74-201501	Water	01/14/15 12:10	01/15/15 08:20
60186183014	IW-76-201501	Water	01/14/15 12:25	01/15/15 08:20
60186183015	MW-84-201501	Water	01/14/15 15:30	01/15/15 08:20
60186183016	MW-28-201501	Water	01/14/15 09:50	01/15/15 08:20
60186183017	ITMW-7-201501	Water	01/14/15 11:55	01/15/15 08:20
60186183018	MW-41-201501	Water	01/14/15 09:55	01/15/15 08:20
60186183019	MW-27-201501	Water	01/14/15 12:05	01/15/15 08:20
60186183020	TB-18-201501	Water	01/14/15 09:08	01/15/15 08:20
60186183021	ITMW-13-201501	Water	01/14/15 15:20	01/15/15 08:20
60186183022	RW-69-201501	Water	01/14/15 11:45	01/15/15 08:20
60186183023	MW-71-201501	Water	01/14/15 09:50	01/15/15 08:20
60186183024	MW-58-201501	Water	01/14/15 09:35	01/15/15 08:20
60186183025	TB-05-201501	Water	01/14/15 09:08	01/15/15 08:20
60186183026	EB-03-201501	Water	01/14/15 17:10	01/15/15 08:20
60186183027	ITMW-10-201501	Water	01/14/15 16:47	01/15/15 08:20
60186183028	MW-33-201501	Water	01/14/15 17:00	01/15/15 08:20
60186183029	TB-19-201501	Water	01/14/15 09:08	01/15/15 08:20
60186183030	EB-06-201501	Water	01/14/15 17:40	01/15/15 08:20
60186183031	MW-26-201501	Water	01/14/15 09:08	01/15/15 08:20
60186183032	TB-17-201501	Water	01/14/15 09:08	01/15/15 11:26

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60186183001	**ITMW-1-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183002	**MW-32-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183003	**ITMW-21-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183004	**ITMW-16-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183005	**MW-66-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183006	**ITMW-14-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183007	**MW-87-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183008	**TB-15-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186183009	**IW-77-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183010	**IW-73-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183011	**TB-16-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186183012	**DUP-01-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186183013	**IW-74-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183014	**IW-76-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183015	**MW-84-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	SMW	2	PASI-K

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SAMPLE ANALYTE COUNT

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183016	**MW-28-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183017	**ITMW-7-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D

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SAMPLE ANALYTE COUNT

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60186183018	**MW-41-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183019	**MW-27-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183020	**TB-18-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186183021	**ITMW-13-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	NDJ	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K

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SAMPLE ANALYTE COUNT

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JML	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183022	**RW-69-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	NDJ	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183023	**MW-71-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	NDJ	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183024	**MW-58-201501**	EPA 8015 - Alcohol	PMS	1	PASI-D
		EPA 6010	NDJ	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K

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SAMPLE ANALYTE COUNT

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183025	**TB-05-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186183026	**EB-03-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186183027	**ITMW-10-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	NDJ	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183028	**MW-33-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	NDJ	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183029	**TB-19-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186183030	**EB-06-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186183031	**MW-26-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	NDJ	2	PASI-K

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SAMPLE ANALYTE COUNT

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186183032	**TB-17-201501**	EPA 5030B/8260	PRG	38	PASI-K

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Method: **EPA 8015 - Alcohol**
Description: Alcohol by Direct Inject GCFID
Client: Environ_AR
Date: February 06, 2015

General Information:
23 samples were analyzed for EPA 8015 - Alcohol. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H3: Sample was received or analysis requested beyond the recognized method holding time.
- ITMW-1-201501 (Lab ID: 60186183001)
- ITMW-10-201501 (Lab ID: 60186183027)
- ITMW-13-201501 (Lab ID: 60186183021)
- ITMW-14-201501 (Lab ID: 60186183006)
- ITMW-16-201501 (Lab ID: 60186183004)
- ITMW-21-201501 (Lab ID: 60186183003)
- ITMW-7-201501 (Lab ID: 60186183017)
- IW-73-201501 (Lab ID: 60186183010)
- IW-74-201501 (Lab ID: 60186183013)
- IW-76-201501 (Lab ID: 60186183014)
- IW-77-201501 (Lab ID: 60186183009)
- MW-26-201501 (Lab ID: 60186183031)
- MW-27-201501 (Lab ID: 60186183019)
- MW-28-201501 (Lab ID: 60186183016)
- MW-32-201501 (Lab ID: 60186183002)
- MW-41-201501 (Lab ID: 60186183018)
- MW-58-201501 (Lab ID: 60186183024)
- MW-66-201501 (Lab ID: 60186183005)
- MW-71-201501 (Lab ID: 60186183023)
- MW-84-201501 (Lab ID: 60186183015)
- MW-87-201501 (Lab ID: 60186183007)
- RW-69-201501 (Lab ID: 60186183022)

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Method: **EPA 8015 - Alcohol**
Description: Alcohol by Direct Inject GCFID
Client: Environ_AR
Date: February 06, 2015

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Environ_AR
Date: February 06, 2015

General Information:
23 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: February 06, 2015

General Information:
32 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/67014
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/67017
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/67027
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/67028
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: Environ_AR
Date: February 06, 2015

General Information:
23 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Method: **SM 3500-Fe B#4**
Description: Iron, Ferric (Calculation)
Client: Environ_AR
Date: February 06, 2015

General Information:
23 samples were analyzed for SM 3500-Fe B#4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: February 06, 2015

General Information:
23 samples were analyzed for SM 4500-H+B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H6: Analysis initiated outside of the 15 minute EPA recommended holding time.
- ITMW-1-201501 (Lab ID: 60186183001)
- ITMW-10-201501 (Lab ID: 60186183027)
- ITMW-13-201501 (Lab ID: 60186183021)
- ITMW-14-201501 (Lab ID: 60186183006)
- ITMW-16-201501 (Lab ID: 60186183004)
- ITMW-21-201501 (Lab ID: 60186183003)
- ITMW-7-201501 (Lab ID: 60186183017)
- IW-73-201501 (Lab ID: 60186183010)
- IW-74-201501 (Lab ID: 60186183013)
- IW-76-201501 (Lab ID: 60186183014)
- IW-77-201501 (Lab ID: 60186183009)
- MW-26-201501 (Lab ID: 60186183031)
- MW-27-201501 (Lab ID: 60186183019)
- MW-28-201501 (Lab ID: 60186183016)
- MW-32-201501 (Lab ID: 60186183002)
- MW-33-201501 (Lab ID: 60186183028)
- MW-41-201501 (Lab ID: 60186183018)
- MW-58-201501 (Lab ID: 60186183024)
- MW-66-201501 (Lab ID: 60186183005)
- MW-71-201501 (Lab ID: 60186183023)
- MW-84-201501 (Lab ID: 60186183015)
- MW-87-201501 (Lab ID: 60186183007)
- RW-69-201501 (Lab ID: 60186183022)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: February 06, 2015

Analyte Comments:

QC Batch: WET/52700

1e: Field pH

- ITMW-14-201501 (Lab ID: 60186183006)
  - pH at 25 Degrees C
- ITMW-16-201501 (Lab ID: 60186183004)
  - pH at 25 Degrees C
- ITMW-21-201501 (Lab ID: 60186183003)
  - pH at 25 Degrees C
- ITMW-7-201501 (Lab ID: 60186183017)
  - pH at 25 Degrees C
- IW-73-201501 (Lab ID: 60186183010)
  - pH at 25 Degrees C
- IW-74-201501 (Lab ID: 60186183013)
  - pH at 25 Degrees C
- IW-76-201501 (Lab ID: 60186183014)
  - pH at 25 Degrees C
- IW-77-201501 (Lab ID: 60186183009)
  - pH at 25 Degrees C
- MW-26-201501 (Lab ID: 60186183031)
  - pH at 25 Degrees C
- MW-27-201501 (Lab ID: 60186183019)
  - pH at 25 Degrees C
- MW-28-201501 (Lab ID: 60186183016)
  - pH at 25 Degrees C
- MW-32-201501 (Lab ID: 60186183002)
  - pH at 25 Degrees C
- MW-41-201501 (Lab ID: 60186183018)
  - pH at 25 Degrees C
- MW-58-201501 (Lab ID: 60186183024)
  - pH at 25 Degrees C
- MW-66-201501 (Lab ID: 60186183005)
  - pH at 25 Degrees C
- MW-71-201501 (Lab ID: 60186183023)
  - pH at 25 Degrees C
- MW-87-201501 (Lab ID: 60186183007)
  - pH at 25 Degrees C

QC Batch: WET/52701

1e: Field pH

- ITMW-1-201501 (Lab ID: 60186183001)
  - pH at 25 Degrees C
- ITMW-10-201501 (Lab ID: 60186183027)
  - pH at 25 Degrees C
- ITMW-13-201501 (Lab ID: 60186183021)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: February 06, 2015

Analyte Comments:

QC Batch: WET/52701

1e: Field pH

- MW-33-201501 (Lab ID: 60186183028)
  - pH at 25 Degrees C
- MW-84-201501 (Lab ID: 60186183015)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Environ_AR
Date: February 06, 2015

General Information:
23 samples were analyzed for SM 4500-S-2 D. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WET/52537

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186183016

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1508450)
  - Sulfide, Total

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Environ_AR
Date: February 06, 2015

General Information:
23 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/32611

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186183021,60186183022

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1510654)
  - Chloride
- MS (Lab ID: 1510656)
  - Chloride
- MSD (Lab ID: 1510655)
  - Chloride

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Method: **EPA 350.1**
Description: 350.1 Ammonia
Client: Environ_AR
Date: February 06, 2015

General Information:
23 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/32588

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186138001,60186183016

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1509156)
  - Nitrogen, Ammonia

QC Batch: WETA/32589

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186097034,60186183031

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1509159)
  - Nitrogen, Ammonia
- MS (Lab ID: 1509161)
  - Nitrogen, Ammonia

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Environ_AR
Date: February 06, 2015

General Information:
23 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/32536

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186167001,60186183021

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1506408)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrate
- MS (Lab ID: 1506450)
  - Nitrogen, NO2 plus NO3

QC Batch: WETA/32537

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186183002,60186183016

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1506416)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrate

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Method: **SM 4500-CO2 D**
Description: Total Carbon Dioxide Calc
Client: Environ_AR
Date: February 06, 2015

General Information:
23 samples were analyzed for SM 4500-CO2 D. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Method: **SM 5310C**
Description: 5310C TOC
Client: Environ_AR
Date: February 06, 2015

General Information:
23 samples were analyzed for SM 5310C. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/32625

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186183006

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1515112)
  - Total Organic Carbon

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Method: **SM 4500-P E**
Description: SM4500P-E, Total Phosphorus
Client: Environ_AR
Date: February 06, 2015

General Information:
23 samples were analyzed for SM 4500-P E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with SM4500-P B with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/7175

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 7522640003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 119343)
  - Phosphate as P04

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: ITMW-1-201501 **Lab ID: 60186183001** Collected: 01/14/15 15:20 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 15:39	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 12:32	7439-89-6	
Manganese	ND	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 12:32	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 22:39	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 22:39	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 22:39	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 22:39	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 22:39	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 22:39	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 22:39	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 22:39	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 22:39	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:39	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 22:39	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 22:39	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 22:39	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:39	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:39	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 22:39	75-35-4	
cis-1,2-Dichloroethene	**9.7**	ug/L	1.0	0.50	1		01/15/15 22:39	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 22:39	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 22:39	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 22:39	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 22:39	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 22:39	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 22:39	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 22:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 22:39	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 22:39	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:39	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 22:39	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 22:39	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:39	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:39	79-00-5	
Trichloroethene	**22.7**	ug/L	1.0	0.50	1		01/15/15 22:39	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 22:39	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 22:39	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/15/15 22:39	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/15/15 22:39	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/15/15 22:39	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 22:39		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: ITMW-1-201501 **Lab ID: 60186183001** Collected: 01/14/15 15:20 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**69.8**	mg/L	20.0	2.0	1		01/21/15 14:48		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/21/15 14:48		
Alkalinity, Total as CaCO3	**69.8**	mg/L	20.0	2.0	1		01/21/15 14:48		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.6**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:35	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**105**	mg/L	10.0	5.0	10		01/23/15 23:19	16887-00-6	
Sulfate	**15.9**	mg/L	1.0	0.50	1		01/26/15 21:09	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 11:05	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.0**	mg/L	0.10	0.012	1		01/15/15 11:49		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 11:49		
Nitrogen, NO2 plus NO3	**1.0**	mg/L	0.10	0.012	1		01/15/15 11:49		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**446**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		02/03/15 19:32	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:02		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-32-201501 **Lab ID: 60186183002** Collected: 01/14/15 14:50 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 15:50	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 12:34	7439-89-6	
Manganese	**414**	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 12:34	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**33.2**	ug/L	10.0	5.0	1		01/15/15 21:12	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 21:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 21:12	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 21:12	75-25-2	
Bromomethane	**22.5**	ug/L	5.0	2.5	1		01/15/15 21:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 21:12	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 21:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 21:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 21:12	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 21:12	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 21:12	67-66-3	
Chloromethane	**10.0**	ug/L	1.0	0.50	1		01/15/15 21:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 21:12	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 21:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 21:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 21:12	75-35-4	
cis-1,2-Dichloroethene	**0.55J**	ug/L	1.0	0.50	1		01/15/15 21:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 21:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 21:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 21:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 21:12	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 21:12	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 21:12	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 21:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 21:12	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 21:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 21:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 21:12	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 21:12	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 21:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 21:12	79-00-5	
Trichloroethene	**20.2**	ug/L	1.0	0.50	1		01/15/15 21:12	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 21:12	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 21:12	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/15/15 21:12	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		01/15/15 21:12	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		01/15/15 21:12	2037-26-5	
Preservation pH	**4.0**		0.10	0.10	1		01/15/15 21:12		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-32-201501 **Lab ID: 60186183002** Collected: 01/14/15 14:50 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**5.5J**	mg/L	20.0	2.0	1		01/21/15 14:51		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/21/15 14:51		
Alkalinity, Total as CaCO3	**5.5J**	mg/L	20.0	2.0	1		01/21/15 14:51		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**4.7**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:37	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**342**	mg/L	20.0	10.0	20		01/26/15 22:29	16887-00-6	
Sulfate	**268**	mg/L	20.0	10.0	20		01/26/15 22:29	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 11:06	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.24**	mg/L	0.10	0.012	1		01/15/15 11:52		M1
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 11:52		
Nitrogen, NO2 plus NO3	**0.24**	mg/L	0.10	0.012	1		01/15/15 11:52		M1
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		02/03/15 19:51	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.066**	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:03		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: ITMW-21-201501 **Lab ID: 60186183003** Collected: 01/14/15 13:50 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 16:02	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 12:37	7439-89-6	
Manganese	**256**	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 12:37	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 22:53	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 22:53	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 22:53	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 22:53	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 22:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 22:53	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 22:53	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 22:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 22:53	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:53	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 22:53	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 22:53	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 22:53	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 22:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 22:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 22:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 22:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 22:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 22:53	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 22:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 22:53	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 22:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 22:53	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 22:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:53	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 22:53	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 22:53	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:53	79-00-5	
Trichloroethene	**10.8**	ug/L	1.0	0.50	1		01/15/15 22:53	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 22:53	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 22:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		01/15/15 22:53	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		01/15/15 22:53	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/15/15 22:53	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 22:53		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: ITMW-21-201501 **Lab ID: 60186183003** Collected: 01/14/15 13:50 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**15.9J**	mg/L	20.0	2.0	1		01/21/15 15:02		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/21/15 15:02		
Alkalinity, Total as CaCO3	**15.9J**	mg/L	20.0	2.0	1		01/21/15 15:02		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.1**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:37	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**834**	mg/L	50.0	25.0	50		01/26/15 23:01	16887-00-6	
Sulfate	**4.5**	mg/L	1.0	0.50	1		01/26/15 23:17	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 11:07	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.089J**	mg/L	0.10	0.012	1		01/15/15 11:54		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 11:54		
Nitrogen, NO2 plus NO3	**0.089J**	mg/L	0.10	0.012	1		01/15/15 11:54		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		02/03/15 20:11	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.13**	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:03		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: ITMW-16-201501 **Lab ID: 60186183004** Collected: 01/14/15 12:35 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 16:13	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**851**	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 12:39	7439-89-6	
Manganese	**13.4**	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 12:39	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 23:08	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 23:08	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 23:08	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 23:08	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 23:08	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 23:08	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 23:08	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 23:08	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 23:08	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:08	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 23:08	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 23:08	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 23:08	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:08	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 23:08	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 23:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 23:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 23:08	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 23:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 23:08	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 23:08	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 23:08	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 23:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 23:08	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 23:08	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:08	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 23:08	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 23:08	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:08	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 23:08	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 23:08	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 23:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/15/15 23:08	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		01/15/15 23:08	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/15/15 23:08	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 23:08		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: ITMW-16-201501 **Lab ID: 60186183004** Collected: 01/14/15 12:35 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**41.3**	mg/L	20.0	2.0	1		01/21/15 15:06		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/21/15 15:06		
Alkalinity, Total as CaCO3	**41.3**	mg/L	20.0	2.0	1		01/21/15 15:06		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.85**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.9**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:38	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**0.72J**	mg/L	1.0	0.50	1		01/29/15 14:38	16887-00-6	
Sulfate	**50.9**	mg/L	10.0	5.0	10		01/24/15 00:54	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 11:08	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.5**	mg/L	0.10	0.012	1		01/15/15 11:55		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 11:55		
Nitrogen, NO2 plus NO3	**1.5**	mg/L	0.10	0.012	1		01/15/15 11:55		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**46.3**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**2.7**	mg/L	1.0	0.50	1		02/03/15 21:09	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.14**	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:03		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-66-201501 **Lab ID: 60186183005** Collected: 01/14/15 10:20 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 16:24	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**410**	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 12:41	7439-89-6	
Manganese	**7.0**	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 12:41	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 23:23	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 23:23	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 23:23	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 23:23	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 23:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 23:23	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 23:23	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 23:23	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 23:23	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:23	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 23:23	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 23:23	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 23:23	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:23	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 23:23	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 23:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 23:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 23:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 23:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 23:23	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 23:23	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 23:23	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 23:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 23:23	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 23:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:23	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 23:23	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 23:23	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:23	79-00-5	
Trichloroethene	**2.4**	ug/L	1.0	0.50	1		01/15/15 23:23	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 23:23	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 23:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/15/15 23:23	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		01/15/15 23:23	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/15/15 23:23	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 23:23		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-66-201501 **Lab ID: 60186183005** Collected: 01/14/15 10:20 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**97.9**	mg/L	20.0	2.0	1		01/21/15 15:08		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/21/15 15:08		
Alkalinity, Total as CaCO3	**97.9**	mg/L	20.0	2.0	1		01/21/15 15:08		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.39**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.1**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:38	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**176**	mg/L	10.0	5.0	10		01/24/15 01:10	16887-00-6	
Sulfate	**6.5**	mg/L	1.0	0.50	1		01/26/15 23:48	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 11:10	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.20**	mg/L	0.10	0.012	1		01/15/15 11:57		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 11:57		
Nitrogen, NO2 plus NO3	**0.20**	mg/L	0.10	0.012	1		01/15/15 11:57		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**253**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		02/03/15 21:29	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.10**	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:03		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: ITMW-14-201501 **Lab ID: 60186183006** Collected: 01/14/15 14:35 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 16:35	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**839**	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 12:44	7439-89-6	
Manganese	**21.0**	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 12:44	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/16/15 00:20	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/16/15 00:20	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/16/15 00:20	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/16/15 00:20	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/16/15 00:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/16/15 00:20	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/16/15 00:20	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/16/15 00:20	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/16/15 00:20	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:20	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/16/15 00:20	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/16/15 00:20	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/16/15 00:20	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:20	75-34-3	
1,2-Dichloroethane	**0.73J**	ug/L	1.0	0.50	1		01/16/15 00:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 00:20	75-35-4	
cis-1,2-Dichloroethene	**11.5**	ug/L	1.0	0.50	1		01/16/15 00:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 00:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/16/15 00:20	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 00:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 00:20	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/16/15 00:20	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/16/15 00:20	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/16/15 00:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/16/15 00:20	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/16/15 00:20	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:20	79-34-5	
Tetrachloroethene	**20.7**	ug/L	1.0	0.50	1		01/16/15 00:20	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/16/15 00:20	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:20	79-00-5	
Trichloroethene	**4.9**	ug/L	1.0	0.50	1		01/16/15 00:20	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/16/15 00:20	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/16/15 00:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/16/15 00:20	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/16/15 00:20	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/16/15 00:20	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/16/15 00:20		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: ITMW-14-201501 **Lab ID: 60186183006** Collected: 01/14/15 14:35 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**31.7**	mg/L	20.0	2.0	1		01/21/15 15:11		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/21/15 15:11		
Alkalinity, Total as CaCO3	**31.7**	mg/L	20.0	2.0	1		01/21/15 15:11		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.8**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:39	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**9.0**	mg/L	1.0	0.50	1		01/27/15 00:04	16887-00-6	
Sulfate	**12.4**	mg/L	1.0	0.50	1		01/27/15 00:04	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 11:11	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.44**	mg/L	0.10	0.012	1		01/15/15 11:58		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 11:58		
Nitrogen, NO2 plus NO3	**0.44**	mg/L	0.10	0.012	1		01/15/15 11:58		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**141**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.58J**	mg/L	1.0	0.50	1		02/03/15 22:08	7440-44-0	M1
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.066**	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:03		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-87-201501 **Lab ID: 60186183007** Collected: 01/14/15 15:13 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 16:46	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**240**	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 12:46	7439-89-6	
Manganese	**118**	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 12:46	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 15:43	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 15:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 15:43	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 15:43	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 15:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 15:43	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 15:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 15:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 15:43	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:43	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 15:43	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 15:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 15:43	124-48-1	
1,1-Dichloroethane	**2.0**	ug/L	1.0	0.50	1		01/15/15 15:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:43	107-06-2	
1,1-Dichloroethene	**5.9**	ug/L	1.0	0.50	1		01/15/15 15:43	75-35-4	
cis-1,2-Dichloroethene	**51.3**	ug/L	1.0	0.50	1		01/15/15 15:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 15:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 15:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 15:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 15:43	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 15:43	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 15:43	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 15:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 15:43	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 15:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:43	79-34-5	
Tetrachloroethene	**3.5**	ug/L	1.0	0.50	1		01/15/15 15:43	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 15:43	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:43	79-00-5	
Trichloroethene	**661**	ug/L	10.0	5.0	10		01/16/15 01:04	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 15:43	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 15:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		01/15/15 15:43	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		01/15/15 15:43	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/15/15 15:43	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 15:43		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-87-201501 **Lab ID: 60186183007** Collected: 01/14/15 15:13 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**54.4**	mg/L	20.0	2.0	1		01/21/15 15:14		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/21/15 15:14		
Alkalinity, Total as CaCO3	**54.4**	mg/L	20.0	2.0	1		01/21/15 15:14		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.24**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.9**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:39	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**62.3**	mg/L	10.0	5.0	10		01/24/15 02:14	16887-00-6	
Sulfate	**12.5**	mg/L	1.0	0.50	1		01/27/15 00:20	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 11:12	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**3.7**	mg/L	0.10	0.012	1		01/15/15 11:59		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 11:59		
Nitrogen, NO2 plus NO3	**3.7**	mg/L	0.10	0.012	1		01/15/15 11:59		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**195**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.63J**	mg/L	1.0	0.50	1		02/03/15 22:47	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:03		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: TB-15-201501 **Lab ID: 60186183008** Collected: 01/14/15 09:08 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 22:10	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 22:10	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 22:10	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 22:10	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 22:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 22:10	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 22:10	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 22:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 22:10	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:10	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 22:10	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 22:10	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 22:10	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 22:10	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 22:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 22:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 22:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 22:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 22:10	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 22:10	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 22:10	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 22:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 22:10	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 22:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:10	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 22:10	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 22:10	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:10	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 22:10	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 22:10	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 22:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		01/15/15 22:10	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/15/15 22:10	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/15/15 22:10	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 22:10		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: IW-77-201501 **Lab ID: 60186183009** Collected: 01/14/15 15:05 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 16:58	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**140**	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 12:53	7439-89-6	
Manganese	**44.0**	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 12:53	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**31.2**	ug/L	10.0	5.0	1		01/15/15 15:11	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 15:11	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 15:11	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 15:11	75-25-2	
Bromomethane	**16.5**	ug/L	5.0	2.5	1		01/15/15 15:11	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 15:11	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 15:11	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 15:11	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 15:11	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:11	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 15:11	67-66-3	
Chloromethane	**19.1**	ug/L	1.0	0.50	1		01/15/15 15:11	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 15:11	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:11	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 15:11	75-35-4	
cis-1,2-Dichloroethene	**4.8**	ug/L	1.0	0.50	1		01/15/15 15:11	156-59-2	
trans-1,2-Dichloroethene	**0.78J**	ug/L	1.0	0.50	1		01/15/15 15:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 15:11	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 15:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 15:11	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 15:11	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 15:11	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 15:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 15:11	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 15:11	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:11	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 15:11	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 15:11	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:11	79-00-5	
Trichloroethene	**201**	ug/L	10.0	5.0	10		01/15/15 21:41	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 15:11	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 15:11	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		01/15/15 15:11	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/15/15 15:11	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/15/15 15:11	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		01/15/15 15:11		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: IW-77-201501 **Lab ID: 60186183009** Collected: 01/14/15 15:05 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**133**	mg/L	20.0	2.0	1		01/21/15 15:18		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/21/15 15:18		
Alkalinity, Total as CaCO3	**133**	mg/L	20.0	2.0	1		01/21/15 15:18		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.9**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:40	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**287**	mg/L	20.0	10.0	20		01/27/15 00:36	16887-00-6	
Sulfate	**1680**	mg/L	100	50.0	100		01/28/15 14:13	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.23**	mg/L	0.10	0.023	1		01/21/15 11:13	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**2.5**	mg/L	0.10	0.012	1		01/15/15 12:00		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 12:00		
Nitrogen, NO2 plus NO3	**2.5**	mg/L	0.10	0.012	1		01/15/15 12:00		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**467**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.81J**	mg/L	1.0	0.50	1		02/03/15 23:26	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.80**	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:04		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: IW-73-201501 **Lab ID: 60186183010** Collected: 01/14/15 10:40 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 17:09	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**2380**	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 12:55	7439-89-6	
Manganese	**1860**	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 12:55	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 23:37	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 23:37	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 23:37	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 23:37	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 23:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 23:37	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 23:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 23:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 23:37	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:37	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 23:37	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 23:37	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 23:37	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:37	107-06-2	
1,1-Dichloroethene	**2.2**	ug/L	1.0	0.50	1		01/15/15 23:37	75-35-4	
cis-1,2-Dichloroethene	**6.3**	ug/L	1.0	0.50	1		01/15/15 23:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 23:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 23:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 23:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 23:37	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 23:37	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 23:37	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 23:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 23:37	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 23:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 23:37	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 23:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:37	79-00-5	
Trichloroethene	**70.8**	ug/L	1.0	0.50	1		01/15/15 23:37	79-01-6	
Vinyl chloride	**4.1**	ug/L	1.0	0.50	1		01/15/15 23:37	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 23:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/15/15 23:37	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/15/15 23:37	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/15/15 23:37	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 23:37		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: IW-73-201501 **Lab ID: 60186183010** Collected: 01/14/15 10:40 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**71.4**	mg/L	20.0	2.0	1		01/21/15 15:21		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/21/15 15:21		
Alkalinity, Total as CaCO3	**71.4**	mg/L	20.0	2.0	1		01/21/15 15:21		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**2.2**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.1**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:40	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**154**	mg/L	10.0	5.0	10		01/24/15 02:46	16887-00-6	
Sulfate	**6.9**	mg/L	1.0	0.50	1		01/27/15 01:40	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.044J**	mg/L	0.10	0.023	1		01/21/15 11:14	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.098J**	mg/L	0.10	0.012	1		01/15/15 12:01		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 12:01		
Nitrogen, NO2 plus NO3	**0.098J**	mg/L	0.10	0.012	1		01/15/15 12:01		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**176**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**2.7**	mg/L	1.0	0.50	1		02/03/15 23:45	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.28**	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:04		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: TB-16-201501 **Lab ID: 60186183011** Collected: 01/14/15 09:08 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 22:24	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 22:24	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 22:24	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 22:24	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 22:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 22:24	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 22:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 22:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 22:24	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:24	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 22:24	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 22:24	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 22:24	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 22:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 22:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 22:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 22:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 22:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 22:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 22:24	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 22:24	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 22:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 22:24	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 22:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 22:24	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 22:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 22:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 22:24	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 22:24	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 22:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/15/15 22:24	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		01/15/15 22:24	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/15/15 22:24	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 22:24		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: DUP-01-201501 **Lab ID: 60186183012** Collected: 01/14/15 12:10 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/16/15 00:49	67-64-1	
Benzene	**0.71J**	ug/L	1.0	0.50	1		01/16/15 00:49	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/16/15 00:49	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/16/15 00:49	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/16/15 00:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/16/15 00:49	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/16/15 00:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/16/15 00:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/16/15 00:49	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:49	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/16/15 00:49	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/16/15 00:49	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/16/15 00:49	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 00:49	75-35-4	
cis-1,2-Dichloroethene	**3.5**	ug/L	1.0	0.50	1		01/16/15 00:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 00:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/16/15 00:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 00:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 00:49	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/16/15 00:49	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/16/15 00:49	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/16/15 00:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/16/15 00:49	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/16/15 00:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:49	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/16/15 00:49	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/16/15 00:49	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:49	79-00-5	
Trichloroethene	**139**	ug/L	1.0	0.50	1		01/16/15 00:49	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/16/15 00:49	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/16/15 00:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/16/15 00:49	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		01/16/15 00:49	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/16/15 00:49	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/16/15 00:49		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: IW-74-201501 **Lab ID: 60186183013** Collected: 01/14/15 12:10 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 17:20	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 12:57	7439-89-6	
Manganese	**1230**	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 12:57	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/16/15 00:35	67-64-1	
Benzene	**0.70J**	ug/L	1.0	0.50	1		01/16/15 00:35	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/16/15 00:35	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/16/15 00:35	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/16/15 00:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/16/15 00:35	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/16/15 00:35	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/16/15 00:35	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/16/15 00:35	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:35	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/16/15 00:35	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/16/15 00:35	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/16/15 00:35	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 00:35	75-35-4	
cis-1,2-Dichloroethene	**3.8**	ug/L	1.0	0.50	1		01/16/15 00:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 00:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/16/15 00:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 00:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 00:35	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/16/15 00:35	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/16/15 00:35	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/16/15 00:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/16/15 00:35	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/16/15 00:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:35	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/16/15 00:35	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/16/15 00:35	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:35	79-00-5	
Trichloroethene	**141**	ug/L	1.0	0.50	1		01/16/15 00:35	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/16/15 00:35	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/16/15 00:35	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/16/15 00:35	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/16/15 00:35	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/16/15 00:35	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/16/15 00:35		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: IW-74-201501 **Lab ID: 60186183013** Collected: 01/14/15 12:10 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**70.7**	mg/L	20.0	2.0	1		01/21/15 15:23		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/21/15 15:23		
Alkalinity, Total as CaCO3	**70.7**	mg/L	20.0	2.0	1		01/21/15 15:23		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.22**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.9**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:40	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**290**	mg/L	20.0	10.0	20		01/27/15 01:56	16887-00-6	
Sulfate	**2.6**	mg/L	1.0	0.50	1		01/27/15 02:12	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 11:15	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.33**	mg/L	0.10	0.012	1		01/15/15 12:02		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 12:02		
Nitrogen, NO2 plus NO3	**0.33**	mg/L	0.10	0.012	1		01/15/15 12:02		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**236**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.77J**	mg/L	1.0	0.50	1		02/04/15 00:05	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.21**	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:04		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: IW-76-201501 **Lab ID: 60186183014** Collected: 01/14/15 12:25 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 17:31	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 13:00	7439-89-6	
Manganese	**9.1**	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 13:00	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**20.4**	ug/L	10.0	5.0	1		01/15/15 15:27	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 15:27	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 15:27	75-27-4	
Bromoform	**10.9**	ug/L	1.0	0.50	1		01/15/15 15:27	75-25-2	
Bromomethane	**27.1**	ug/L	5.0	2.5	1		01/15/15 15:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 15:27	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 15:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 15:27	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 15:27	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:27	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 15:27	67-66-3	
Chloromethane	**1.5**	ug/L	1.0	0.50	1		01/15/15 15:27	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 15:27	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:27	107-06-2	
1,1-Dichloroethene	**0.64J**	ug/L	1.0	0.50	1		01/15/15 15:27	75-35-4	
cis-1,2-Dichloroethene	**8.8**	ug/L	1.0	0.50	1		01/15/15 15:27	156-59-2	
trans-1,2-Dichloroethene	**0.56J**	ug/L	1.0	0.50	1		01/15/15 15:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 15:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 15:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 15:27	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 15:27	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 15:27	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 15:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 15:27	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 15:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:27	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 15:27	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 15:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 15:27	79-00-5	
Trichloroethene	**288**	ug/L	5.0	2.5	5		01/15/15 21:55	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 15:27	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 15:27	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		01/15/15 15:27	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		01/15/15 15:27	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/15/15 15:27	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		01/15/15 15:27		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: IW-76-201501 **Lab ID: 60186183014** Collected: 01/14/15 12:25 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**13.7J**	mg/L	20.0	2.0	1		01/21/15 15:26		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/21/15 15:26		
Alkalinity, Total as CaCO3	**13.7J**	mg/L	20.0	2.0	1		01/21/15 15:26		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.1**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:41	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**382**	mg/L	50.0	25.0	50		01/27/15 02:28	16887-00-6	
Sulfate	**470**	mg/L	50.0	25.0	50		01/27/15 02:28	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 11:19	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.75**	mg/L	0.10	0.012	1		01/15/15 12:02		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 12:02		
Nitrogen, NO2 plus NO3	**0.75**	mg/L	0.10	0.012	1		01/15/15 12:02		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		02/04/15 09:37	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.14**	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:05		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-84-201501 **Lab ID: 60186183015** Collected: 01/14/15 15:30 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 17:42	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**30.2J**	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 13:02	7439-89-6	
Manganese	ND	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 13:02	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**97.8**	ug/L	10.0	5.0	1		01/15/15 21:26	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 21:26	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 21:26	75-27-4	
Bromoform	**2.3**	ug/L	1.0	0.50	1		01/15/15 21:26	75-25-2	
Bromomethane	**25.9**	ug/L	5.0	2.5	1		01/15/15 21:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 21:26	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 21:26	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 21:26	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 21:26	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 21:26	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 21:26	67-66-3	
Chloromethane	**16.7**	ug/L	1.0	0.50	1		01/15/15 21:26	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 21:26	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 21:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 21:26	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 21:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 21:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 21:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 21:26	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 21:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 21:26	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 21:26	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 21:26	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 21:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 21:26	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 21:26	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 21:26	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 21:26	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 21:26	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 21:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 21:26	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 21:26	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 21:26	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 21:26	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/15/15 21:26	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		01/15/15 21:26	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/15/15 21:26	2037-26-5	
Preservation pH	**4.0**		0.10	0.10	1		01/15/15 21:26		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-84-201501 **Lab ID: 60186183015** Collected: 01/14/15 15:30 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**165**	mg/L	20.0	2.0	1		01/21/15 15:31		
Alkalinity, Carbonate (CaCO3)	**169**	mg/L	20.0	2.0	1		01/21/15 15:31		
Alkalinity, Total as CaCO3	**334**	mg/L	20.0	2.0	1		01/21/15 15:31		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**9.2**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:42	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**362**	mg/L	50.0	25.0	50		01/27/15 02:43	16887-00-6	
Sulfate	**4000**	mg/L	500	250	500		01/27/15 02:59	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.49**	mg/L	0.10	0.023	1		01/21/15 11:20	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**3.4**	mg/L	0.10	0.012	1		01/15/15 12:03		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 12:03		
Nitrogen, NO2 plus NO3	**3.4**	mg/L	0.10	0.012	1		01/15/15 12:03		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**220**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.96J**	mg/L	1.0	0.50	1		02/04/15 18:38	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.87**	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:05		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-28-201501 **Lab ID: 60186183016** Collected: 01/14/15 09:50 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 17:54	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**184**	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 13:04	7439-89-6	
Manganese	**32.6**	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 13:04	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 23:51	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 23:51	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 23:51	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 23:51	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 23:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 23:51	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 23:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 23:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 23:51	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:51	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 23:51	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 23:51	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 23:51	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 23:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 23:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 23:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 23:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 23:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 23:51	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 23:51	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 23:51	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 23:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 23:51	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 23:51	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 23:51	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 23:51	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 23:51	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 23:51	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 23:51	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 23:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/15/15 23:51	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/15/15 23:51	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/15/15 23:51	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 23:51		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-28-201501 **Lab ID: 60186183016** Collected: 01/14/15 09:50 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**92.0**	mg/L	20.0	2.0	1		01/21/15 15:43		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/21/15 15:43		
Alkalinity, Total as CaCO3	**92.0**	mg/L	20.0	2.0	1		01/21/15 15:43		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.3**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:42	18496-25-8	M1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**23.2**	mg/L	2.0	1.0	2		01/27/15 03:15	16887-00-6	
Sulfate	**39.6**	mg/L	5.0	2.5	5		01/27/15 03:31	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 11:21	7664-41-7	M1
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		01/15/15 12:04		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 12:04		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		01/15/15 12:04		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**180**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.61J**	mg/L	1.0	0.50	1		02/04/15 19:17	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.084**	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:06		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: ITMW-7-201501 **Lab ID: 60186183017** Collected: 01/14/15 11:55 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 18:05	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 13:11	7439-89-6	
Manganese	**56.3**	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 13:11	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/16/15 00:06	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/16/15 00:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/16/15 00:06	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/16/15 00:06	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/16/15 00:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/16/15 00:06	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/16/15 00:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/16/15 00:06	56-23-5	
Chlorobenzene	**0.63J**	ug/L	1.0	0.50	1		01/16/15 00:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:06	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/16/15 00:06	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/16/15 00:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/16/15 00:06	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 00:06	75-35-4	
cis-1,2-Dichloroethene	**10.5**	ug/L	1.0	0.50	1		01/16/15 00:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 00:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/16/15 00:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 00:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 00:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/16/15 00:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/16/15 00:06	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/16/15 00:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/16/15 00:06	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/16/15 00:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/16/15 00:06	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/16/15 00:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 00:06	79-00-5	
Trichloroethene	**34.7**	ug/L	1.0	0.50	1		01/16/15 00:06	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/16/15 00:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/16/15 00:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/16/15 00:06	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/16/15 00:06	17060-07-0	
Toluene-d8 (S)	104	%	80-120		1		01/16/15 00:06	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/16/15 00:06		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: ITMW-7-201501 **Lab ID: 60186183017** Collected: 01/14/15 11:55 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**8.5J**	mg/L	20.0	2.0	1		01/21/15 15:49		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/21/15 15:49		
Alkalinity, Total as CaCO3	**8.5J**	mg/L	20.0	2.0	1		01/21/15 15:49		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**4.9**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:43	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**310**	mg/L	20.0	10.0	20		01/27/15 03:47	16887-00-6	
Sulfate	**9.4**	mg/L	1.0	0.50	1		01/27/15 04:03	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.26**	mg/L	0.10	0.023	1		01/21/15 11:23	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**2.7**	mg/L	0.10	0.012	1		01/15/15 12:08		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 12:08		
Nitrogen, NO2 plus NO3	**2.7**	mg/L	0.10	0.012	1		01/15/15 12:08		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		02/04/15 19:56	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:06		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-41-201501 **Lab ID: 60186183018** Collected: 01/14/15 09:55 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 18:16	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**3710**	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 13:20	7439-89-6	
Manganese	**5370**	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 13:20	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 16:00	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 16:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:00	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 16:00	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 16:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 16:00	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 16:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 16:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 16:00	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:00	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 16:00	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:00	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:00	107-06-2	
1,1-Dichloroethene	**1.3**	ug/L	1.0	0.50	1		01/15/15 16:00	75-35-4	
cis-1,2-Dichloroethene	**15.6**	ug/L	1.0	0.50	1		01/15/15 16:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 16:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 16:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 16:00	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 16:00	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 16:00	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 16:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 16:00	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 16:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:00	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 16:00	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:00	79-00-5	
Trichloroethene	**425**	ug/L	10.0	5.0	10		01/16/15 01:18	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 16:00	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 16:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/15/15 16:00	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		01/15/15 16:00	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/15/15 16:00	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 16:00		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-41-201501 **Lab ID: 60186183018** Collected: 01/14/15 09:55 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**35.7**	mg/L	20.0	2.0	1		01/22/15 10:00		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 10:00		
Alkalinity, Total as CaCO3	**35.7**	mg/L	20.0	2.0	1		01/22/15 10:00		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.41**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.5**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:43	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**466**	mg/L	50.0	25.0	50		01/27/15 05:07	16887-00-6	
Sulfate	**2.8**	mg/L	1.0	0.50	1		01/27/15 05:23	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 11:26	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.021J**	mg/L	0.10	0.012	1		01/15/15 11:47		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 11:47		
Nitrogen, NO2 plus NO3	**0.021J**	mg/L	0.10	0.012	1		01/15/15 11:47		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**257**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		02/04/15 20:15	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.17**	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:06		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-27-201501 **Lab ID: 60186183019** Collected: 01/14/15 12:05 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 18:27	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**305**	ug/L	50.0	24.0	1	01/16/15 10:30	01/20/15 13:27	7439-89-6	
Manganese	**200**	ug/L	5.0	2.5	1	01/16/15 10:30	01/20/15 13:27	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/16/15 04:27	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/16/15 04:27	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/16/15 04:27	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/16/15 04:27	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/16/15 04:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/16/15 04:27	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/16/15 04:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/16/15 04:27	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/16/15 04:27	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:27	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/16/15 04:27	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/16/15 04:27	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/16/15 04:27	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 04:27	75-35-4	
cis-1,2-Dichloroethene	**0.59J**	ug/L	1.0	0.50	1		01/16/15 04:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 04:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/16/15 04:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 04:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 04:27	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/16/15 04:27	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/16/15 04:27	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/16/15 04:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/16/15 04:27	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/16/15 04:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:27	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/16/15 04:27	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/16/15 04:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:27	79-00-5	
Trichloroethene	**0.84J**	ug/L	1.0	0.50	1		01/16/15 04:27	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/16/15 04:27	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/16/15 04:27	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/16/15 04:27	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/16/15 04:27	17060-07-0	
Toluene-d8 (S)	103	%	80-120		1		01/16/15 04:27	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/16/15 04:27		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-27-201501 **Lab ID: 60186183019** Collected: 01/14/15 12:05 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**40.2**	mg/L	20.0	2.0	1		01/22/15 10:13		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 10:13		
Alkalinity, Total as CaCO3	**40.2**	mg/L	20.0	2.0	1		01/22/15 10:13		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.30**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.8**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:44	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**59.0**	mg/L	10.0	5.0	10		01/24/15 05:57	16887-00-6	
Sulfate	**16.8**	mg/L	1.0	0.50	1		01/27/15 06:42	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 12:42	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.19**	mg/L	0.10	0.012	1		01/15/15 12:09		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 12:09		
Nitrogen, NO2 plus NO3	**0.19**	mg/L	0.10	0.012	1		01/15/15 12:09		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**172**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.65J**	mg/L	1.0	0.50	1		02/04/15 20:35	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.17**	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:06		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: TB-18-201501 **Lab ID: 60186183020** Collected: 01/14/15 09:08 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/16/15 03:00	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/16/15 03:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/16/15 03:00	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/16/15 03:00	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/16/15 03:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/16/15 03:00	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/16/15 03:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/16/15 03:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/16/15 03:00	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:00	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/16/15 03:00	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/16/15 03:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/16/15 03:00	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/16/15 03:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 03:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 03:00	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/16/15 03:00	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/16/15 03:00	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/16/15 03:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/16/15 03:00	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/16/15 03:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:00	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/16/15 03:00	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:00	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:00	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/16/15 03:00	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/16/15 03:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/16/15 03:00	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/16/15 03:00	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/16/15 03:00	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/16/15 03:00		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: ITMW-13-201501 **Lab ID: 60186183021** Collected: 01/14/15 15:20 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 18:38	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	01/20/15 09:45	01/26/15 11:10	7439-89-6	
Manganese	ND	ug/L	5.0	2.5	1	01/20/15 09:45	01/26/15 11:10	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/16/15 04:56	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/16/15 04:56	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/16/15 04:56	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/16/15 04:56	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/16/15 04:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/16/15 04:56	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/16/15 04:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/16/15 04:56	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/16/15 04:56	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:56	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/16/15 04:56	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/16/15 04:56	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/16/15 04:56	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:56	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 04:56	75-35-4	
cis-1,2-Dichloroethene	**28.5**	ug/L	1.0	0.50	1		01/16/15 04:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 04:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/16/15 04:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 04:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 04:56	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/16/15 04:56	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/16/15 04:56	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/16/15 04:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/16/15 04:56	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/16/15 04:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/16/15 04:56	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/16/15 04:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:56	79-00-5	
Trichloroethene	**45.8**	ug/L	1.0	0.50	1		01/16/15 04:56	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/16/15 04:56	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/16/15 04:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/16/15 04:56	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/16/15 04:56	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/16/15 04:56	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/16/15 04:56		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: ITMW-13-201501 **Lab ID: 60186183021** Collected: 01/14/15 15:20 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**67.9**	mg/L	20.0	2.0	1		01/22/15 10:19		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 10:19		
Alkalinity, Total as CaCO3	**67.9**	mg/L	20.0	2.0	1		01/22/15 10:19		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.1**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:44	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**24.7**	mg/L	2.0	1.0	2		01/28/15 09:09	16887-00-6	M1
Sulfate	**7.0**	mg/L	1.0	0.50	1		01/27/15 09:05	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 12:48	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.16**	mg/L	0.10	0.012	1		01/15/15 12:10		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 12:10		
Nitrogen, NO2 plus NO3	**0.16**	mg/L	0.10	0.012	1		01/15/15 12:10		M1
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**175**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		02/04/15 20:54	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.066**	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:07		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: RW-69-201501 **Lab ID: 60186183022** Collected: 01/14/15 11:45 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 18:50	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**154**	ug/L	50.0	24.0	1	01/20/15 09:45	01/26/15 11:13	7439-89-6	
Manganese	**814**	ug/L	5.0	2.5	1	01/20/15 09:45	01/26/15 11:13	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/16/15 05:10	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/16/15 05:10	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/16/15 05:10	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/16/15 05:10	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/16/15 05:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/16/15 05:10	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/16/15 05:10	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/16/15 05:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/16/15 05:10	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/16/15 05:10	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/16/15 05:10	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/16/15 05:10	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/16/15 05:10	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 05:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 05:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 05:10	75-35-4	
cis-1,2-Dichloroethene	**4.7**	ug/L	1.0	0.50	1		01/16/15 05:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 05:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/16/15 05:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 05:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 05:10	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/16/15 05:10	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/16/15 05:10	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/16/15 05:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/16/15 05:10	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/16/15 05:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/16/15 05:10	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/16/15 05:10	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/16/15 05:10	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 05:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 05:10	79-00-5	
Trichloroethene	**115**	ug/L	1.0	0.50	1		01/16/15 05:10	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/16/15 05:10	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/16/15 05:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/16/15 05:10	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		01/16/15 05:10	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		01/16/15 05:10	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/16/15 05:10		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: RW-69-201501 **Lab ID: 60186183022** Collected: 01/14/15 11:45 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**12.4J**	mg/L	20.0	2.0	1		01/22/15 10:22		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 10:22		
Alkalinity, Total as CaCO3	**12.4J**	mg/L	20.0	2.0	1		01/22/15 10:22		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.2**	Std. Units	0.10	0.10	1		01/22/15 00:00		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:46	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**322**	mg/L	20.0	10.0	20		01/27/15 09:53	16887-00-6	M1
Sulfate	**4.2**	mg/L	1.0	0.50	1		01/27/15 10:25	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 12:49	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.15**	mg/L	0.10	0.012	1		01/15/15 12:12		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 12:12		
Nitrogen, NO2 plus NO3	**0.15**	mg/L	0.10	0.012	1		01/15/15 12:12		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		02/03/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		02/05/15 08:19	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	ND	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:07		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-71-201501 **Lab ID: 60186183023** Collected: 01/14/15 09:50 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 19:01	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**404**	ug/L	50.0	24.0	1	01/20/15 09:45	01/26/15 11:15	7439-89-6	
Manganese	**1130**	ug/L	5.0	2.5	1	01/20/15 09:45	01/26/15 11:15	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/16/15 05:25	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/16/15 05:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/16/15 05:25	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/16/15 05:25	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/16/15 05:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/16/15 05:25	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/16/15 05:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/16/15 05:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/16/15 05:25	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/16/15 05:25	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/16/15 05:25	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/16/15 05:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/16/15 05:25	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 05:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 05:25	107-06-2	
1,1-Dichloroethene	**1.4**	ug/L	1.0	0.50	1		01/16/15 05:25	75-35-4	
cis-1,2-Dichloroethene	**6.0**	ug/L	1.0	0.50	1		01/16/15 05:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 05:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/16/15 05:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 05:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 05:25	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/16/15 05:25	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/16/15 05:25	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/16/15 05:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/16/15 05:25	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/16/15 05:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/16/15 05:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/16/15 05:25	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/16/15 05:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 05:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 05:25	79-00-5	
Trichloroethene	**170**	ug/L	1.0	0.50	1		01/16/15 05:25	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/16/15 05:25	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/16/15 05:25	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/16/15 05:25	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		01/16/15 05:25	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		01/16/15 05:25	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/16/15 05:25		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-71-201501 **Lab ID: 60186183023** Collected: 01/14/15 09:50 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**16.5J**	mg/L	20.0	2.0	1		01/22/15 10:32		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 10:32		
Alkalinity, Total as CaCO3	**16.5J**	mg/L	20.0	2.0	1		01/22/15 10:32		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.1**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:46	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**315**	mg/L	20.0	10.0	20		01/27/15 11:28	16887-00-6	
Sulfate	**4.2**	mg/L	1.0	0.50	1		01/27/15 11:44	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 12:50	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.027J**	mg/L	0.10	0.012	1		01/15/15 12:13		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 12:13		
Nitrogen, NO2 plus NO3	**0.027J**	mg/L	0.10	0.012	1		01/15/15 12:13		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		02/05/15 08:39	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	ND	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:07		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-58-201501 **Lab ID: 60186183024** Collected: 01/14/15 09:35 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/29/15 19:12	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**1130**	ug/L	50.0	24.0	1	01/20/15 09:45	01/26/15 11:17	7439-89-6	
Manganese	**351**	ug/L	5.0	2.5	1	01/20/15 09:45	01/26/15 11:17	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 16:16	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 16:16	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:16	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 16:16	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 16:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 16:16	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 16:16	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 16:16	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 16:16	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:16	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 16:16	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:16	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:16	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:16	107-06-2	
1,1-Dichloroethene	**2.0**	ug/L	1.0	0.50	1		01/15/15 16:16	75-35-4	
cis-1,2-Dichloroethene	**14.7**	ug/L	1.0	0.50	1		01/15/15 16:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 16:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 16:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 16:16	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 16:16	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 16:16	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 16:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 16:16	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 16:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:16	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:16	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 16:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:16	79-00-5	
Trichloroethene	**385**	ug/L	5.0	2.5	5		01/16/15 05:39	79-01-6	
Vinyl chloride	**0.71J**	ug/L	1.0	0.50	1		01/15/15 16:16	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 16:16	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/15/15 16:16	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/15/15 16:16	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/15/15 16:16	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 16:16		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-58-201501 **Lab ID: 60186183024** Collected: 01/14/15 09:35 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**8.8J**	mg/L	20.0	2.0	1		01/22/15 10:34		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 10:34		
Alkalinity, Total as CaCO3	**8.8J**	mg/L	20.0	2.0	1		01/22/15 10:34		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.0**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:47	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**288**	mg/L	20.0	10.0	20		01/27/15 12:00	16887-00-6	
Sulfate	**1.6**	mg/L	1.0	0.50	1		01/27/15 12:16	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 12:51	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		01/15/15 12:14		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 12:14		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		01/15/15 12:14		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		02/05/15 08:58	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.14**	mg/L	0.030	0.010	1	01/30/15 09:06	01/30/15 13:07		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: TB-05-201501 **Lab ID: 60186183025** Collected: 01/14/15 09:08 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/16/15 03:14	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/16/15 03:14	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/16/15 03:14	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/16/15 03:14	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/16/15 03:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/16/15 03:14	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/16/15 03:14	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/16/15 03:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/16/15 03:14	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:14	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/16/15 03:14	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/16/15 03:14	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/16/15 03:14	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/16/15 03:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 03:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 03:14	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/16/15 03:14	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/16/15 03:14	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/16/15 03:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/16/15 03:14	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/16/15 03:14	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:14	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:14	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/16/15 03:14	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:14	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:14	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/16/15 03:14	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/16/15 03:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/16/15 03:14	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/16/15 03:14	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/16/15 03:14	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/16/15 03:14		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: EB-03-201501 **Lab ID: 60186183026** Collected: 01/14/15 17:10 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/16/15 03:58	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/16/15 03:58	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/16/15 03:58	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/16/15 03:58	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/16/15 03:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/16/15 03:58	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/16/15 03:58	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/16/15 03:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/16/15 03:58	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:58	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/16/15 03:58	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/16/15 03:58	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/16/15 03:58	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/16/15 03:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 03:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 03:58	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/16/15 03:58	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/16/15 03:58	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/16/15 03:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/16/15 03:58	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/16/15 03:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:58	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:58	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/16/15 03:58	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:58	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:58	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/16/15 03:58	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/16/15 03:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/16/15 03:58	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/16/15 03:58	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		01/16/15 03:58	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/16/15 03:58		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: ITMW-10-201501 **Lab ID: 60186183027** Collected: 01/14/15 16:47 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/30/15 15:05	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	01/20/15 09:45	01/26/15 11:20	7439-89-6	
Manganese	**403**	ug/L	5.0	2.5	1	01/20/15 09:45	01/26/15 11:20	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 16:33	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 16:33	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:33	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 16:33	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 16:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 16:33	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 16:33	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 16:33	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 16:33	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:33	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 16:33	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:33	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:33	124-48-1	
1,1-Dichloroethane	**2.6**	ug/L	1.0	0.50	1		01/15/15 16:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:33	107-06-2	
1,1-Dichloroethene	**4.0**	ug/L	1.0	0.50	1		01/15/15 16:33	75-35-4	
cis-1,2-Dichloroethene	**38.9**	ug/L	1.0	0.50	1		01/15/15 16:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 16:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 16:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 16:33	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 16:33	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 16:33	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 16:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 16:33	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 16:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:33	79-34-5	
Tetrachloroethene	**1.0**	ug/L	1.0	0.50	1		01/15/15 16:33	127-18-4	
Toluene	**0.58J**	ug/L	1.0	0.50	1		01/15/15 16:33	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:33	79-00-5	
Trichloroethene	**403**	ug/L	5.0	2.5	5		01/16/15 05:54	79-01-6	
Vinyl chloride	**1.4**	ug/L	1.0	0.50	1		01/15/15 16:33	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 16:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		01/15/15 16:33	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/15/15 16:33	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/15/15 16:33	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 16:33		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: ITMW-10-201501 **Lab ID: 60186183027** Collected: 01/14/15 16:47 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**81.8**	mg/L	20.0	2.0	1		01/22/15 10:40		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 10:40		
Alkalinity, Total as CaCO3	**81.8**	mg/L	20.0	2.0	1		01/22/15 10:40		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.7**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:48	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**129**	mg/L	10.0	5.0	10		01/24/15 09:23	16887-00-6	
Sulfate	**36.1**	mg/L	2.0	1.0	2		01/27/15 12:32	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 12:52	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**5.7**	mg/L	0.20	0.023	2		01/15/15 12:21		
Nitrogen, Nitrite	ND	mg/L	0.20	0.023	2		01/15/15 12:21		
Nitrogen, NO2 plus NO3	**5.7**	mg/L	0.20	0.023	2		01/15/15 12:21		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**370**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.2**	mg/L	1.0	0.50	1		02/05/15 09:18	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	01/30/15 09:08	01/30/15 13:12		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-33-201501 **Lab ID: 60186183028** Collected: 01/14/15 17:00 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/30/15 15:16	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**35.5J**	ug/L	50.0	24.0	1	01/20/15 09:45	01/26/15 11:26	7439-89-6	
Manganese	**99.0**	ug/L	5.0	2.5	1	01/20/15 09:45	01/26/15 11:26	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/15/15 16:49	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/15/15 16:49	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:49	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/15/15 16:49	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/15/15 16:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/15/15 16:49	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/15/15 16:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/15/15 16:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/15/15 16:49	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:49	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/15/15 16:49	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:49	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/15/15 16:49	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:49	107-06-2	
1,1-Dichloroethene	**0.82J**	ug/L	1.0	0.50	1		01/15/15 16:49	75-35-4	
cis-1,2-Dichloroethene	**13.9**	ug/L	1.0	0.50	1		01/15/15 16:49	156-59-2	
trans-1,2-Dichloroethene	**1.5**	ug/L	1.0	0.50	1		01/15/15 16:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/15/15 16:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 16:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/15/15 16:49	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/15/15 16:49	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/15/15 16:49	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/15/15 16:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/15/15 16:49	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/15/15 16:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:49	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/15/15 16:49	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/15/15 16:49	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/15/15 16:49	79-00-5	
Trichloroethene	**1080**	ug/L	10.0	5.0	10		01/16/15 06:08	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/15/15 16:49	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/15/15 16:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		01/15/15 16:49	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		01/15/15 16:49	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/15/15 16:49	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/15/15 16:49		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-33-201501 **Lab ID: 60186183028** Collected: 01/14/15 17:00 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**10.5J**	mg/L	20.0	2.0	1		01/22/15 10:43		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 10:43		
Alkalinity, Total as CaCO3	**10.5J**	mg/L	20.0	2.0	1		01/22/15 10:43		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.0**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:48	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**220**	mg/L	20.0	10.0	20		01/27/15 12:48	16887-00-6	
Sulfate	**17.8**	mg/L	1.0	0.50	1		01/27/15 13:04	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 12:53	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**2.5**	mg/L	0.10	0.012	1		01/15/15 12:15		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 12:15		
Nitrogen, NO2 plus NO3	**2.5**	mg/L	0.10	0.012	1		01/15/15 12:15		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		02/05/15 09:37	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	01/30/15 09:08	01/30/15 13:13		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: TB-19-201501 **Lab ID: 60186183029** Collected: 01/14/15 09:08 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/16/15 03:29	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/16/15 03:29	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/16/15 03:29	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/16/15 03:29	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/16/15 03:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/16/15 03:29	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/16/15 03:29	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/16/15 03:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/16/15 03:29	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:29	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/16/15 03:29	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/16/15 03:29	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/16/15 03:29	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/16/15 03:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 03:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 03:29	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/16/15 03:29	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/16/15 03:29	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/16/15 03:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/16/15 03:29	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/16/15 03:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:29	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:29	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/16/15 03:29	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:29	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:29	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/16/15 03:29	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/16/15 03:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/16/15 03:29	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/16/15 03:29	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/16/15 03:29	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/16/15 03:29		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: EB-06-201501 **Lab ID: 60186183030** Collected: 01/14/15 17:40 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/16/15 04:12	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/16/15 04:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/16/15 04:12	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/16/15 04:12	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/16/15 04:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/16/15 04:12	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/16/15 04:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/16/15 04:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/16/15 04:12	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:12	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/16/15 04:12	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/16/15 04:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/16/15 04:12	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 04:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 04:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 04:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/16/15 04:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 04:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 04:12	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/16/15 04:12	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/16/15 04:12	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/16/15 04:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/16/15 04:12	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/16/15 04:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/16/15 04:12	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/16/15 04:12	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 04:12	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/16/15 04:12	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/16/15 04:12	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/16/15 04:12	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/16/15 04:12	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/16/15 04:12	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/16/15 04:12		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-26-201501 **Lab ID: 60186183031** Collected: 01/14/15 09:08 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/30/15 15:28	107-07-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	01/20/15 09:45	01/26/15 11:29	7439-89-6	
Manganese	**253**	ug/L	5.0	2.5	1	01/20/15 09:45	01/26/15 11:29	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/16/15 04:41	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/16/15 04:41	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/16/15 04:41	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/16/15 04:41	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/16/15 04:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/16/15 04:41	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/16/15 04:41	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/16/15 04:41	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/16/15 04:41	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:41	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/16/15 04:41	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/16/15 04:41	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/16/15 04:41	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 04:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 04:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 04:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/16/15 04:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 04:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 04:41	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/16/15 04:41	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/16/15 04:41	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/16/15 04:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/16/15 04:41	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/16/15 04:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:41	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/16/15 04:41	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/16/15 04:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 04:41	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 04:41	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/16/15 04:41	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/16/15 04:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/16/15 04:41	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/16/15 04:41	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		01/16/15 04:41	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/16/15 04:41		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: MW-26-201501 **Lab ID: 60186183031** Collected: 01/14/15 09:08 Received: 01/15/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**24.9**	mg/L	20.0	2.0	1		01/22/15 10:45		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 10:45		
Alkalinity, Total as CaCO3	**24.9**	mg/L	20.0	2.0	1		01/22/15 10:45		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.6**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:48	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**335**	mg/L	20.0	10.0	20		01/27/15 13:20	16887-00-6	
Sulfate	**9.5**	mg/L	1.0	0.50	1		01/27/15 13:36	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/21/15 12:54	7664-41-7	M1
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**2.7**	mg/L	0.10	0.012	1		01/15/15 12:18		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/15/15 12:18		
Nitrogen, NO2 plus NO3	**2.7**	mg/L	0.10	0.012	1		01/15/15 12:18		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**159**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		02/05/15 09:57	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	01/30/15 09:08	01/30/15 13:13		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Sample: TB-17-201501 **Lab ID: 60186183032** Collected: 01/14/15 09:08 Received: 01/15/15 11:26 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/16/15 03:43	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/16/15 03:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/16/15 03:43	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/16/15 03:43	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/16/15 03:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/16/15 03:43	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/16/15 03:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/16/15 03:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/16/15 03:43	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:43	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/16/15 03:43	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/16/15 03:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/16/15 03:43	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/16/15 03:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 03:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/16/15 03:43	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/16/15 03:43	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/16/15 03:43	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/16/15 03:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/16/15 03:43	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/16/15 03:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:43	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/16/15 03:43	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/16/15 03:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/16/15 03:43	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/16/15 03:43	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/16/15 03:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/16/15 03:43	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/16/15 03:43	17060-07-0	
Toluene-d8 (S)	104	%	80-120		1		01/16/15 03:43	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/16/15 03:43		

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: GCSV/3384 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017, 60186183018, 60186183019, 60186183021, 60186183022, 60186183023, 60186183024

METHOD BLANK: 119222 Matrix: Water
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017, 60186183018, 60186183019, 60186183021, 60186183022, 60186183023, 60186183024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	01/29/15 14:55	

LABORATORY CONTROL SAMPLE: 119223

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	96300	96	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 119224 119225

Parameter	Units	60186183016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2-Chloroethanol	ug/L	ND	100000	100000	100000	96000	100	96	40-140	4	40	H3

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: GCSV/3389 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60186183027, 60186183028, 60186183031

METHOD BLANK: 119355 Matrix: Water
Associated Lab Samples: 60186183027, 60186183028, 60186183031

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	01/30/15 14:21	

LABORATORY CONTROL SAMPLE: 119356

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	98100	98	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 119357 119358

Parameter	Units	60186183027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2-Chloroethanol	ug/L	ND	100000	100000	97600	100000	98	100	40-140	2	40	H3

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: MPRP/30489 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017, 60186183018, 60186183019

METHOD BLANK: 1507164 Matrix: Water
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017, 60186183018, 60186183019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	01/20/15 12:30	
Manganese	ug/L	ND	5.0	01/20/15 12:30	

LABORATORY CONTROL SAMPLE: 1507165

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9630	96	80-120	
Manganese	ug/L	1000	960	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1507166 1507167

Parameter	Units	60186183016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	184	10000	10000	9740	9760	96	96	75-125	0	20	
Manganese	ug/L	32.6	1000	1000	986	985	95	95	75-125	0	20	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: MPRP/30501 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60186183021, 60186183022, 60186183023, 60186183024, 60186183027, 60186183028, 60186183031

METHOD BLANK: 1508570 Matrix: Water
Associated Lab Samples: 60186183021, 60186183022, 60186183023, 60186183024, 60186183027, 60186183028, 60186183031

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	01/26/15 11:08	
Manganese	ug/L	ND	5.0	01/26/15 11:08	

LABORATORY CONTROL SAMPLE: 1508571

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9840	98	80-120	
Manganese	ug/L	1000	976	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1508572 1508573

Parameter	Units	60186309001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	9620	10000	10000	18900	18800	93	92	75-125	0	20	
Manganese	ug/L	217	1000	1000	1170	1160	95	95	75-125	1	20	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: MSV/67015 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186183001, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183008, 60186183010, 60186183011, 60186183012, 60186183013, 60186183016, 60186183017, 60186183018

METHOD BLANK: 1506497 Matrix: Water
Associated Lab Samples: 60186183001, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183008, 60186183010, 60186183011, 60186183012, 60186183013, 60186183016, 60186183017, 60186183018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/15/15 20:58	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/15/15 20:58	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/15/15 20:58	
1,1-Dichloroethane	ug/L	ND	1.0	01/15/15 20:58	
1,1-Dichloroethene	ug/L	ND	1.0	01/15/15 20:58	
1,2-Dichloroethane	ug/L	ND	1.0	01/15/15 20:58	
1,2-Dichloropropane	ug/L	ND	1.0	01/15/15 20:58	
2-Butanone (MEK)	ug/L	ND	10.0	01/15/15 20:58	
2-Hexanone	ug/L	ND	10.0	01/15/15 20:58	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/15/15 20:58	
Acetone	ug/L	ND	10.0	01/15/15 20:58	
Benzene	ug/L	ND	1.0	01/15/15 20:58	
Bromodichloromethane	ug/L	ND	1.0	01/15/15 20:58	
Bromoform	ug/L	ND	1.0	01/15/15 20:58	
Bromomethane	ug/L	ND	5.0	01/15/15 20:58	
Carbon disulfide	ug/L	ND	5.0	01/15/15 20:58	
Carbon tetrachloride	ug/L	ND	1.0	01/15/15 20:58	
Chlorobenzene	ug/L	ND	1.0	01/15/15 20:58	
Chloroethane	ug/L	ND	1.0	01/15/15 20:58	
Chloroform	ug/L	ND	1.0	01/15/15 20:58	
Chloromethane	ug/L	ND	1.0	01/15/15 20:58	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/15/15 20:58	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/15/15 20:58	
Dibromochloromethane	ug/L	ND	1.0	01/15/15 20:58	
Ethylbenzene	ug/L	ND	1.0	01/15/15 20:58	
Methylene chloride	ug/L	ND	1.0	01/15/15 20:58	
Styrene	ug/L	ND	1.0	01/15/15 20:58	
Tetrachloroethene	ug/L	ND	1.0	01/15/15 20:58	
Toluene	ug/L	ND	1.0	01/15/15 20:58	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/15/15 20:58	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/15/15 20:58	
Trichloroethene	ug/L	ND	1.0	01/15/15 20:58	
Vinyl chloride	ug/L	ND	1.0	01/15/15 20:58	
Xylene (Total)	ug/L	ND	3.0	01/15/15 20:58	
1,2-Dichloroethane-d4 (S)	%	98	80-120	01/15/15 20:58	
4-Bromofluorobenzene (S)	%	99	80-120	01/15/15 20:58	
Toluene-d8 (S)	%	103	80-120	01/15/15 20:58	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

LABORATORY CONTROL SAMPLE: 1506498

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.5	103	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	18.8	94	73-121	
1,1,2-Trichloroethane	ug/L	20	20.7	103	80-120	
1,1-Dichloroethane	ug/L	20	20.6	103	80-120	
1,1-Dichloroethene	ug/L	20	20.5	103	80-120	
1,2-Dichloroethane	ug/L	20	20.5	102	81-120	
1,2-Dichloropropane	ug/L	20	20.3	101	80-120	
2-Butanone (MEK)	ug/L	100	98.7	99	67-122	
2-Hexanone	ug/L	100	85.4	85	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	87.2	87	76-120	
Acetone	ug/L	100	92.3	92	72-120	
Benzene	ug/L	20	20.4	102	80-120	
Bromodichloromethane	ug/L	20	20.0	100	80-120	
Bromoform	ug/L	20	19.2	96	73-138	
Bromomethane	ug/L	20	15.6	78	38-137	
Carbon disulfide	ug/L	20	21.6	108	71-129	
Carbon tetrachloride	ug/L	20	21.5	107	67-146	
Chlorobenzene	ug/L	20	20.0	100	80-120	
Chloroethane	ug/L	20	19.2	96	76-120	
Chloroform	ug/L	20	20.6	103	80-120	
Chloromethane	ug/L	20	18.4	92	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.7	103	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.6	103	80-120	
Dibromochloromethane	ug/L	20	19.1	96	80-126	
Ethylbenzene	ug/L	20	20.6	103	80-120	
Methylene chloride	ug/L	20	19.6	98	80-120	
Styrene	ug/L	20	20.1	100	80-123	
Tetrachloroethene	ug/L	20	20.7	104	80-123	
Toluene	ug/L	20	21.2	106	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.5	102	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.1	95	80-129	
Trichloroethene	ug/L	20	20.8	104	80-120	
Vinyl chloride	ug/L	20	20.9	104	62-125	
Xylene (Total)	ug/L	60	60.9	102	80-120	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1506499 1506500

Parameter	Units	60186183016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	21.0	21.4	105	107	88-124	2	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.8	19.5	94	97	78-116	4	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	20.0	19.4	100	97	84-112	3	10	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1506499 1506500

Parameter	Units	60186183016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	ND	20	20	21.1	21.2	106	106	82-121	0	9	
1,1-Dichloroethene	ug/L	ND	20	20	21.8	22.1	109	111	78-124	2	12	
1,2-Dichloroethane	ug/L	ND	20	20	19.7	20.0	98	100	79-121	1	12	
1,2-Dichloropropane	ug/L	ND	20	20	19.9	20.3	100	101	82-119	2	10	
2-Butanone (MEK)	ug/L	ND	100	100	90.0	90.7	90	91	66-114	1	13	
2-Hexanone	ug/L	ND	100	100	79.8	80.2	80	80	71-116	0	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	82.5	80.8	82	81	72-122	2	12	
Acetone	ug/L	ND	100	100	83.3	83.3	83	83	65-113	0	27	
Benzene	ug/L	ND	20	20	20.6	20.9	103	105	46-155	1	13	
Bromodichloromethane	ug/L	ND	20	20	19.4	19.3	97	96	77-127	1	10	
Bromoform	ug/L	ND	20	20	17.4	17.9	87	89	70-125	2	11	
Bromomethane	ug/L	ND	20	20	17.2	19.1	86	96	41-140	11	30	
Carbon disulfide	ug/L	ND	20	20	22.4	22.7	112	113	68-140	1	10	
Carbon tetrachloride	ug/L	ND	20	20	22.0	22.6	110	113	68-147	3	11	
Chlorobenzene	ug/L	ND	20	20	19.0	19.7	95	99	83-121	4	9	
Chloroethane	ug/L	ND	20	20	19.7	19.5	98	97	69-126	1	19	
Chloroform	ug/L	ND	20	20	20.4	20.6	102	103	86-119	1	9	
Chloromethane	ug/L	ND	20	20	17.7	18.2	89	91	23-168	3	49	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.6	20.9	103	104	85-117	1	10	
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.3	19.4	97	97	74-115	1	12	
Dibromochloromethane	ug/L	ND	20	20	18.1	18.0	91	90	65-134	1	11	
Ethylbenzene	ug/L	ND	20	20	19.5	20.4	97	102	51-148	5	14	
Methylene chloride	ug/L	ND	20	20	19.0	19.6	93	96	75-118	3	11	
Styrene	ug/L	ND	20	20	19.0	19.5	95	97	17-174	3	10	
Tetrachloroethene	ug/L	ND	20	20	19.5	20.3	97	101	78-127	4	9	
Toluene	ug/L	ND	20	20	21.0	21.4	105	107	47-149	2	16	
trans-1,2-Dichloroethene	ug/L	ND	20	20	20.8	21.2	104	106	84-119	2	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	17.9	18.0	89	90	71-120	1	10	
Trichloroethene	ug/L	ND	20	20	19.7	19.8	97	98	70-135	1	10	
Vinyl chloride	ug/L	ND	20	20	20.9	21.2	104	106	58-130	2	11	
Xylene (Total)	ug/L	ND	60	60	58.0	60.3	97	101	39-158	4	15	
1,2-Dichloroethane-d4 (S)	%						104	105	80-120			
4-Bromofluorobenzene (S)	%						99	99	80-120			
Toluene-d8 (S)	%						100	102	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: MSV/67017 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186183019, 60186183020, 60186183021, 60186183022, 60186183023, 60186183024, 60186183025, 60186183026, 60186183027, 60186183028, 60186183029, 60186183030, 60186183031, 60186183032

METHOD BLANK: 1506552 Matrix: Water
Associated Lab Samples: 60186183019, 60186183020, 60186183021, 60186183022, 60186183023, 60186183024, 60186183025, 60186183026, 60186183027, 60186183028, 60186183029, 60186183030, 60186183031, 60186183032

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/16/15 02:45	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/16/15 02:45	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/16/15 02:45	
1,1-Dichloroethane	ug/L	ND	1.0	01/16/15 02:45	
1,1-Dichloroethene	ug/L	ND	1.0	01/16/15 02:45	
1,2-Dichloroethane	ug/L	ND	1.0	01/16/15 02:45	
1,2-Dichloropropane	ug/L	ND	1.0	01/16/15 02:45	
2-Butanone (MEK)	ug/L	ND	10.0	01/16/15 02:45	
2-Hexanone	ug/L	ND	10.0	01/16/15 02:45	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/16/15 02:45	
Acetone	ug/L	ND	10.0	01/16/15 02:45	
Benzene	ug/L	ND	1.0	01/16/15 02:45	
Bromodichloromethane	ug/L	ND	1.0	01/16/15 02:45	
Bromoform	ug/L	ND	1.0	01/16/15 02:45	
Bromomethane	ug/L	ND	5.0	01/16/15 02:45	
Carbon disulfide	ug/L	ND	5.0	01/16/15 02:45	
Carbon tetrachloride	ug/L	ND	1.0	01/16/15 02:45	
Chlorobenzene	ug/L	ND	1.0	01/16/15 02:45	
Chloroethane	ug/L	ND	1.0	01/16/15 02:45	
Chloroform	ug/L	ND	1.0	01/16/15 02:45	
Chloromethane	ug/L	ND	1.0	01/16/15 02:45	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/16/15 02:45	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/16/15 02:45	
Dibromochloromethane	ug/L	ND	1.0	01/16/15 02:45	
Ethylbenzene	ug/L	ND	1.0	01/16/15 02:45	
Methylene chloride	ug/L	ND	1.0	01/16/15 02:45	
Styrene	ug/L	ND	1.0	01/16/15 02:45	
Tetrachloroethene	ug/L	ND	1.0	01/16/15 02:45	
Toluene	ug/L	ND	1.0	01/16/15 02:45	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/16/15 02:45	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/16/15 02:45	
Trichloroethene	ug/L	ND	1.0	01/16/15 02:45	
Vinyl chloride	ug/L	ND	1.0	01/16/15 02:45	
Xylene (Total)	ug/L	ND	3.0	01/16/15 02:45	
1,2-Dichloroethane-d4 (S)	%	103	80-120	01/16/15 02:45	
4-Bromofluorobenzene (S)	%	94	80-120	01/16/15 02:45	
Toluene-d8 (S)	%	102	80-120	01/16/15 02:45	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

LABORATORY CONTROL SAMPLE: 1506553

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.3	101	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	17.2	86	73-121	
1,1,2-Trichloroethane	ug/L	20	20.3	101	80-120	
1,1-Dichloroethane	ug/L	20	20.8	104	80-120	
1,1-Dichloroethene	ug/L	20	20.0	100	80-120	
1,2-Dichloroethane	ug/L	20	20.3	102	81-120	
1,2-Dichloropropane	ug/L	20	20.5	102	80-120	
2-Butanone (MEK)	ug/L	100	97.5	97	67-122	
2-Hexanone	ug/L	100	86.5	87	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	89.0	89	76-120	
Acetone	ug/L	100	97.6	98	72-120	
Benzene	ug/L	20	20.4	102	80-120	
Bromodichloromethane	ug/L	20	20.0	100	80-120	
Bromoform	ug/L	20	19.7	99	73-138	
Bromomethane	ug/L	20	23.7	118	38-137	
Carbon disulfide	ug/L	20	21.6	108	71-129	
Carbon tetrachloride	ug/L	20	20.3	102	67-146	
Chlorobenzene	ug/L	20	19.8	99	80-120	
Chloroethane	ug/L	20	19.9	99	76-120	
Chloroform	ug/L	20	20.4	102	80-120	
Chloromethane	ug/L	20	20.4	102	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.6	103	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.9	99	80-120	
Dibromochloromethane	ug/L	20	18.9	94	80-126	
Ethylbenzene	ug/L	20	20.0	100	80-120	
Methylene chloride	ug/L	20	20.4	102	80-120	
Styrene	ug/L	20	20.0	100	80-123	
Tetrachloroethene	ug/L	20	19.5	97	80-123	
Toluene	ug/L	20	20.5	102	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.8	99	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.0	95	80-129	
Trichloroethene	ug/L	20	21.4	107	80-120	
Vinyl chloride	ug/L	20	21.0	105	62-125	
Xylene (Total)	ug/L	60	60.0	100	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: MSV/67027 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186183007, 60186183018, 60186183024, 60186183027, 60186183028

METHOD BLANK: 1507198 Matrix: Water
Associated Lab Samples: 60186183007, 60186183018, 60186183024, 60186183027, 60186183028

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,1-Dichloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,1-Dichloroethene	ug/L	ND	1.0	01/15/15 12:26	
1,2-Dichloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,2-Dichloropropane	ug/L	ND	1.0	01/15/15 12:26	
2-Butanone (MEK)	ug/L	ND	10.0	01/15/15 12:26	
2-Hexanone	ug/L	ND	10.0	01/15/15 12:26	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/15/15 12:26	
Acetone	ug/L	ND	10.0	01/15/15 12:26	
Benzene	ug/L	ND	1.0	01/15/15 12:26	
Bromodichloromethane	ug/L	ND	1.0	01/15/15 12:26	
Bromoform	ug/L	ND	1.0	01/15/15 12:26	
Bromomethane	ug/L	ND	5.0	01/15/15 12:26	
Carbon disulfide	ug/L	ND	5.0	01/15/15 12:26	
Carbon tetrachloride	ug/L	ND	1.0	01/15/15 12:26	
Chlorobenzene	ug/L	ND	1.0	01/15/15 12:26	
Chloroethane	ug/L	ND	1.0	01/15/15 12:26	
Chloroform	ug/L	ND	1.0	01/15/15 12:26	
Chloromethane	ug/L	ND	1.0	01/15/15 12:26	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/15/15 12:26	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/15/15 12:26	
Dibromochloromethane	ug/L	ND	1.0	01/15/15 12:26	
Ethylbenzene	ug/L	ND	1.0	01/15/15 12:26	
Methylene chloride	ug/L	ND	1.0	01/15/15 12:26	
Styrene	ug/L	ND	1.0	01/15/15 12:26	
Tetrachloroethene	ug/L	ND	1.0	01/15/15 12:26	
Toluene	ug/L	ND	1.0	01/15/15 12:26	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/15/15 12:26	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/15/15 12:26	
Vinyl chloride	ug/L	ND	1.0	01/15/15 12:26	
Xylene (Total)	ug/L	ND	3.0	01/15/15 12:26	
1,2-Dichloroethane-d4 (S)	%	97	80-120	01/15/15 12:26	
4-Bromofluorobenzene (S)	%	96	80-120	01/15/15 12:26	
Toluene-d8 (S)	%	102	80-120	01/15/15 12:26	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

LABORATORY CONTROL SAMPLE: 1507199

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.7	109	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	21.0	105	73-121	
1,1,2-Trichloroethane	ug/L	20	19.7	99	80-120	
1,1-Dichloroethane	ug/L	20	18.4	92	80-120	
1,1-Dichloroethene	ug/L	20	19.1	96	80-120	
1,2-Dichloroethane	ug/L	20	21.0	105	81-120	
1,2-Dichloropropane	ug/L	20	20.5	102	80-120	
2-Butanone (MEK)	ug/L	100	82.4	82	67-122	
2-Hexanone	ug/L	100	90.2	90	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	94.1	94	76-120	
Acetone	ug/L	100	79.4	79	72-120	
Benzene	ug/L	20	20.7	103	80-120	
Bromodichloromethane	ug/L	20	21.2	106	80-120	
Bromoform	ug/L	20	19.4	97	73-138	
Bromomethane	ug/L	20	13.7	68	38-137	
Carbon disulfide	ug/L	20	18.5	92	71-129	
Carbon tetrachloride	ug/L	20	20.1	100	67-146	
Chlorobenzene	ug/L	20	21.1	105	80-120	
Chloroethane	ug/L	20	15.4	77	76-120	
Chloroform	ug/L	20	20.6	103	80-120	
Chloromethane	ug/L	20	11.5	58	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.0	100	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.2	106	80-120	
Dibromochloromethane	ug/L	20	21.3	106	80-126	
Ethylbenzene	ug/L	20	21.1	105	80-120	
Methylene chloride	ug/L	20	19.2	96	80-120	
Styrene	ug/L	20	20.9	104	80-123	
Tetrachloroethene	ug/L	20	22.2	111	80-123	
Toluene	ug/L	20	20.0	100	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.0	95	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.2	106	80-129	
Vinyl chloride	ug/L	20	17.4	87	62-125	
Xylene (Total)	ug/L	60	60.4	101	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: MSV/67014 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60186183002, 60186183009, 60186183014, 60186183015

METHOD BLANK: 1506495 Matrix: Water
Associated Lab Samples: 60186183002, 60186183009, 60186183014, 60186183015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/15/15 20:58	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/15/15 20:58	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/15/15 20:58	
1,1-Dichloroethane	ug/L	ND	1.0	01/15/15 20:58	
1,1-Dichloroethene	ug/L	ND	1.0	01/15/15 20:58	
1,2-Dichloroethane	ug/L	ND	1.0	01/15/15 20:58	
1,2-Dichloropropane	ug/L	ND	1.0	01/15/15 20:58	
2-Butanone (MEK)	ug/L	ND	10.0	01/15/15 20:58	
2-Hexanone	ug/L	ND	10.0	01/15/15 20:58	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/15/15 20:58	
Acetone	ug/L	ND	10.0	01/15/15 20:58	
Benzene	ug/L	ND	1.0	01/15/15 20:58	
Bromodichloromethane	ug/L	ND	1.0	01/15/15 20:58	
Bromoform	ug/L	ND	1.0	01/15/15 20:58	
Bromomethane	ug/L	ND	5.0	01/15/15 20:58	
Carbon disulfide	ug/L	ND	5.0	01/15/15 20:58	
Carbon tetrachloride	ug/L	ND	1.0	01/15/15 20:58	
Chlorobenzene	ug/L	ND	1.0	01/15/15 20:58	
Chloroethane	ug/L	ND	1.0	01/15/15 20:58	
Chloroform	ug/L	ND	1.0	01/15/15 20:58	
Chloromethane	ug/L	ND	1.0	01/15/15 20:58	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/15/15 20:58	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/15/15 20:58	
Dibromochloromethane	ug/L	ND	1.0	01/15/15 20:58	
Ethylbenzene	ug/L	ND	1.0	01/15/15 20:58	
Methylene chloride	ug/L	ND	1.0	01/15/15 20:58	
Styrene	ug/L	ND	1.0	01/15/15 20:58	
Tetrachloroethene	ug/L	ND	1.0	01/15/15 20:58	
Toluene	ug/L	ND	1.0	01/15/15 20:58	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/15/15 20:58	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/15/15 20:58	
Trichloroethene	ug/L	ND	1.0	01/15/15 20:58	
Vinyl chloride	ug/L	ND	1.0	01/15/15 20:58	
Xylene (Total)	ug/L	ND	3.0	01/15/15 20:58	
1,2-Dichloroethane-d4 (S)	%	98	80-120	01/15/15 20:58	
4-Bromofluorobenzene (S)	%	99	80-120	01/15/15 20:58	
Toluene-d8 (S)	%	103	80-120	01/15/15 20:58	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

LABORATORY CONTROL SAMPLE: 1506496

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.5	103	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	18.8	94	73-121	
1,1,2-Trichloroethane	ug/L	20	20.7	103	80-120	
1,1-Dichloroethane	ug/L	20	20.6	103	80-120	
1,1-Dichloroethene	ug/L	20	20.5	103	80-120	
1,2-Dichloroethane	ug/L	20	20.5	102	81-120	
1,2-Dichloropropane	ug/L	20	20.3	101	80-120	
2-Butanone (MEK)	ug/L	100	98.7	99	67-122	
2-Hexanone	ug/L	100	85.4	85	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	87.2	87	76-120	
Acetone	ug/L	100	92.3	92	72-120	
Benzene	ug/L	20	20.4	102	80-120	
Bromodichloromethane	ug/L	20	20.0	100	80-120	
Bromoform	ug/L	20	19.2	96	73-138	
Bromomethane	ug/L	20	15.6	78	38-137	
Carbon disulfide	ug/L	20	21.6	108	71-129	
Carbon tetrachloride	ug/L	20	21.5	107	67-146	
Chlorobenzene	ug/L	20	20.0	100	80-120	
Chloroethane	ug/L	20	19.2	96	76-120	
Chloroform	ug/L	20	20.6	103	80-120	
Chloromethane	ug/L	20	18.4	92	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.7	103	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.6	103	80-120	
Dibromochloromethane	ug/L	20	19.1	96	80-126	
Ethylbenzene	ug/L	20	20.6	103	80-120	
Methylene chloride	ug/L	20	19.6	98	80-120	
Styrene	ug/L	20	20.1	100	80-123	
Tetrachloroethene	ug/L	20	20.7	104	80-123	
Toluene	ug/L	20	21.2	106	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.5	102	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.1	95	80-129	
Trichloroethene	ug/L	20	20.8	104	80-120	
Vinyl chloride	ug/L	20	20.9	104	62-125	
Xylene (Total)	ug/L	60	60.9	102	80-120	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: MSV/67028 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60186183009, 60186183014

METHOD BLANK: 1507202 Matrix: Water
Associated Lab Samples: 60186183009, 60186183014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,1-Dichloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,1-Dichloroethene	ug/L	ND	1.0	01/15/15 12:26	
1,2-Dichloroethane	ug/L	ND	1.0	01/15/15 12:26	
1,2-Dichloropropane	ug/L	ND	1.0	01/15/15 12:26	
2-Butanone (MEK)	ug/L	ND	10.0	01/15/15 12:26	
2-Hexanone	ug/L	ND	10.0	01/15/15 12:26	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/15/15 12:26	
Acetone	ug/L	ND	10.0	01/15/15 12:26	
Benzene	ug/L	ND	1.0	01/15/15 12:26	
Bromodichloromethane	ug/L	ND	1.0	01/15/15 12:26	
Bromoform	ug/L	ND	1.0	01/15/15 12:26	
Bromomethane	ug/L	ND	5.0	01/15/15 12:26	
Carbon disulfide	ug/L	ND	5.0	01/15/15 12:26	
Carbon tetrachloride	ug/L	ND	1.0	01/15/15 12:26	
Chlorobenzene	ug/L	ND	1.0	01/15/15 12:26	
Chloroethane	ug/L	ND	1.0	01/15/15 12:26	
Chloroform	ug/L	ND	1.0	01/15/15 12:26	
Chloromethane	ug/L	ND	1.0	01/15/15 12:26	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/15/15 12:26	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/15/15 12:26	
Dibromochloromethane	ug/L	ND	1.0	01/15/15 12:26	
Ethylbenzene	ug/L	ND	1.0	01/15/15 12:26	
Methylene chloride	ug/L	ND	1.0	01/15/15 12:26	
Styrene	ug/L	ND	1.0	01/15/15 12:26	
Tetrachloroethene	ug/L	ND	1.0	01/15/15 12:26	
Toluene	ug/L	ND	1.0	01/15/15 12:26	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/15/15 12:26	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/15/15 12:26	
Vinyl chloride	ug/L	ND	1.0	01/15/15 12:26	
Xylene (Total)	ug/L	ND	3.0	01/15/15 12:26	
1,2-Dichloroethane-d4 (S)	%	97	80-120	01/15/15 12:26	
4-Bromofluorobenzene (S)	%	96	80-120	01/15/15 12:26	
Toluene-d8 (S)	%	102	80-120	01/15/15 12:26	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

LABORATORY CONTROL SAMPLE: 1507203

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.7	109	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	21.0	105	73-121	
1,1,2-Trichloroethane	ug/L	20	19.7	99	80-120	
1,1-Dichloroethane	ug/L	20	18.4	92	80-120	
1,1-Dichloroethene	ug/L	20	19.1	96	80-120	
1,2-Dichloroethane	ug/L	20	21.0	105	81-120	
1,2-Dichloropropane	ug/L	20	20.5	102	80-120	
2-Butanone (MEK)	ug/L	100	82.4	82	67-122	
2-Hexanone	ug/L	100	90.2	90	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	94.1	94	76-120	
Acetone	ug/L	100	79.4	79	72-120	
Benzene	ug/L	20	20.7	103	80-120	
Bromodichloromethane	ug/L	20	21.2	106	80-120	
Bromoform	ug/L	20	19.4	97	73-138	
Bromomethane	ug/L	20	13.7	68	38-137	
Carbon disulfide	ug/L	20	18.5	92	71-129	
Carbon tetrachloride	ug/L	20	20.1	100	67-146	
Chlorobenzene	ug/L	20	21.1	105	80-120	
Chloroethane	ug/L	20	15.4	77	76-120	
Chloroform	ug/L	20	20.6	103	80-120	
Chloromethane	ug/L	20	11.5	58	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.0	100	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.2	106	80-120	
Dibromochloromethane	ug/L	20	21.3	106	80-126	
Ethylbenzene	ug/L	20	21.1	105	80-120	
Methylene chloride	ug/L	20	19.2	96	80-120	
Styrene	ug/L	20	20.9	104	80-123	
Tetrachloroethene	ug/L	20	22.2	111	80-123	
Toluene	ug/L	20	20.0	100	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.0	95	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.2	106	80-129	
Vinyl chloride	ug/L	20	17.4	87	62-125	
Xylene (Total)	ug/L	60	60.4	101	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: WET/52570 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017

METHOD BLANK: 1509614 Matrix: Water
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	01/21/15 14:14	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	01/21/15 14:14	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	01/21/15 14:14	

LABORATORY CONTROL SAMPLE: 1509615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	507	101	90-110	

SAMPLE DUPLICATE: 1509616

Parameter	Units	60186367004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	461	462	0	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	461	462	0	10	

SAMPLE DUPLICATE: 1509617

Parameter	Units	60186183016 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	92.0	91.5	1	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	92.0	91.5	1	10	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: WET/52576 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60186183018, 60186183019, 60186183021, 60186183022, 60186183023, 60186183024, 60186183027, 60186183028, 60186183031

METHOD BLANK: 1509750 Matrix: Water
Associated Lab Samples: 60186183018, 60186183019, 60186183021, 60186183022, 60186183023, 60186183024, 60186183027, 60186183028, 60186183031

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	01/22/15 09:56	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	01/22/15 09:56	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	01/22/15 09:56	

LABORATORY CONTROL SAMPLE: 1509751

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	521	104	90-110	

SAMPLE DUPLICATE: 1509752

Parameter	Units	60186097034 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	140	140	0	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	140	140	0	10	

SAMPLE DUPLICATE: 1509753

Parameter	Units	60186183024 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	8.8J	8.5J		10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	8.8J	8.5J		10	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: WET/52537 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017, 60186183018, 60186183019, 60186183021

METHOD BLANK: 1508447 Matrix: Water
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017, 60186183018, 60186183019, 60186183021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	01/20/15 10:29	

LABORATORY CONTROL SAMPLE: 1508448

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.52	103	80-120	

MATRIX SPIKE SAMPLE: 1508450

Parameter	Units	60186183016 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.34	67	75-125	M1

SAMPLE DUPLICATE: 1508449

Parameter	Units	60186097035 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: WET/52538 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60186183022, 60186183023, 60186183024, 60186183027, 60186183028, 60186183031

METHOD BLANK: 1508451 Matrix: Water
Associated Lab Samples: 60186183022, 60186183023, 60186183024, 60186183027, 60186183028, 60186183031

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	01/20/15 10:45	

LABORATORY CONTROL SAMPLE: 1508452

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.52	104	80-120	

MATRIX SPIKE SAMPLE: 1508453

Parameter	Units	60186183022 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.46	92	75-125	

SAMPLE DUPLICATE: 1508454

Parameter	Units	60186183023 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: WETA/32610 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017, 60186183018, 60186183019

METHOD BLANK: 1510635 Matrix: Water
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017, 60186183018, 60186183019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/23/15 22:47	
Sulfate	mg/L	ND	1.0	01/23/15 22:47	

METHOD BLANK: 1512177 Matrix: Water
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017, 60186183018, 60186183019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/26/15 20:38	
Sulfate	mg/L	ND	1.0	01/26/15 20:38	

METHOD BLANK: 1512703 Matrix: Water
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017, 60186183018, 60186183019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/27/15 18:02	
Sulfate	mg/L	ND	1.0	01/27/15 18:02	

METHOD BLANK: 1513337 Matrix: Water
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017, 60186183018, 60186183019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/28/15 12:58	
Sulfate	mg/L	ND	1.0	01/28/15 12:58	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

METHOD BLANK: 1513931 Matrix: Water
Associated Lab Samples: 60186183004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/29/15 14:08	

LABORATORY CONTROL SAMPLE: 1510636

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	94	90-110	
Sulfate	mg/L	5	5.1	101	90-110	

LABORATORY CONTROL SAMPLE: 1512178

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	99	90-110	
Sulfate	mg/L	5	5.0	100	90-110	

LABORATORY CONTROL SAMPLE: 1512704

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	98	90-110	
Sulfate	mg/L	5	5.0	100	90-110	

LABORATORY CONTROL SAMPLE: 1513338

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.6	91	90-110	
Sulfate	mg/L	5	4.8	96	90-110	

LABORATORY CONTROL SAMPLE: 1513932

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	93	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1510637 1510638

Parameter	Units	60186183001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	105	50	50	161	159	111	107	80-120	1	15	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1510637 1510638

Parameter	Units	60186183001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	15.9	5	5	21.0	21.0	101	102	80-120	0	15	

MATRIX SPIKE SAMPLE: 1510639

Parameter	Units	60186183002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	342	100	460	118	80-120	
Sulfate	mg/L	268	100	373	105	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: WETA/32611 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60186183021, 60186183022, 60186183023, 60186183024, 60186183027, 60186183028, 60186183031

METHOD BLANK: 1510652 Matrix: Water
Associated Lab Samples: 60186183027

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/24/15 07:00	

METHOD BLANK: 1512520 Matrix: Water
Associated Lab Samples: 60186183021, 60186183022, 60186183023, 60186183024, 60186183027, 60186183028, 60186183031

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/27/15 07:14	
Sulfate	mg/L	ND	1.0	01/27/15 07:14	

METHOD BLANK: 1512833 Matrix: Water
Associated Lab Samples: 60186183021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/28/15 08:37	

LABORATORY CONTROL SAMPLE: 1510653

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	94	90-110	

LABORATORY CONTROL SAMPLE: 1512521

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	98	90-110	
Sulfate	mg/L	5	5.0	100	90-110	

LABORATORY CONTROL SAMPLE: 1512834

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.2	104	90-110	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1510654 1510655

Parameter	Units	60186183021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	24.7	10	10	37.5	40.7	128	160	80-120	8	15	M1
Sulfate	mg/L	7.0	5	5	12.3	12.2	106	104	80-120	1	15	

MATRIX SPIKE SAMPLE: 1510656

Parameter	Units	60186183022 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	322	100	455	134	80-120	M1
Sulfate	mg/L	4.2	5	9.3	103	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: WETA/32588 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017, 60186183018

METHOD BLANK: 1509152 Matrix: Water
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017, 60186183018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	01/21/15 10:54	

LABORATORY CONTROL SAMPLE: 1509153

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.2	110	90-110	

MATRIX SPIKE SAMPLE: 1509154

Parameter	Units	60186138001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	2.0	98	90-110	

MATRIX SPIKE SAMPLE: 1509156

Parameter	Units	60186183016 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.6	79	90-110	M1

SAMPLE DUPLICATE: 1509155

Parameter	Units	60186169002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	ND	ND		18	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: WETA/32589 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60186183019, 60186183021, 60186183022, 60186183023, 60186183024, 60186183027, 60186183028, 60186183031

METHOD BLANK: 1509157 Matrix: Water
Associated Lab Samples: 60186183019, 60186183021, 60186183022, 60186183023, 60186183024, 60186183027, 60186183028, 60186183031

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	01/21/15 12:36	

LABORATORY CONTROL SAMPLE: 1509158

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.0	102	90-110	

MATRIX SPIKE SAMPLE: 1509159

Parameter	Units	60186097034 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.066J	2	1.7	83	90-110	M1

MATRIX SPIKE SAMPLE: 1509161

Parameter	Units	60186183031 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.4	70	90-110	M1

SAMPLE DUPLICATE: 1509160

Parameter	Units	60186097036 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	ND	ND		18	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: WETA/32536 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60186183001, 60186183018, 60186183021, 60186183022, 60186183023, 60186183024, 60186183027, 60186183028, 60186183031

METHOD BLANK: 1506406 Matrix: Water
Associated Lab Samples: 60186183001, 60186183018, 60186183021, 60186183022, 60186183023, 60186183024, 60186183027, 60186183028, 60186183031

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	01/15/15 11:11	
Nitrogen, Nitrite	mg/L	ND	0.10	01/15/15 11:11	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	01/15/15 11:11	

LABORATORY CONTROL SAMPLE: 1506407

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.7	109	85-115	
Nitrogen, Nitrite	mg/L	.4	0.38	95	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	106	90-110	

MATRIX SPIKE SAMPLE: 1506408

Parameter	Units	60186167001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	13.4	8	20.0	82	85-115	M1
Nitrogen, Nitrite	mg/L	ND	2	1.9	96	90-110	
Nitrogen, NO2 plus NO3	mg/L	13.4	10	21.9	85	90-110	M1

MATRIX SPIKE SAMPLE: 1506450

Parameter	Units	60186183021 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	0.16	1.6	2.0	114	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.39	98	90-110	
Nitrogen, NO2 plus NO3	mg/L	0.16	2	2.4	111	90-110	M1

SAMPLE DUPLICATE: 1506409

Parameter	Units	60186176002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.58	0.58	0	20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	0.58	0.58	0	20	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: WETA/32537 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017, 60186183019

METHOD BLANK: 1506414 Matrix: Water
Associated Lab Samples: 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017, 60186183019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	01/15/15 11:50	
Nitrogen, Nitrite	mg/L	ND	0.10	01/15/15 11:50	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	01/15/15 11:50	

LABORATORY CONTROL SAMPLE: 1506415

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.7	108	85-115	
Nitrogen, Nitrite	mg/L	.4	0.38	96	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	106	90-110	

MATRIX SPIKE SAMPLE: 1506416

Parameter	Units	60186183002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	0.24	1.6	2.2	122	85-115	M1
Nitrogen, Nitrite	mg/L	ND	.4	0.40	101	90-110	
Nitrogen, NO2 plus NO3	mg/L	0.24	2	2.6	118	90-110	M1

MATRIX SPIKE SAMPLE: 1506417

Parameter	Units	60186183016 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	ND	1.6	1.8	112	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.40	99	90-110	
Nitrogen, NO2 plus NO3	mg/L	ND	2	2.2	109	90-110	

SAMPLE DUPLICATE: 1506418

Parameter	Units	60186183019 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.19	0.17	13	20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	0.19	0.17	13	20	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: WETA/32625 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014

METHOD BLANK: 1511703 Matrix: Water
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	02/03/15 18:34	

METHOD BLANK: 1516117 Matrix: Water
Associated Lab Samples: 60186183014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	02/04/15 08:58	

LABORATORY CONTROL SAMPLE: 1511704

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.1	101	80-120	

LABORATORY CONTROL SAMPLE: 1516118

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	4.9	99	80-120	

MATRIX SPIKE SAMPLE: 1515112

Parameter	Units	60186183006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	0.58J	5	7.5	138	80-120	M1

SAMPLE DUPLICATE: 1515113

Parameter	Units	60186183007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	0.63J	0.61J		25	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: WETA/32752 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60186183015, 60186183016, 60186183017, 60186183018, 60186183019, 60186183021, 60186183022, 60186183023, 60186183024, 60186183027, 60186183028, 60186183031

METHOD BLANK: 1516267 Matrix: Water
Associated Lab Samples: 60186183015, 60186183016, 60186183017, 60186183018, 60186183019, 60186183021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	02/04/15 17:59	

METHOD BLANK: 1516754 Matrix: Water
Associated Lab Samples: 60186183022, 60186183023, 60186183024, 60186183027, 60186183028, 60186183031

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	02/05/15 18:03	

LABORATORY CONTROL SAMPLE: 1516268

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.1	102	80-120	

LABORATORY CONTROL SAMPLE: 1516755

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	4.9	99	80-120	

MATRIX SPIKE SAMPLE: 1516270

Parameter	Units	60186183016 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	0.61J	5	5.2	93	80-120	

SAMPLE DUPLICATE: 1516269

Parameter	Units	60186183015 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	0.96J	0.53J		25	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: WETA/7174 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017, 60186183018, 60186183019, 60186183021, 60186183022, 60186183023, 60186183024

METHOD BLANK: 119332 Matrix: Water
Associated Lab Samples: 60186183001, 60186183002, 60186183003, 60186183004, 60186183005, 60186183006, 60186183007, 60186183009, 60186183010, 60186183013, 60186183014, 60186183015, 60186183016, 60186183017, 60186183018, 60186183019, 60186183021, 60186183022, 60186183023, 60186183024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	01/30/15 13:02	

LABORATORY CONTROL SAMPLE: 119333

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.6	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 119334 119335

Parameter	Units	60186183001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphate as P04	mg/L	0.032	1.5	1.5	1.7	1.6	107	104	80-120	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 119338 119339

Parameter	Units	60186183016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphate as P04	mg/L	0.084	1.5	1.5	1.7	1.6	104	97	80-120	6	20	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

QC Batch: WETA/7175 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60186183027, 60186183028, 60186183031

METHOD BLANK: 119341 Matrix: Water
Associated Lab Samples: 60186183027, 60186183028, 60186183031

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	01/30/15 13:10	

LABORATORY CONTROL SAMPLE: 119342

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.5	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 119343 119344

Parameter	Units	7522640003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphate as P04	mg/L	9.4	15.3	15.3	20.6	21.6	73	80	80-120	5	20	M1

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QUALIFIERS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

PASI-D	Pace Analytical Services - Dallas
PASI-K	Pace Analytical Services - Kansas City

BATCH QUALIFIERS

Batch: MSV/67014

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/67017

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/67027

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/67028

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1e	Field pH
H3	Sample was received or analysis requested beyond the recognized method holding time.
H6	Analysis initiated outside of the 15 minute EPA recommended holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186183001	ITMW-1-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183002	MW-32-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183003	ITMW-21-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183004	ITMW-16-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183005	MW-66-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183006	ITMW-14-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183007	MW-87-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183009	IW-77-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183010	IW-73-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183013	IW-74-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183014	IW-76-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183015	MW-84-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183016	MW-28-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183017	ITMW-7-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183018	MW-41-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183019	MW-27-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183021	ITMW-13-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183022	RW-69-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183023	MW-71-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183024	MW-58-201501	EPA 8015 - Alcohol	GCSV/3384		
60186183027	ITMW-10-201501	EPA 8015 - Alcohol	GCSV/3389		
60186183028	MW-33-201501	EPA 8015 - Alcohol	GCSV/3389		
60186183031	MW-26-201501	EPA 8015 - Alcohol	GCSV/3389		
60186183001	ITMW-1-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186183002	MW-32-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186183003	ITMW-21-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186183004	ITMW-16-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186183005	MW-66-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186183006	ITMW-14-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186183007	MW-87-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186183009	IW-77-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186183010	IW-73-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186183013	IW-74-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186183014	IW-76-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186183015	MW-84-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186183016	MW-28-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186183017	ITMW-7-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186183018	MW-41-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186183019	MW-27-201501	EPA 3010	MPRP/30489	EPA 6010	ICP/22783
60186183021	ITMW-13-201501	EPA 3010	MPRP/30501	EPA 6010	ICP/22791
60186183022	RW-69-201501	EPA 3010	MPRP/30501	EPA 6010	ICP/22791
60186183023	MW-71-201501	EPA 3010	MPRP/30501	EPA 6010	ICP/22791
60186183024	MW-58-201501	EPA 3010	MPRP/30501	EPA 6010	ICP/22791
60186183027	ITMW-10-201501	EPA 3010	MPRP/30501	EPA 6010	ICP/22791
60186183028	MW-33-201501	EPA 3010	MPRP/30501	EPA 6010	ICP/22791
60186183031	MW-26-201501	EPA 3010	MPRP/30501	EPA 6010	ICP/22791
60186183001	ITMW-1-201501	EPA 5030B/8260	MSV/67015		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186183003	ITMW-21-201501	EPA 5030B/8260	MSV/67015		
60186183004	ITMW-16-201501	EPA 5030B/8260	MSV/67015		
60186183005	MW-66-201501	EPA 5030B/8260	MSV/67015		
60186183006	ITMW-14-201501	EPA 5030B/8260	MSV/67015		
60186183007	MW-87-201501	EPA 5030B/8260	MSV/67015		
60186183007	MW-87-201501	EPA 5030B/8260	MSV/67027		
60186183008	TB-15-201501	EPA 5030B/8260	MSV/67015		
60186183010	IW-73-201501	EPA 5030B/8260	MSV/67015		
60186183011	TB-16-201501	EPA 5030B/8260	MSV/67015		
60186183012	DUP-01-201501	EPA 5030B/8260	MSV/67015		
60186183013	IW-74-201501	EPA 5030B/8260	MSV/67015		
60186183016	MW-28-201501	EPA 5030B/8260	MSV/67015		
60186183017	ITMW-7-201501	EPA 5030B/8260	MSV/67015		
60186183018	MW-41-201501	EPA 5030B/8260	MSV/67015		
60186183018	MW-41-201501	EPA 5030B/8260	MSV/67027		
60186183019	MW-27-201501	EPA 5030B/8260	MSV/67017		
60186183020	TB-18-201501	EPA 5030B/8260	MSV/67017		
60186183021	ITMW-13-201501	EPA 5030B/8260	MSV/67017		
60186183022	RW-69-201501	EPA 5030B/8260	MSV/67017		
60186183023	MW-71-201501	EPA 5030B/8260	MSV/67017		
60186183024	MW-58-201501	EPA 5030B/8260	MSV/67017		
60186183024	MW-58-201501	EPA 5030B/8260	MSV/67027		
60186183025	TB-05-201501	EPA 5030B/8260	MSV/67017		
60186183026	EB-03-201501	EPA 5030B/8260	MSV/67017		
60186183027	ITMW-10-201501	EPA 5030B/8260	MSV/67017		
60186183027	ITMW-10-201501	EPA 5030B/8260	MSV/67027		
60186183028	MW-33-201501	EPA 5030B/8260	MSV/67017		
60186183028	MW-33-201501	EPA 5030B/8260	MSV/67027		
60186183029	TB-19-201501	EPA 5030B/8260	MSV/67017		
60186183030	EB-06-201501	EPA 5030B/8260	MSV/67017		
60186183031	MW-26-201501	EPA 5030B/8260	MSV/67017		
60186183032	TB-17-201501	EPA 5030B/8260	MSV/67017		
60186183002	MW-32-201501	EPA 5030B/8260	MSV/67014		
60186183009	IW-77-201501	EPA 5030B/8260	MSV/67014		
60186183009	IW-77-201501	EPA 5030B/8260	MSV/67028		
60186183014	IW-76-201501	EPA 5030B/8260	MSV/67014		
60186183014	IW-76-201501	EPA 5030B/8260	MSV/67028		
60186183015	MW-84-201501	EPA 5030B/8260	MSV/67014		
60186183001	ITMW-1-201501	SM 2320B	WET/52570		
60186183002	MW-32-201501	SM 2320B	WET/52570		
60186183003	ITMW-21-201501	SM 2320B	WET/52570		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186183004	ITMW-16-201501	SM 2320B	WET/52570		
60186183005	MW-66-201501	SM 2320B	WET/52570		
60186183006	ITMW-14-201501	SM 2320B	WET/52570		
60186183007	MW-87-201501	SM 2320B	WET/52570		
60186183009	IW-77-201501	SM 2320B	WET/52570		
60186183010	IW-73-201501	SM 2320B	WET/52570		
60186183013	IW-74-201501	SM 2320B	WET/52570		
60186183014	IW-76-201501	SM 2320B	WET/52570		
60186183015	MW-84-201501	SM 2320B	WET/52570		
60186183016	MW-28-201501	SM 2320B	WET/52570		
60186183017	ITMW-7-201501	SM 2320B	WET/52570		
60186183018	MW-41-201501	SM 2320B	WET/52576		
60186183019	MW-27-201501	SM 2320B	WET/52576		
60186183021	ITMW-13-201501	SM 2320B	WET/52576		
60186183022	RW-69-201501	SM 2320B	WET/52576		
60186183023	MW-71-201501	SM 2320B	WET/52576		
60186183024	MW-58-201501	SM 2320B	WET/52576		
60186183027	ITMW-10-201501	SM 2320B	WET/52576		
60186183028	MW-33-201501	SM 2320B	WET/52576		
60186183031	MW-26-201501	SM 2320B	WET/52576		
60186183001	ITMW-1-201501	SM 3500-Fe B#4	WET/52696		
60186183002	MW-32-201501	SM 3500-Fe B#4	WET/52696		
60186183003	ITMW-21-201501	SM 3500-Fe B#4	WET/52696		
60186183004	ITMW-16-201501	SM 3500-Fe B#4	WET/52696		
60186183005	MW-66-201501	SM 3500-Fe B#4	WET/52696		
60186183006	ITMW-14-201501	SM 3500-Fe B#4	WET/52696		
60186183007	MW-87-201501	SM 3500-Fe B#4	WET/52696		
60186183009	IW-77-201501	SM 3500-Fe B#4	WET/52696		
60186183010	IW-73-201501	SM 3500-Fe B#4	WET/52696		
60186183013	IW-74-201501	SM 3500-Fe B#4	WET/52696		
60186183014	IW-76-201501	SM 3500-Fe B#4	WET/52696		
60186183015	MW-84-201501	SM 3500-Fe B#4	WET/52696		
60186183016	MW-28-201501	SM 3500-Fe B#4	WET/52703		
60186183017	ITMW-7-201501	SM 3500-Fe B#4	WET/52703		
60186183018	MW-41-201501	SM 3500-Fe B#4	WET/52703		
60186183019	MW-27-201501	SM 3500-Fe B#4	WET/52703		
60186183021	ITMW-13-201501	SM 3500-Fe B#4	WET/52703		
60186183022	RW-69-201501	SM 3500-Fe B#4	WET/52732		
60186183023	MW-71-201501	SM 3500-Fe B#4	WET/52703		
60186183024	MW-58-201501	SM 3500-Fe B#4	WET/52703		
60186183027	ITMW-10-201501	SM 3500-Fe B#4	WET/52703		
60186183028	MW-33-201501	SM 3500-Fe B#4	WET/52703		
60186183031	MW-26-201501	SM 3500-Fe B#4	WET/52703		
60186183001	ITMW-1-201501	SM 4500-H+B	WET/52701		
60186183002	MW-32-201501	SM 4500-H+B	WET/52700		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186183003	ITMW-21-201501	SM 4500-H+B	WET/52700		
60186183004	ITMW-16-201501	SM 4500-H+B	WET/52700		
60186183005	MW-66-201501	SM 4500-H+B	WET/52700		
60186183006	ITMW-14-201501	SM 4500-H+B	WET/52700		
60186183007	MW-87-201501	SM 4500-H+B	WET/52700		
60186183009	IW-77-201501	SM 4500-H+B	WET/52700		
60186183010	IW-73-201501	SM 4500-H+B	WET/52700		
60186183013	IW-74-201501	SM 4500-H+B	WET/52700		
60186183014	IW-76-201501	SM 4500-H+B	WET/52700		
60186183015	MW-84-201501	SM 4500-H+B	WET/52701		
60186183016	MW-28-201501	SM 4500-H+B	WET/52700		
60186183017	ITMW-7-201501	SM 4500-H+B	WET/52700		
60186183018	MW-41-201501	SM 4500-H+B	WET/52700		
60186183019	MW-27-201501	SM 4500-H+B	WET/52700		
60186183021	ITMW-13-201501	SM 4500-H+B	WET/52701		
60186183022	RW-69-201501	SM 4500-H+B	WET/52702		
60186183023	MW-71-201501	SM 4500-H+B	WET/52700		
60186183024	MW-58-201501	SM 4500-H+B	WET/52700		
60186183027	ITMW-10-201501	SM 4500-H+B	WET/52701		
60186183028	MW-33-201501	SM 4500-H+B	WET/52701		
60186183031	MW-26-201501	SM 4500-H+B	WET/52700		
60186183001	ITMW-1-201501	SM 4500-S-2 D	WET/52537		
60186183002	MW-32-201501	SM 4500-S-2 D	WET/52537		
60186183003	ITMW-21-201501	SM 4500-S-2 D	WET/52537		
60186183004	ITMW-16-201501	SM 4500-S-2 D	WET/52537		
60186183005	MW-66-201501	SM 4500-S-2 D	WET/52537		
60186183006	ITMW-14-201501	SM 4500-S-2 D	WET/52537		
60186183007	MW-87-201501	SM 4500-S-2 D	WET/52537		
60186183009	IW-77-201501	SM 4500-S-2 D	WET/52537		
60186183010	IW-73-201501	SM 4500-S-2 D	WET/52537		
60186183013	IW-74-201501	SM 4500-S-2 D	WET/52537		
60186183014	IW-76-201501	SM 4500-S-2 D	WET/52537		
60186183015	MW-84-201501	SM 4500-S-2 D	WET/52537		
60186183016	MW-28-201501	SM 4500-S-2 D	WET/52537		
60186183017	ITMW-7-201501	SM 4500-S-2 D	WET/52537		
60186183018	MW-41-201501	SM 4500-S-2 D	WET/52537		
60186183019	MW-27-201501	SM 4500-S-2 D	WET/52537		
60186183021	ITMW-13-201501	SM 4500-S-2 D	WET/52537		
60186183022	RW-69-201501	SM 4500-S-2 D	WET/52538		
60186183023	MW-71-201501	SM 4500-S-2 D	WET/52538		
60186183024	MW-58-201501	SM 4500-S-2 D	WET/52538		
60186183027	ITMW-10-201501	SM 4500-S-2 D	WET/52538		
60186183028	MW-33-201501	SM 4500-S-2 D	WET/52538		
60186183031	MW-26-201501	SM 4500-S-2 D	WET/52538		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186183001	ITMW-1-201501	EPA 300.0	WETA/32610		
60186183002	MW-32-201501	EPA 300.0	WETA/32610		
60186183003	ITMW-21-201501	EPA 300.0	WETA/32610		
60186183004	ITMW-16-201501	EPA 300.0	WETA/32610		
60186183005	MW-66-201501	EPA 300.0	WETA/32610		
60186183006	ITMW-14-201501	EPA 300.0	WETA/32610		
60186183007	MW-87-201501	EPA 300.0	WETA/32610		
60186183009	IW-77-201501	EPA 300.0	WETA/32610		
60186183010	IW-73-201501	EPA 300.0	WETA/32610		
60186183013	IW-74-201501	EPA 300.0	WETA/32610		
60186183014	IW-76-201501	EPA 300.0	WETA/32610		
60186183015	MW-84-201501	EPA 300.0	WETA/32610		
60186183016	MW-28-201501	EPA 300.0	WETA/32610		
60186183017	ITMW-7-201501	EPA 300.0	WETA/32610		
60186183018	MW-41-201501	EPA 300.0	WETA/32610		
60186183019	MW-27-201501	EPA 300.0	WETA/32610		
60186183021	ITMW-13-201501	EPA 300.0	WETA/32611		
60186183022	RW-69-201501	EPA 300.0	WETA/32611		
60186183023	MW-71-201501	EPA 300.0	WETA/32611		
60186183024	MW-58-201501	EPA 300.0	WETA/32611		
60186183027	ITMW-10-201501	EPA 300.0	WETA/32611		
60186183028	MW-33-201501	EPA 300.0	WETA/32611		
60186183031	MW-26-201501	EPA 300.0	WETA/32611		
60186183001	ITMW-1-201501	EPA 350.1	WETA/32588		
60186183002	MW-32-201501	EPA 350.1	WETA/32588		
60186183003	ITMW-21-201501	EPA 350.1	WETA/32588		
60186183004	ITMW-16-201501	EPA 350.1	WETA/32588		
60186183005	MW-66-201501	EPA 350.1	WETA/32588		
60186183006	ITMW-14-201501	EPA 350.1	WETA/32588		
60186183007	MW-87-201501	EPA 350.1	WETA/32588		
60186183009	IW-77-201501	EPA 350.1	WETA/32588		
60186183010	IW-73-201501	EPA 350.1	WETA/32588		
60186183013	IW-74-201501	EPA 350.1	WETA/32588		
60186183014	IW-76-201501	EPA 350.1	WETA/32588		
60186183015	MW-84-201501	EPA 350.1	WETA/32588		
60186183016	MW-28-201501	EPA 350.1	WETA/32588		
60186183017	ITMW-7-201501	EPA 350.1	WETA/32588		
60186183018	MW-41-201501	EPA 350.1	WETA/32588		
60186183019	MW-27-201501	EPA 350.1	WETA/32589		
60186183021	ITMW-13-201501	EPA 350.1	WETA/32589		
60186183022	RW-69-201501	EPA 350.1	WETA/32589		
60186183023	MW-71-201501	EPA 350.1	WETA/32589		
60186183024	MW-58-201501	EPA 350.1	WETA/32589		
60186183027	ITMW-10-201501	EPA 350.1	WETA/32589		
60186183028	MW-33-201501	EPA 350.1	WETA/32589		
60186183031	MW-26-201501	EPA 350.1	WETA/32589		
60186183001	ITMW-1-201501	EPA 353.2	WETA/32536		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186183002	MW-32-201501	EPA 353.2	WETA/32537		
60186183003	ITMW-21-201501	EPA 353.2	WETA/32537		
60186183004	ITMW-16-201501	EPA 353.2	WETA/32537		
60186183005	MW-66-201501	EPA 353.2	WETA/32537		
60186183006	ITMW-14-201501	EPA 353.2	WETA/32537		
60186183007	MW-87-201501	EPA 353.2	WETA/32537		
60186183009	IW-77-201501	EPA 353.2	WETA/32537		
60186183010	IW-73-201501	EPA 353.2	WETA/32537		
60186183013	IW-74-201501	EPA 353.2	WETA/32537		
60186183014	IW-76-201501	EPA 353.2	WETA/32537		
60186183015	MW-84-201501	EPA 353.2	WETA/32537		
60186183016	MW-28-201501	EPA 353.2	WETA/32537		
60186183017	ITMW-7-201501	EPA 353.2	WETA/32537		
60186183018	MW-41-201501	EPA 353.2	WETA/32536		
60186183019	MW-27-201501	EPA 353.2	WETA/32537		
60186183021	ITMW-13-201501	EPA 353.2	WETA/32536		
60186183022	RW-69-201501	EPA 353.2	WETA/32536		
60186183023	MW-71-201501	EPA 353.2	WETA/32536		
60186183024	MW-58-201501	EPA 353.2	WETA/32536		
60186183027	ITMW-10-201501	EPA 353.2	WETA/32536		
60186183028	MW-33-201501	EPA 353.2	WETA/32536		
60186183031	MW-26-201501	EPA 353.2	WETA/32536		
60186183001	ITMW-1-201501	SM 4500-CO2 D	WETA/32669		
60186183002	MW-32-201501	SM 4500-CO2 D	WETA/32669		
60186183003	ITMW-21-201501	SM 4500-CO2 D	WETA/32669		
60186183004	ITMW-16-201501	SM 4500-CO2 D	WETA/32669		
60186183005	MW-66-201501	SM 4500-CO2 D	WETA/32669		
60186183006	ITMW-14-201501	SM 4500-CO2 D	WETA/32669		
60186183007	MW-87-201501	SM 4500-CO2 D	WETA/32669		
60186183009	IW-77-201501	SM 4500-CO2 D	WETA/32669		
60186183010	IW-73-201501	SM 4500-CO2 D	WETA/32669		
60186183013	IW-74-201501	SM 4500-CO2 D	WETA/32669		
60186183014	IW-76-201501	SM 4500-CO2 D	WETA/32669		
60186183015	MW-84-201501	SM 4500-CO2 D	WETA/32669		
60186183016	MW-28-201501	SM 4500-CO2 D	WETA/32669		
60186183017	ITMW-7-201501	SM 4500-CO2 D	WETA/32669		
60186183018	MW-41-201501	SM 4500-CO2 D	WETA/32669		
60186183019	MW-27-201501	SM 4500-CO2 D	WETA/32669		
60186183021	ITMW-13-201501	SM 4500-CO2 D	WETA/32669		
60186183022	RW-69-201501	SM 4500-CO2 D	WETA/32727		
60186183023	MW-71-201501	SM 4500-CO2 D	WETA/32669		
60186183024	MW-58-201501	SM 4500-CO2 D	WETA/32669		
60186183027	ITMW-10-201501	SM 4500-CO2 D	WETA/32673		
60186183028	MW-33-201501	SM 4500-CO2 D	WETA/32673		
60186183031	MW-26-201501	SM 4500-CO2 D	WETA/32673		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186183

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186183001	ITMW-1-201501	SM 5310C	WETA/32625		
60186183002	MW-32-201501	SM 5310C	WETA/32625		
60186183003	ITMW-21-201501	SM 5310C	WETA/32625		
60186183004	ITMW-16-201501	SM 5310C	WETA/32625		
60186183005	MW-66-201501	SM 5310C	WETA/32625		
60186183006	ITMW-14-201501	SM 5310C	WETA/32625		
60186183007	MW-87-201501	SM 5310C	WETA/32625		
60186183009	IW-77-201501	SM 5310C	WETA/32625		
60186183010	IW-73-201501	SM 5310C	WETA/32625		
60186183013	IW-74-201501	SM 5310C	WETA/32625		
60186183014	IW-76-201501	SM 5310C	WETA/32625		
60186183015	MW-84-201501	SM 5310C	WETA/32752		
60186183016	MW-28-201501	SM 5310C	WETA/32752		
60186183017	ITMW-7-201501	SM 5310C	WETA/32752		
60186183018	MW-41-201501	SM 5310C	WETA/32752		
60186183019	MW-27-201501	SM 5310C	WETA/32752		
60186183021	ITMW-13-201501	SM 5310C	WETA/32752		
60186183022	RW-69-201501	SM 5310C	WETA/32752		
60186183023	MW-71-201501	SM 5310C	WETA/32752		
60186183024	MW-58-201501	SM 5310C	WETA/32752		
60186183027	ITMW-10-201501	SM 5310C	WETA/32752		
60186183028	MW-33-201501	SM 5310C	WETA/32752		
60186183031	MW-26-201501	SM 5310C	WETA/32752		
60186183001	ITMW-1-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183002	MW-32-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183003	ITMW-21-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183004	ITMW-16-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183005	MW-66-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183006	ITMW-14-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183007	MW-87-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183009	IW-77-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183010	IW-73-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183013	IW-74-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183014	IW-76-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183015	MW-84-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183016	MW-28-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183017	ITMW-7-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183018	MW-41-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183019	MW-27-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183021	ITMW-13-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183022	RW-69-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183023	MW-71-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183024	MW-58-201501	SM4500-P B	WETA/7174	SM 4500-P E	WETA/7176
60186183027	ITMW-10-201501	SM4500-P B	WETA/7175	SM 4500-P E	WETA/7177
60186183028	MW-33-201501	SM4500-P B	WETA/7175	SM 4500-P E	WETA/7177
60186183031	MW-26-201501	SM4500-P B	WETA/7175	SM 4500-P E	WETA/7177

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Sample Condition Upon Receipt

WO# : 60186183

60186183

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☑ VIA

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☐ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☐ None ☐ Other ☑ zip/c

Thermometer Used: T-239 / T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 3.9/2.5/2.1/0.1/2.9/0.3

Temperature should be above freezing to 6°C

Date and initials of person examining contents: pv/15/15

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☑Yes ☐No ☐N/A	6. Ferr Nov NO3 pH
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	7.
Sufficient volume:	☑Yes ☐No ☐N/A	8. Received with TB
Correct containers used:	☑Yes ☐No ☐N/A	TB19 - MW33, MW-26, ITMW-10, EB-06
Pace containers used:	☑Yes ☐No ☐N/A	9. TB15 - ITMW-1, MW32, ITMW-21, ITMW-16
Containers intact:	☑Yes ☐No ☐N/A	10. TB16 - IW-77, MW-87, ITMW-14, MW-66
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11. TB-05 - MW-71, ITMW-13, RW-69, MW-58, EB-03
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	12. TB-17 - MW-84, IW-76, IW-74, IW-73, DUP01
Sample labels match COC:	☑Yes ☐No ☐N/A	TB18 - MW-41, MW-28, ITMW-7, MW-27
Includes date/time/ID/analyses Matrix: WT		13. Did not receive Ascorbic volume for IW-73.
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☑Yes ☐No ☐N/A	
Pace Trip Blank lot # (if purchased): 120814-3		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution:
TB-17 received but not listed on COC.
Analyze MW-32 for all tests per Wendy Stonestreet - MW 1.15.15

Project Manager Review: MW Date: 1/15/15

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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.

Page: 1 of 3

Section A Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH + Zn	$Na_2S_2O_3$	Methanol	Other Ascorbic	Analysis Test Y/N	8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	ITMW-1-201501	WT	G			1/14/15	1520		11	X	X	X	X	X			U		X	X	X	X	X	X	X	X	X	X	N	30DAH
2	MW-32-201501	WT	G			1/14/15	1450		11	X	X	X	X	X			X														7day hold 30THR
3	ITMW-21-201501	WT	G			1/14/15	1350		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	N	30DAH
4	ITMW-16-201501	WT	G			1/14/15	1235		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	N	
5	MW-66-201501	WT	G			1/14/15	1020		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	N	
6	ITMW-14-201501	WT	G			1/14/15	1435		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	N	
7	MW-37-201501	WT	G			1/14/15	1573		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	N	
8	TB-15-201501	WT	G			1/14/15	—		2				X						X												2DAH
9	IW-77-201501	WT	G			1/14/15	1505		11	X	X	X		X				X	X	X	X	X	X	X	X	X	X	X	X	N	7day hold 30THR
10	IW-73-201501	WT	G			1/14/15	1040		11	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	X	N	30DAH
11	TB-16-201501	WT	G			1/14/15	—		2				X						X												2DAH
12	DUP-01-201501	WT	G			1/14/15	1210		3				X						X												3DAH

1600186183

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Level IV data package required	Victoria Sieglen / ENVIRON	1/14/15	1800	[signature]	1/15/15	0820

SAMPLE CONDITIONS

Temp °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
3.9	Y	Y	Y
2.5			
2.1			
0.1			
2.5 0.2			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Sieglen

SIGNATURE of SAMPLER: Victoria Sieglen DATE Signed (MM/DD/YY): 1/14/15

*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.

Pace Analytical
www.pacelabs.com

Section A Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tamara Gleason
	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	Tamara Gleason
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH + Zn	$Na_2S_2O_3$	Methanol	Other Ascorbic Acid	Analysis Test Y/N	8260 client specific list VOCs	Alkalinity	TDL	Chloride, Sulfate	EDB (Chlorinated)	EDC (Ethylene Dichloride)	Ferrous Iron	Ammonia	Nitrate - Nitrite	Total Phosphate	Sulfide	CO2 Calc (Alk pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	IW-74-201501	WT	G			1/14/15	1210		11	X	X	X	X	X		3D/6H		X	X	X	X	X	X	X	X	X	X	N	
2	IW-76-201501	WT	G			1/14/15	1225		11	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	N	3D/6H
3	MW-84-201501	WT	G			1/14/15	1530		11	X	X	X		X			X	X	X	X	X	X	X	X	X	X	X	N	7 day Hold 3 OTHR
4	MW-28-201501	WT	G			1/14/15	0950		14	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	N	7 day Hold
5	IMW-7-201501	WT	G			1/14/15	1155		11	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	N	MS/MSD 6D/6H
6	MW-41-201501	WT	G			1/14/15	0955		11	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	N	3D/6H
7	MW-21-201501	WT	G			1/14/15	1205		11	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	N	
8	TB-18-201501	WT	G			1/14/15	—		2					X				X										N	2D/6H
9	IMW-13F-201501	WT	G			1/14/15	1520		11	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	N	
10	RW-09-201501	WT	G			1/14/15	1145		11	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	N	
11	MW-71-201501	WT	G			1/14/15	0950		11	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	N	
12	MW-58-201501	WT	G			1/14/15	0935		11	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	Victoria Siegler / ENVIRON	1/14/15	1800		1/15/15	0620

SAMPLE CONDITIONS

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
3.9	Y	Y	Y
2.5			
2.1			
0.1			
2.9			
0.3			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Siegler

SIGNATURE of SAMPLER: Victoria Siegler

DATE Signed (MM/DD/YY): 1/14/15

*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.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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Section A — Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B — Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tamara Gleason
	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	

Section C — Invoice Information:

Attention:	Tamara Gleason
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Section D — Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH + Zn	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list: VOCs	Alkalinity	TOC	Chlorine, Sulfate	8015 Chlorinated	8010 Iron/Mn	Ferric, Iron calc	Ammonia	Nitrate-Nitrite	Total Phosphate	Sulfide	Con Calc (Alk, pH	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TB-05-201501	WT	-			1/14/15	—		2				X						X											N	2D69H
2	EB-05-201501	WT	G			1/14/15	1710		3				X						X											N	3D69H
~~3~~	~~ITMW-10-201501~~	~~WT~~	~~G~~				~~1700~~																								
4	ITMW-10-201501 (1BP3U 1AG3S 1BP3S)	WT	G	1BP3N-S		1BP3U-W	1647		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	N	3D69U 3D69H
5	MW-33-201501	WT	G			1/14/15	1700		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	N	
6	TB-19-201501	WT	G			1/14/15	—		2				X						X											N	2D69H
7	EB-06-201501	WT	G			1/14/15	1740		3				X						X											N	
8	MW-26-201501	WT	G			1/14/15	0908		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	N	2D69H-TB-17-201501
9																															
10																															
11																															
12																															

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	Victoria Stegton ENVIRON	1/14/15	1800	[signature] MASI	1/15/15	0620

SAMPLE CONDITIONS

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
3.9	X	Y	X
2.5			
2.1			
0.1			
2.9			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Stegton

SIGNATURE of SAMPLER: Victoria Stegton — DATE Signed (MM/DD/YY): 1/14/15

*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

WO# : 7522761

7522761

Pace Analytical®
www.pacelabs.com

Workorder: *60186183* **Workorder Name:** *Fort Smith, AR* **Owner Received Date:** *1/15/2015* **Results Requested By:** *1/30/2015*

Report To	Subcontract To
Mary Jane Walls *Pace Analytical Services, Inc.* *9608 Loiret Blvd.* *Lenexa, KS 66219* *Phone (913)599-5665* *Fax (913)599-1759*	*Pace Analytical Dallas* *400 West Bethany Drive* *Suite 190* *Allen, TX 75013* *Phone (972)727-1123*

						Preserved Containers						Requested Analysis												
Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	H2SO4	none					Total Phosphate	8015 Chloroethanol											LAB USE ONLY
1	ITMW-1-201501	PS	1/14/2015 15:20	60186183001	Water	1	3					X	X											001
2	MW-32-201501	PS	1/14/2015 14.50	60186183002	Water	1	3					X	X											002
3	ITMW-21-201501	PS	01/14/15 13:50	60186183003	Water	1	3					X	X											003
4	ITMW-16-201501	PS	01/14/15 12:35	60186183004	Water	1	3					X	X											004
5	MW-66-201501	PS	01/14/15 10:20	60186183005	Water	1	3					X	X											005
6	ITMW-14-201501	PS	01/14/15 14:35	60186183006	Water	1	3					X	X											006
7	MW-87-201501	PS	01/14/15 15:13	60186183007	Water	1	3					X	X											007
8	IW-77-201501	PS	01/14/15 15:05	60186183009	Water	1	3					X	X											008
9	IW-73-201501	PS	01/14/15 10:40	60186183010	Water	1	3					X	X											009
10	IW-74-201501	PS	01/14/15 12:10	60186183013	Water	1	3					X	X											010
11	IW-76-201501	PS	01/14/15 12:25	60186183014	Water	1	3					X	X											011
12	MW-84-201501	PS	01/14/15 15:30	60186183015	Water	1	3					X	X											012
13	MW-28-201501	RQS	01/14/15 09:50	60186183016	Water	1	3					X	X											013
14	ITMW-7-201501	PS	01/14/15 11:55	60186183017	Water	1	3					X	X											014
15	MW-41-201501	PS	01/14/15 09:55	60186183018	Water	1	3					X	X											015
16	MW-27-201501	PS	01/14/15 12:05	60186183019	Water	1	3					X	X											016
17	ITMW-13-201501	PS	01/14/15 15:20	60186183021	Water	1	3					X	X											017
18	RW-69-201501	PS	01/14/15 11:45	60186183022	Water	1	3					X	X											018
19	MW-71-201501	PS	01/14/15 09:50	60186183023	Water	1	3					X	X											019

Chain of Custody

Pace Analytical®
www.pacelabs.com

Workorder: *60186183* **Workorder Name:** *Fort Smith, AR* **Owner Received Date:** *1/15/2015* **Results Requested By:** *1/30/2015*

Report To	Subcontract To
Mary Jane Walls *Pace Analytical Services, Inc.* *9608 Loiret Blvd.* *Lenexa, KS 66219* *Phone (913)599-5665* *Fax (913)599-1759*	*Pace Analytical Dallas* *400 West Bethany Drive* *Suite 190* *Allen, TX 75013* *Phone (972)727-1123*

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: H2SO4	Preserved Containers: none	Requested Analysis: Total Phosphate	Requested Analysis: 8015 Chloroethanol	LAB USE ONLY
20	*MW-58-201501*	*PS*	*01/14/15 09:35*	*60186183024*	*Water*	*1*	*3*	X	X	020
21	*ITMW-10-201501*	*PS*	*01/14/15 16:47*	*60186183027*	*Water*	*1*	*3*	X	X	021
22	*MW-33-201501*	*PS*	*01/14/15 17:00*	*60186183028*	*Water*	*1*	*3*	X	X	022
23	*MW-26-201501*	*PS*	*01/14/15 09:08*	*60186183031*	*Water*	*1*	*3*	X	X	023
24										

WO# 75227761

Transfers	Released By	Date/Time	Received By	Date/Time
1			Katy Wiemann Pace	1/15/15 0855
2				
3				

Comments

Cooler Temperature on Receipt 0.2 °C IR#1 **Custody Seal** (Y) or N **Received on Ice** (Y) or N **Samples Intact** (Y) or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*
This chain of custody is considered complete as is since this information is available in the owner laboratory.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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Section A Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH + ZN	$Na_2S_2O_3$	Methanol	Other Ascorbic	Analysis Test Y/N	8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	ITMW-1-20150[illegible]	WT	G	[illegible]	[illegible]	1/14/15	1520		11	X	X	X	X	X		3Dbg	U		X	X	X	X	X	X	X	X	X	X	N	3D/14H
2	MW-32-20150[illegible]	WT	G			1/14/15	1450		11	X	X	X	X	X			X													7day hold 30THR
3	ITMW-21-20150[illegible]	WT	G			1/14/15	1350		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	N	3D/6H
4	ITMW-16-20150[illegible]	WT	G			1/14/15	1235		11	X	X	X	X	X					X	X	X	X	Y	X	X	Y	X	X	N	
5	MW-166-20150[illegible]	WT	G			1/14/15	1020		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	N	
6	ITMW-14-20150[illegible]	WT	G			1/14/15	1435		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	N	
7	MW-37-20150[illegible]	WT	G			1/14/15	1573		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	N	2D/4H
8	TB-15-20150[illegible]	WT	G			1/14/15	—		2				X						X											2D/4H
9	IW-77-20150[illegible]	WT	G			1/14/15	1505		11	X	X	X		X			X		X	X	X	X	X	X	X	X	X	X	N	7day hold 30THR
10	IW-73-20150[illegible]	WT	G			1/14/15	1040		11	X	X	X	X	X			X		X	X	X	X	X	Y	X	X	X	X	N	3D/6H
11	TB-16-20150[illegible]	WT	G			1/14/15	—		2				X						X											2D/4H
12	DUP-01-20150[illegible]	WT	G			1/14/15	1210		3				X						X											3D/4H

N522761
L01861853

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Level IV data package required	Victoria Sington/ENVIRON	1/14/15	1800	[signature]	1/15/15	0820
	[signature]	1/14/15	1800	Kathy Weiss/Pace Mtns	0855	0.2°C

SAMPLE CONDITIONS

Temp (°C)	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
3.9	Y	Y	Y
2.5			
2.1			
0.1			
2.4			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Sington

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 1/14/15

*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.

Pace Analytical
www.pacelabs.com

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Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tamara Gleason
	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	Tamara Gleason
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH + Zn	$Na_2S_2O_3$	Methanol	Other Ascorbic Acid	Y/N	Analysis Test: 8260 client specific list VOCs	Alkalinity	TDC	Chloride, Sulfate	EDB Listing/MM	Ferrous Iron calc	Ammonia	Nitrate - Nitrite	Total Phosphate	Sulfide	CO2 Calc (Alkalinity)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	IW-74-201501	WT	G		1815		1210		11	X	X	X	X	X		3D6aU		N	X	X	X	X	X	X	X	X	X	X	7522761
2	IW-76-201501	WT	G		1832	1/14/15	1225		11	X	X	X	X	X			X	N	X	X	X	X	X	X	X	X	X	X	3D6aU
3	MW-84-201501	WT	G			1/14/15	1530		11	X	X	X		X			X	N	X	X	X	X	X	X	X	X	X	X	7 day Hold 3 OTHR
4	MW-28-201501	WT	G			1/14/15	0950		14	X	X	X	X	X				N	X	X	X	X	X	X	X	X	X	X	7 day Hold ↓
5	TMW-7-201501	WT	G			1/14/15	1155		11	X	X	X	X	X				N	X	X	X	X	X	X	X	X	X	X	MS/MSD 6D6aU
6	MW-41-201501	WT	G			1/14/15	0955		11	X	X	X	X	X				N	X	X	X	X	X	X	X	X	X	X	3D6aU
7	MW-21-201501	WT	G			1/14/15	1205		11	X	X	X	X	X				N	X	X	X	X	X	X	X	X	X	X	
8	TB-18-201501	WT	G			1/14/15	—		2				X					N	X										2D6aU
9	TMW-13-201501	WT	G			1/14/15	1520		11	X	X	X	X	X				N	X	X	X	X	X	X	X	X	X	X	
10	RW-09-201501	WT	G			1/14/15	1145		11	X	X	X	X	X				N	X	X	X	X	X	X	X	X	X	X	
11	MW-71-201501	WT	G			1/14/15	0950		11	X	X	X	X	X				N	X	X	X	X	X	X	X	X	X	X	
12	MW-58-201501	WT	G			1/14/15	0935		11	X	X	X	X	X				N	X	X	X	X	X	X	X	X	X	X	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	Victoria Siegler / ENVIRON	1/14/15	1800		1/15/15	0620
		1/28/15	1800	Kathy Williamson 1/29/15	0855	0620

SAMPLE CONDITIONS

Temp In °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
3.9			
2.5			
2.1			
0.1			
2.9			
0.3			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Siegler

SIGNATURE of SAMPLER: Victoria Siegler DATE Signed (MM/DD/YY): 1/14/15

*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.

Pace Analytical
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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.

Section A Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tamara Gleason
	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	Tamara Gleason
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH + Zn	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list (VOCs)	Alkalinity	TOC	Chloride, Sulfate	8015 Ch-fuel	8010 Iron/Mn	Ferric Iron Calc	Ammonia	Nitrate-Nitrite	Total Phosphate	Sulfide	Ca Calc (Alk, pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																			N	N	N	N	N	N	N	N	N	N	N	75222761
1	TB-05-201501	WT	-			1/14/15	—		2				X							X									N	2D6H
2	EB-05-201501	WT	G			1/14/15	1710		3				X							X									N	3D6H
3	~~ITMW-10-201501~~	~~WT~~	~~G~~				~~1700~~																							
4	ITMW-10-201501 1BP3U 1AGBS 1BP3S	WT	G	1BP3N-5	1BP3SW	1/14/15	1647		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	N	3D6U 3D6H
5	MW-33-201501 ↓ ↓ ↓	WT	G	↓	↓	1/14/15	1700		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	N	↓ ↓
6	TB-19-201501	WT	G			1/14/15	—		2				X							X									N	2D6H
7	EB-06-201501	WT	G			1/14/15	1740		3				X							X									N	↓
8	MW-26-201501 ↓ ↓ ↓	WT	G	↓	↓	1/14/15	0905		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X		↓
9																																2D6H-TB-17-201501
10																																
11																																
12																																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Victoria Sieglen / ENVIRON	1/14/15	1800	[signature]	1/15/15	0620	3.9		X	X	X
	[signature]	1/29/15	1800	Kathy Weeks / Pace	1/29/15	0855	2.5				
							2.1				
							0.1				
							2.9				
							0.5				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Sieglen

SIGNATURE of SAMPLER: Victoria Sieglen DATE Signed (MM/DD/YY): 1/14/15

*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.

7522761

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Sample Condition Upon Receipt

WO#: 60186183

60186183

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☒ WIA

Tracking #: Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☐ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☐ None ☐ Other ☑ zip/c

Thermometer Used: T-239 / T-194 Type of Ice: (Wet) Blue None ☐ Samples received on ice, cooling process has begun.

Cooler Temperature: 3.9/2.5/2.1/0.1/2.9/0.3 (circle one)

Date and initials of person examining contents: PW 1/15/15

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☑Yes ☐No ☐N/A	6. Ferr Nov NO3 pH
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	7.
Sufficient volume:	☑Yes ☐No ☐N/A	8. received with TB
Correct containers used:	☑Yes ☐No ☐N/A	TB19 - MW33, MW-26, ITMW-10, EB-06
Pace containers used:	☑Yes ☐No ☐N/A	9. TB15 - ITMW-1, MW-32, ITMW-21, ITMW-16
Containers intact:	☑Yes ☐No ☐N/A	10. TB16 - IW-77, MW-87, ITMW-14, MW-66
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11. TB-05 - MW-71, ITMW-13, RW-69, MW-58, EB-03
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	12. TB-17 - MW-84, IW-76, IW-74, IW-77, DUP01
Sample labels match COC:	☑Yes ☐No ☐N/A	TB18 - MW-41, MW-28, ITMW-7, MW-27
Includes date/time/ID/analyses Matrix: WT		13. Did not receive Ascorbic volume for IW-73.
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	☐Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes ☐No ☐N/A	
Pace Trip Blank lot # (if purchased): 120814-3		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: Date/Time:

Comments/ Resolution:

TB-17 received but not listed on COC.

Analyze MW-32 for all tests per Wendy Stonesheet - MW 1/15/15

Project Manager Review: MW Date: 1/15/15

Pace Analytical Services - Dallas

Sample Container Count-

COC PAGE ____ of ____

COC ID# _____

Pace Project # 7522761

Sample Line Item	AG1S	AG1U	AG3S	BG1H	BG1S	BP1U	BP2N	BP2S	BP2U	BP20	SP5T	VG9H	VG9M	VG9T	VG9U	VG9W	WGFU	WGKU	BP3S		
1															3				1		
2															3				1		
3															3				1		
4															3				1		
5															3				1		
6															3				1		
7															3				1		
8															3				1		
9															3				1		
10															3				1		
11															3				1		
12															3				1		

Container Codes

DG9H	40mL HCL amber voa vial	AF	Air Filter	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	BP3A	250mL NaOh, Asc Acid plastic	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag
WGKU	8oz wide jar upreserved	SP5T	120mL Coliform Na Thiosulfate	SP5U	120mL Coliform unpreserved	GN	General unpreserved
Other	Other						

Pace Analytical Services - Dallas

Sample Container Count-

COC PAGE ____ of ____

COC ID# _____

Pace Project # 7522761

Sample Line Item	AG1S	AG1U	AG3S	BG1H	BG1S	BP1U	BP2N	BP2S	BP2U	BP20	SP5T	VG9H	VG9M	VG9T	VG9U	VG9W	WGFU	WGKU	BP3S		
1															3				1		
2															3				1		
3															3				1		
4															3				1		
5															3				1		
6															3				1		
7															3				1		
8															3				1		
9															3				1		
10															3				1		
11															3				1		
12																					

Container Codes

DG9H	40mL HCL amber voa vial	AF	Air Filter	BP1N	1 liter HNO3 plastic	DG9P	40mL TSP amber vial
AG1U	1liter unpreserved amber glass	AG1H	1 liter HCL amber glass	BP1S	1 liter H2SO4 plastic	DG9S	40mL H2SO4 amber vial
WGFU	4oz clear soil jar	AG1S	1 liter H2SO4 amber glass	BP1U	1 liter unpreserved plastic	DG9T	40mL Na Thio amber vial
R	terra core kit	AG1T	1 liter Na Thiosulfate amber gl	BP1Z	1 liter NaOH, Zn, Ac	DG9U	40mL unpreserved **amber** vial
BP2N	500mL HNO3 plastic	AG2N	500mL HNO3 amber glass	BP2A	500mL NaOH, Asc Acid plastic	I	Wipe/Swab
BP2U	500mL unpreserved plastic	AG2S	500mL H2SO4 amber glass	BP2O	500mL NaOH plastic	JGFU	4oz unpreserved amber wide
BP2S	500mL H2SO4 plastic	AG2U	500mL unpreserved amber gla	BP2Z	500mL NaOH, Zn Ac	U	Summa Can
BP3N	250mL HNO3 plastic	AG3U	250mL unpreserved amber gla	BP3A	250mL NaOh, Asc Acid plastic	VG9H	40mL HCL clear vial
BP3U	250mL unpreserved plastic	BG1H	1 liter HCL clear glass	BP3C	250mL NaOH plastic	VG9T	40mL Na Thio. clear vial
BP3S	250mL H2SO4 plastic	BG1S	1 liter H2SO4 clear glass	BP3Z	250mL NaOH, Zn Ac plastic	VG9U	40mL unpreserved **clear** vial
AG3S	250mL H2SO4 glass amber	BG1T	1 liter Na Thiosulfate clear gla	C	Air Cassettes	VSG	Headspace septa vial & HCL
AG1S	1 liter H2SO4 amber glass	BG1U	1 liter unpreserved glass	DG9B	40mL Na Bisulfate amber vial	WGFX	4oz wide jar w/hexane wipe
BP1U	1 liter unpreserved plastic	BP1A	1 liter NaOH, Asc Acid plastic	DG9M	40mL MeOH clear vial	ZPLC	Ziploc Bag
WGKU	8oz wide jar upreserved	SP5T	120mL Coliform Na Thiosulfate	SP5U	120mL Coliform unpreserved	GN	General unpreserved
Other	Other						

Pace Analytical

Sample Condition Upon Receipt
Dallas

Client Name: Pace KS Project Work order: 7522761

Courier: FedEX ☒ UPS ☐ USPS ☐ Client ☐ Courier ☐ LSO ☐ PACE ☐ Other:

Tracking#: 6262 7066 3098

Custody Seal on Cooler/Box: Yes ☒ No ☐ **Seals Intact:** Yes ☒ No ☐ NA ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☐ None ☐ Other ☒

Thermometer Used: IR-01 Type of Ice: Wet ☒ Blue ☐ None ☐ Sample Received on ice, cooling process has begun ☒

Cooler Temp: 0.2°C (Temp should be above freezing to 6°C)

Chain of Custody Present	Yes ☒ No ☐ NA ☐	1
Chain of Custody filled out	Yes ☒ No ☐ NA ☐	2
Chain of Custody relinquished	Yes ☒ No ☐ NA ☐	3
Sampler name & signature on COC	Yes ☒ No ☐ NA ☐	4
Sample received within HT	Yes ☒ No ☒ NA ☐ (1.28 MM)	5 8015 chloroethanol received out of hold
Short HT analyses (<72 hrs)	Yes ☐ No ☒ NA ☐	6
Rush TAT requested	Yes ☒ No ☐ NA ☐	7
Sufficient Volume received	Yes ☒ No ☐ NA ☐	8
Correct Container used Pace Container used	Yes ☒ No ☐ NA ☐ Yes ☒ No ☐ NA ☐	9
Container Intact	Yes ☒ No ☐ NA ☐	10
Unpreserved 5035A soil frozen within 48 hrs	Yes ☐ No ☐ NA ☒	11
Filtered volume received for Dissolved tests	Yes ☐ No ☐ NA ☒	12
Sample labels match COC Include date/time/ID/analyses Matrix: water	Yes ☒ No ☐ NA ☐	13
All containers needing preservation have been checked	Yes ☒ No ☐ NA ☐	14a. Lot# of pH strip: 0403001 pH checked Yes ☒ No ☐ pH<2 ☒ pH>9 ☐ pH>12 ☐ Lot# of Iodine strip: Lot# of Lead Acetate strip:
Do containers require preservation at the lab	Yes ☐ No ☒ NA ☐	14b. Preservation: / Lot#:
All containers needing preservation are found to be in Compliance with EPA recommendation **Exception**: VOA, coliform, O&G	Yes ☒ No ☐ NA ☐ Yes ☒ No ☐	14c.
Are soil samples (volatiles) received in	Bulk ☐ Terracore ☐ EnCore ☐ NA ☒	15.
Trip Blank present Trip Blank Custody Seals Intact Pace Trip Blank Lot# (if purchased):	Yes ☐ No ☒ NA ☐ Yes ☐ No ☐ NA ☒	16.
Headspace in VOA (>6mm)	Yes ☐ No ☒ NA ☐	17.
Project sampled in USDA Regulated Area:	Yes ☐ No ☐ NA ☒	18. List State

Client Notification/Resolution/Comments:

Person Contacted: Date:

Comments/Resolution:

Person Examining Contents: MM Date: 1-29-15

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

February 06, 2015

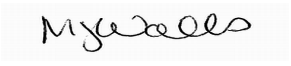
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on January 16, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

Dallas Certification IDs:
400 West Bethany Dr Suite 190, Allen, TX 75013
EPA# TX00074
Texas Certification #: T104704232-14-8
Kansas Certification #: E-10388
Arkansas Certification #: 88-0647
Oklahoma Certification #: 2014-055
Louisiana Certification #: 02007

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Lenexa, KS 66219
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SAMPLE SUMMARY

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186334001	ITMW-18-201501	Water	01/15/15 10:00	01/16/15 08:30
60186334002	MW-85-201501	Water	01/15/15 14:00	01/16/15 08:30
60186334003	MW-86-201501	Water	01/15/15 12:55	01/16/15 08:30
60186334004	ITMW-19-201501	Water	01/15/15 13:10	01/16/15 08:30
60186334005	MW-38-201501	Water	01/15/15 11:55	01/16/15 08:30
60186334006	DUP-06-201501	Water	01/15/15 11:55	01/16/15 08:30
60186334007	ITMW-17-201501	Water	01/15/15 09:47	01/16/15 08:30
60186334008	DUP-04-201501	Water	01/15/15 09:32	01/16/15 08:30
60186334009	ITMW-12-201501	Water	01/15/15 09:32	01/16/15 08:30
60186334010	TB-20-201501	Water	01/15/15 09:32	01/16/15 08:30
60186334011	ITMW-15-201501	Water	01/15/15 12:50	01/16/15 08:30
60186334012	ITMW-11-201501	Water	01/15/15 10:22	01/16/15 08:30
60186334013	DUP-05-201501	Water	01/15/15 12:50	01/16/15 08:30
60186334014	MW-83-201501	Water	01/15/15 13:20	01/16/15 08:30
60186334015	MW-25-201501	Water	01/15/15 11:25	01/16/15 08:30
60186334016	TB-21-201501	Water	01/15/15 09:32	01/16/15 08:30
60186334017	TB-22-201501	Water	01/15/15 09:32	01/16/15 08:30
60186334018	EB-04-201501	Water	01/15/15 17:10	01/16/15 08:30

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Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60186334001	**ITMW-18-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	NDJ	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186334002	**MW-85-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	NDJ	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186334003	**MW-86-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	NDJ	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186334004	**ITMW-19-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	NDJ	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186334005	**MW-38-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	NDJ	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186334006	**DUP-06-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186334007	**ITMW-17-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	NDJ	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K

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SAMPLE ANALYTE COUNT

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186334008	**DUP-04-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186334009	**ITMW-12-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	NDJ	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186334010	**TB-20-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186334011	**ITMW-15-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	NDJ	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186334012	**ITMW-11-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	NDJ	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K

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SAMPLE ANALYTE COUNT

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186334013	**DUP-05-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186334014	**MW-83-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	NDJ	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186334015	**MW-25-201501**	EPA 8015 - Alcohol	EIG	1	PASI-D
		EPA 6010	NDJ	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	JMC1	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	JMC1	1	PASI-K
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	OL	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60186334016	**TB-21-201501**	EPA 5030B/8260	PRG	38	PASI-K

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SAMPLE ANALYTE COUNT

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60186334017	**TB-22-201501**	EPA 5030B/8260	PRG	38	PASI-K
60186334018	**EB-04-201501**	EPA 5030B/8260	PRG	38	PASI-K

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Method: **EPA 8015 - Alcohol**
Description: Alcohol by Direct Inject GCFID
Client: Environ_AR
Date: February 06, 2015

General Information:
11 samples were analyzed for EPA 8015 - Alcohol. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Environ_AR
Date: February 06, 2015

General Information:
11 samples were analyzed for EPA 6010. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with EPA 3010 with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: February 06, 2015

General Information:
18 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/67126

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1509650)
  - Carbon tetrachloride

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/67069

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/67101

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/67116

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/67126

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186453026

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 1509651)

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: February 06, 2015

QC Batch: MSV/67126

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186453026

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- Carbon tetrachloride

- MSD (Lab ID: 1509652)
  - Carbon tetrachloride

Additional Comments:

Analyte Comments:

QC Batch: MSV/67101

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- MW-86-201501 (Lab ID: 60186334003)
  - 1,1,1-Trichloroethane
  - 1,1,2,2-Tetrachloroethane
  - Trichloroethene

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: Environ_AR
Date: February 06, 2015

General Information:
11 samples were analyzed for SM 2320B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Method: **SM 3500-Fe B#4**
Description: Iron, Ferric (Calculation)
Client: Environ_AR
Date: February 06, 2015

General Information:
11 samples were analyzed for SM 3500-Fe B#4. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: February 06, 2015

General Information:
11 samples were analyzed for SM 4500-H+B. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

H6: Analysis initiated outside of the 15 minute EPA recommended holding time.
- ITMW-11-201501 (Lab ID: 60186334012)
- ITMW-12-201501 (Lab ID: 60186334009)
- ITMW-15-201501 (Lab ID: 60186334011)
- ITMW-17-201501 (Lab ID: 60186334007)
- ITMW-18-201501 (Lab ID: 60186334001)
- ITMW-19-201501 (Lab ID: 60186334004)
- MW-25-201501 (Lab ID: 60186334015)
- MW-38-201501 (Lab ID: 60186334005)
- MW-83-201501 (Lab ID: 60186334014)
- MW-85-201501 (Lab ID: 60186334002)
- MW-86-201501 (Lab ID: 60186334003)

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

Analyte Comments:

QC Batch: WET/52705

1e: Field pH
- ITMW-11-201501 (Lab ID: 60186334012)
  - pH at 25 Degrees C
- ITMW-12-201501 (Lab ID: 60186334009)
  - pH at 25 Degrees C
- ITMW-15-201501 (Lab ID: 60186334011)
  - pH at 25 Degrees C
- ITMW-17-201501 (Lab ID: 60186334007)
  - pH at 25 Degrees C
- ITMW-18-201501 (Lab ID: 60186334001)
  - pH at 25 Degrees C
- ITMW-19-201501 (Lab ID: 60186334004)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: February 06, 2015

Analyte Comments:

QC Batch: WET/52705

1e: Field pH

- MW-25-201501 (Lab ID: 60186334015)
  - pH at 25 Degrees C
- MW-38-201501 (Lab ID: 60186334005)
  - pH at 25 Degrees C
- MW-83-201501 (Lab ID: 60186334014)
  - pH at 25 Degrees C
- MW-85-201501 (Lab ID: 60186334002)
  - pH at 25 Degrees C
- MW-86-201501 (Lab ID: 60186334003)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Environ_AR
Date: February 06, 2015

General Information:
11 samples were analyzed for SM 4500-S-2 D. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Environ_AR
Date: February 06, 2015

General Information:
11 samples were analyzed for EPA 300.0. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/32626

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186288001,60186289002

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1511711)
  - Chloride

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Method: **EPA 350.1**
Description: 350.1 Ammonia
Client: Environ_AR
Date: February 06, 2015

General Information:
11 samples were analyzed for EPA 350.1. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/32590

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186334001,60186360001

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1509169)
  - Nitrogen, Ammonia
- MS (Lab ID: 1509171)
  - Nitrogen, Ammonia

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Environ_AR
Date: February 06, 2015

General Information:
11 samples were analyzed for EPA 353.2. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: WETA/32550

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186301001,60186334009

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1507428)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrate
  - Nitrogen, Nitrite

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

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(913)599-5665

PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Method: **SM 4500-CO2 D**
Description: Total Carbon Dioxide Calc
Client: Environ_AR
Date: February 06, 2015

General Information:
11 samples were analyzed for SM 4500-CO2 D. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Method: **SM 5310C**
Description: 5310C TOC
Client: Environ_AR
Date: February 06, 2015

General Information:
11 samples were analyzed for SM 5310C. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Duplicate Sample:
All duplicate sample results were within method acceptance criteria with any exceptions noted below.

Additional Comments:

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PROJECT NARRATIVE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Method: **SM 4500-P E**
Description: SM4500P-E, Total Phosphorus
Client: Environ_AR
Date: February 06, 2015

General Information:
11 samples were analyzed for SM 4500-P E. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Sample Preparation:
The samples were prepared in accordance with SM4500-P B with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: ITMW-18-201501 **Lab ID: 60186334001** Collected: 01/15/15 10:00 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/23/15 10:39	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**26.0J**	ug/L	50.0	24.0	1	01/20/15 09:45	01/26/15 11:31	7439-89-6	
Manganese	ND	ug/L	5.0	2.5	1	01/20/15 09:45	01/26/15 11:31	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/20/15 14:40	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 14:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 14:40	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 14:40	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/20/15 14:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 14:40	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 14:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 14:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 14:40	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:40	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 14:40	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/20/15 14:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 14:40	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 14:40	75-35-4	
cis-1,2-Dichloroethene	**26.5**	ug/L	1.0	0.50	1		01/20/15 14:40	156-59-2	
trans-1,2-Dichloroethene	**2.2**	ug/L	1.0	0.50	1		01/20/15 14:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 14:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 14:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 14:40	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 14:40	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 14:40	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/20/15 14:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 14:40	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 14:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 14:40	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 14:40	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:40	79-00-5	
Trichloroethene	**488**	ug/L	100	50.0	100		01/20/15 18:36	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 14:40	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 14:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/20/15 14:40	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/20/15 14:40	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/20/15 14:40	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 14:40		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: ITMW-18-201501 **Lab ID: 60186334001** Collected: 01/15/15 10:00 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 11:11		
Alkalinity, Carbonate (CaCO3)	**36.9**	mg/L	20.0	2.0	1		01/22/15 11:11		
Alkalinity, Total as CaCO3	**41.6**	mg/L	20.0	2.0	1		01/22/15 11:11		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**10.1**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**79.3**	mg/L	10.0	5.0	10		01/28/15 05:10	16887-00-6	
Sulfate	**58.1**	mg/L	10.0	5.0	10		01/28/15 05:10	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.22**	mg/L	0.10	0.023	1		01/21/15 13:42	7664-41-7	M1
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.2**	mg/L	0.10	0.012	1		01/16/15 15:38		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/16/15 15:38		
Nitrogen, NO2 plus NO3	**1.2**	mg/L	0.10	0.012	1		01/16/15 15:38		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.69J**	mg/L	1.0	0.50	1		02/05/15 10:16	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	ND	mg/L	0.030	0.010	1	01/23/15 08:43	01/23/15 13:33		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: MW-85-201501 **Lab ID: 60186334002** Collected: 01/15/15 14:00 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/23/15 10:50	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**118**	ug/L	50.0	24.0	1	01/20/15 09:45	01/26/15 11:33	7439-89-6	
Manganese	**12.1**	ug/L	5.0	2.5	1	01/20/15 09:45	01/26/15 11:33	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**71.5**	ug/L	10.0	5.0	1		01/20/15 14:57	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 14:57	71-43-2	
Bromodichloromethane	**1.4**	ug/L	1.0	0.50	1		01/20/15 14:57	75-27-4	
Bromoform	**3.8**	ug/L	1.0	0.50	1		01/20/15 14:57	75-25-2	
Bromomethane	**32.4**	ug/L	5.0	2.5	1		01/20/15 14:57	74-83-9	
2-Butanone (MEK)	**7.4J**	ug/L	10.0	5.0	1		01/20/15 14:57	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 14:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 14:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 14:57	108-90-7	
Chloroethane	**0.90J**	ug/L	1.0	0.50	1		01/20/15 14:57	75-00-3	
Chloroform	**17.8**	ug/L	1.0	0.50	1		01/20/15 14:57	67-66-3	
Chloromethane	**4.3**	ug/L	1.0	0.50	1		01/20/15 14:57	74-87-3	
Dibromochloromethane	**12.5**	ug/L	1.0	0.50	1		01/20/15 14:57	124-48-1	
1,1-Dichloroethane	**1.2**	ug/L	1.0	0.50	1		01/20/15 14:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 14:57	75-35-4	
cis-1,2-Dichloroethene	**167**	ug/L	1.0	0.50	1		01/20/15 14:57	156-59-2	
trans-1,2-Dichloroethene	**25.3**	ug/L	1.0	0.50	1		01/20/15 14:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 14:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 14:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 14:57	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 14:57	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 14:57	591-78-6	
Methylene chloride	**53.2**	ug/L	1.0	0.50	1		01/20/15 14:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 14:57	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 14:57	100-42-5	
1,1,2,2-Tetrachloroethane	**36.4**	ug/L	1.0	0.50	1		01/20/15 14:57	79-34-5	
Tetrachloroethene	**13.4**	ug/L	1.0	0.50	1		01/20/15 14:57	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 14:57	108-88-3	
1,1,1-Trichloroethane	**100**	ug/L	1.0	0.50	1		01/20/15 14:57	71-55-6	
1,1,2-Trichloroethane	**1.1**	ug/L	1.0	0.50	1		01/20/15 14:57	79-00-5	
Trichloroethene	**5940**	ug/L	500	250	500		01/20/15 18:50	79-01-6	
Vinyl chloride	**1.1**	ug/L	1.0	0.50	1		01/20/15 14:57	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 14:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/20/15 14:57	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		01/20/15 14:57	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		01/20/15 14:57	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 14:57		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: MW-85-201501 **Lab ID: 60186334002** Collected: 01/15/15 14:00 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**83.5**	mg/L	20.0	2.0	1		01/22/15 14:25		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 14:25		
Alkalinity, Total as CaCO3	**83.5**	mg/L	20.0	2.0	1		01/22/15 14:25		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.6**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:51	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**418**	mg/L	50.0	25.0	50		01/28/15 19:31	16887-00-6	
Sulfate	**1530**	mg/L	200	100	200		01/28/15 19:47	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.29**	mg/L	0.10	0.023	1		01/21/15 13:44	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.3**	mg/L	0.10	0.012	1		01/16/15 15:31		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/16/15 15:31		
Nitrogen, NO2 plus NO3	**1.3**	mg/L	0.10	0.012	1		01/16/15 15:31		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**483**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**2.2**	mg/L	1.0	0.50	1		02/05/15 10:36	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.35**	mg/L	0.030	0.010	1	01/23/15 08:43	01/23/15 13:33		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: MW-86-201501 **Lab ID: 60186334003** Collected: 01/15/15 12:55 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/23/15 11:02	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**4070**	ug/L	50.0	24.0	1	01/20/15 09:45	01/26/15 11:36	7439-89-6	
Manganese	**2280**	ug/L	5.0	2.5	1	01/20/15 09:45	01/26/15 11:36	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**177**	ug/L	10.0	5.0	1		01/20/15 15:13	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 15:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 15:13	75-27-4	
Bromoform	**3.5**	ug/L	1.0	0.50	1		01/20/15 15:13	75-25-2	
Bromomethane	**5.9**	ug/L	5.0	2.5	1		01/20/15 15:13	74-83-9	
2-Butanone (MEK)	**43.9**	ug/L	10.0	5.0	1		01/20/15 15:13	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 15:13	75-15-0	
Carbon tetrachloride	**3.0**	ug/L	1.0	0.50	1		01/20/15 15:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 15:13	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 15:13	75-00-3	
Chloroform	**79.4**	ug/L	1.0	0.50	1		01/20/15 15:13	67-66-3	
Chloromethane	**1.6**	ug/L	1.0	0.50	1		01/20/15 15:13	74-87-3	
Dibromochloromethane	**35.5**	ug/L	1.0	0.50	1		01/20/15 15:13	124-48-1	
1,1-Dichloroethane	**10**	ug/L	1.0	0.50	1		01/20/15 15:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 15:13	107-06-2	
1,1-Dichloroethene	**10.9**	ug/L	1.0	0.50	1		01/20/15 15:13	75-35-4	
cis-1,2-Dichloroethene	**128**	ug/L	1.0	0.50	1		01/20/15 15:13	156-59-2	
trans-1,2-Dichloroethene	**18.4**	ug/L	1.0	0.50	1		01/20/15 15:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 15:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 15:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 15:13	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 15:13	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 15:13	591-78-6	
Methylene chloride	**20.4**	ug/L	1.0	0.50	1		01/20/15 15:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 15:13	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 15:13	100-42-5	
1,1,2,2-Tetrachloroethane	**1080**	ug/L	1.0	0.50	1		01/20/15 15:13	79-34-5	E
1,1,2,2-Tetrachloroethane	ND	ug/L	2000	1000	2000		01/20/15 19:05	79-34-5	
Tetrachloroethene	**38.5**	ug/L	1.0	0.50	1		01/20/15 15:13	127-18-4	
Toluene	**2.7**	ug/L	1.0	0.50	1		01/20/15 15:13	108-88-3	
1,1,1-Trichloroethane	**1100**	ug/L	1.0	0.50	1		01/20/15 15:13	71-55-6	E
1,1,1-Trichloroethane	ND	ug/L	2000	1000	2000		01/20/15 19:05	71-55-6	
1,1,2-Trichloroethane	**8.1**	ug/L	1.0	0.50	1		01/20/15 15:13	79-00-5	
Trichloroethene	**10900**	ug/L	1.0	0.50	1		01/20/15 15:13	79-01-6	E
Trichloroethene	**81200**	ug/L	2000	1000	2000		01/20/15 19:05	79-01-6	
Vinyl chloride	**4.5**	ug/L	1.0	0.50	1		01/20/15 15:13	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 15:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/20/15 15:13	460-00-4	

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: MW-86-201501 **Lab ID: 60186334003** Collected: 01/15/15 12:55 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Surrogates									
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		01/20/15 15:13	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		01/20/15 15:13	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 15:13		
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**250**	mg/L	20.0	2.0	1		01/22/15 14:28		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 14:28		
Alkalinity, Total as CaCO3	**250**	mg/L	20.0	2.0	1		01/22/15 14:28		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**4.0**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.1**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:51	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**625**	mg/L	50.0	25.0	50		01/28/15 20:03	16887-00-6	
Sulfate	**5050**	mg/L	500	250	500		01/28/15 20:19	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**3.9**	mg/L	0.50	0.11	5		01/24/15 12:32	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**3.0**	mg/L	0.10	0.012	1		01/16/15 15:28		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/16/15 15:28		
Nitrogen, NO2 plus NO3	**3.0**	mg/L	0.10	0.012	1		01/16/15 15:28		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**591**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**38.8**	mg/L	5.0	2.5	5		02/05/15 10:55	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.17**	mg/L	0.030	0.010	1	01/23/15 08:43	01/23/15 13:33		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: ITMW-19-201501 **Lab ID: 60186334004** Collected: 01/15/15 13:10 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/23/15 11:13	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**25.8J**	ug/L	50.0	24.0	1	01/20/15 09:45	01/26/15 11:38	7439-89-6	
Manganese	**73.1**	ug/L	50.0	25.0	10	01/20/15 09:45	01/26/15 12:10	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**27.8**	ug/L	10.0	5.0	1		01/20/15 16:40	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 16:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 16:40	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 16:40	75-25-2	
Bromomethane	**6.9**	ug/L	5.0	2.5	1		01/20/15 16:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 16:40	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 16:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 16:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 16:40	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 16:40	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 16:40	67-66-3	
Chloromethane	**18.5**	ug/L	1.0	0.50	1		01/20/15 16:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 16:40	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 16:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 16:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 16:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 16:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 16:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 16:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 16:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 16:40	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 16:40	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 16:40	591-78-6	
Methylene chloride	**0.86J**	ug/L	1.0	0.50	1		01/20/15 16:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 16:40	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 16:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 16:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 16:40	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 16:40	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 16:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 16:40	79-00-5	
Trichloroethene	**17.4**	ug/L	1.0	0.50	1		01/20/15 16:40	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 16:40	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 16:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/20/15 16:40	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120		1		01/20/15 16:40	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		01/20/15 16:40	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		01/20/15 16:40		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: ITMW-19-201501 **Lab ID: 60186334004** Collected: 01/15/15 13:10 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**125**	mg/L	20.0	2.0	1		01/22/15 14:38		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 14:38		
Alkalinity, Total as CaCO3	**125**	mg/L	20.0	2.0	1		01/22/15 14:38		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**8.4**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:52	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**333**	mg/L	20.0	10.0	20		01/28/15 20:35	16887-00-6	
Sulfate	**8480**	mg/L	1000	500	1000		01/28/15 20:51	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**2.6**	mg/L	0.10	0.023	1		01/24/15 12:05	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**2.4**	mg/L	0.10	0.012	1		01/16/15 15:29		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/16/15 15:29		
Nitrogen, NO2 plus NO3	**2.4**	mg/L	0.10	0.012	1		01/16/15 15:29		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**111**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		02/05/15 11:15	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.17**	mg/L	0.030	0.010	1	01/23/15 08:43	01/23/15 13:34		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: MW-38-201501 **Lab ID: 60186334005** Collected: 01/15/15 11:55 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/23/15 11:24	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**1130**	ug/L	50.0	24.0	1	01/20/15 09:45	01/26/15 11:41	7439-89-6	
Manganese	**4240**	ug/L	5.0	2.5	1	01/20/15 09:45	01/26/15 11:41	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/23/15 16:33	67-64-1	
Benzene	**0.97J**	ug/L	1.0	0.50	1		01/23/15 16:33	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/23/15 16:33	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/23/15 16:33	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/23/15 16:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/23/15 16:33	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/23/15 16:33	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/23/15 16:33	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/23/15 16:33	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/23/15 16:33	75-00-3	
Chloroform	**0.65J**	ug/L	1.0	0.50	1		01/23/15 16:33	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/23/15 16:33	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/23/15 16:33	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 16:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 16:33	107-06-2	
1,1-Dichloroethene	**15.6**	ug/L	1.0	0.50	1		01/23/15 16:33	75-35-4	
cis-1,2-Dichloroethene	**1900**	ug/L	100	50.0	100		01/22/15 01:52	156-59-2	
trans-1,2-Dichloroethene	**16.8**	ug/L	1.0	0.50	1		01/23/15 16:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/23/15 16:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 16:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 16:33	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/23/15 16:33	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/23/15 16:33	591-78-6	
Methylene chloride	**0.65J**	ug/L	1.0	0.50	1		01/23/15 16:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/23/15 16:33	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/23/15 16:33	100-42-5	
1,1,2,2-Tetrachloroethane	**0.71J**	ug/L	1.0	0.50	1		01/23/15 16:33	79-34-5	
Tetrachloroethene	**2.5**	ug/L	1.0	0.50	1		01/23/15 16:33	127-18-4	
Toluene	**0.76J**	ug/L	1.0	0.50	1		01/23/15 16:33	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 16:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 16:33	79-00-5	
Trichloroethene	**5440**	ug/L	100	50.0	100		01/22/15 01:52	79-01-6	
Vinyl chloride	**133**	ug/L	1.0	0.50	1		01/23/15 16:33	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/23/15 16:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/23/15 16:33	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/23/15 16:33	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		01/23/15 16:33	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/23/15 16:33		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: MW-38-201501 **Lab ID: 60186334005** Collected: 01/15/15 11:55 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**315**	mg/L	20.0	2.0	1		01/22/15 14:42		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 14:42		
Alkalinity, Total as CaCO3	**315**	mg/L	20.0	2.0	1		01/22/15 14:42		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.96**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.6**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:52	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**38.0**	mg/L	2.0	1.0	2		01/29/15 15:42	16887-00-6	
Sulfate	**89.8**	mg/L	10.0	5.0	10		01/28/15 21:07	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/24/15 12:06	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.13**	mg/L	0.10	0.012	1		01/16/15 15:26		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/16/15 15:26		
Nitrogen, NO2 plus NO3	**0.13**	mg/L	0.10	0.012	1		01/16/15 15:26		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**425**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.9**	mg/L	1.0	0.50	1		02/05/15 12:13	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.066**	mg/L	0.030	0.010	1	01/23/15 08:43	01/23/15 13:34		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: DUP-06-201501 **Lab ID: 60186334006** Collected: 01/15/15 11:55 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/22/15 01:38	67-64-1	
Benzene	**0.95J**	ug/L	1.0	0.50	1		01/22/15 01:38	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/22/15 01:38	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/22/15 01:38	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/22/15 01:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/22/15 01:38	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/22/15 01:38	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/22/15 01:38	56-23-5	L3
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/22/15 01:38	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/22/15 01:38	75-00-3	
Chloroform	**0.64J**	ug/L	1.0	0.50	1		01/22/15 01:38	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/22/15 01:38	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/22/15 01:38	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 01:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 01:38	107-06-2	
1,1-Dichloroethene	**17.3**	ug/L	1.0	0.50	1		01/22/15 01:38	75-35-4	
cis-1,2-Dichloroethene	**1190**	ug/L	25.0	12.5	25		01/23/15 16:16	156-59-2	
trans-1,2-Dichloroethene	**18.3**	ug/L	1.0	0.50	1		01/22/15 01:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/22/15 01:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 01:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 01:38	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/22/15 01:38	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/22/15 01:38	591-78-6	
Methylene chloride	**0.94J**	ug/L	1.0	0.50	1		01/22/15 01:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/22/15 01:38	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/22/15 01:38	100-42-5	
1,1,2,2-Tetrachloroethane	**0.60J**	ug/L	1.0	0.50	1		01/22/15 01:38	79-34-5	
Tetrachloroethene	**2.1**	ug/L	1.0	0.50	1		01/22/15 01:38	127-18-4	
Toluene	**0.73J**	ug/L	1.0	0.50	1		01/22/15 01:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 01:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 01:38	79-00-5	
Trichloroethene	**3910**	ug/L	25.0	12.5	25		01/23/15 16:16	79-01-6	
Vinyl chloride	**143**	ug/L	1.0	0.50	1		01/22/15 01:38	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/22/15 01:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/22/15 01:38	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/22/15 01:38	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		01/22/15 01:38	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/22/15 01:38		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: ITMW-17-201501 **Lab ID: 60186334007** Collected: 01/15/15 09:47 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/23/15 11:35	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**998**	ug/L	50.0	24.0	1	01/20/15 09:45	01/26/15 11:43	7439-89-6	
Manganese	**61.7**	ug/L	5.0	2.5	1	01/20/15 09:45	01/26/15 11:43	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/23/15 16:49	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/23/15 16:49	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/23/15 16:49	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/23/15 16:49	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/23/15 16:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/23/15 16:49	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/23/15 16:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/23/15 16:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/23/15 16:49	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/23/15 16:49	75-00-3	
Chloroform	**0.93J**	ug/L	1.0	0.50	1		01/23/15 16:49	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/23/15 16:49	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/23/15 16:49	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 16:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 16:49	107-06-2	
1,1-Dichloroethene	**0.75J**	ug/L	1.0	0.50	1		01/23/15 16:49	75-35-4	
cis-1,2-Dichloroethene	**110**	ug/L	1.0	0.50	1		01/23/15 16:49	156-59-2	
trans-1,2-Dichloroethene	**15.5**	ug/L	1.0	0.50	1		01/23/15 16:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/23/15 16:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 16:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 16:49	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/23/15 16:49	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/23/15 16:49	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/23/15 16:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/23/15 16:49	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/23/15 16:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/23/15 16:49	79-34-5	
Tetrachloroethene	**1.4**	ug/L	1.0	0.50	1		01/23/15 16:49	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/23/15 16:49	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 16:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 16:49	79-00-5	
Trichloroethene	**3840**	ug/L	50.0	25.0	50		01/22/15 02:07	79-01-6	
Vinyl chloride	**1.5**	ug/L	1.0	0.50	1		01/23/15 16:49	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/23/15 16:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		01/23/15 16:49	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/23/15 16:49	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		01/23/15 16:49	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/23/15 16:49		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: ITMW-17-201501 **Lab ID: 60186334007** Collected: 01/15/15 09:47 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**25.2**	mg/L	20.0	2.0	1		01/22/15 14:46		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 14:46		
Alkalinity, Total as CaCO3	**25.2**	mg/L	20.0	2.0	1		01/22/15 14:46		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**1.0**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.8**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:52	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**362**	mg/L	50.0	25.0	50		01/28/15 21:23	16887-00-6	
Sulfate	**62.4**	mg/L	10.0	5.0	10		01/28/15 06:30	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/24/15 12:08	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.14**	mg/L	0.10	0.012	1		01/16/15 15:38		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/16/15 15:38		
Nitrogen, NO2 plus NO3	**0.14**	mg/L	0.10	0.012	1		01/16/15 15:38		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**106**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**2.0**	mg/L	1.0	0.50	1		02/05/15 12:32	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.14**	mg/L	0.030	0.010	1	01/23/15 08:43	01/23/15 13:35		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: DUP-04-201501 **Lab ID: 60186334008** Collected: 01/15/15 09:32 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**19.0**	ug/L	10.0	5.0	1		01/20/15 17:09	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 17:09	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 17:09	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 17:09	75-25-2	
Bromomethane	**7.3**	ug/L	5.0	2.5	1		01/20/15 17:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 17:09	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 17:09	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 17:09	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 17:09	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:09	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 17:09	67-66-3	
Chloromethane	**4.4**	ug/L	1.0	0.50	1		01/20/15 17:09	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 17:09	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 17:09	75-35-4	
cis-1,2-Dichloroethene	**4.8**	ug/L	1.0	0.50	1		01/20/15 17:09	156-59-2	
trans-1,2-Dichloroethene	**0.87J**	ug/L	1.0	0.50	1		01/20/15 17:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 17:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 17:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 17:09	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 17:09	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 17:09	591-78-6	
Methylene chloride	**1.6**	ug/L	1.0	0.50	1		01/20/15 17:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 17:09	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 17:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:09	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 17:09	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 17:09	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:09	79-00-5	
Trichloroethene	**59.3**	ug/L	1.0	0.50	1		01/20/15 17:09	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 17:09	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 17:09	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		1		01/20/15 17:09	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		01/20/15 17:09	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		01/20/15 17:09	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		01/20/15 17:09		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: ITMW-12-201501 **Lab ID: 60186334009** Collected: 01/15/15 09:32 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/23/15 11:47	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**32.2J**	ug/L	50.0	24.0	1	01/20/15 09:45	01/26/15 11:45	7439-89-6	
Manganese	**10.3**	ug/L	5.0	2.5	1	01/20/15 09:45	01/26/15 11:45	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**18.9**	ug/L	10.0	5.0	1		01/20/15 13:18	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 13:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 13:18	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 13:18	75-25-2	
Bromomethane	**6.2**	ug/L	5.0	2.5	1		01/20/15 13:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 13:18	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 13:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 13:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 13:18	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:18	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 13:18	67-66-3	
Chloromethane	**1.9**	ug/L	1.0	0.50	1		01/20/15 13:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 13:18	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 13:18	75-35-4	
cis-1,2-Dichloroethene	**4.2**	ug/L	1.0	0.50	1		01/20/15 13:18	156-59-2	
trans-1,2-Dichloroethene	**0.77J**	ug/L	1.0	0.50	1		01/20/15 13:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 13:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 13:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 13:18	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 13:18	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 13:18	591-78-6	
Methylene chloride	**0.51J**	ug/L	1.0	0.50	1		01/20/15 13:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 13:18	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 13:18	100-42-5	
1,1,2,2-Tetrachloroethane	**0.66J**	ug/L	1.0	0.50	1		01/20/15 13:18	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 13:18	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 13:18	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:18	79-00-5	
Trichloroethene	**57.1**	ug/L	1.0	0.50	1		01/20/15 13:18	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 13:18	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 13:18	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/20/15 13:18	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/20/15 13:18	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/20/15 13:18	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 13:18		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: ITMW-12-201501 **Lab ID: 60186334009** Collected: 01/15/15 09:32 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**54.6**	mg/L	20.0	2.0	1		01/22/15 14:50		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 14:50		
Alkalinity, Total as CaCO3	**54.6**	mg/L	20.0	2.0	1		01/22/15 14:50		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.8**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:53	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**23.6**	mg/L	2.0	1.0	2		01/28/15 22:10	16887-00-6	
Sulfate	**962**	mg/L	100	50.0	100		01/28/15 22:26	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.13**	mg/L	0.10	0.023	1		01/24/15 12:09	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.1**	mg/L	0.10	0.012	1		01/16/15 15:36		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/16/15 15:36		
Nitrogen, NO2 plus NO3	**1.1**	mg/L	0.10	0.012	1		01/16/15 15:36		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**221**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.93J**	mg/L	1.0	0.50	1		02/05/15 16:26	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.10**	mg/L	0.030	0.010	1	01/23/15 08:43	01/23/15 13:35		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: TB-20-201501 **Lab ID: 60186334010** Collected: 01/15/15 09:32 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/22/15 00:26	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/22/15 00:26	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/22/15 00:26	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/22/15 00:26	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/22/15 00:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/22/15 00:26	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/22/15 00:26	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/22/15 00:26	56-23-5	L3
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/22/15 00:26	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/22/15 00:26	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/22/15 00:26	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/22/15 00:26	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/22/15 00:26	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 00:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 00:26	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 00:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 00:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 00:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/22/15 00:26	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 00:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 00:26	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/22/15 00:26	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/22/15 00:26	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/22/15 00:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/22/15 00:26	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/22/15 00:26	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/22/15 00:26	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/22/15 00:26	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/22/15 00:26	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 00:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 00:26	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 00:26	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/22/15 00:26	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/22/15 00:26	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/22/15 00:26	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		01/22/15 00:26	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		01/22/15 00:26	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/22/15 00:26		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: ITMW-15-201501 **Lab ID: 60186334011** Collected: 01/15/15 12:50 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/23/15 11:58	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**155**	ug/L	50.0	24.0	1	01/20/15 09:45	01/26/15 11:48	7439-89-6	
Manganese	**7.8**	ug/L	5.0	2.5	1	01/20/15 09:45	01/26/15 11:48	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**29.1**	ug/L	10.0	5.0	1		01/20/15 16:55	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 16:55	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 16:55	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 16:55	75-25-2	
Bromomethane	**7.9**	ug/L	5.0	2.5	1		01/20/15 16:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 16:55	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 16:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 16:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 16:55	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 16:55	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 16:55	67-66-3	
Chloromethane	**8.3**	ug/L	1.0	0.50	1		01/20/15 16:55	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 16:55	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 16:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 16:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 16:55	75-35-4	
cis-1,2-Dichloroethene	**2.9**	ug/L	1.0	0.50	1		01/20/15 16:55	156-59-2	
trans-1,2-Dichloroethene	**0.55J**	ug/L	1.0	0.50	1		01/20/15 16:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 16:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 16:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 16:55	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 16:55	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 16:55	591-78-6	
Methylene chloride	**0.67J**	ug/L	1.0	0.50	1		01/20/15 16:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 16:55	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 16:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 16:55	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 16:55	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 16:55	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 16:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 16:55	79-00-5	
Trichloroethene	**56.5**	ug/L	1.0	0.50	1		01/20/15 16:55	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 16:55	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 16:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/20/15 16:55	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		01/20/15 16:55	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/20/15 16:55	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		01/20/15 16:55		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: ITMW-15-201501 **Lab ID: 60186334011** Collected: 01/15/15 12:50 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**228**	mg/L	20.0	2.0	1		01/22/15 14:54		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 14:54		
Alkalinity, Total as CaCO3	**228**	mg/L	20.0	2.0	1		01/22/15 14:54		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**4.9**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:53	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**130**	mg/L	10.0	5.0	10		01/28/15 07:34	16887-00-6	
Sulfate	**1520**	mg/L	100	50.0	100		01/28/15 22:42	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.32**	mg/L	0.10	0.023	1		01/24/15 12:10	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.5**	mg/L	0.10	0.012	1		01/16/15 15:27		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/16/15 15:27		
Nitrogen, NO2 plus NO3	**1.5**	mg/L	0.10	0.012	1		01/16/15 15:27		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**6080**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.61J**	mg/L	1.0	0.50	1		02/05/15 16:46	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.94**	mg/L	0.030	0.010	1	01/23/15 08:43	01/23/15 13:35		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: ITMW-11-201501 **Lab ID: 60186334012** Collected: 01/15/15 10:22 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/23/15 12:09	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**116**	ug/L	50.0	24.0	1	01/20/15 09:45	01/26/15 11:55	7439-89-6	
Manganese	**16.3**	ug/L	5.0	2.5	1	01/20/15 09:45	01/26/15 11:55	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/20/15 14:24	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 14:24	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 14:24	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 14:24	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/20/15 14:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 14:24	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 14:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 14:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 14:24	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:24	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 14:24	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/20/15 14:24	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 14:24	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 14:24	75-35-4	
cis-1,2-Dichloroethene	**9.8**	ug/L	1.0	0.50	1		01/20/15 14:24	156-59-2	
trans-1,2-Dichloroethene	**1.0**	ug/L	1.0	0.50	1		01/20/15 14:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 14:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 14:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 14:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 14:24	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 14:24	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/20/15 14:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 14:24	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 14:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 14:24	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 14:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:24	79-00-5	
Trichloroethene	**68.3**	ug/L	1.0	0.50	1		01/20/15 14:24	79-01-6	
Vinyl chloride	**1.9**	ug/L	1.0	0.50	1		01/20/15 14:24	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 14:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/20/15 14:24	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		01/20/15 14:24	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/20/15 14:24	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 14:24		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: ITMW-11-201501 **Lab ID: 60186334012** Collected: 01/15/15 10:22 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**21.9**	mg/L	20.0	2.0	1		01/22/15 15:05		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 15:05		
Alkalinity, Total as CaCO3	**21.9**	mg/L	20.0	2.0	1		01/22/15 15:05		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**4.8**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:53	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**16.2**	mg/L	1.0	0.50	1		01/28/15 22:58	16887-00-6	
Sulfate	**952**	mg/L	100	50.0	100		01/29/15 15:29	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.27**	mg/L	0.10	0.023	1		01/24/15 12:12	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.0**	mg/L	0.10	0.012	1		01/16/15 15:40		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/16/15 15:40		
Nitrogen, NO2 plus NO3	**1.0**	mg/L	0.10	0.012	1		01/16/15 15:40		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**667**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.54J**	mg/L	1.0	0.50	1		02/05/15 17:05	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.52**	mg/L	0.030	0.010	1	01/23/15 08:43	01/23/15 13:36		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: DUP-05-201501 **Lab ID: 60186334013** Collected: 01/15/15 12:50 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**28.2**	ug/L	10.0	5.0	1		01/20/15 17:23	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 17:23	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 17:23	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 17:23	75-25-2	
Bromomethane	**10.8**	ug/L	5.0	2.5	1		01/20/15 17:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 17:23	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 17:23	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 17:23	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 17:23	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:23	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 17:23	67-66-3	
Chloromethane	**10.3**	ug/L	1.0	0.50	1		01/20/15 17:23	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 17:23	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:23	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 17:23	75-35-4	
cis-1,2-Dichloroethene	**3.8**	ug/L	1.0	0.50	1		01/20/15 17:23	156-59-2	
trans-1,2-Dichloroethene	**0.60J**	ug/L	1.0	0.50	1		01/20/15 17:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 17:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 17:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 17:23	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 17:23	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 17:23	591-78-6	
Methylene chloride	**0.61J**	ug/L	1.0	0.50	1		01/20/15 17:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 17:23	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 17:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:23	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 17:23	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 17:23	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:23	79-00-5	
Trichloroethene	**61.7**	ug/L	1.0	0.50	1		01/20/15 17:23	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 17:23	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 17:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		01/20/15 17:23	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		01/20/15 17:23	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		01/20/15 17:23	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		01/20/15 17:23		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: MW-83-201501 **Lab ID: 60186334014** Collected: 01/15/15 13:20 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/23/15 12:20	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**149**	ug/L	50.0	24.0	1	01/20/15 09:45	01/26/15 11:57	7439-89-6	
Manganese	**13.8**	ug/L	5.0	2.5	1	01/20/15 09:45	01/26/15 11:57	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**23.9**	ug/L	10.0	5.0	1		01/20/15 13:02	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 13:02	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 13:02	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 13:02	75-25-2	
Bromomethane	**12.3**	ug/L	5.0	2.5	1		01/20/15 13:02	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 13:02	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 13:02	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 13:02	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 13:02	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:02	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 13:02	67-66-3	
Chloromethane	**1.4**	ug/L	1.0	0.50	1		01/20/15 13:02	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 13:02	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:02	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 13:02	75-35-4	
cis-1,2-Dichloroethene	**1.8**	ug/L	1.0	0.50	1		01/20/15 13:02	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 13:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 13:02	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 13:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 13:02	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 13:02	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 13:02	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/20/15 13:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 13:02	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 13:02	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:02	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 13:02	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 13:02	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:02	79-00-5	
Trichloroethene	**101**	ug/L	1.0	0.50	1		01/20/15 13:02	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 13:02	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 13:02	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		01/20/15 13:02	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		01/20/15 13:02	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/20/15 13:02	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 13:02		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: MW-83-201501 **Lab ID: 60186334014** Collected: 01/15/15 13:20 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**146**	mg/L	20.0	2.0	1		01/22/15 15:08		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 15:08		
Alkalinity, Total as CaCO3	**146**	mg/L	20.0	2.0	1		01/22/15 15:08		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.1**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:54	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**413**	mg/L	50.0	25.0	50		01/28/15 23:30	16887-00-6	
Sulfate	**818**	mg/L	50.0	25.0	50		01/28/15 23:30	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		01/24/15 12:13	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.6**	mg/L	0.10	0.012	1		01/16/15 15:30		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/16/15 15:30		
Nitrogen, NO2 plus NO3	**1.6**	mg/L	0.10	0.012	1		01/16/15 15:30		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**339**	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		02/05/15 17:24	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.52**	mg/L	0.030	0.010	1	01/23/15 08:43	01/23/15 13:36		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: MW-25-201501 **Lab ID: 60186334015** Collected: 01/15/15 11:25 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		01/23/15 12:31	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**331**	ug/L	50.0	24.0	1	01/20/15 09:45	01/26/15 11:59	7439-89-6	
Manganese	**645**	ug/L	5.0	2.5	1	01/20/15 09:45	01/26/15 11:59	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**102**	ug/L	10.0	5.0	1		01/20/15 14:07	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 14:07	71-43-2	
Bromodichloromethane	**4.0**	ug/L	1.0	0.50	1		01/20/15 14:07	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 14:07	75-25-2	
Bromomethane	**36.6**	ug/L	5.0	2.5	1		01/20/15 14:07	74-83-9	
2-Butanone (MEK)	**11.6**	ug/L	10.0	5.0	1		01/20/15 14:07	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 14:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 14:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 14:07	108-90-7	
Chloroethane	**1.7**	ug/L	1.0	0.50	1		01/20/15 14:07	75-00-3	
Chloroform	**18.6**	ug/L	1.0	0.50	1		01/20/15 14:07	67-66-3	
Chloromethane	**29.6**	ug/L	1.0	0.50	1		01/20/15 14:07	74-87-3	
Dibromochloromethane	**7.5**	ug/L	1.0	0.50	1		01/20/15 14:07	124-48-1	
1,1-Dichloroethane	**1.7**	ug/L	1.0	0.50	1		01/20/15 14:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 14:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 14:07	75-35-4	
cis-1,2-Dichloroethene	**126**	ug/L	50.0	25.0	50		01/21/15 22:01	156-59-2	
trans-1,2-Dichloroethene	**35.2**	ug/L	1.0	0.50	1		01/20/15 14:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 14:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 14:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 14:07	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 14:07	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 14:07	591-78-6	
Methylene chloride	**23.8**	ug/L	1.0	0.50	1		01/20/15 14:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 14:07	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 14:07	100-42-5	
1,1,2,2-Tetrachloroethane	**41.7**	ug/L	1.0	0.50	1		01/20/15 14:07	79-34-5	
Tetrachloroethene	**7.6**	ug/L	1.0	0.50	1		01/20/15 14:07	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 14:07	108-88-3	
1,1,1-Trichloroethane	**8.3**	ug/L	1.0	0.50	1		01/20/15 14:07	71-55-6	
1,1,2-Trichloroethane	**1.2**	ug/L	1.0	0.50	1		01/20/15 14:07	79-00-5	
Trichloroethene	**2510**	ug/L	50.0	25.0	50		01/21/15 22:01	79-01-6	
Vinyl chloride	**1.6**	ug/L	1.0	0.50	1		01/20/15 14:07	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 14:07	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		01/20/15 14:07	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/20/15 14:07	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/20/15 14:07	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 14:07		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: MW-25-201501 **Lab ID: 60186334015** Collected: 01/15/15 11:25 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**10.4J**	mg/L	20.0	2.0	1		01/22/15 15:14		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		01/22/15 15:14		
Alkalinity, Total as CaCO3	**10.4J**	mg/L	20.0	2.0	1		01/22/15 15:14		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.31**	mg/L	0.20		1		01/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**4.1**	Std. Units	0.10	0.10	1		01/22/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0092	1		01/20/15 10:54	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**508**	mg/L	50.0	25.0	50		01/28/15 23:46	16887-00-6	
Sulfate	**4610**	mg/L	500	250	500		01/29/15 00:02	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.2**	mg/L	0.50	0.11	5		01/27/15 07:55	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.53**	mg/L	0.10	0.012	1		01/16/15 15:25		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		01/16/15 15:25		
Nitrogen, NO2 plus NO3	**0.53**	mg/L	0.10	0.012	1		01/16/15 15:25		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		01/28/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**4.3**	mg/L	1.0	0.50	1		02/05/15 17:44	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.066**	mg/L	0.030	0.010	1	01/23/15 08:43	01/23/15 13:49		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: TB-21-201501 **Lab ID: 60186334016** Collected: 01/15/15 09:32 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/22/15 00:40	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/22/15 00:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/22/15 00:40	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/22/15 00:40	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/22/15 00:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/22/15 00:40	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/22/15 00:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/22/15 00:40	56-23-5	L3
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/22/15 00:40	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/22/15 00:40	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/22/15 00:40	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/22/15 00:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/22/15 00:40	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 00:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 00:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 00:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 00:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 00:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/22/15 00:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 00:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 00:40	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/22/15 00:40	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/22/15 00:40	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/22/15 00:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/22/15 00:40	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/22/15 00:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/22/15 00:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/22/15 00:40	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/22/15 00:40	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 00:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 00:40	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 00:40	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/22/15 00:40	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/22/15 00:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/22/15 00:40	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/22/15 00:40	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		01/22/15 00:40	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/22/15 00:40		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: TB-22-201501 **Lab ID: 60186334017** Collected: 01/15/15 09:32 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/22/15 00:55	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/22/15 00:55	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/22/15 00:55	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/22/15 00:55	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/22/15 00:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/22/15 00:55	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/22/15 00:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/22/15 00:55	56-23-5	L3
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/22/15 00:55	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/22/15 00:55	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/22/15 00:55	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/22/15 00:55	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/22/15 00:55	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 00:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 00:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 00:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 00:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 00:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/22/15 00:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 00:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 00:55	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/22/15 00:55	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/22/15 00:55	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/22/15 00:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/22/15 00:55	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/22/15 00:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/22/15 00:55	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/22/15 00:55	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/22/15 00:55	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 00:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 00:55	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 00:55	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/22/15 00:55	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/22/15 00:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/22/15 00:55	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		01/22/15 00:55	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		01/22/15 00:55	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/22/15 00:55		

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ANALYTICAL RESULTS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Sample: EB-04-201501 **Lab ID: 60186334018** Collected: 01/15/15 17:10 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/22/15 01:24	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/22/15 01:24	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/22/15 01:24	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/22/15 01:24	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/22/15 01:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/22/15 01:24	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/22/15 01:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/22/15 01:24	56-23-5	L3
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/22/15 01:24	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/22/15 01:24	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/22/15 01:24	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/22/15 01:24	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/22/15 01:24	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 01:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 01:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 01:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 01:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 01:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/22/15 01:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 01:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 01:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/22/15 01:24	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/22/15 01:24	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/22/15 01:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/22/15 01:24	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/22/15 01:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/22/15 01:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/22/15 01:24	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/22/15 01:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 01:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 01:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 01:24	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/22/15 01:24	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/22/15 01:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%	80-120		1		01/22/15 01:24	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		01/22/15 01:24	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		01/22/15 01:24	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/22/15 01:24		

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

QC Batch: GCSV/3368 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

METHOD BLANK: 117786 Matrix: Water
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	01/23/15 09:54	

LABORATORY CONTROL SAMPLE: 117787

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	98000	98	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 117788 117789

Parameter	Units	60186334001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2-Chloroethanol	ug/L	ND	100000	100000	100000	103000	100	103	40-140	3	40	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

QC Batch: MPRP/30501 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

METHOD BLANK: 1508570 Matrix: Water
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	01/26/15 11:08	
Manganese	ug/L	ND	5.0	01/26/15 11:08	

LABORATORY CONTROL SAMPLE: 1508571

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9840	98	90-111	
Manganese	ug/L	1000	976	98	91-108	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1508572 1508573

Parameter	Units	60186309001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	9620	10000	10000	18900	18800	93	92	75-125	0	20	
Manganese	ug/L	217	1000	1000	1170	1160	95	95	75-125	1	20	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

QC Batch: MSV/67126 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186334005, 60186334006, 60186334007, 60186334010, 60186334016, 60186334017, 60186334018

METHOD BLANK: 1509649 Matrix: Water
Associated Lab Samples: 60186334005, 60186334006, 60186334007, 60186334010, 60186334016, 60186334017, 60186334018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/21/15 23:57	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/21/15 23:57	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/21/15 23:57	
1,1-Dichloroethane	ug/L	ND	1.0	01/21/15 23:57	
1,1-Dichloroethene	ug/L	ND	1.0	01/21/15 23:57	
1,2-Dichloroethane	ug/L	ND	1.0	01/21/15 23:57	
1,2-Dichloropropane	ug/L	ND	1.0	01/21/15 23:57	
2-Butanone (MEK)	ug/L	ND	10.0	01/21/15 23:57	
2-Hexanone	ug/L	ND	10.0	01/21/15 23:57	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/21/15 23:57	
Acetone	ug/L	ND	10.0	01/21/15 23:57	
Benzene	ug/L	ND	1.0	01/21/15 23:57	
Bromodichloromethane	ug/L	ND	1.0	01/21/15 23:57	
Bromoform	ug/L	ND	1.0	01/21/15 23:57	
Bromomethane	ug/L	ND	5.0	01/21/15 23:57	
Carbon disulfide	ug/L	ND	5.0	01/21/15 23:57	
Carbon tetrachloride	ug/L	ND	1.0	01/21/15 23:57	
Chlorobenzene	ug/L	ND	1.0	01/21/15 23:57	
Chloroethane	ug/L	ND	1.0	01/21/15 23:57	
Chloroform	ug/L	ND	1.0	01/21/15 23:57	
Chloromethane	ug/L	ND	1.0	01/21/15 23:57	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/21/15 23:57	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/21/15 23:57	
Dibromochloromethane	ug/L	ND	1.0	01/21/15 23:57	
Ethylbenzene	ug/L	ND	1.0	01/21/15 23:57	
Methylene chloride	ug/L	ND	1.0	01/21/15 23:57	
Styrene	ug/L	ND	1.0	01/21/15 23:57	
Tetrachloroethene	ug/L	ND	1.0	01/21/15 23:57	
Toluene	ug/L	ND	1.0	01/21/15 23:57	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/21/15 23:57	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/21/15 23:57	
Trichloroethene	ug/L	ND	1.0	01/21/15 23:57	
Vinyl chloride	ug/L	ND	1.0	01/21/15 23:57	
Xylene (Total)	ug/L	ND	3.0	01/21/15 23:57	
1,2-Dichloroethane-d4 (S)	%	99	80-120	01/21/15 23:57	
4-Bromofluorobenzene (S)	%	101	80-120	01/21/15 23:57	
Toluene-d8 (S)	%	98	80-120	01/21/15 23:57	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

LABORATORY CONTROL SAMPLE: 1509650

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.1	106	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	18.8	94	73-121	
1,1,2-Trichloroethane	ug/L	20	19.2	96	80-120	
1,1-Dichloroethane	ug/L	20	21.4	107	80-120	
1,1-Dichloroethene	ug/L	20	20.8	104	80-120	
1,2-Dichloroethane	ug/L	20	20.0	100	81-120	
1,2-Dichloropropane	ug/L	20	19.6	98	80-120	
2-Butanone (MEK)	ug/L	100	100	100	67-122	
2-Hexanone	ug/L	100	92.3	92	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	90.6	91	76-120	
Acetone	ug/L	100	102	102	72-120	
Benzene	ug/L	20	22.1	110	80-120	
Bromodichloromethane	ug/L	20	20.0	100	80-120	
Bromoform	ug/L	20	19.1	96	73-138	
Bromomethane	ug/L	20	21.6	108	38-137	
Carbon disulfide	ug/L	20	23.5	117	71-129	
Carbon tetrachloride	ug/L	20	30.0	150	67-146	L0
Chlorobenzene	ug/L	20	20.3	101	80-120	
Chloroethane	ug/L	20	20.9	104	76-120	
Chloroform	ug/L	20	21.2	106	80-120	
Chloromethane	ug/L	20	23.2	116	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.3	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.6	98	80-120	
Dibromochloromethane	ug/L	20	18.7	93	80-126	
Ethylbenzene	ug/L	20	19.6	98	80-120	
Methylene chloride	ug/L	20	20.5	103	80-120	
Styrene	ug/L	20	21.4	107	80-123	
Tetrachloroethene	ug/L	20	19.1	96	80-123	
Toluene	ug/L	20	18.5	93	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.8	104	80-120	
trans-1,3-Dichloropropene	ug/L	20	17.9	89	80-129	
Trichloroethene	ug/L	20	20.5	102	80-120	
Vinyl chloride	ug/L	20	22.3	112	62-125	
Xylene (Total)	ug/L	60	64.1	107	80-120	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1509651 1509652

Parameter	Units	60186453026 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	1.6	20	20	23.7	22.9	111	107	88-124	3	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.4	19.2	97	96	78-116	1	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	19.5	19.1	97	95	84-112	2	10	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1509651 1509652

Parameter	Units	60186453026 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	2.3	20	20	23.4	22.2	105	100	82-121	5	9	
1,1-Dichloroethene	ug/L	3.1	20	20	24.7	23.7	108	103	78-124	5	12	
1,2-Dichloroethane	ug/L	ND	20	20	19.5	18.8	97	93	79-121	4	12	
1,2-Dichloropropane	ug/L	ND	20	20	18.8	18.8	94	94	82-119	0	10	
2-Butanone (MEK)	ug/L	ND	100	100	93.8	94.1	94	94	66-114	0	13	
2-Hexanone	ug/L	ND	100	100	90.7	94.2	91	94	71-116	4	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	86.7	85.5	87	86	72-122	1	12	
Acetone	ug/L	ND	100	100	91.6	88.8	92	89	65-113	3	27	
Benzene	ug/L	ND	20	20	22.4	21.8	106	103	46-155	3	13	
Bromodichloromethane	ug/L	ND	20	20	19.2	19.2	96	96	77-127	0	10	
Bromoform	ug/L	ND	20	20	18.8	19.1	94	96	70-125	2	11	
Bromomethane	ug/L	ND	20	20	10.9	12.7	55	63	41-140	15	30	
Carbon disulfide	ug/L	ND	20	20	25.2	24.8	125	123	68-140	2	10	
Carbon tetrachloride	ug/L	1.2	20	20	31.7	30.8	152	148	68-147	3	11	M0
Chlorobenzene	ug/L	ND	20	20	20.3	20.0	102	100	83-121	1	9	
Chloroethane	ug/L	ND	20	20	19.9	19.8	100	99	69-126	1	19	
Chloroform	ug/L	3.2	20	20	23.8	23.2	102	100	86-119	2	9	
Chloromethane	ug/L	ND	20	20	20.7	20.6	104	103	23-168	1	49	
cis-1,2-Dichloroethene	ug/L	169	20	20	180	178	111	101	85-117	1	10	
cis-1,3-Dichloropropene	ug/L	ND	20	20	18.9	18.3	94	91	74-115	3	12	
Dibromochloromethane	ug/L	32.5	20	20	18.3	19.0	91	95	65-134	4	11	
Ethylbenzene	ug/L	ND	20	20	20.1	19.5	100	97	51-148	3	14	
Methylene chloride	ug/L	ND	20	20	18.5	18.5	93	93	75-118	0	11	
Styrene	ug/L	ND	20	20	19.8	20.0	99	100	17-174	1	10	
Tetrachloroethene	ug/L	33.5	20	20	49.4	48.3	96	91	78-127	2	9	
Toluene	ug/L	ND	20	20	19.1	18.9	96	95	47-149	1	16	
trans-1,2-Dichloroethene	ug/L	ND	20	20	21.6	21.3	105	103	84-119	1	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.0	17.8	90	89	71-120	1	10	
Trichloroethene	ug/L	27.2	20	20	47.8	46.4	98	92	70-135	3	10	
Vinyl chloride	ug/L	3.1	20	20	25.3	25.8	110	113	58-130	2	11	
Xylene (Total)	ug/L	ND	60	60	61.9	62.0	103	103	39-158	0	15	
1,2-Dichloroethane-d4 (S)	%						101	103	80-120			
4-Bromofluorobenzene (S)	%						100	99	80-120			
Toluene-d8 (S)	%						99	100	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

QC Batch: MSV/67167 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186334005, 60186334006, 60186334007

METHOD BLANK: 1510598 Matrix: Water
Associated Lab Samples: 60186334005, 60186334006, 60186334007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/23/15 11:38	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/23/15 11:38	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/23/15 11:38	
1,1-Dichloroethane	ug/L	ND	1.0	01/23/15 11:38	
1,1-Dichloroethene	ug/L	ND	1.0	01/23/15 11:38	
1,2-Dichloroethane	ug/L	ND	1.0	01/23/15 11:38	
1,2-Dichloropropane	ug/L	ND	1.0	01/23/15 11:38	
2-Butanone (MEK)	ug/L	ND	10.0	01/23/15 11:38	
2-Hexanone	ug/L	ND	10.0	01/23/15 11:38	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/23/15 11:38	
Acetone	ug/L	ND	10.0	01/23/15 11:38	
Benzene	ug/L	ND	1.0	01/23/15 11:38	
Bromodichloromethane	ug/L	ND	1.0	01/23/15 11:38	
Bromoform	ug/L	ND	1.0	01/23/15 11:38	
Bromomethane	ug/L	ND	5.0	01/23/15 11:38	
Carbon disulfide	ug/L	ND	5.0	01/23/15 11:38	
Carbon tetrachloride	ug/L	ND	1.0	01/23/15 11:38	
Chlorobenzene	ug/L	ND	1.0	01/23/15 11:38	
Chloroethane	ug/L	ND	1.0	01/23/15 11:38	
Chloroform	ug/L	ND	1.0	01/23/15 11:38	
Chloromethane	ug/L	ND	1.0	01/23/15 11:38	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 11:38	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 11:38	
Dibromochloromethane	ug/L	ND	1.0	01/23/15 11:38	
Ethylbenzene	ug/L	ND	1.0	01/23/15 11:38	
Methylene chloride	ug/L	ND	1.0	01/23/15 11:38	
Styrene	ug/L	ND	1.0	01/23/15 11:38	
Tetrachloroethene	ug/L	ND	1.0	01/23/15 11:38	
Toluene	ug/L	ND	1.0	01/23/15 11:38	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 11:38	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 11:38	
Trichloroethene	ug/L	ND	1.0	01/23/15 11:38	
Vinyl chloride	ug/L	ND	1.0	01/23/15 11:38	
Xylene (Total)	ug/L	ND	3.0	01/23/15 11:38	
1,2-Dichloroethane-d4 (S)	%	102	80-120	01/23/15 11:38	
4-Bromofluorobenzene (S)	%	93	80-120	01/23/15 11:38	
Toluene-d8 (S)	%	99	80-120	01/23/15 11:38	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

LABORATORY CONTROL SAMPLE: 1510599

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.4	107	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.9	99	73-121	
1,1,2-Trichloroethane	ug/L	20	21.1	105	80-120	
1,1-Dichloroethane	ug/L	20	18.0	90	80-120	
1,1-Dichloroethene	ug/L	20	18.6	93	80-120	
1,2-Dichloroethane	ug/L	20	21.3	106	81-120	
1,2-Dichloropropane	ug/L	20	20.4	102	80-120	
2-Butanone (MEK)	ug/L	100	91.3	91	67-122	
2-Hexanone	ug/L	100	94.3	94	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	103	103	76-120	
Acetone	ug/L	100	88.2	88	72-120	
Benzene	ug/L	20	20.2	101	80-120	
Bromodichloromethane	ug/L	20	21.3	106	80-120	
Bromoform	ug/L	20	20.7	104	73-138	
Bromomethane	ug/L	20	23.7	118	38-137	
Carbon disulfide	ug/L	20	18.6	93	71-129	
Carbon tetrachloride	ug/L	20	21.2	106	67-146	
Chlorobenzene	ug/L	20	20.4	102	80-120	
Chloroethane	ug/L	20	18.3	92	76-120	
Chloroform	ug/L	20	19.6	98	80-120	
Chloromethane	ug/L	20	21.0	105	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.5	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.5	102	80-120	
Dibromochloromethane	ug/L	20	19.6	98	80-126	
Ethylbenzene	ug/L	20	20.5	102	80-120	
Methylene chloride	ug/L	20	18.2	91	80-120	
Styrene	ug/L	20	20.4	102	80-123	
Tetrachloroethene	ug/L	20	20.4	102	80-123	
Toluene	ug/L	20	20.0	100	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.9	94	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.2	101	80-129	
Trichloroethene	ug/L	20	19.6	98	80-120	
Vinyl chloride	ug/L	20	20.1	100	62-125	
Xylene (Total)	ug/L	60	60.6	101	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1510600 1510601

Parameter	Units	60186403024 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	20.9	21.5	104	108	88-124	3	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.6	20.1	98	100	78-116	2	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	20.1	20.5	101	103	84-112	2	10	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1510600 1510601

Parameter	Units	60186403024 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	ND	20	20	18.4	18.6	92	93	82-121	1	9	
1,1-Dichloroethene	ug/L	ND	20	20	18.5	19.5	93	97	78-124	5	12	
1,2-Dichloroethane	ug/L	ND	20	20	20.2	21.4	101	107	79-121	6	12	
1,2-Dichloropropane	ug/L	ND	20	20	19.4	20.5	97	102	82-119	6	10	
2-Butanone (MEK)	ug/L	ND	100	100	82.9	92.0	83	92	66-114	10	13	
2-Hexanone	ug/L	ND	100	100	94.2	96.7	94	97	71-116	3	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	101	102	101	102	72-122	1	12	
Acetone	ug/L	ND	100	100	82.8	87.0	83	87	65-113	5	27	
Benzene	ug/L	ND	20	20	19.9	20.5	99	103	46-155	3	13	
Bromodichloromethane	ug/L	ND	20	20	20.5	21.3	102	106	77-127	4	10	
Bromoform	ug/L	ND	20	20	19.3	20.5	97	102	70-125	6	11	
Bromomethane	ug/L	ND	20	20	23.0	27.5	115	137	41-140	18	30	
Carbon disulfide	ug/L	ND	20	20	18.6	19.2	93	96	68-140	3	10	
Carbon tetrachloride	ug/L	ND	20	20	21.3	22.0	107	110	68-147	3	11	
Chlorobenzene	ug/L	ND	20	20	19.8	20.0	99	100	83-121	1	9	
Chloroethane	ug/L	ND	20	20	18.5	18.8	92	94	69-126	2	19	
Chloroform	ug/L	ND	20	20	19.5	20.1	98	101	86-119	3	9	
Chloromethane	ug/L	ND	20	20	22.1	21.5	110	108	23-168	3	49	
cis-1,2-Dichloroethene	ug/L	17.7	20	20	37.4	39.6	98	109	85-117	6	10	
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.9	20.7	100	103	74-115	4	12	
Dibromochloromethane	ug/L	ND	20	20	20.3	20.6	102	103	65-134	1	11	
Ethylbenzene	ug/L	ND	20	20	19.6	19.8	98	99	51-148	1	14	
Methylene chloride	ug/L	ND	20	20	18.4	19.0	92	95	75-118	3	11	
Styrene	ug/L	ND	20	20	19.8	20.2	99	101	17-174	2	10	
Tetrachloroethene	ug/L	1.1	20	20	21.1	21.3	100	101	78-127	1	9	
Toluene	ug/L	ND	20	20	19.3	19.8	97	99	47-149	2	16	
trans-1,2-Dichloroethene	ug/L	1.2	20	20	19.9	20.1	93	95	84-119	1	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	19.3	19.9	97	99	71-120	3	10	
Trichloroethene	ug/L	2.5	20	20	21.3	22.2	94	98	70-135	4	10	
Vinyl chloride	ug/L	ND	20	20	20.6	22.2	103	111	58-130	7	11	
Xylene (Total)	ug/L	ND	60	60	58.5	60.1	97	100	39-158	3	15	
1,2-Dichloroethane-d4 (S)	%						102	105	80-120			
4-Bromofluorobenzene (S)	%						101	103	80-120			
Toluene-d8 (S)	%						100	101	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

QC Batch: MSV/67069 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334008, 60186334011, 60186334013

METHOD BLANK: 1508633 Matrix: Water
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334008, 60186334011, 60186334013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/20/15 15:13	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/20/15 15:13	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/20/15 15:13	
1,1-Dichloroethane	ug/L	ND	1.0	01/20/15 15:13	
1,1-Dichloroethene	ug/L	ND	1.0	01/20/15 15:13	
1,2-Dichloroethane	ug/L	ND	1.0	01/20/15 15:13	
1,2-Dichloropropane	ug/L	ND	1.0	01/20/15 15:13	
2-Butanone (MEK)	ug/L	ND	10.0	01/20/15 15:13	
2-Hexanone	ug/L	ND	10.0	01/20/15 15:13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/20/15 15:13	
Acetone	ug/L	ND	10.0	01/20/15 15:13	
Benzene	ug/L	ND	1.0	01/20/15 15:13	
Bromodichloromethane	ug/L	ND	1.0	01/20/15 15:13	
Bromoform	ug/L	ND	1.0	01/20/15 15:13	
Bromomethane	ug/L	ND	5.0	01/20/15 15:13	
Carbon disulfide	ug/L	ND	5.0	01/20/15 15:13	
Carbon tetrachloride	ug/L	ND	1.0	01/20/15 15:13	
Chlorobenzene	ug/L	ND	1.0	01/20/15 15:13	
Chloroethane	ug/L	ND	1.0	01/20/15 15:13	
Chloroform	ug/L	ND	1.0	01/20/15 15:13	
Chloromethane	ug/L	ND	1.0	01/20/15 15:13	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/20/15 15:13	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/20/15 15:13	
Dibromochloromethane	ug/L	ND	1.0	01/20/15 15:13	
Ethylbenzene	ug/L	ND	1.0	01/20/15 15:13	
Methylene chloride	ug/L	ND	1.0	01/20/15 15:13	
Styrene	ug/L	ND	1.0	01/20/15 15:13	
Tetrachloroethene	ug/L	ND	1.0	01/20/15 15:13	
Toluene	ug/L	ND	1.0	01/20/15 15:13	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/20/15 15:13	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/20/15 15:13	
Trichloroethene	ug/L	ND	1.0	01/20/15 15:13	
Vinyl chloride	ug/L	ND	1.0	01/20/15 15:13	
Xylene (Total)	ug/L	ND	3.0	01/20/15 15:13	
1,2-Dichloroethane-d4 (S)	%	101	80-120	01/20/15 15:13	
4-Bromofluorobenzene (S)	%	100	80-120	01/20/15 15:13	
Toluene-d8 (S)	%	99	80-120	01/20/15 15:13	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

LABORATORY CONTROL SAMPLE: 1508634

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.5	108	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.1	101	73-121	
1,1,2-Trichloroethane	ug/L	20	20.0	100	80-120	
1,1-Dichloroethane	ug/L	20	21.2	106	80-120	
1,1-Dichloroethene	ug/L	20	21.8	109	80-120	
1,2-Dichloroethane	ug/L	20	21.4	107	81-120	
1,2-Dichloropropane	ug/L	20	21.8	109	80-120	
2-Butanone (MEK)	ug/L	100	111	111	67-122	
2-Hexanone	ug/L	100	94.5	94	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	96.6	97	76-120	
Acetone	ug/L	100	102	102	72-120	
Benzene	ug/L	20	21.5	108	80-120	
Bromodichloromethane	ug/L	20	21.0	105	80-120	
Bromoform	ug/L	20	19.2	96	73-138	
Bromomethane	ug/L	20	17.2	86	38-137	
Carbon disulfide	ug/L	20	22.6	113	71-129	
Carbon tetrachloride	ug/L	20	21.3	106	67-146	
Chlorobenzene	ug/L	20	20.4	102	80-120	
Chloroethane	ug/L	20	20.7	104	76-120	
Chloroform	ug/L	20	21.5	107	80-120	
Chloromethane	ug/L	20	16.1	80	34-165	
cis-1,2-Dichloroethene	ug/L	20	21.7	109	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.7	103	80-120	
Dibromochloromethane	ug/L	20	19.3	96	80-126	
Ethylbenzene	ug/L	20	20.7	103	80-120	
Methylene chloride	ug/L	20	20.8	104	80-120	
Styrene	ug/L	20	20.4	102	80-123	
Tetrachloroethene	ug/L	20	19.4	97	80-123	
Toluene	ug/L	20	21.4	107	80-120	
trans-1,2-Dichloroethene	ug/L	20	21.2	106	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.7	93	80-129	
Trichloroethene	ug/L	20	20.6	103	80-120	
Vinyl chloride	ug/L	20	20.7	104	62-125	
Xylene (Total)	ug/L	60	61.3	102	80-120	
1,2-Dichloroethane-d4 (S)	%			104	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			100	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

QC Batch: MSV/67101 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334009, 60186334012, 60186334014, 60186334015

METHOD BLANK: 1509249 Matrix: Water
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334009, 60186334012, 60186334014, 60186334015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1-Dichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1-Dichloroethene	ug/L	ND	1.0	01/20/15 11:37	
1,2-Dichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,2-Dichloropropane	ug/L	ND	1.0	01/20/15 11:37	
2-Butanone (MEK)	ug/L	ND	10.0	01/20/15 11:37	
2-Hexanone	ug/L	ND	10.0	01/20/15 11:37	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/20/15 11:37	
Acetone	ug/L	ND	10.0	01/20/15 11:37	
Benzene	ug/L	ND	1.0	01/20/15 11:37	
Bromodichloromethane	ug/L	ND	1.0	01/20/15 11:37	
Bromoform	ug/L	ND	1.0	01/20/15 11:37	
Bromomethane	ug/L	ND	5.0	01/20/15 11:37	
Carbon disulfide	ug/L	ND	5.0	01/20/15 11:37	
Carbon tetrachloride	ug/L	ND	1.0	01/20/15 11:37	
Chlorobenzene	ug/L	ND	1.0	01/20/15 11:37	
Chloroethane	ug/L	ND	1.0	01/20/15 11:37	
Chloroform	ug/L	ND	1.0	01/20/15 11:37	
Chloromethane	ug/L	ND	1.0	01/20/15 11:37	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/20/15 11:37	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/20/15 11:37	
Dibromochloromethane	ug/L	ND	1.0	01/20/15 11:37	
Ethylbenzene	ug/L	ND	1.0	01/20/15 11:37	
Methylene chloride	ug/L	ND	1.0	01/20/15 11:37	
Styrene	ug/L	ND	1.0	01/20/15 11:37	
Tetrachloroethene	ug/L	ND	1.0	01/20/15 11:37	
Toluene	ug/L	ND	1.0	01/20/15 11:37	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/20/15 11:37	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/20/15 11:37	
Trichloroethene	ug/L	ND	1.0	01/20/15 11:37	
Vinyl chloride	ug/L	ND	1.0	01/20/15 11:37	
Xylene (Total)	ug/L	ND	3.0	01/20/15 11:37	
1,2-Dichloroethane-d4 (S)	%	101	80-120	01/20/15 11:37	
4-Bromofluorobenzene (S)	%	98	80-120	01/20/15 11:37	
Toluene-d8 (S)	%	102	80-120	01/20/15 11:37	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

LABORATORY CONTROL SAMPLE: 1509250

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.5	107	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.5	102	73-121	
1,1,2-Trichloroethane	ug/L	20	20.0	100	80-120	
1,1-Dichloroethane	ug/L	20	17.8	89	80-120	
1,1-Dichloroethene	ug/L	20	19.2	96	80-120	
1,2-Dichloroethane	ug/L	20	21.1	105	81-120	
1,2-Dichloropropane	ug/L	20	20.7	104	80-120	
2-Butanone (MEK)	ug/L	100	86.2	86	67-122	
2-Hexanone	ug/L	100	92.1	92	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	96.4	96	76-120	
Acetone	ug/L	100	83.1	83	72-120	
Benzene	ug/L	20	20.2	101	80-120	
Bromodichloromethane	ug/L	20	21.7	108	80-120	
Bromoform	ug/L	20	20.2	101	73-138	
Bromomethane	ug/L	20	16.0	80	38-137	
Carbon disulfide	ug/L	20	18.5	92	71-129	
Carbon tetrachloride	ug/L	20	19.6	98	67-146	
Chlorobenzene	ug/L	20	20.7	104	80-120	
Chloroethane	ug/L	20	16.2	81	76-120	
Chloroform	ug/L	20	20.3	102	80-120	
Chloromethane	ug/L	20	11.9	59	34-165	
cis-1,2-Dichloroethene	ug/L	20	18.7	93	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.3	106	80-120	
Dibromochloromethane	ug/L	20	20.5	102	80-126	
Ethylbenzene	ug/L	20	20.5	102	80-120	
Methylene chloride	ug/L	20	18.7	94	80-120	
Styrene	ug/L	20	20.2	101	80-123	
Tetrachloroethene	ug/L	20	22.0	110	80-123	
Toluene	ug/L	20	20.0	100	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.6	93	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.0	105	80-129	
Trichloroethene	ug/L	20	20.3	101	80-120	
Vinyl chloride	ug/L	20	17.8	89	62-125	
Xylene (Total)	ug/L	60	59.2	99	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			102	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

QC Batch: MSV/67116
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60186334015

METHOD BLANK: 1509372
Matrix: Water
Associated Lab Samples: 60186334015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/21/15 17:40	
Trichloroethene	ug/L	ND	1.0	01/21/15 17:40	
1,2-Dichloroethane-d4 (S)	%	98	80-120	01/21/15 17:40	
4-Bromofluorobenzene (S)	%	100	80-120	01/21/15 17:40	
Toluene-d8 (S)	%	101	80-120	01/21/15 17:40	

LABORATORY CONTROL SAMPLE: 1509373

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	20	20.2	101	80-120	
Trichloroethene	ug/L	20	18.5	93	80-120	
1,2-Dichloroethane-d4 (S)	%			96	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			102	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

QC Batch: WET/52576
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60186334001

METHOD BLANK: 1509750 Matrix: Water
Associated Lab Samples: 60186334001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	01/22/15 09:56	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	01/22/15 09:56	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	01/22/15 09:56	

LABORATORY CONTROL SAMPLE: 1509751

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	521	104	90-110	

SAMPLE DUPLICATE: 1509752

Parameter	Units	60186097034 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	140	140	0	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	140	140	0	10	

SAMPLE DUPLICATE: 1509753

Parameter	Units	60186183024 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	8.8J	8.5J		10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	8.8J	8.5J		10	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

QC Batch: WET/52591 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60186334002, 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

METHOD BLANK: 1510099 Matrix: Water
Associated Lab Samples: 60186334002, 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	01/22/15 14:22	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	01/22/15 14:22	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	01/22/15 14:22	

LABORATORY CONTROL SAMPLE: 1510100

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	504	101	90-110	

SAMPLE DUPLICATE: 1510101

Parameter	Units	60186334003 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	250	250	0	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	250	250	0	10	

SAMPLE DUPLICATE: 1510102

Parameter	Units	60186334014 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	146	150	3	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	146	150	3	10	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

QC Batch: WET/52538 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

METHOD BLANK: 1508451 Matrix: Water
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	01/20/15 10:45	

LABORATORY CONTROL SAMPLE: 1508452

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.52	104	80-120	

MATRIX SPIKE SAMPLE: 1508453

Parameter	Units	60186183022 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.46	92	75-125	

SAMPLE DUPLICATE: 1508454

Parameter	Units	60186183023 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

QC Batch: WETA/32626 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

METHOD BLANK: 1511707 Matrix: Water
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/28/15 01:28	
Sulfate	mg/L	ND	1.0	01/28/15 01:28	

METHOD BLANK: 1513353 Matrix: Water
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/28/15 16:05	
Sulfate	mg/L	ND	1.0	01/28/15 16:05	

METHOD BLANK: 1513933 Matrix: Water
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/29/15 14:08	
Sulfate	mg/L	ND	1.0	01/29/15 14:08	

METHOD BLANK: 1514046 Matrix: Water
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	01/29/15 15:10	
Sulfate	mg/L	ND	1.0	01/29/15 15:10	

LABORATORY CONTROL SAMPLE: 1511708

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	98	90-110	
Sulfate	mg/L	5	5.0	100	90-110	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

LABORATORY CONTROL SAMPLE: 1513354

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.5	91	90-110	
Sulfate	mg/L	5	4.8	96	90-110	

LABORATORY CONTROL SAMPLE: 1513934

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	93	90-110	
Sulfate	mg/L	5	4.7	94	90-110	

LABORATORY CONTROL SAMPLE: 1514047

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	93	90-110	
Sulfate	mg/L	5	4.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1511709 1511710

Parameter	Units	60186288001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	52.0	50	50	107	108	111	112	80-120	1	15	
Sulfate	mg/L	225	100	100	332	332	107	107	80-120	0	15	

MATRIX SPIKE SAMPLE: 1511711

Parameter	Units	60186289002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	514	250	821	123	80-120	M1
Sulfate	mg/L	386	250	661	110	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

QC Batch: WETA/32590 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60186334001, 60186334002

METHOD BLANK: 1509167 Matrix: Water
Associated Lab Samples: 60186334001, 60186334002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	01/21/15 13:09	

LABORATORY CONTROL SAMPLE: 1509168

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.1	105	90-110	

MATRIX SPIKE SAMPLE: 1509169

Parameter	Units	60186360001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	2.3	113	90-110	M1

MATRIX SPIKE SAMPLE: 1509171

Parameter	Units	60186334001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.22	2	1.9	85	90-110	M1

SAMPLE DUPLICATE: 1509170

Parameter	Units	60186100002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	0.75	0.74	1	18	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

QC Batch: WETA/32617 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

METHOD BLANK: 1511423 Matrix: Water
Associated Lab Samples: 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	01/24/15 11:57	

METHOD BLANK: 1512147 Matrix: Water
Associated Lab Samples: 60186334015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	01/27/15 07:44	

LABORATORY CONTROL SAMPLE: 1511424

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.1	105	90-110	

LABORATORY CONTROL SAMPLE: 1512148

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.2	110	90-110	

MATRIX SPIKE SAMPLE: 1511425

Parameter	Units	60186334003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	3.9	10	13.6	97	90-110	

MATRIX SPIKE SAMPLE: 1511427

Parameter	Units	60186334015 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	1.2	10	11.1	99	90-110	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

SAMPLE DUPLICATE: 1511426

Parameter	Units	60186334005 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	ND	ND		18	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

QC Batch: WETA/32550 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

METHOD BLANK: 1507426 Matrix: Water
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	01/16/15 14:58	
Nitrogen, Nitrite	mg/L	ND	0.10	01/16/15 14:58	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	01/16/15 14:58	

LABORATORY CONTROL SAMPLE: 1507427

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.7	107	85-115	
Nitrogen, Nitrite	mg/L	.4	0.36	91	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	104	90-110	

MATRIX SPIKE SAMPLE: 1507428

Parameter	Units	60186301001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	132	80	194	78	85-115	M1
Nitrogen, Nitrite	mg/L	21.3	20	47.4	131	90-110	M1
Nitrogen, NO2 plus NO3	mg/L	153	100	242	88	90-110	M1

MATRIX SPIKE SAMPLE: 1508274

Parameter	Units	60186334009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.1	1.6	2.8	103	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.36	91	90-110	
Nitrogen, NO2 plus NO3	mg/L	1.1	2	3.1	100	90-110	

SAMPLE DUPLICATE: 1507429

Parameter	Units	60186309001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	ND	ND		20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

QC Batch: WETA/32752 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334005, 60186334007

METHOD BLANK: 1516754 Matrix: Water
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334005, 60186334007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	02/05/15 18:03	

LABORATORY CONTROL SAMPLE: 1516755

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	4.9	99	80-120	

MATRIX SPIKE SAMPLE: 1516270

Parameter	Units	60186183016 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	0.61J	5	5.2	93	80-120	

SAMPLE DUPLICATE: 1516269

Parameter	Units	60186183015 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	0.96J	0.53J		25	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

QC Batch: WETA/32753 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

METHOD BLANK: 1516271 Matrix: Water
Associated Lab Samples: 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	02/05/15 13:11	

LABORATORY CONTROL SAMPLE: 1516272

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.0	99	80-120	

SAMPLE DUPLICATE: 1516274

Parameter	Units	60186208004 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	153	155	1	25	

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QUALITY CONTROL DATA

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

QC Batch: WETA/7104 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

METHOD BLANK: 117768 Matrix: Water
Associated Lab Samples: 60186334001, 60186334002, 60186334003, 60186334004, 60186334005, 60186334007, 60186334009, 60186334011, 60186334012, 60186334014, 60186334015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	01/23/15 13:32	

LABORATORY CONTROL SAMPLE: 117769

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.6	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 117770 117771

Parameter	Units	60186334001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphate as P04	mg/L	ND	1.5	1.5	1.4	1.6	94	102	80-120	8	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 117774 117775

Parameter	Units	7522454002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphate as P04	mg/L	0.032	1.5	1.5	1.6	1.4	100	91	80-120	9	20	

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QUALIFIERS

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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TNI - The NELAC Institute.

LABORATORIES

PASI-D	Pace Analytical Services - Dallas
PASI-K	Pace Analytical Services - Kansas City

BATCH QUALIFIERS

Batch: MSV/67069

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/67101

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/67116

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1e	Field pH
E	Analyte concentration exceeded the calibration range. The reported result is estimated.
H6	Analysis initiated outside of the 15 minute EPA recommended holding time.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186334001	ITMW-18-201501	EPA 8015 - Alcohol	GCSV/3368		
60186334002	MW-85-201501	EPA 8015 - Alcohol	GCSV/3368		
60186334003	MW-86-201501	EPA 8015 - Alcohol	GCSV/3368		
60186334004	ITMW-19-201501	EPA 8015 - Alcohol	GCSV/3368		
60186334005	MW-38-201501	EPA 8015 - Alcohol	GCSV/3368		
60186334007	ITMW-17-201501	EPA 8015 - Alcohol	GCSV/3368		
60186334009	ITMW-12-201501	EPA 8015 - Alcohol	GCSV/3368		
60186334011	ITMW-15-201501	EPA 8015 - Alcohol	GCSV/3368		
60186334012	ITMW-11-201501	EPA 8015 - Alcohol	GCSV/3368		
60186334014	MW-83-201501	EPA 8015 - Alcohol	GCSV/3368		
60186334015	MW-25-201501	EPA 8015 - Alcohol	GCSV/3368		
60186334001	ITMW-18-201501	EPA 3010	MPRP/30501	EPA 6010	ICP/22791
60186334002	MW-85-201501	EPA 3010	MPRP/30501	EPA 6010	ICP/22791
60186334003	MW-86-201501	EPA 3010	MPRP/30501	EPA 6010	ICP/22791
60186334004	ITMW-19-201501	EPA 3010	MPRP/30501	EPA 6010	ICP/22791
60186334005	MW-38-201501	EPA 3010	MPRP/30501	EPA 6010	ICP/22791
60186334007	ITMW-17-201501	EPA 3010	MPRP/30501	EPA 6010	ICP/22791
60186334009	ITMW-12-201501	EPA 3010	MPRP/30501	EPA 6010	ICP/22791
60186334011	ITMW-15-201501	EPA 3010	MPRP/30501	EPA 6010	ICP/22791
60186334012	ITMW-11-201501	EPA 3010	MPRP/30501	EPA 6010	ICP/22791
60186334014	MW-83-201501	EPA 3010	MPRP/30501	EPA 6010	ICP/22791
60186334015	MW-25-201501	EPA 3010	MPRP/30501	EPA 6010	ICP/22791
60186334005	MW-38-201501	EPA 5030B/8260	MSV/67126		
60186334005	MW-38-201501	EPA 5030B/8260	MSV/67167		
60186334006	DUP-06-201501	EPA 5030B/8260	MSV/67126		
60186334006	DUP-06-201501	EPA 5030B/8260	MSV/67167		
60186334007	ITMW-17-201501	EPA 5030B/8260	MSV/67126		
60186334007	ITMW-17-201501	EPA 5030B/8260	MSV/67167		
60186334010	TB-20-201501	EPA 5030B/8260	MSV/67126		
60186334016	TB-21-201501	EPA 5030B/8260	MSV/67126		
60186334017	TB-22-201501	EPA 5030B/8260	MSV/67126		
60186334018	EB-04-201501	EPA 5030B/8260	MSV/67126		
60186334001	ITMW-18-201501	EPA 5030B/8260	MSV/67069		
60186334001	ITMW-18-201501	EPA 5030B/8260	MSV/67101		
60186334002	MW-85-201501	EPA 5030B/8260	MSV/67069		
60186334002	MW-85-201501	EPA 5030B/8260	MSV/67101		
60186334003	MW-86-201501	EPA 5030B/8260	MSV/67069		
60186334003	MW-86-201501	EPA 5030B/8260	MSV/67101		
60186334004	ITMW-19-201501	EPA 5030B/8260	MSV/67069		
60186334008	DUP-04-201501	EPA 5030B/8260	MSV/67069		
60186334009	ITMW-12-201501	EPA 5030B/8260	MSV/67101		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186334011	ITMW-15-201501	EPA 5030B/8260	MSV/67069		
60186334012	ITMW-11-201501	EPA 5030B/8260	MSV/67101		
60186334013	DUP-05-201501	EPA 5030B/8260	MSV/67069		
60186334014	MW-83-201501	EPA 5030B/8260	MSV/67101		
60186334015	MW-25-201501	EPA 5030B/8260	MSV/67101		
60186334015	MW-25-201501	EPA 5030B/8260	MSV/67116		
60186334001	ITMW-18-201501	SM 2320B	WET/52576		
60186334002	MW-85-201501	SM 2320B	WET/52591		
60186334003	MW-86-201501	SM 2320B	WET/52591		
60186334004	ITMW-19-201501	SM 2320B	WET/52591		
60186334005	MW-38-201501	SM 2320B	WET/52591		
60186334007	ITMW-17-201501	SM 2320B	WET/52591		
60186334009	ITMW-12-201501	SM 2320B	WET/52591		
60186334011	ITMW-15-201501	SM 2320B	WET/52591		
60186334012	ITMW-11-201501	SM 2320B	WET/52591		
60186334014	MW-83-201501	SM 2320B	WET/52591		
60186334015	MW-25-201501	SM 2320B	WET/52591		
60186334001	ITMW-18-201501	SM 3500-Fe B#4	WET/52704		
60186334002	MW-85-201501	SM 3500-Fe B#4	WET/52704		
60186334003	MW-86-201501	SM 3500-Fe B#4	WET/52704		
60186334004	ITMW-19-201501	SM 3500-Fe B#4	WET/52704		
60186334005	MW-38-201501	SM 3500-Fe B#4	WET/52704		
60186334007	ITMW-17-201501	SM 3500-Fe B#4	WET/52704		
60186334009	ITMW-12-201501	SM 3500-Fe B#4	WET/52704		
60186334011	ITMW-15-201501	SM 3500-Fe B#4	WET/52704		
60186334012	ITMW-11-201501	SM 3500-Fe B#4	WET/52704		
60186334014	MW-83-201501	SM 3500-Fe B#4	WET/52704		
60186334015	MW-25-201501	SM 3500-Fe B#4	WET/52704		
60186334001	ITMW-18-201501	SM 4500-H+B	WET/52705		
60186334002	MW-85-201501	SM 4500-H+B	WET/52705		
60186334003	MW-86-201501	SM 4500-H+B	WET/52705		
60186334004	ITMW-19-201501	SM 4500-H+B	WET/52705		
60186334005	MW-38-201501	SM 4500-H+B	WET/52705		
60186334007	ITMW-17-201501	SM 4500-H+B	WET/52705		
60186334009	ITMW-12-201501	SM 4500-H+B	WET/52705		
60186334011	ITMW-15-201501	SM 4500-H+B	WET/52705		
60186334012	ITMW-11-201501	SM 4500-H+B	WET/52705		
60186334014	MW-83-201501	SM 4500-H+B	WET/52705		
60186334015	MW-25-201501	SM 4500-H+B	WET/52705		
60186334001	ITMW-18-201501	SM 4500-S-2 D	WET/52538		
60186334002	MW-85-201501	SM 4500-S-2 D	WET/52538		
60186334003	MW-86-201501	SM 4500-S-2 D	WET/52538		
60186334004	ITMW-19-201501	SM 4500-S-2 D	WET/52538		
60186334005	MW-38-201501	SM 4500-S-2 D	WET/52538		

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(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186334007	**ITMW-17-201501**	SM 4500-S-2 D	WET/52538		
60186334009	**ITMW-12-201501**	SM 4500-S-2 D	WET/52538		
60186334011	**ITMW-15-201501**	SM 4500-S-2 D	WET/52538		
60186334012	**ITMW-11-201501**	SM 4500-S-2 D	WET/52538		
60186334014	**MW-83-201501**	SM 4500-S-2 D	WET/52538		
60186334015	**MW-25-201501**	SM 4500-S-2 D	WET/52538		
60186334001	**ITMW-18-201501**	EPA 300.0	WETA/32626		
60186334002	**MW-85-201501**	EPA 300.0	WETA/32626		
60186334003	**MW-86-201501**	EPA 300.0	WETA/32626		
60186334004	**ITMW-19-201501**	EPA 300.0	WETA/32626		
60186334005	**MW-38-201501**	EPA 300.0	WETA/32626		
60186334007	**ITMW-17-201501**	EPA 300.0	WETA/32626		
60186334009	**ITMW-12-201501**	EPA 300.0	WETA/32626		
60186334011	**ITMW-15-201501**	EPA 300.0	WETA/32626		
60186334012	**ITMW-11-201501**	EPA 300.0	WETA/32626		
60186334014	**MW-83-201501**	EPA 300.0	WETA/32626		
60186334015	**MW-25-201501**	EPA 300.0	WETA/32626		
60186334001	**ITMW-18-201501**	EPA 350.1	WETA/32590		
60186334002	**MW-85-201501**	EPA 350.1	WETA/32590		
60186334003	**MW-86-201501**	EPA 350.1	WETA/32617		
60186334004	**ITMW-19-201501**	EPA 350.1	WETA/32617		
60186334005	**MW-38-201501**	EPA 350.1	WETA/32617		
60186334007	**ITMW-17-201501**	EPA 350.1	WETA/32617		
60186334009	**ITMW-12-201501**	EPA 350.1	WETA/32617		
60186334011	**ITMW-15-201501**	EPA 350.1	WETA/32617		
60186334012	**ITMW-11-201501**	EPA 350.1	WETA/32617		
60186334014	**MW-83-201501**	EPA 350.1	WETA/32617		
60186334015	**MW-25-201501**	EPA 350.1	WETA/32617		
60186334001	**ITMW-18-201501**	EPA 353.2	WETA/32550		
60186334002	**MW-85-201501**	EPA 353.2	WETA/32550		
60186334003	**MW-86-201501**	EPA 353.2	WETA/32550		
60186334004	**ITMW-19-201501**	EPA 353.2	WETA/32550		
60186334005	**MW-38-201501**	EPA 353.2	WETA/32550		
60186334007	**ITMW-17-201501**	EPA 353.2	WETA/32550		
60186334009	**ITMW-12-201501**	EPA 353.2	WETA/32550		
60186334011	**ITMW-15-201501**	EPA 353.2	WETA/32550		
60186334012	**ITMW-11-201501**	EPA 353.2	WETA/32550		
60186334014	**MW-83-201501**	EPA 353.2	WETA/32550		
60186334015	**MW-25-201501**	EPA 353.2	WETA/32550		
60186334001	**ITMW-18-201501**	SM 4500-CO2 D	WETA/32673		
60186334002	**MW-85-201501**	SM 4500-CO2 D	WETA/32673		
60186334003	**MW-86-201501**	SM 4500-CO2 D	WETA/32673		
60186334004	**ITMW-19-201501**	SM 4500-CO2 D	WETA/32673		
60186334005	**MW-38-201501**	SM 4500-CO2 D	WETA/32673		
60186334007	**ITMW-17-201501**	SM 4500-CO2 D	WETA/32673		
60186334009	**ITMW-12-201501**	SM 4500-CO2 D	WETA/32673		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith AR 1st Quarter
Pace Project No.: 60186334

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186334011	**ITMW-15-201501**	SM 4500-CO2 D	WETA/32673		
60186334012	**ITMW-11-201501**	SM 4500-CO2 D	WETA/32673		
60186334014	**MW-83-201501**	SM 4500-CO2 D	WETA/32673		
60186334015	**MW-25-201501**	SM 4500-CO2 D	WETA/32673		
60186334001	**ITMW-18-201501**	SM 5310C	WETA/32752		
60186334002	**MW-85-201501**	SM 5310C	WETA/32752		
60186334003	**MW-86-201501**	SM 5310C	WETA/32752		
60186334004	**ITMW-19-201501**	SM 5310C	WETA/32752		
60186334005	**MW-38-201501**	SM 5310C	WETA/32752		
60186334007	**ITMW-17-201501**	SM 5310C	WETA/32752		
60186334009	**ITMW-12-201501**	SM 5310C	WETA/32753		
60186334011	**ITMW-15-201501**	SM 5310C	WETA/32753		
60186334012	**ITMW-11-201501**	SM 5310C	WETA/32753		
60186334014	**MW-83-201501**	SM 5310C	WETA/32753		
60186334015	**MW-25-201501**	SM 5310C	WETA/32753		
60186334001	**ITMW-18-201501**	SM4500-P B	WETA/7104	SM 4500-P E	WETA/7111
60186334002	**MW-85-201501**	SM4500-P B	WETA/7104	SM 4500-P E	WETA/7111
60186334003	**MW-86-201501**	SM4500-P B	WETA/7104	SM 4500-P E	WETA/7111
60186334004	**ITMW-19-201501**	SM4500-P B	WETA/7104	SM 4500-P E	WETA/7111
60186334005	**MW-38-201501**	SM4500-P B	WETA/7104	SM 4500-P E	WETA/7111
60186334007	**ITMW-17-201501**	SM4500-P B	WETA/7104	SM 4500-P E	WETA/7111
60186334009	**ITMW-12-201501**	SM4500-P B	WETA/7104	SM 4500-P E	WETA/7111
60186334011	**ITMW-15-201501**	SM4500-P B	WETA/7104	SM 4500-P E	WETA/7111
60186334012	**ITMW-11-201501**	SM4500-P B	WETA/7104	SM 4500-P E	WETA/7111
60186334014	**MW-83-201501**	SM4500-P B	WETA/7104	SM 4500-P E	WETA/7111
60186334015	**MW-25-201501**	SM4500-P B	WETA/7104	SM 4500-P E	WETA/7111

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Sample Condition Upon Receipt

WO#: 60186334

60186334

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 6262706539914005 Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☑ None ☐ Other ☐

Thermometer Used: T-239 / T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: TB 5.3 / I 4.7 / II 2.7 / III

Temperature should be above freezing to 6°C

Date and initials of person examining contents: BB 1/16/15

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☑Yes ☐No ☐N/A	6. NO2NO3
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	7.
Sufficient volume:	☑Yes ☐No ☐N/A	8.
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	9.
Containers intact:	☑Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	12.
Sample labels match COC:	☑Yes ☐No ☐N/A	
Includes date/time/ID/analyses Y Matrix: water		13.
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	☐Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☑Yes ☐No ☐N/A	TB marked w/ I, II, or III corresponds to vials in same cooler.
Pace Trip Blank lot # (if purchased): 12081-3BZM		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MW Date: 1/16/15

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

Section A Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

13.5 1.0

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH / Zn Acetate	$Na_2S_2O_3$	Methanol	Other Ascorbic Acid	Y/N	Analysis Test: 8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	ITMW-18-201501 BP3Z BP3S	WT	G	BP3N		BP3U	1/15/15	1000	11						AGS		X												6DG9U	1 day hold 001
2	MW-85-201501	WT	G				1/15/15	1400	11								X													7 day hold 002
3	MW-86-201501	WT	G				1/15/15	1355	11								X													7 day hold 003
4	ITMW-19-201501	WT	G				1/15/15	1310	11								X													7 day hold 004
5	MW-38-201501	WT	G				1/15/15	1155	11																					7 day hold 005 3DG9U
6	Dup-06-201501	WT	G				1/15/15	1155	3																				3	DG9H 006
7	ITMW-17-201501	WT	G				1/15/15	0947	11																					3DG9U 007
8	Dup-04-201501	WT	G				1/15/15	0932	3								X													7 day hold 008
9	ITMW-12-201501	WT	G				1/15/15	0932	11								X													7 day hold 6DG9U 009
10	TB-20-201501	WT	G				1/15/15		2																				2	DG9H 010
11	ITMW-15-201501	WT	G				1/15/15	1250	11								X													7 day hold 6DG9U 011
12	ITMW-11-201501	WT	G				1/15/15	1022	11																					7 day hold 012

6D1867334

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Level IV data package required	Victoria Siegler / ENVIRON	1/15/15	1800	Ben Barrett Pace	1/16/15	0830	5.3 I	Y	Y	Y
							4.7 II			
							2.7 III			

SAMPLER NAME AND SIGNATURE			Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Victoria Siegler					
SIGNATURE of SAMPLER:	Victoria Siegler	DATE Signed (MM/DD/YY): 1/15/15				

*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.

F-ALL-Q-020rev.07, 15-Feb-2007

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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.

Section A Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Ascorbic Acid	Analysis Test Y/N: 8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Dup-05-201501	WT	G	1.0		4/15/15	1250		3									+							3DG9H			7 day hold	013
2	MW-83-201501 BP3Z BP3S AG3S	WT	G	BP3N		BP3U	1320		11	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+		7 day hold 6DG9H	014
3	MW-25-201501 ↓ ↓ ↓	WT	G	↓		↓	1125		11	+	+	+		+	+	+	+	+	+	+	+	+	+	+	+	+		7 day hold ↓	015
4	TB-21-201501	WT	G			4/15/15			2				+					+										2DG9H	016
5	TB-22-201501	WT	G			4/15/15			2				+					+										↓	017
6	EB-04-201501	WT	G			4/15/15	1710		3				+					+										3DG9H	018
7																													
8																													
9																													
10																													
11																													
12																													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Level IV data package required	Victoria Siegler / Environ	4/15/15	1800	Ron Rumpf Pace	4/16/15	0830	5.3	Y	Y	Y
							4.7	"		
							2.7	"		

SAMPLER NAME AND SIGNATURE			Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Victoria Siegler	DATE Signed (MM/DD/YY): 4/15/15				
SIGNATURE of SAMPLER:	Victoria Siegler					

*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.

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January 27, 2015

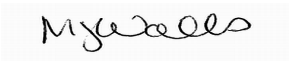
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FOR SMITH, AR
Pace Project No.: 60186371

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on January 16, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: FOR SMITH, AR
Pace Project No.: 60186371

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

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SAMPLE SUMMARY

Project: FOR SMITH, AR
Pace Project No.: 60186371

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186371001	**MW-95-201501**	Water	01/15/15 14:40	01/16/15 08:30
60186371002	**MW-98-201501**	Water	01/15/15 10:55	01/16/15 08:30
60186371003	**MW-96-201501**	Water	01/15/15 09:25	01/16/15 08:30
60186371004	**MW-97-201501**	Water	01/15/15 09:05	01/16/15 08:30
60186371005	**MW-99-201501**	Water	01/15/15 11:30	01/16/15 08:30
60186371006	**MW-94-201501**	Water	01/15/15 16:35	01/16/15 08:30
60186371007	**MW-92-201501**	Water	01/15/15 16:08	01/16/15 08:30
60186371008	**MW-93-201501**	Water	01/15/15 14:30	01/16/15 08:30
60186371009	**MW-23-201501**	Water	01/15/15 15:35	01/16/15 08:30
60186371010	**MW-24-201501**	Water	01/15/15 16:25	01/16/15 08:30
60186371011	**MW-172-201501**	Water	01/15/15 16:05	01/16/15 08:30
60186371012	**TB-23-201501**	Water	01/15/15 09:05	01/16/15 08:30

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: FOR SMITH, AR
Pace Project No.: 60186371

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60186371001	MW-95-201501	EPA 5030B/8260	PRG	38
60186371002	MW-98-201501	EPA 5030B/8260	PRG	38
60186371003	MW-96-201501	EPA 5030B/8260	PRG	38
60186371004	MW-97-201501	EPA 5030B/8260	PRG	38
60186371005	MW-99-201501	EPA 5030B/8260	PRG	38
60186371006	MW-94-201501	EPA 5030B/8260	PRG	38
60186371007	MW-92-201501	EPA 5030B/8260	PRG	38
60186371008	MW-93-201501	EPA 5030B/8260	PRG	38
60186371009	MW-23-201501	EPA 5030B/8260	PRG	38
60186371010	MW-24-201501	EPA 5030B/8260	PRG	38
60186371011	MW-172-201501	EPA 5030B/8260	PRG	38
60186371012	TB-23-201501	EPA 5030B/8260	PRG	38

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PROJECT NARRATIVE

Project: FOR SMITH, AR
Pace Project No.: 60186371

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: January 27, 2015

General Information:
12 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/67126

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1509650)
  - Carbon tetrachloride

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/67069

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/67101

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/67126

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60186453026

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 1509651)
  - Carbon tetrachloride
- MSD (Lab ID: 1509652)
  - Carbon tetrachloride

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PROJECT NARRATIVE

Project: FOR SMITH, AR
Pace Project No.: 60186371

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: January 27, 2015

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FOR SMITH, AR
Pace Project No.: 60186371

Sample: MW-95-201501 **Lab ID: 60186371001** Collected: 01/15/15 14:40 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/23/15 17:06	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/23/15 17:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/23/15 17:06	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/23/15 17:06	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/23/15 17:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/23/15 17:06	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/23/15 17:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/23/15 17:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/23/15 17:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/23/15 17:06	75-00-3	
Chloroform	**6.5**	ug/L	1.0	0.50	1		01/23/15 17:06	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/23/15 17:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/23/15 17:06	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 17:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 17:06	107-06-2	
1,1-Dichloroethene	**37.7**	ug/L	1.0	0.50	1		01/23/15 17:06	75-35-4	
cis-1,2-Dichloroethene	**177**	ug/L	1.0	0.50	1		01/23/15 17:06	156-59-2	
trans-1,2-Dichloroethene	**0.97J**	ug/L	1.0	0.50	1		01/23/15 17:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/23/15 17:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 17:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 17:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/23/15 17:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/23/15 17:06	591-78-6	
Methylene chloride	**3.7**	ug/L	1.0	0.50	1		01/23/15 17:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/23/15 17:06	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/23/15 17:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/23/15 17:06	79-34-5	
Tetrachloroethene	**6.4**	ug/L	1.0	0.50	1		01/23/15 17:06	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/23/15 17:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 17:06	71-55-6	
1,1,2-Trichloroethane	**2.3**	ug/L	1.0	0.50	1		01/23/15 17:06	79-00-5	
Trichloroethene	**21100**	ug/L	200	100	200		01/22/15 03:19	79-01-6	
Vinyl chloride	**25.6**	ug/L	1.0	0.50	1		01/23/15 17:06	75-01-4	
Xylene (Total)	ND	ug/L	600	300	200		01/22/15 03:19	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/23/15 17:06	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/23/15 17:06	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		01/23/15 17:06	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/23/15 17:06		

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ANALYTICAL RESULTS

Project: FOR SMITH, AR
Pace Project No.: 60186371

Sample: MW-98-201501 **Lab ID: 60186371002** Collected: 01/15/15 10:55 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/22/15 02:21	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/22/15 02:21	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/22/15 02:21	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/22/15 02:21	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/22/15 02:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/22/15 02:21	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/22/15 02:21	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/22/15 02:21	56-23-5	L3
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/22/15 02:21	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/22/15 02:21	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/22/15 02:21	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/22/15 02:21	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/22/15 02:21	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 02:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 02:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 02:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 02:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 02:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/22/15 02:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 02:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 02:21	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/22/15 02:21	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/22/15 02:21	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/22/15 02:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/22/15 02:21	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/22/15 02:21	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/22/15 02:21	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/22/15 02:21	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/22/15 02:21	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 02:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 02:21	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 11:54	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/22/15 02:21	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/22/15 02:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/22/15 02:21	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		01/22/15 02:21	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		01/22/15 02:21	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/22/15 02:21		

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ANALYTICAL RESULTS

Project: FOR SMITH, AR
Pace Project No.: 60186371

Sample: MW-96-201501 **Lab ID: 60186371003** Collected: 01/15/15 09:25 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/22/15 02:36	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/22/15 02:36	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/22/15 02:36	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/22/15 02:36	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/22/15 02:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/22/15 02:36	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/22/15 02:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/22/15 02:36	56-23-5	L3
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/22/15 02:36	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/22/15 02:36	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/22/15 02:36	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/22/15 02:36	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/22/15 02:36	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 02:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 02:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 02:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 02:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 02:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/22/15 02:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 02:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 02:36	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/22/15 02:36	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/22/15 02:36	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/22/15 02:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/22/15 02:36	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/22/15 02:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/22/15 02:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/22/15 02:36	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/22/15 02:36	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 02:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 02:36	79-00-5	
Trichloroethene	**0.59J**	ug/L	1.0	0.50	1		01/22/15 02:36	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/22/15 02:36	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/22/15 02:36	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/22/15 02:36	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		01/22/15 02:36	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/22/15 02:36	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/22/15 02:36		

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ANALYTICAL RESULTS

Project: FOR SMITH, AR
Pace Project No.: 60186371

Sample: MW-97-201501 **Lab ID: 60186371004** Collected: 01/15/15 09:05 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/22/15 02:50	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/22/15 02:50	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/22/15 02:50	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/22/15 02:50	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/22/15 02:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/22/15 02:50	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/22/15 02:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/22/15 02:50	56-23-5	L3
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/22/15 02:50	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/22/15 02:50	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/22/15 02:50	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/22/15 02:50	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/22/15 02:50	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 02:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 02:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 02:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 02:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 02:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/22/15 02:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 02:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 02:50	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/22/15 02:50	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/22/15 02:50	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/22/15 02:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/22/15 02:50	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/22/15 02:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/22/15 02:50	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/22/15 02:50	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/22/15 02:50	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 02:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 02:50	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 02:50	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/22/15 02:50	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/22/15 02:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/22/15 02:50	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/22/15 02:50	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		01/22/15 02:50	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/22/15 02:50		

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ANALYTICAL RESULTS

Project: FOR SMITH, AR
Pace Project No.: 60186371

Sample: MW-99-201501 **Lab ID: 60186371005** Collected: 01/15/15 11:30 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/22/15 03:05	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/22/15 03:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/22/15 03:05	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/22/15 03:05	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/22/15 03:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/22/15 03:05	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/22/15 03:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/22/15 03:05	56-23-5	L3
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/22/15 03:05	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/22/15 03:05	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/22/15 03:05	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/22/15 03:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/22/15 03:05	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 03:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 03:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 03:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 03:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 03:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/22/15 03:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 03:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 03:05	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/22/15 03:05	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/22/15 03:05	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/22/15 03:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/22/15 03:05	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/22/15 03:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/22/15 03:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/22/15 03:05	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/22/15 03:05	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 03:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 03:05	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 03:05	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/22/15 03:05	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/22/15 03:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/22/15 03:05	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		01/22/15 03:05	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		01/22/15 03:05	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/22/15 03:05		

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ANALYTICAL RESULTS

Project: FOR SMITH, AR
Pace Project No.: 60186371

Sample: MW-94-201501 **Lab ID: 60186371006** Collected: 01/15/15 16:35 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/23/15 17:22	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/23/15 17:22	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/23/15 17:22	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/23/15 17:22	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/23/15 17:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/23/15 17:22	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/23/15 17:22	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/23/15 17:22	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/23/15 17:22	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/23/15 17:22	75-00-3	
Chloroform	**2.9**	ug/L	1.0	0.50	1		01/23/15 17:22	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/23/15 17:22	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/23/15 17:22	124-48-1	
1,1-Dichloroethane	**2.5**	ug/L	1.0	0.50	1		01/23/15 17:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 17:22	107-06-2	
1,1-Dichloroethene	**130**	ug/L	1.0	0.50	1		01/23/15 17:22	75-35-4	
cis-1,2-Dichloroethene	**297**	ug/L	250	125	250		01/22/15 03:33	156-59-2	
trans-1,2-Dichloroethene	**1.7**	ug/L	1.0	0.50	1		01/23/15 17:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/23/15 17:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 17:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 17:22	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/23/15 17:22	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/23/15 17:22	591-78-6	
Methylene chloride	**0.61J**	ug/L	1.0	0.50	1		01/23/15 17:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/23/15 17:22	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/23/15 17:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/23/15 17:22	79-34-5	
Tetrachloroethene	**2.5**	ug/L	1.0	0.50	1		01/23/15 17:22	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/23/15 17:22	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 17:22	71-55-6	
1,1,2-Trichloroethane	**0.82J**	ug/L	1.0	0.50	1		01/23/15 17:22	79-00-5	
Trichloroethene	**9530**	ug/L	250	125	250		01/22/15 03:33	79-01-6	
Vinyl chloride	**2.4**	ug/L	1.0	0.50	1		01/23/15 17:22	75-01-4	
Xylene (Total)	ND	ug/L	750	375	250		01/22/15 03:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/23/15 17:22	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/23/15 17:22	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		01/23/15 17:22	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/23/15 17:22		

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ANALYTICAL RESULTS

Project: FOR SMITH, AR
Pace Project No.: 60186371

Sample: MW-92-201501 **Lab ID: 60186371007** Collected: 01/15/15 16:08 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/20/15 13:35	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 13:35	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 13:35	75-27-4	
Bromoform	**3.7**	ug/L	1.0	0.50	1		01/20/15 13:35	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/20/15 13:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 13:35	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 13:35	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 13:35	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 13:35	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:35	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 13:35	67-66-3	
Chloromethane	**0.64J**	ug/L	1.0	0.50	1		01/20/15 13:35	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 13:35	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:35	107-06-2	
1,1-Dichloroethene	**2.1**	ug/L	1.0	0.50	1		01/20/15 13:35	75-35-4	
cis-1,2-Dichloroethene	**10.4**	ug/L	1.0	0.50	1		01/20/15 13:35	156-59-2	
trans-1,2-Dichloroethene	**0.87J**	ug/L	1.0	0.50	1		01/20/15 13:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 13:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 13:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 13:35	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 13:35	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 13:35	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/20/15 13:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 13:35	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 13:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:35	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 13:35	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 13:35	108-88-3	
1,1,1-Trichloroethane	**1.7**	ug/L	1.0	0.50	1		01/20/15 13:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:35	79-00-5	
Trichloroethene	**1410**	ug/L	25.0	12.5	25		01/20/15 18:07	79-01-6	
Vinyl chloride	**4.6**	ug/L	1.0	0.50	1		01/20/15 13:35	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 13:35	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		01/20/15 13:35	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/20/15 13:35	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/20/15 13:35	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 13:35		

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ANALYTICAL RESULTS

Project: FOR SMITH, AR
Pace Project No.: 60186371

Sample: MW-93-201501 **Lab ID: 60186371008** Collected: 01/15/15 14:30 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/23/15 17:38	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/23/15 17:38	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/23/15 17:38	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/23/15 17:38	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/23/15 17:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/23/15 17:38	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/23/15 17:38	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/23/15 17:38	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/23/15 17:38	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/23/15 17:38	75-00-3	
Chloroform	**5.6**	ug/L	1.0	0.50	1		01/23/15 17:38	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/23/15 17:38	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/23/15 17:38	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 17:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 17:38	107-06-2	
1,1-Dichloroethene	**26.8**	ug/L	1.0	0.50	1		01/23/15 17:38	75-35-4	
cis-1,2-Dichloroethene	**131**	ug/L	1.0	0.50	1		01/23/15 17:38	156-59-2	
trans-1,2-Dichloroethene	**1.1**	ug/L	1.0	0.50	1		01/23/15 17:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/23/15 17:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 17:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 17:38	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/23/15 17:38	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/23/15 17:38	591-78-6	
Methylene chloride	**3.4**	ug/L	1.0	0.50	1		01/23/15 17:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/23/15 17:38	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/23/15 17:38	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/23/15 17:38	79-34-5	
Tetrachloroethene	**5.3**	ug/L	1.0	0.50	1		01/23/15 17:38	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/23/15 17:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 17:38	71-55-6	
1,1,2-Trichloroethane	**1.6**	ug/L	1.0	0.50	1		01/23/15 17:38	79-00-5	
Trichloroethene	**18000**	ug/L	200	100	200		01/22/15 03:48	79-01-6	
Vinyl chloride	**3.4**	ug/L	1.0	0.50	1		01/23/15 17:38	75-01-4	
Xylene (Total)	ND	ug/L	600	300	200		01/22/15 03:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/23/15 17:38	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/23/15 17:38	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		01/23/15 17:38	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/23/15 17:38		

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ANALYTICAL RESULTS

Project: FOR SMITH, AR
Pace Project No.: 60186371

Sample: MW-23-201501 **Lab ID: 60186371009** Collected: 01/15/15 15:35 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**21.4**	ug/L	10.0	5.0	1		01/20/15 17:38	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 17:38	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 17:38	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 17:38	75-25-2	
Bromomethane	**9.3**	ug/L	5.0	2.5	1		01/20/15 17:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 17:38	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 17:38	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 17:38	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 17:38	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:38	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 17:38	67-66-3	
Chloromethane	**4.4**	ug/L	1.0	0.50	1		01/20/15 17:38	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 17:38	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:38	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 17:38	75-35-4	
cis-1,2-Dichloroethene	**2.2**	ug/L	1.0	0.50	1		01/20/15 17:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 17:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 17:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 17:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 17:38	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 17:38	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 17:38	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/20/15 17:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 17:38	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 17:38	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:38	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 17:38	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 17:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:38	79-00-5	
Trichloroethene	**115**	ug/L	1.0	0.50	1		01/20/15 17:38	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 17:38	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 17:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		01/20/15 17:38	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/20/15 17:38	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/20/15 17:38	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		01/20/15 17:38		

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ANALYTICAL RESULTS

Project: FOR SMITH, AR
Pace Project No.: 60186371

Sample: MW-24-201501 **Lab ID: 60186371010** Collected: 01/15/15 16:25 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**80.7**	ug/L	10.0	5.0	1		01/20/15 17:52	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 17:52	71-43-2	
Bromodichloromethane	**0.79J**	ug/L	1.0	0.50	1		01/20/15 17:52	75-27-4	
Bromoform	**35.5**	ug/L	1.0	0.50	1		01/20/15 17:52	75-25-2	
Bromomethane	**37.7**	ug/L	5.0	2.5	1		01/20/15 17:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 17:52	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 17:52	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 17:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 17:52	108-90-7	
Chloroethane	**1.3**	ug/L	1.0	0.50	1		01/20/15 17:52	75-00-3	
Chloroform	**0.56J**	ug/L	1.0	0.50	1		01/20/15 17:52	67-66-3	
Chloromethane	**55.7**	ug/L	1.0	0.50	1		01/20/15 17:52	74-87-3	
Dibromochloromethane	**1.8**	ug/L	1.0	0.50	1		01/20/15 17:52	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:52	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 17:52	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 17:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 17:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 17:52	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 17:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 17:52	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 17:52	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 17:52	591-78-6	
Methylene chloride	**0.88J**	ug/L	1.0	0.50	1		01/20/15 17:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 17:52	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 17:52	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:52	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 17:52	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 17:52	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 17:52	79-00-5	
Trichloroethene	**26.9**	ug/L	1.0	0.50	1		01/20/15 17:52	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 17:52	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 17:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		01/20/15 17:52	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		01/20/15 17:52	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		01/20/15 17:52	2037-26-5	
Preservation pH	**2.0**		0.10	0.10	1		01/20/15 17:52		

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ANALYTICAL RESULTS

Project: FOR SMITH, AR
Pace Project No.: 60186371

Sample: MW-172-201501 **Lab ID: 60186371011** Collected: 01/15/15 16:05 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**9.7J**	ug/L	10.0	5.0	1		01/20/15 13:51	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 13:51	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 13:51	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 13:51	75-25-2	
Bromomethane	**5.0**	ug/L	5.0	2.5	1		01/20/15 13:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 13:51	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 13:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 13:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 13:51	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:51	75-00-3	
Chloroform	**2.8**	ug/L	1.0	0.50	1		01/20/15 13:51	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/20/15 13:51	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 13:51	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:51	107-06-2	
1,1-Dichloroethene	**0.72J**	ug/L	1.0	0.50	1		01/20/15 13:51	75-35-4	
cis-1,2-Dichloroethene	**22.4**	ug/L	1.0	0.50	1		01/20/15 13:51	156-59-2	
trans-1,2-Dichloroethene	**2.8**	ug/L	1.0	0.50	1		01/20/15 13:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 13:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 13:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 13:51	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 13:51	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 13:51	591-78-6	
Methylene chloride	**0.75J**	ug/L	1.0	0.50	1		01/20/15 13:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 13:51	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 13:51	100-42-5	
1,1,2,2-Tetrachloroethane	**2.7**	ug/L	1.0	0.50	1		01/20/15 13:51	79-34-5	
Tetrachloroethene	**2.1**	ug/L	1.0	0.50	1		01/20/15 13:51	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 13:51	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 13:51	71-55-6	
1,1,2-Trichloroethane	**0.56J**	ug/L	1.0	0.50	1		01/20/15 13:51	79-00-5	
Trichloroethene	**3600**	ug/L	25.0	12.5	25		01/20/15 18:21	79-01-6	
Vinyl chloride	**1.2**	ug/L	1.0	0.50	1		01/20/15 13:51	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 13:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/20/15 13:51	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/20/15 13:51	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/20/15 13:51	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 13:51		

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ANALYTICAL RESULTS

Project: FOR SMITH, AR
Pace Project No.: 60186371

Sample: TB-23-201501 **Lab ID: 60186371012** Collected: 01/15/15 09:05 Received: 01/16/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/22/15 01:09	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/22/15 01:09	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/22/15 01:09	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/22/15 01:09	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/22/15 01:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/22/15 01:09	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/22/15 01:09	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/22/15 01:09	56-23-5	L3
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/22/15 01:09	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/22/15 01:09	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/22/15 01:09	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/22/15 01:09	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/22/15 01:09	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 01:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 01:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 01:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 01:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 01:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/22/15 01:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 01:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/22/15 01:09	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/22/15 01:09	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/22/15 01:09	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/22/15 01:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/22/15 01:09	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/22/15 01:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/22/15 01:09	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/22/15 01:09	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/22/15 01:09	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 01:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/22/15 01:09	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/22/15 01:09	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/22/15 01:09	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/22/15 01:09	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/22/15 01:09	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		01/22/15 01:09	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		01/22/15 01:09	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/22/15 01:09		

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QUALITY CONTROL DATA

Project: FOR SMITH, AR
Pace Project No.: 60186371

QC Batch: MSV/67126 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186371001, 60186371002, 60186371003, 60186371004, 60186371005, 60186371006, 60186371008, 60186371012

METHOD BLANK: 1509649 Matrix: Water
Associated Lab Samples: 60186371001, 60186371002, 60186371003, 60186371004, 60186371005, 60186371006, 60186371008, 60186371012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/21/15 23:57	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/21/15 23:57	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/21/15 23:57	
1,1-Dichloroethane	ug/L	ND	1.0	01/21/15 23:57	
1,1-Dichloroethene	ug/L	ND	1.0	01/21/15 23:57	
1,2-Dichloroethane	ug/L	ND	1.0	01/21/15 23:57	
1,2-Dichloropropane	ug/L	ND	1.0	01/21/15 23:57	
2-Butanone (MEK)	ug/L	ND	10.0	01/21/15 23:57	
2-Hexanone	ug/L	ND	10.0	01/21/15 23:57	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/21/15 23:57	
Acetone	ug/L	ND	10.0	01/21/15 23:57	
Benzene	ug/L	ND	1.0	01/21/15 23:57	
Bromodichloromethane	ug/L	ND	1.0	01/21/15 23:57	
Bromoform	ug/L	ND	1.0	01/21/15 23:57	
Bromomethane	ug/L	ND	5.0	01/21/15 23:57	
Carbon disulfide	ug/L	ND	5.0	01/21/15 23:57	
Carbon tetrachloride	ug/L	ND	1.0	01/21/15 23:57	
Chlorobenzene	ug/L	ND	1.0	01/21/15 23:57	
Chloroethane	ug/L	ND	1.0	01/21/15 23:57	
Chloroform	ug/L	ND	1.0	01/21/15 23:57	
Chloromethane	ug/L	ND	1.0	01/21/15 23:57	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/21/15 23:57	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/21/15 23:57	
Dibromochloromethane	ug/L	ND	1.0	01/21/15 23:57	
Ethylbenzene	ug/L	ND	1.0	01/21/15 23:57	
Methylene chloride	ug/L	ND	1.0	01/21/15 23:57	
Styrene	ug/L	ND	1.0	01/21/15 23:57	
Tetrachloroethene	ug/L	ND	1.0	01/21/15 23:57	
Toluene	ug/L	ND	1.0	01/21/15 23:57	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/21/15 23:57	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/21/15 23:57	
Trichloroethene	ug/L	ND	1.0	01/21/15 23:57	
Vinyl chloride	ug/L	ND	1.0	01/21/15 23:57	
Xylene (Total)	ug/L	ND	3.0	01/21/15 23:57	
1,2-Dichloroethane-d4 (S)	%	99	80-120	01/21/15 23:57	
4-Bromofluorobenzene (S)	%	101	80-120	01/21/15 23:57	
Toluene-d8 (S)	%	98	80-120	01/21/15 23:57	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: FOR SMITH, AR
Pace Project No.: 60186371

LABORATORY CONTROL SAMPLE: 1509650

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.1	106	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	18.8	94	73-121	
1,1,2-Trichloroethane	ug/L	20	19.2	96	80-120	
1,1-Dichloroethane	ug/L	20	21.4	107	80-120	
1,1-Dichloroethene	ug/L	20	20.8	104	80-120	
1,2-Dichloroethane	ug/L	20	20.0	100	81-120	
1,2-Dichloropropane	ug/L	20	19.6	98	80-120	
2-Butanone (MEK)	ug/L	100	100	100	67-122	
2-Hexanone	ug/L	100	92.3	92	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	90.6	91	76-120	
Acetone	ug/L	100	102	102	72-120	
Benzene	ug/L	20	22.1	110	80-120	
Bromodichloromethane	ug/L	20	20.0	100	80-120	
Bromoform	ug/L	20	19.1	96	73-138	
Bromomethane	ug/L	20	21.6	108	38-137	
Carbon disulfide	ug/L	20	23.5	117	71-129	
Carbon tetrachloride	ug/L	20	30.0	150	67-146	L0
Chlorobenzene	ug/L	20	20.3	101	80-120	
Chloroethane	ug/L	20	20.9	104	76-120	
Chloroform	ug/L	20	21.2	106	80-120	
Chloromethane	ug/L	20	23.2	116	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.3	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.6	98	80-120	
Dibromochloromethane	ug/L	20	18.7	93	80-126	
Ethylbenzene	ug/L	20	19.6	98	80-120	
Methylene chloride	ug/L	20	20.5	103	80-120	
Styrene	ug/L	20	21.4	107	80-123	
Tetrachloroethene	ug/L	20	19.1	96	80-123	
Toluene	ug/L	20	18.5	93	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.8	104	80-120	
trans-1,3-Dichloropropene	ug/L	20	17.9	89	80-129	
Trichloroethene	ug/L	20	20.5	102	80-120	
Vinyl chloride	ug/L	20	22.3	112	62-125	
Xylene (Total)	ug/L	60	64.1	107	80-120	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1509651 1509652

Parameter	Units	60186453026 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	1.6	20	20	23.7	22.9	111	107	88-124	3	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.4	19.2	97	96	78-116	1	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	19.5	19.1	97	95	84-112	2	10	

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QUALITY CONTROL DATA

Project: FOR SMITH, AR
Pace Project No.: 60186371

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1509651 1509652

Parameter	Units	60186453026 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	2.3	20	20	23.4	22.2	105	100	82-121	5	9	
1,1-Dichloroethene	ug/L	3.1	20	20	24.7	23.7	108	103	78-124	5	12	
1,2-Dichloroethane	ug/L	ND	20	20	19.5	18.8	97	93	79-121	4	12	
1,2-Dichloropropane	ug/L	ND	20	20	18.8	18.8	94	94	82-119	0	10	
2-Butanone (MEK)	ug/L	ND	100	100	93.8	94.1	94	94	66-114	0	13	
2-Hexanone	ug/L	ND	100	100	90.7	94.2	91	94	71-116	4	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	86.7	85.5	87	86	72-122	1	12	
Acetone	ug/L	ND	100	100	91.6	88.8	92	89	65-113	3	27	
Benzene	ug/L	ND	20	20	22.4	21.8	106	103	46-155	3	13	
Bromodichloromethane	ug/L	ND	20	20	19.2	19.2	96	96	77-127	0	10	
Bromoform	ug/L	ND	20	20	18.8	19.1	94	96	70-125	2	11	
Bromomethane	ug/L	ND	20	20	10.9	12.7	55	63	41-140	15	30	
Carbon disulfide	ug/L	ND	20	20	25.2	24.8	125	123	68-140	2	10	
Carbon tetrachloride	ug/L	1.2	20	20	31.7	30.8	152	148	68-147	3	11	M0
Chlorobenzene	ug/L	ND	20	20	20.3	20.0	102	100	83-121	1	9	
Chloroethane	ug/L	ND	20	20	19.9	19.8	100	99	69-126	1	19	
Chloroform	ug/L	3.2	20	20	23.8	23.2	102	100	86-119	2	9	
Chloromethane	ug/L	ND	20	20	20.7	20.6	104	103	23-168	1	49	
cis-1,2-Dichloroethene	ug/L	169	20	20	180	178	111	101	85-117	1	10	
cis-1,3-Dichloropropene	ug/L	ND	20	20	18.9	18.3	94	91	74-115	3	12	
Dibromochloromethane	ug/L	32.5	20	20	18.3	19.0	91	95	65-134	4	11	
Ethylbenzene	ug/L	ND	20	20	20.1	19.5	100	97	51-148	3	14	
Methylene chloride	ug/L	ND	20	20	18.5	18.5	93	93	75-118	0	11	
Styrene	ug/L	ND	20	20	19.8	20.0	99	100	17-174	1	10	
Tetrachloroethene	ug/L	33.5	20	20	49.4	48.3	96	91	78-127	2	9	
Toluene	ug/L	ND	20	20	19.1	18.9	96	95	47-149	1	16	
trans-1,2-Dichloroethene	ug/L	ND	20	20	21.6	21.3	105	103	84-119	1	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.0	17.8	90	89	71-120	1	10	
Trichloroethene	ug/L	27.2	20	20	47.8	46.4	98	92	70-135	3	10	
Vinyl chloride	ug/L	3.1	20	20	25.3	25.8	110	113	58-130	2	11	
Xylene (Total)	ug/L	ND	60	60	61.9	62.0	103	103	39-158	0	15	
1,2-Dichloroethane-d4 (S)	%						101	103	80-120			
4-Bromofluorobenzene (S)	%						100	99	80-120			
Toluene-d8 (S)	%						99	100	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALITY CONTROL DATA

Project: FOR SMITH, AR
Pace Project No.: 60186371

QC Batch: MSV/67167 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186371001, 60186371002, 60186371006, 60186371008

METHOD BLANK: 1510598 Matrix: Water
Associated Lab Samples: 60186371001, 60186371002, 60186371006, 60186371008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/23/15 11:38	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/23/15 11:38	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/23/15 11:38	
1,1-Dichloroethane	ug/L	ND	1.0	01/23/15 11:38	
1,1-Dichloroethene	ug/L	ND	1.0	01/23/15 11:38	
1,2-Dichloroethane	ug/L	ND	1.0	01/23/15 11:38	
1,2-Dichloropropane	ug/L	ND	1.0	01/23/15 11:38	
2-Butanone (MEK)	ug/L	ND	10.0	01/23/15 11:38	
2-Hexanone	ug/L	ND	10.0	01/23/15 11:38	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/23/15 11:38	
Acetone	ug/L	ND	10.0	01/23/15 11:38	
Benzene	ug/L	ND	1.0	01/23/15 11:38	
Bromodichloromethane	ug/L	ND	1.0	01/23/15 11:38	
Bromoform	ug/L	ND	1.0	01/23/15 11:38	
Bromomethane	ug/L	ND	5.0	01/23/15 11:38	
Carbon disulfide	ug/L	ND	5.0	01/23/15 11:38	
Carbon tetrachloride	ug/L	ND	1.0	01/23/15 11:38	
Chlorobenzene	ug/L	ND	1.0	01/23/15 11:38	
Chloroethane	ug/L	ND	1.0	01/23/15 11:38	
Chloroform	ug/L	ND	1.0	01/23/15 11:38	
Chloromethane	ug/L	ND	1.0	01/23/15 11:38	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 11:38	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 11:38	
Dibromochloromethane	ug/L	ND	1.0	01/23/15 11:38	
Ethylbenzene	ug/L	ND	1.0	01/23/15 11:38	
Methylene chloride	ug/L	ND	1.0	01/23/15 11:38	
Styrene	ug/L	ND	1.0	01/23/15 11:38	
Tetrachloroethene	ug/L	ND	1.0	01/23/15 11:38	
Toluene	ug/L	ND	1.0	01/23/15 11:38	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 11:38	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 11:38	
Trichloroethene	ug/L	ND	1.0	01/23/15 11:38	
Vinyl chloride	ug/L	ND	1.0	01/23/15 11:38	
1,2-Dichloroethane-d4 (S)	%	102	80-120	01/23/15 11:38	
4-Bromofluorobenzene (S)	%	93	80-120	01/23/15 11:38	
Toluene-d8 (S)	%	99	80-120	01/23/15 11:38	

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QUALITY CONTROL DATA

Project: FOR SMITH, AR
Pace Project No.: 60186371

LABORATORY CONTROL SAMPLE: 1510599

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.4	107	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.9	99	73-121	
1,1,2-Trichloroethane	ug/L	20	21.1	105	80-120	
1,1-Dichloroethane	ug/L	20	18.0	90	80-120	
1,1-Dichloroethene	ug/L	20	18.6	93	80-120	
1,2-Dichloroethane	ug/L	20	21.3	106	81-120	
1,2-Dichloropropane	ug/L	20	20.4	102	80-120	
2-Butanone (MEK)	ug/L	100	91.3	91	67-122	
2-Hexanone	ug/L	100	94.3	94	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	103	103	76-120	
Acetone	ug/L	100	88.2	88	72-120	
Benzene	ug/L	20	20.2	101	80-120	
Bromodichloromethane	ug/L	20	21.3	106	80-120	
Bromoform	ug/L	20	20.7	104	73-138	
Bromomethane	ug/L	20	23.7	118	38-137	
Carbon disulfide	ug/L	20	18.6	93	71-129	
Carbon tetrachloride	ug/L	20	21.2	106	67-146	
Chlorobenzene	ug/L	20	20.4	102	80-120	
Chloroethane	ug/L	20	18.3	92	76-120	
Chloroform	ug/L	20	19.6	98	80-120	
Chloromethane	ug/L	20	21.0	105	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.5	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.5	102	80-120	
Dibromochloromethane	ug/L	20	19.6	98	80-126	
Ethylbenzene	ug/L	20	20.5	102	80-120	
Methylene chloride	ug/L	20	18.2	91	80-120	
Styrene	ug/L	20	20.4	102	80-123	
Tetrachloroethene	ug/L	20	20.4	102	80-123	
Toluene	ug/L	20	20.0	100	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.9	94	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.2	101	80-129	
Trichloroethene	ug/L	20	19.6	98	80-120	
Vinyl chloride	ug/L	20	20.1	100	62-125	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1510600 1510601

Parameter	Units	60186403024 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	20.9	21.5	104	108	88-124	3	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.6	20.1	98	100	78-116	2	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	20.1	20.5	101	103	84-112	2	10	
1,1-Dichloroethane	ug/L	ND	20	20	18.4	18.6	92	93	82-121	1	9	

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QUALITY CONTROL DATA

Project: FOR SMITH, AR
Pace Project No.: 60186371

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1510600 1510601

Parameter	Units	60186403024 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	20	20	18.5	19.5	93	97	78-124	5	12	
1,2-Dichloroethane	ug/L	ND	20	20	20.2	21.4	101	107	79-121	6	12	
1,2-Dichloropropane	ug/L	ND	20	20	19.4	20.5	97	102	82-119	6	10	
2-Butanone (MEK)	ug/L	ND	100	100	82.9	92.0	83	92	66-114	10	13	
2-Hexanone	ug/L	ND	100	100	94.2	96.7	94	97	71-116	3	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	101	102	101	102	72-122	1	12	
Acetone	ug/L	ND	100	100	82.8	87.0	83	87	65-113	5	27	
Benzene	ug/L	ND	20	20	19.9	20.5	99	103	46-155	3	13	
Bromodichloromethane	ug/L	ND	20	20	20.5	21.3	102	106	77-127	4	10	
Bromoform	ug/L	ND	20	20	19.3	20.5	97	102	70-125	6	11	
Bromomethane	ug/L	ND	20	20	23.0	27.5	115	137	41-140	18	30	
Carbon disulfide	ug/L	ND	20	20	18.6	19.2	93	96	68-140	3	10	
Carbon tetrachloride	ug/L	ND	20	20	21.3	22.0	107	110	68-147	3	11	
Chlorobenzene	ug/L	ND	20	20	19.8	20.0	99	100	83-121	1	9	
Chloroethane	ug/L	ND	20	20	18.5	18.8	92	94	69-126	2	19	
Chloroform	ug/L	ND	20	20	19.5	20.1	98	101	86-119	3	9	
Chloromethane	ug/L	ND	20	20	22.1	21.5	110	108	23-168	3	49	
cis-1,2-Dichloroethene	ug/L	17.7	20	20	37.4	39.6	98	109	85-117	6	10	
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.9	20.7	100	103	74-115	4	12	
Dibromochloromethane	ug/L	ND	20	20	20.3	20.6	102	103	65-134	1	11	
Ethylbenzene	ug/L	ND	20	20	19.6	19.8	98	99	51-148	1	14	
Methylene chloride	ug/L	ND	20	20	18.4	19.0	92	95	75-118	3	11	
Styrene	ug/L	ND	20	20	19.8	20.2	99	101	17-174	2	10	
Tetrachloroethene	ug/L	1.1	20	20	21.1	21.3	100	101	78-127	1	9	
Toluene	ug/L	ND	20	20	19.3	19.8	97	99	47-149	2	16	
trans-1,2-Dichloroethene	ug/L	1.2	20	20	19.9	20.1	93	95	84-119	1	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	19.3	19.9	97	99	71-120	3	10	
Trichloroethene	ug/L	2.5	20	20	21.3	22.2	94	98	70-135	4	10	
Vinyl chloride	ug/L	ND	20	20	20.6	22.2	103	111	58-130	7	11	
1,2-Dichloroethane-d4 (S)	%						102	105	80-120			
4-Bromofluorobenzene (S)	%						101	103	80-120			
Toluene-d8 (S)	%						100	101	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALITY CONTROL DATA

Project: FOR SMITH, AR
Pace Project No.: 60186371

QC Batch: MSV/67069 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60186371007, 60186371009, 60186371010, 60186371011

METHOD BLANK: 1508633 Matrix: Water
Associated Lab Samples: 60186371007, 60186371009, 60186371010, 60186371011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/20/15 15:13	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/20/15 15:13	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/20/15 15:13	
1,1-Dichloroethane	ug/L	ND	1.0	01/20/15 15:13	
1,1-Dichloroethene	ug/L	ND	1.0	01/20/15 15:13	
1,2-Dichloroethane	ug/L	ND	1.0	01/20/15 15:13	
1,2-Dichloropropane	ug/L	ND	1.0	01/20/15 15:13	
2-Butanone (MEK)	ug/L	ND	10.0	01/20/15 15:13	
2-Hexanone	ug/L	ND	10.0	01/20/15 15:13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/20/15 15:13	
Acetone	ug/L	ND	10.0	01/20/15 15:13	
Benzene	ug/L	ND	1.0	01/20/15 15:13	
Bromodichloromethane	ug/L	ND	1.0	01/20/15 15:13	
Bromoform	ug/L	ND	1.0	01/20/15 15:13	
Bromomethane	ug/L	ND	5.0	01/20/15 15:13	
Carbon disulfide	ug/L	ND	5.0	01/20/15 15:13	
Carbon tetrachloride	ug/L	ND	1.0	01/20/15 15:13	
Chlorobenzene	ug/L	ND	1.0	01/20/15 15:13	
Chloroethane	ug/L	ND	1.0	01/20/15 15:13	
Chloroform	ug/L	ND	1.0	01/20/15 15:13	
Chloromethane	ug/L	ND	1.0	01/20/15 15:13	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/20/15 15:13	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/20/15 15:13	
Dibromochloromethane	ug/L	ND	1.0	01/20/15 15:13	
Ethylbenzene	ug/L	ND	1.0	01/20/15 15:13	
Methylene chloride	ug/L	ND	1.0	01/20/15 15:13	
Styrene	ug/L	ND	1.0	01/20/15 15:13	
Tetrachloroethene	ug/L	ND	1.0	01/20/15 15:13	
Toluene	ug/L	ND	1.0	01/20/15 15:13	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/20/15 15:13	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/20/15 15:13	
Trichloroethene	ug/L	ND	1.0	01/20/15 15:13	
Vinyl chloride	ug/L	ND	1.0	01/20/15 15:13	
Xylene (Total)	ug/L	ND	3.0	01/20/15 15:13	
1,2-Dichloroethane-d4 (S)	%	101	80-120	01/20/15 15:13	
4-Bromofluorobenzene (S)	%	100	80-120	01/20/15 15:13	
Toluene-d8 (S)	%	99	80-120	01/20/15 15:13	

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QUALITY CONTROL DATA

Project: FOR SMITH, AR
Pace Project No.: 60186371

LABORATORY CONTROL SAMPLE: 1508634

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.5	108	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.1	101	73-121	
1,1,2-Trichloroethane	ug/L	20	20.0	100	80-120	
1,1-Dichloroethane	ug/L	20	21.2	106	80-120	
1,1-Dichloroethene	ug/L	20	21.8	109	80-120	
1,2-Dichloroethane	ug/L	20	21.4	107	81-120	
1,2-Dichloropropane	ug/L	20	21.8	109	80-120	
2-Butanone (MEK)	ug/L	100	111	111	67-122	
2-Hexanone	ug/L	100	94.5	94	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	96.6	97	76-120	
Acetone	ug/L	100	102	102	72-120	
Benzene	ug/L	20	21.5	108	80-120	
Bromodichloromethane	ug/L	20	21.0	105	80-120	
Bromoform	ug/L	20	19.2	96	73-138	
Bromomethane	ug/L	20	17.2	86	38-137	
Carbon disulfide	ug/L	20	22.6	113	71-129	
Carbon tetrachloride	ug/L	20	21.3	106	67-146	
Chlorobenzene	ug/L	20	20.4	102	80-120	
Chloroethane	ug/L	20	20.7	104	76-120	
Chloroform	ug/L	20	21.5	107	80-120	
Chloromethane	ug/L	20	16.1	80	34-165	
cis-1,2-Dichloroethene	ug/L	20	21.7	109	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.7	103	80-120	
Dibromochloromethane	ug/L	20	19.3	96	80-126	
Ethylbenzene	ug/L	20	20.7	103	80-120	
Methylene chloride	ug/L	20	20.8	104	80-120	
Styrene	ug/L	20	20.4	102	80-123	
Tetrachloroethene	ug/L	20	19.4	97	80-123	
Toluene	ug/L	20	21.4	107	80-120	
trans-1,2-Dichloroethene	ug/L	20	21.2	106	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.7	93	80-129	
Trichloroethene	ug/L	20	20.6	103	80-120	
Vinyl chloride	ug/L	20	20.7	104	62-125	
Xylene (Total)	ug/L	60	61.3	102	80-120	
1,2-Dichloroethane-d4 (S)	%			104	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			100	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FOR SMITH, AR
Pace Project No.: 60186371

QC Batch: MSV/67101
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60186371007, 60186371011

METHOD BLANK: 1509249
Matrix: Water
Associated Lab Samples: 60186371007, 60186371011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1-Dichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1-Dichloroethene	ug/L	ND	1.0	01/20/15 11:37	
1,2-Dichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,2-Dichloropropane	ug/L	ND	1.0	01/20/15 11:37	
2-Butanone (MEK)	ug/L	ND	10.0	01/20/15 11:37	
2-Hexanone	ug/L	ND	10.0	01/20/15 11:37	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/20/15 11:37	
Acetone	ug/L	ND	10.0	01/20/15 11:37	
Benzene	ug/L	ND	1.0	01/20/15 11:37	
Bromodichloromethane	ug/L	ND	1.0	01/20/15 11:37	
Bromoform	ug/L	ND	1.0	01/20/15 11:37	
Bromomethane	ug/L	ND	5.0	01/20/15 11:37	
Carbon disulfide	ug/L	ND	5.0	01/20/15 11:37	
Carbon tetrachloride	ug/L	ND	1.0	01/20/15 11:37	
Chlorobenzene	ug/L	ND	1.0	01/20/15 11:37	
Chloroethane	ug/L	ND	1.0	01/20/15 11:37	
Chloroform	ug/L	ND	1.0	01/20/15 11:37	
Chloromethane	ug/L	ND	1.0	01/20/15 11:37	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/20/15 11:37	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/20/15 11:37	
Dibromochloromethane	ug/L	ND	1.0	01/20/15 11:37	
Ethylbenzene	ug/L	ND	1.0	01/20/15 11:37	
Methylene chloride	ug/L	ND	1.0	01/20/15 11:37	
Styrene	ug/L	ND	1.0	01/20/15 11:37	
Tetrachloroethene	ug/L	ND	1.0	01/20/15 11:37	
Toluene	ug/L	ND	1.0	01/20/15 11:37	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/20/15 11:37	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/20/15 11:37	
Vinyl chloride	ug/L	ND	1.0	01/20/15 11:37	
Xylene (Total)	ug/L	ND	3.0	01/20/15 11:37	
1,2-Dichloroethane-d4 (S)	%	101	80-120	01/20/15 11:37	
4-Bromofluorobenzene (S)	%	98	80-120	01/20/15 11:37	
Toluene-d8 (S)	%	102	80-120	01/20/15 11:37	

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QUALITY CONTROL DATA

Project: FOR SMITH, AR
Pace Project No.: 60186371

LABORATORY CONTROL SAMPLE: 1509250

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.5	107	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.5	102	73-121	
1,1,2-Trichloroethane	ug/L	20	20.0	100	80-120	
1,1-Dichloroethane	ug/L	20	17.8	89	80-120	
1,1-Dichloroethene	ug/L	20	19.2	96	80-120	
1,2-Dichloroethane	ug/L	20	21.1	105	81-120	
1,2-Dichloropropane	ug/L	20	20.7	104	80-120	
2-Butanone (MEK)	ug/L	100	86.2	86	67-122	
2-Hexanone	ug/L	100	92.1	92	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	96.4	96	76-120	
Acetone	ug/L	100	83.1	83	72-120	
Benzene	ug/L	20	20.2	101	80-120	
Bromodichloromethane	ug/L	20	21.7	108	80-120	
Bromoform	ug/L	20	20.2	101	73-138	
Bromomethane	ug/L	20	16.0	80	38-137	
Carbon disulfide	ug/L	20	18.5	92	71-129	
Carbon tetrachloride	ug/L	20	19.6	98	67-146	
Chlorobenzene	ug/L	20	20.7	104	80-120	
Chloroethane	ug/L	20	16.2	81	76-120	
Chloroform	ug/L	20	20.3	102	80-120	
Chloromethane	ug/L	20	11.9	59	34-165	
cis-1,2-Dichloroethene	ug/L	20	18.7	93	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.3	106	80-120	
Dibromochloromethane	ug/L	20	20.5	102	80-126	
Ethylbenzene	ug/L	20	20.5	102	80-120	
Methylene chloride	ug/L	20	18.7	94	80-120	
Styrene	ug/L	20	20.2	101	80-123	
Tetrachloroethene	ug/L	20	22.0	110	80-123	
Toluene	ug/L	20	20.0	100	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.6	93	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.0	105	80-129	
Vinyl chloride	ug/L	20	17.8	89	62-125	
Xylene (Total)	ug/L	60	59.2	99	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			102	80-120	

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QUALIFIERS

Project: FOR SMITH, AR
Pace Project No.: 60186371

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/67069

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/67101

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

M0 Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FOR SMITH, AR
Pace Project No.: 60186371

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186371001	**MW-95-201501**	EPA 5030B/8260	MSV/67126		
60186371001	**MW-95-201501**	EPA 5030B/8260	MSV/67167		
60186371002	**MW-98-201501**	EPA 5030B/8260	MSV/67126		
60186371002	**MW-98-201501**	EPA 5030B/8260	MSV/67167		
60186371003	**MW-96-201501**	EPA 5030B/8260	MSV/67126		
60186371004	**MW-97-201501**	EPA 5030B/8260	MSV/67126		
60186371005	**MW-99-201501**	EPA 5030B/8260	MSV/67126		
60186371006	**MW-94-201501**	EPA 5030B/8260	MSV/67126		
60186371006	**MW-94-201501**	EPA 5030B/8260	MSV/67167		
60186371008	**MW-93-201501**	EPA 5030B/8260	MSV/67126		
60186371008	**MW-93-201501**	EPA 5030B/8260	MSV/67167		
60186371012	**TB-23-201501**	EPA 5030B/8260	MSV/67126		
60186371007	**MW-92-201501**	EPA 5030B/8260	MSV/67069		
60186371007	**MW-92-201501**	EPA 5030B/8260	MSV/67101		
60186371009	**MW-23-201501**	EPA 5030B/8260	MSV/67069		
60186371010	**MW-24-201501**	EPA 5030B/8260	MSV/67069		
60186371011	**MW-172-201501**	EPA 5030B/8260	MSV/67069		
60186371011	**MW-172-201501**	EPA 5030B/8260	MSV/67101		

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Sample Condition Upon Receipt

WO#: 60186371

60186371

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 6262 7065 3650 Pace Shipping Label Used? Yes ☐ No ☐

Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☒ None ☐ Other ☐

Thermometer Used: T-239 / T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 3.3

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JB 1/16

Chain of Custody present:	☒Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☒Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☒Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☒Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☒Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☒No ☐N/A	6.
Rush Turn Around Time requested:	☐Yes ☒No ☐N/A	7.
Sufficient volume:	☒Yes ☐No ☐N/A	8.
Correct containers used:	☒Yes ☐No ☐N/A	
Pace containers used:	☒Yes ☐No ☐N/A	9.
Containers intact:	☒Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☒N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☐No ☒N/A	12.
Sample labels match COC:	☒Yes ☐No ☐N/A	
Includes date/time/ID/analyses Matrix: WT		13.
All containers needing preservation have been checked.	☐Yes ☐No ☒N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☒N/A	14.
Exceptions: VOA coliform, TOC, O&G, WI-DRO (water), Phenolics	☒Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☒Yes ☐No ☐N/A	
Pace Trip Blank lot # (if purchased): 1/5/15		15.
Headspace in VOA vials (>6mm):	☐Yes ☒No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☒N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MJ Walls Date: 1/16/15

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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.

Page: | of

Section A — **Required** Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B — **Required** Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tamara Gleason
	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	

Section C — Invoice Information:

Attention:	Tamara Gleason
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Section D — **Required** Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Ascorbic Acid	Analysis Test Y/N	8260 client specific list	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-95-201501	WT	G			1/15/15	1440		3				X					X	(3) DCHN		01
2	MW-98-201501	WT	G			1/15/15	1055		3				X					X			02
3	MW-910-201501	WT	G			1/15/15	0925		3				X					X			03
4	MW-97-201501	WT	G			1/15/15	0905		3				X					X			04
5	MW-99-201501	WT	G			1/15/15	1130		3				X					X			05
6	MW-94-201501	WT	G			1/15/15	1635		3				X					X			06
7	MW-92-201501	WT	G			1/15/15	1605		3								X	X	(3) OTHR		7 day hold 07
8	MW-93-201501	WT	G			1/15/15	1430		3				X					X	(3) DCHN		08
9	MW-23-201501	WT	G			1/15/15	1535		3				X				X	X	(3) OTHR		7 day hold 09
10	MW-24-201501	WT	G			1/15/15	1625		3								X	X			7 day hold 10
11	MW-172-201501	WT	G			1/15/15	1205		3								X	X			7 day hold 11
12	TB-23-201501	WT	G			1/15/15			2				X					X	(3) DCHN TB		12

6018637

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Victoria Stiegler ENVIRON	1/15/15	1800		1/16	0830	3.3	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Stiegler

SIGNATURE of SAMPLER: Victoria Stiegler DATE Signed (MM/DD/YY): 1/15/15

*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.

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January 27, 2015

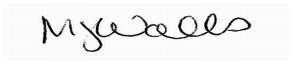
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH AR VOCs
Pace Project No.: 60186478

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on January 20, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186478

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

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SAMPLE SUMMARY

Project: FORT SMITH AR VOCs
Pace Project No.: 60186478

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186478001	**MW-33R-GW-20150118**	Water	01/18/15 12:10	01/20/15 06:15
60186478002	**MW-32R-GW-20150119**	Water	01/19/15 15:30	01/20/15 06:15
60186478003	**MW-31R-GW-20150119**	Water	01/19/15 15:50	01/20/15 06:15
60186478004	**TB-01**	Water	01/19/15 15:50	01/20/15 06:15

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR VOCs
Pace Project No.: 60186478

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60186478001	**MW-33R-GW-20150118**	EPA 5030B/8260	PRG	38
60186478002	**MW-32R-GW-20150119**	EPA 5030B/8260	PRG	38
60186478003	**MW-31R-GW-20150119**	EPA 5030B/8260	PRG	38
60186478004	**TB-01**	EPA 5030B/8260	PRG	38

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PROJECT NARRATIVE

Project: FORT SMITH AR VOCs
Pace Project No.: 60186478

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: January 27, 2015

General Information:
4 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/67116
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/67140
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/67171
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/67208
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186478

Sample: MW-33R-GW-20150118 **Lab ID: 60186478001** Collected: 01/18/15 12:10 Received: 01/20/15 06:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/21/15 22:16	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/21/15 22:16	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/21/15 22:16	75-27-4	
Bromoform	**1.0**	ug/L	1.0	0.50	1		01/21/15 22:16	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/21/15 22:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/21/15 22:16	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/21/15 22:16	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/21/15 22:16	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/21/15 22:16	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/21/15 22:16	75-00-3	
Chloroform	**0.99J**	ug/L	1.0	0.50	1		01/21/15 22:16	67-66-3	
Chloromethane	**0.70J**	ug/L	1.0	0.50	1		01/21/15 22:16	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/21/15 22:16	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/21/15 22:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/21/15 22:16	107-06-2	
1,1-Dichloroethene	**0.67J**	ug/L	1.0	0.50	1		01/21/15 22:16	75-35-4	
cis-1,2-Dichloroethene	**9.9**	ug/L	1.0	0.50	1		01/21/15 22:16	156-59-2	
trans-1,2-Dichloroethene	**0.83J**	ug/L	1.0	0.50	1		01/21/15 22:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/21/15 22:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/21/15 22:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/21/15 22:16	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/21/15 22:16	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/21/15 22:16	591-78-6	
Methylene chloride	**0.64J**	ug/L	1.0	0.50	1		01/21/15 22:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/21/15 22:16	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/21/15 22:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/21/15 22:16	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/21/15 22:16	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/21/15 22:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/21/15 22:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/21/15 22:16	79-00-5	
Trichloroethene	**799**	ug/L	5.0	2.5	5		01/22/15 11:09	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/21/15 22:16	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/21/15 22:16	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		01/21/15 22:16	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/21/15 22:16	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		01/21/15 22:16	2037-26-5	
Preservation pH	**4.0**		0.10	0.10	1		01/21/15 22:16		

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ANALYTICAL RESULTS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186478

Sample: MW-32R-GW-20150119 **Lab ID: 60186478002** Collected: 01/19/15 15:30 Received: 01/20/15 06:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**60.3**	ug/L	10.0	5.0	1		01/21/15 22:30	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/21/15 22:30	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/21/15 22:30	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/21/15 22:30	75-25-2	
Bromomethane	**34.9**	ug/L	5.0	2.5	1		01/21/15 22:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/21/15 22:30	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/21/15 22:30	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/21/15 22:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/21/15 22:30	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/21/15 22:30	75-00-3	
Chloroform	**0.97J**	ug/L	1.0	0.50	1		01/21/15 22:30	67-66-3	
Chloromethane	**15.5**	ug/L	1.0	0.50	1		01/21/15 22:30	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/21/15 22:30	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/21/15 22:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/21/15 22:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/21/15 22:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/21/15 22:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/21/15 22:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/21/15 22:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/21/15 22:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/21/15 22:30	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/21/15 22:30	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/21/15 22:30	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/21/15 22:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/21/15 22:30	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/21/15 22:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/21/15 22:30	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/21/15 22:30	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/21/15 22:30	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/21/15 22:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/21/15 22:30	79-00-5	
Trichloroethene	**12.9**	ug/L	1.0	0.50	1		01/21/15 22:30	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/21/15 22:30	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/21/15 22:30	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/21/15 22:30	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		01/21/15 22:30	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		01/21/15 22:30	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		01/21/15 22:30		

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ANALYTICAL RESULTS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186478

Sample: MW-31R-GW-20150119 **Lab ID: 60186478003** Collected: 01/19/15 15:50 Received: 01/20/15 06:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**8.5J**	ug/L	10.0	5.0	1		01/27/15 01:02	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/23/15 19:26	71-43-2	
Bromodichloromethane	**0.52J**	ug/L	1.0	0.50	1		01/23/15 19:26	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/23/15 19:26	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/23/15 19:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/23/15 19:26	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/23/15 19:26	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/23/15 19:26	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/23/15 19:26	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:26	75-00-3	
Chloroform	**6.6**	ug/L	1.0	0.50	1		01/23/15 19:26	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/23/15 19:26	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/23/15 19:26	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:26	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/23/15 19:26	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 19:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 19:26	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/23/15 19:26	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/23/15 19:26	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/23/15 19:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/23/15 19:26	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/23/15 19:26	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:26	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:26	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/23/15 19:26	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:26	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:26	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/23/15 19:26	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/23/15 19:26	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/23/15 19:26	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		01/23/15 19:26	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/23/15 19:26	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/23/15 19:26		

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ANALYTICAL RESULTS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186478

Sample: TB-01 **Lab ID: 60186478004** Collected: 01/19/15 15:50 Received: 01/20/15 06:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/23/15 15:27	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/23/15 15:27	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/23/15 15:27	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/23/15 15:27	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/23/15 15:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/23/15 15:27	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/23/15 15:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/23/15 15:27	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/23/15 15:27	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/23/15 15:27	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/23/15 15:27	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/23/15 15:27	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/23/15 15:27	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 15:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 15:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 15:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 15:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 15:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/23/15 15:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 15:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 15:27	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/23/15 15:27	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/23/15 15:27	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/23/15 15:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/23/15 15:27	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/23/15 15:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/23/15 15:27	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/23/15 15:27	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/23/15 15:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 15:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 15:27	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 15:27	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/23/15 15:27	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/23/15 15:27	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		01/23/15 15:27	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/23/15 15:27	17060-07-0	
Toluene-d8 (S)	103	%	80-120		1		01/23/15 15:27	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/23/15 15:27		

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QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186478

QC Batch: MSV/67171
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186478003, 60186478004

METHOD BLANK: 1510745
Matrix: Water
Associated Lab Samples: 60186478003, 60186478004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/23/15 15:12	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/23/15 15:12	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/23/15 15:12	
1,1-Dichloroethane	ug/L	ND	1.0	01/23/15 15:12	
1,1-Dichloroethene	ug/L	ND	1.0	01/23/15 15:12	
1,2-Dichloroethane	ug/L	ND	1.0	01/23/15 15:12	
1,2-Dichloropropane	ug/L	ND	1.0	01/23/15 15:12	
2-Butanone (MEK)	ug/L	ND	10.0	01/23/15 15:12	
2-Hexanone	ug/L	ND	10.0	01/23/15 15:12	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/23/15 15:12	
Acetone	ug/L	ND	10.0	01/23/15 15:12	
Benzene	ug/L	ND	1.0	01/23/15 15:12	
Bromodichloromethane	ug/L	ND	1.0	01/23/15 15:12	
Bromoform	ug/L	ND	1.0	01/23/15 15:12	
Bromomethane	ug/L	ND	5.0	01/23/15 15:12	
Carbon disulfide	ug/L	ND	5.0	01/23/15 15:12	
Carbon tetrachloride	ug/L	ND	1.0	01/23/15 15:12	
Chlorobenzene	ug/L	ND	1.0	01/23/15 15:12	
Chloroethane	ug/L	ND	1.0	01/23/15 15:12	
Chloroform	ug/L	ND	1.0	01/23/15 15:12	
Chloromethane	ug/L	ND	1.0	01/23/15 15:12	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 15:12	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 15:12	
Dibromochloromethane	ug/L	ND	1.0	01/23/15 15:12	
Ethylbenzene	ug/L	ND	1.0	01/23/15 15:12	
Methylene chloride	ug/L	ND	1.0	01/23/15 15:12	
Styrene	ug/L	ND	1.0	01/23/15 15:12	
Tetrachloroethene	ug/L	ND	1.0	01/23/15 15:12	
Toluene	ug/L	ND	1.0	01/23/15 15:12	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 15:12	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 15:12	
Trichloroethene	ug/L	ND	1.0	01/23/15 15:12	
Vinyl chloride	ug/L	ND	1.0	01/23/15 15:12	
Xylene (Total)	ug/L	ND	3.0	01/23/15 15:12	
1,2-Dichloroethane-d4 (S)	%	102	80-120	01/23/15 15:12	
4-Bromofluorobenzene (S)	%	100	80-120	01/23/15 15:12	
Toluene-d8 (S)	%	100	80-120	01/23/15 15:12	

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REPORT OF LABORATORY ANALYSIS

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(913)599-5665

QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186478

LABORATORY CONTROL SAMPLE: 1510746

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.3	102	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.8	99	73-121	
1,1,2-Trichloroethane	ug/L	20	21.1	105	80-120	
1,1-Dichloroethane	ug/L	20	20.6	103	80-120	
1,1-Dichloroethene	ug/L	20	20.2	101	80-120	
1,2-Dichloroethane	ug/L	20	21.5	107	81-120	
1,2-Dichloropropane	ug/L	20	20.6	103	80-120	
2-Butanone (MEK)	ug/L	100	100	100	67-122	
2-Hexanone	ug/L	100	102	102	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	102	102	76-120	
Acetone	ug/L	100	95.9	96	72-120	
Benzene	ug/L	20	22.1	111	80-120	
Bromodichloromethane	ug/L	20	21.3	107	80-120	
Bromoform	ug/L	20	20.3	102	73-138	
Bromomethane	ug/L	20	14.1	71	38-137	
Carbon disulfide	ug/L	20	21.5	107	71-129	
Carbon tetrachloride	ug/L	20	20.6	103	67-146	
Chlorobenzene	ug/L	20	22.0	110	80-120	
Chloroethane	ug/L	20	17.9	89	76-120	
Chloroform	ug/L	20	20.1	100	80-120	
Chloromethane	ug/L	20	16.0	80	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.9	105	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.5	103	80-120	
Dibromochloromethane	ug/L	20	20.9	105	80-126	
Ethylbenzene	ug/L	20	21.0	105	80-120	
Methylene chloride	ug/L	20	18.7	94	80-120	
Styrene	ug/L	20	22.1	110	80-123	
Tetrachloroethene	ug/L	20	21.0	105	80-123	
Toluene	ug/L	20	21.5	108	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.5	102	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.1	106	80-129	
Trichloroethene	ug/L	20	20.7	103	80-120	
Vinyl chloride	ug/L	20	18.3	92	62-125	
Xylene (Total)	ug/L	60	65.7	109	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			104	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186478

QC Batch: MSV/67208
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186478003

METHOD BLANK: 1511906
Matrix: Water
Associated Lab Samples: 60186478003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Acetone	ug/L	ND	10.0	01/26/15 21:49	
1,2-Dichloroethane-d4 (S)	%	101	80-120	01/26/15 21:49	
4-Bromofluorobenzene (S)	%	98	80-120	01/26/15 21:49	
Toluene-d8 (S)	%	97	80-120	01/26/15 21:49	

LABORATORY CONTROL SAMPLE: 1511907

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acetone	ug/L	100	89.1	89	72-120	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			104	80-120	
Toluene-d8 (S)	%			98	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186478

QC Batch: MSV/67116 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60186478001, 60186478002

METHOD BLANK: 1509372 Matrix: Water
Associated Lab Samples: 60186478001, 60186478002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/21/15 17:40	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/21/15 17:40	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/21/15 17:40	
1,1-Dichloroethane	ug/L	ND	1.0	01/21/15 17:40	
1,1-Dichloroethene	ug/L	ND	1.0	01/21/15 17:40	
1,2-Dichloroethane	ug/L	ND	1.0	01/21/15 17:40	
1,2-Dichloropropane	ug/L	ND	1.0	01/21/15 17:40	
2-Butanone (MEK)	ug/L	ND	10.0	01/21/15 17:40	
2-Hexanone	ug/L	ND	10.0	01/21/15 17:40	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/21/15 17:40	
Acetone	ug/L	ND	10.0	01/21/15 17:40	
Benzene	ug/L	ND	1.0	01/21/15 17:40	
Bromodichloromethane	ug/L	ND	1.0	01/21/15 17:40	
Bromoform	ug/L	ND	1.0	01/21/15 17:40	
Bromomethane	ug/L	ND	5.0	01/21/15 17:40	
Carbon disulfide	ug/L	ND	5.0	01/21/15 17:40	
Carbon tetrachloride	ug/L	ND	1.0	01/21/15 17:40	
Chlorobenzene	ug/L	ND	1.0	01/21/15 17:40	
Chloroethane	ug/L	ND	1.0	01/21/15 17:40	
Chloroform	ug/L	ND	1.0	01/21/15 17:40	
Chloromethane	ug/L	ND	1.0	01/21/15 17:40	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/21/15 17:40	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/21/15 17:40	
Dibromochloromethane	ug/L	ND	1.0	01/21/15 17:40	
Ethylbenzene	ug/L	ND	1.0	01/21/15 17:40	
Methylene chloride	ug/L	ND	1.0	01/21/15 17:40	
Styrene	ug/L	ND	1.0	01/21/15 17:40	
Tetrachloroethene	ug/L	ND	1.0	01/21/15 17:40	
Toluene	ug/L	ND	1.0	01/21/15 17:40	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/21/15 17:40	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/21/15 17:40	
Trichloroethene	ug/L	ND	1.0	01/21/15 17:40	
Vinyl chloride	ug/L	ND	1.0	01/21/15 17:40	
Xylene (Total)	ug/L	ND	3.0	01/21/15 17:40	
1,2-Dichloroethane-d4 (S)	%	98	80-120	01/21/15 17:40	
4-Bromofluorobenzene (S)	%	100	80-120	01/21/15 17:40	
Toluene-d8 (S)	%	101	80-120	01/21/15 17:40	

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QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186478

LABORATORY CONTROL SAMPLE: 1509373

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.3	96	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.4	97	73-121	
1,1,2-Trichloroethane	ug/L	20	20.3	101	80-120	
1,1-Dichloroethane	ug/L	20	20.3	101	80-120	
1,1-Dichloroethene	ug/L	20	19.0	95	80-120	
1,2-Dichloroethane	ug/L	20	19.4	97	81-120	
1,2-Dichloropropane	ug/L	20	19.4	97	80-120	
2-Butanone (MEK)	ug/L	100	92.7	93	67-122	
2-Hexanone	ug/L	100	92.6	93	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	82.8	83	76-120	
Acetone	ug/L	100	94.7	95	72-120	
Benzene	ug/L	20	21.5	107	80-120	
Bromodichloromethane	ug/L	20	18.7	94	80-120	
Bromoform	ug/L	20	19.8	99	73-138	
Bromomethane	ug/L	20	18.8	94	38-137	
Carbon disulfide	ug/L	20	21.7	108	71-129	
Carbon tetrachloride	ug/L	20	17.7	89	67-146	
Chlorobenzene	ug/L	20	21.1	105	80-120	
Chloroethane	ug/L	20	18.7	94	76-120	
Chloroform	ug/L	20	19.5	97	80-120	
Chloromethane	ug/L	20	21.0	105	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.2	101	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.2	96	80-120	
Dibromochloromethane	ug/L	20	19.3	96	80-126	
Ethylbenzene	ug/L	20	20.1	100	80-120	
Methylene chloride	ug/L	20	19.5	98	80-120	
Styrene	ug/L	20	21.3	107	80-123	
Tetrachloroethene	ug/L	20	18.5	92	80-123	
Toluene	ug/L	20	19.5	98	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.0	100	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.2	101	80-129	
Trichloroethene	ug/L	20	18.5	93	80-120	
Vinyl chloride	ug/L	20	19.7	98	62-125	
Xylene (Total)	ug/L	60	64.4	107	80-120	
1,2-Dichloroethane-d4 (S)	%			96	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			102	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186478

QC Batch: MSV/67140
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60186478001

METHOD BLANK: 1509943
Matrix: Water
Associated Lab Samples: 60186478001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	ug/L	ND	1.0	01/22/15 10:53	
1,2-Dichloroethane-d4 (S)	%	99	80-120	01/22/15 10:53	
4-Bromofluorobenzene (S)	%	98	80-120	01/22/15 10:53	
Toluene-d8 (S)	%	100	80-120	01/22/15 10:53	

LABORATORY CONTROL SAMPLE: 1509944

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	20	18.7	94	80-120	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALIFIERS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186478

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/67116

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/67140

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/67171

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/67208

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR VOCs
Pace Project No.: 60186478

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186478003	**MW-31R-GW-20150119**	EPA 5030B/8260	MSV/67171		
60186478003	**MW-31R-GW-20150119**	EPA 5030B/8260	MSV/67208		
60186478004	**TB-01**	EPA 5030B/8260	MSV/67171		
60186478001	**MW-33R-GW-20150118**	EPA 5030B/8260	MSV/67116		
60186478001	**MW-33R-GW-20150118**	EPA 5030B/8260	MSV/67140		
60186478002	**MW-32R-GW-20150119**	EPA 5030B/8260	MSV/67116		

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Sample Condition Upon Receipt

WO# : 60186478

60186478

Client Name: Enviro

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☑ V

Tracking #: _____ Pace Shipping Label Used? Yes ☑ No ☐

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☑ None ☐ Other ☐

Thermometer Used: T-239 / T-194 **Type of Ice:** Wet Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 1.7

Temperature should be above freezing to 6°C

Date and initials of person examining contents: BB 1/20/15

Chain of Custody present:	☑Yes ☐No ☐N/A	1.	
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.	
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	6.	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	7.	
Sufficient volume:	☑Yes ☐No ☐N/A	8.	
Correct containers used:	☑Yes ☐No ☐N/A		
Pace containers used:	☑Yes ☐No ☐N/A	9.	
Containers intact:	☑Yes ☐No ☐N/A	10.	
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11.	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	12.	
Sample labels match COC: Includes date/time/ID/analyses Y Matrix: water	☑Yes ☐No ☐N/A	13.	
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A		
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	14.	
Exceptions: (VOA) coliform, TOC, O&G, WI-DRO (water), Phenolics	☑Yes ☐No	Initial when completed	Lot # of added preservative
Trip Blank present: Pace Trip Blank lot # (if purchased): 120814-38ZM	☑Yes ☐No ☐N/A	15.	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.	
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:	

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MJ Walls Date: 1/20/15

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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.

Page: 1 of 1

Section A — Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STANDARD

Section B — Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tamara Gleason
	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	343446

Section C — Invoice Information:

Attention:	Tamara Gleason
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: AR

Section D — Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-33R-GW-20150118	WT	G			1/18/15	1210		3								X	X	X		30G9U
2	MW-32R-GW-20150119	WT	G			1/19/15	1530		3								3	X	X		↓
3	MW-31R-GW-20150119	WT	G			1/19/15	1550		3				3					X	X		30G9H
4	~~MW-ME~~ TRIP BLANK-01	WT							2				2					X	X		10G9H
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / Environ	1/19/15	1745	[signature]	1/19/15	0615	1.7	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Michael Eddings

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 1/19/15

Temp In °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

February 04, 2015

Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

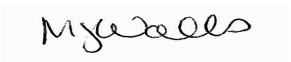
RE: Project: Ft. Smith -14544 Microseeps
Pace Project No.: 60186607

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on January 16, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: Ft. Smith -14544 Microseeps
Pace Project No.: 60186607

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186607001	ITMW-1-201501	Water	01/14/15 15:20	01/16/15 09:20
60186607002	ITMW-1-201501	Water	01/15/15 13:00	01/16/15 09:20
60186607003	ITMW-2-201501	Water	01/13/15 16:20	01/16/15 09:20
60186607004	ITMW-2-201501	Water	01/15/15 13:22	01/16/15 09:20
60186607005	ITMW-4-201501	Water	01/13/15 09:30	01/16/15 09:20
60186607006	ITMW-4-201501	Water	01/12/15 12:44	01/16/15 09:20
60186607007	ITMW-6-201501	Water	01/13/15 11:48	01/16/15 09:20
60186607008	ITMW-6-201501	Water	01/12/15 13:56	01/16/15 09:20
60186607009	ITMW-7-201501	Water	01/14/15 11:55	01/16/15 09:20
60186607010	ITMW-7-201501	Water	01/12/15 14:35	01/16/15 09:20
60186607011	ITMW-9-201501	Water	01/13/15 09:20	01/16/15 09:20
60186607012	ITMW-9-201501	Water	01/15/15 14:10	01/16/15 09:20
60186607013	ITMW-10-201501	Water	01/14/15 16:47	01/16/15 09:20
60186607014	ITMW-10-201501	Water	01/12/15 13:27	01/16/15 09:20
60186607015	ITMW-11-201501	Water	01/15/15 10:22	01/16/15 09:20
60186607016	ITMW-11-201501	Water	01/15/15 14:31	01/16/15 09:20
60186607017	ITMW-12-201501	Water	01/15/15 09:32	01/16/15 09:20
60186607018	ITMW-12-201501	Water	01/14/15 17:11	01/16/15 09:20
60186607019	ITMW-13-201501	Water	01/14/15 15:20	01/16/15 09:20
60186607020	ITMW-13-201501	Water	01/15/15 13:28	01/16/15 09:20
60186607021	ITMW-14-201501	Water	01/14/15 14:35	01/16/15 09:20
60186607022	ITMW-14-201501	Water	01/15/15 13:51	01/16/15 09:20
60186607023	ITMW-15-201501	Water	01/15/15 12:50	01/16/15 09:20
60186607024	ITMW-15-201501	Water	01/15/15 14:48	01/16/15 09:20
60186607025	ITMW-16-201501	Water	01/14/15 12:35	01/16/15 09:20
60186607026	ITMW-16-201501	Water	01/15/15 12:58	01/16/15 09:20
60186607027	ITMW-17-201501	Water	01/15/15 09:47	01/16/15 09:20
60186607028	ITMW-17-201501	Water	01/14/15 16:46	01/16/15 09:20
60186607029	ITMW-18-201501	Water	01/15/15 10:00	01/16/15 09:20
60186607030	ITMW-18-201501	Water	01/14/15 15:16	01/16/15 09:20
60186607031	ITMW-19-201501	Water	01/15/15 13:10	01/16/15 09:20
60186607032	ITMW-19-201501	Water	01/15/15 08:29	01/16/15 09:20
60186607033	ITMW-20-201501	Water	01/12/15 16:20	01/16/15 09:20
60186607034	ITMW-20-201501	Water	01/12/15 15:08	01/16/15 09:20
60186607035	ITMW-21-201501	Water	01/14/15 13:50	01/16/15 09:20
60186607036	ITMW-21-201501	Water	01/12/15 16:50	01/16/15 09:20
60186607037	IW-72-201501	Water	01/12/15 14:00	01/16/15 09:20

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: Ft. Smith -14544 Microseeps
Pace Project No.: 60186607

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186607038	**IW-72-201501**	Water	01/13/15 12:35	01/16/15 09:20
60186607039	**IW-73-201501**	Water	01/14/15 10:40	01/16/15 09:20
60186607040	**IW-73-201501**	Water	01/13/15 13:31	01/16/15 09:20
60186607041	**IW-74-201501**	Water	01/14/15 12:10	01/16/15 09:20
60186607042	**IW-74-201501**	Water	01/13/15 12:59	01/16/15 09:20
60186607043	**IW-76-201501**	Water	01/14/15 12:25	01/16/15 09:20
60186607044	**IW-76-201501**	Water	01/13/15 14:52	01/16/15 09:20
60186607045	**IW-77-201501**	Water	01/14/15 15:05	01/16/15 09:20
60186607046	**IW-77-201501**	Water	01/14/15 11:19	01/16/15 09:20
60186607047	**IW-80-201501**	Water	01/13/15 13:35	01/16/15 09:20
60186607048	**IW-80-201501**	Water	01/13/15 15:16	01/16/15 09:20

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Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project:
Pace Project No.:

Method:
Description:
Client:
Date:

This data package has been reviewed for quality and completeness and is approved for release.

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14544

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 5

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Pace Analytical Services, Inc.	Report To:	MJ Walls	Attention:	
Address:	9608 Loiret Blvd	Copy To:		Company Name:	
	Lenexa, KS 66219			Address:	
Email To:	mjwalls@pacelabs.com	Purchase Order No.:		Pace Quote Reference:	
Phone:	913-563-1401 Fax:	Project Name:	Ft. Smith, AR	Pace Project Manager:	MJ Walls
Requested Due Date/TAT:		Project Number:		Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☒ OTHER _____

Site Location STATE: AR

Requested Analysis Filtered (Y/N)

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Scalwin Preservative	Analysis Test Y/N	AM 20 GAX*	AM 20 GX - Hydrogen	AM 21 GAX - Volatile Fatty Acides										Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	ITMW-1-201501	WT	AR	G	1/15/15	1200	1/15/15	1300		1	X							X		X	X	X							N	
2	ITMW-2-201501	WT					1/15/15	1322										X		X		X								
3	ITMW-4-201501	WT					1/12/15	1244										X		X		X								
4	ITMW-5-201501	WT					1/12/15	1356										X		X		X								
5	ITMW-7-201501	WT					1/12/15	1435										X		X		X								
6	ITMW-9-201501	WT					1/15/15	1410										X		X		X								
7	ITMW-10-201501	WT					1/12/15	1327										X		X		X								
8	ITMW-11-201501	WT					1/15/15	1431										X		X		X								
9	ITMW-12-201501	WT					1/14/15	1711										X		X		X								
10	ITMW-13-201501	WT					1/15/15	1328										X		X		X								
11	ITMW-14-201501	WT					1/15/15	1351										X		X		X								
12	ITMW-15-201501	WT					1/15/15	1448										X		X		X								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
*Methane, Ethane, Ethene, Acetylene	Wendy Stonestreet	1/15/15	1800	Rueben Pace	1/16/15	0920	
**Dissolved Gases - Hydrogen							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

Pace Analytical®
www.pacelabs.com
Microseeps

220 William Pitt Way
Pittsburgh, PA 15238
412-826-5245

14544

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 of 6

003652

Section A Required Client Information:

Company: Pace Analytical
Address: 9608 Loiret Blvd
Lenexa, KS 66219
Email To: mjwalls@pacelabs.com
Phone: 913-563-1401 Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: MJ Walls
Copy To:
Purchase Order No.:
Project Name: Ft. Smith, AR
Project Number:

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager: MJ Walls
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER X

Site Location STATE: AR

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Matrix Codes MATRIX / CODE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zinc Acetate & NaOH	Other	Y/N	Analysis Test: AM 20 GX - Hydrogen	AM 20GAX	AM 21GAX YFA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	ITMW-16-201501	WT AR	GR	G			1/15/15	1258		1										X	X	X	N	
2	ITMW-17-201501	WT					1/14/15	1646													X	X		
3	ITMW-18-201501	WT					1/14/15	1516													X	X		
4	ITMW-19-201501	WT					1/15/15	0829													X	X		
5	ITMW-20-201501	WT					1/12/15	1508													X	X		
6	ITMW-21-201501	WT					1/12/15	1650													X	X		
7	IW-72-201501	WT					1/13/15	1235													X	X		
8	IW-73-201501	WT					1/13/15	1331													X	X		
9	IW-74-201501	WT					1/13/15	1259													X	X		
10	IW-76-201501	WT					1/13/15	1452													X	X		
11	IW-77-201501	WT					1/14/15	1119													X	X		
12	IW-80-201501	WT					1/13/15	1516													X	X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet / ENVIRON	1/15/15	1800	RWelch PAES	1/16/15	0920	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*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.

NON-CONFORMANCE FORM

Microseeps Project Number: 14544

Date: 1-16-15 Time of Receipt: 0920 Receiver: R. Welsh

Client: Pace - KS

REASON FOR NON-CONFORMANCE:

All H_2 vials match COC

Water vials for MW-50-201501, MW-58-201501, MW-60-201501 MW-61-201501, MW-63-201501 match COC

Samples MW-56-201501, MW-57-201501 date on vials match COC no times reported on vials

All other water vials do not match COC for date & time of collection

ACTION TAKEN:

Client name: Mary Jane Wells Date: 1/16/15 Time: email

Client sent another set of COC's with collection dates and times that match sample vials for water analysis.

Customer Service Initials: RR Date: 1/21/15

14544

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Page: 1 of 6

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ENVIRON	Report To: wstonestreet@environcorp.com	Attention:
Address: 7500 College Blvd Overland Park, KS	Copy To: tgleason@environcorp.com	Company Name:
Email To: wstonestreet@environcorp.com	Purchase Order No.:	Address:
Phone: 913-553-5926 Fax:	Project Name: Whirlpool Ft Smith	Pace Quote Reference:
Requested Due Date/TAT: Standard	Project Number: 34341399A	Pace Project Manager:
		Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Sodium Phosphate	Analysis Test Y/N	AM 20 GRX	AM 2 GRX VFA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-72-201501		WT	G			1/12/15	1400		4	X							X		X	X	N	
2	MW-67-201501		WT	G			1/12/15	1451		4	X							X		X	X	N	
3	MW-68-201501		WT	G			1/12/15	1410		4	X							X		X	X	N	
4	TMW-20-201501		WT	G			1/12/15	1620		4	X							X		X	X	N	
5	MW-31-201501		WT	G			1/12/15	1700		4	X							X		X	X	N	
6	MW-40-201501		WT	G			1/12/15	1445		4	X							X		X	X	N	
7	MW-36-201501		WT	G			1/12/15	1635		4	X							X		X	X	N	
8	MW-90-201501		WT	G			1/12/15	1625		4	X							X		X	X	N	
9	MW-39-201501		WT	G			1/12/15	1430		4	X							X		X	X	N	
10	MW-56-201501		WT	G			1/13/15	1115		4	X							X		X	X	N	
11	MW-97-201501		WT	G			1/13/15	1437		4	X							X		X	X	N	
12	TMW-9-201501		WT	G			1/13/15	920		4	X							X		X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet/ENVIRON	1/15/15	1800				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*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.

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Page: 2 of 6

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ENVIRON	Report To:	Attention:
Address: SEE PAGE 1	Copy To: SEE PAGE 1	Company Name:
		Address:
Email To: wstonestreet@environcorp.com	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Whirlpool	Pace Project Manager:
Requested Due Date/TAT: Standard	Project Number: 343139.17	Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Sodium Phosphate	Y/N	Analysis Test: AM20GAX	AM21GAX VFA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-80-201501	WT	G			1/13/15	1335		4	X							X		X	X	N	
2	MW-35R-201501	WT	G			1/13/15	1035		4	X							X		X	X	N	
3	MW-65-201501	WT	G			1/13/15	1040		4	X							X		X	X	N	
4	MW-34-201501	WT	G			1/13/15	1320		4	X							X		X	X	N	
5	ITMW-6-201501	WT	G			1/13/15	1148		4	X							X		X	X	N	
6	ITMW-1-201501	WT	G			1/13/15	0930		4	X							X		X	X	N	
7	MW-88-201501	WT	G			1/13/15	1158		4	X							X		X	X	N	
8	MW-82-201501 MW-6232	WT	G			1/13/15	1120		4	X							X		X	X	N	
9	MW-29-201501	WT	G			1/13/15	1423		4	X							X		X	X	N	
10	ITMW-2-201501	WT	G			1/13/15	1620		4	X							X		X	X	N	
11	MW-22-201501	WT	G			1/13/15	0945		4	X							X		X	X	N	
12	MW-46R-201501	WT	G			1/13/15	1455		4	X							X		X	X	N	

14545

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet/ENVIRON	1/15/15	1800				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

F-ALL-Q-020rev.08, 12-Oct-2007

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Page: 3 of 6

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ENVIRON	Report To:	Attention:
Address: SEE PAGE 1	Copy To: SEE PAGE 1	Company Name:
	Purchase Order No.:	Address:
Email To: wstonestreet@environcorp.com	Project Name: Whirlpool Ft Smith	Pace Quote Reference:
Phone: Fax:	Project Number: 342439/9	Pace Project Manager:
Requested Due Date/TAT: Standard		Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Sodium Phosphate	Requested Analysis Filtered (Y/N) Y/N ↓ Analysis Test ↓	RM 20 GAX	RM 21 GAX VFA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-91-201501	WT	G			1/13/15	1631		4	X							X		X	X	N	
2	MW-89-201501	WT	G			1/13/15	1441		4	X							X		X	X	N	
3	MW-81-201501	WT	G			1/13/15	1600		4	X							X		X	X	N	
4	MW-61-201501	WT	G			1/13/15	1600		4	X							X		X	X	N	
5	MW-50-201501	WT	G			1/13/15	1430		4	X							X		X	X	N	
6	MW-60-201501	WT	G			1/13/15	1300		4	X							X		X	X	N	
7	MW-82-201501	WT	G			1/13/15	1615		4	X							X		X	X	N	
8	MW-63-201501	WT	G			1/13/15	1625		4	X							X		X	X	N	
9	TMW-1-201501	WT	G			1/14/15	1520		4	X							X		X	X	N	
10	MW-32-201501	WT	G			1/14/15	1450		4	X							X		X	X	N	
11	TMW-21-201501	WT	G			1/14/15	1350		4	X							X		X	X	N	
12	TMW-16-201501	WT	G			1/14/15	1235		4	X							X		X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet/ENVIRON	1/15/15	1800				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*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

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 4 of 6

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ENVIRON	Report To:	Attention:
Address: SEE PAGE 1	Copy To: SEE PAGE 1	Company Name:
		Address:
Email To: wstonestreet@environcorp.com	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Whirlpool Ft. Smith	Pace Project Manager:
Requested Due Date/TAT: STANDARD	Project Number: 31343991A	Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Requested Analysis Filtered (Y/N)

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Sodium Phosphate	Analysis Test Y/N	AM20 GRX	AM1 GRN VEA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-66-201501	WT	G			1/14/15	1020		4	X							X		X	X	N	
2	MW-14-201501	WT	G			1/14/15	1436		4	X							X		X	X	N	
3	MW-87-201501	WT	G			1/14/15	1513		4	X							X		X	X	N	
4	MW-77-201501	WT	G			1/14/15	1505		4	X							X		X	X	N	
5	MW-73-201501	WT	G			1/14/15	1040		4	X							X		X	X	N	
6	MW-74-201501	WT	G			1/14/15	1210		4	X							X		X	X	N	
7	MW-76-201501	WT	G			1/14/15	1225		4	X							X		X	X	N	
8	MW-84-201501	WT	G			1/14/15	1530		4	X							X		X	X	N	
9	MW-28-201501	WT	G			1/14/15	0950		4	X							X		X	X	N	
10	MW-7-201501	WT	G			1/14/15	1155		4	X							X		X	X	N	
11	MW-41-201501	WT	G			1/14/15	0955		4	X							X		X	X	N	
12	MW-27-201501	WT	G			1/14/15	1205		4	X							X		X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet / ENVIRON	1/15/15	1800				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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14544

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 5 of 6

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ENVIRON	Report To:	Attention:
Address: SEE PAGE 1	Copy To: SEE PAGE 1	Company Name:
		Address:
Email To: wstonestreet@environcorp.com	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Whirlpool Ft. Smith	Pace Project Manager:
Requested Due Date/TAT: STANDARD	Project Number: 343439PA	Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☒ OTHER ~~ADEQ~~

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Sodium Phosphate	Analysis Test Y/N	Am 2a GRX	Am 3i GRX VFA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	ITMW-13-201501	WT	G			1/14/15	1520		4	X							X		X	X	N	
2	RW-69-201501	WT	G			1/14/15	1145		4	X							X		X	X	N	
3	MW-71-201501	WT	G			1/14/15	0950		4	X							X		X	X	N	
4	MW-58-201501	WT	G			1/14/15	0935		4	X							X		X	X	N	
5	ITMW-10-201501	WT	G			1/14/15	1647		4	X							X		X	X	N	
6	MW-33-201501	WT	G			1/14/15	1701		4	X							X		X	X	N	
7	MW-26-201501	WT	G			1/14/15	0908		4	X							X		X	X	N	
8	ITMW-18-201501	WT	G			1/15/15	1000		4	X							X		X	X	N	
9	MW-85-201501	WT	G			1/15/15	1400		4	X							X		X	X	N	
10	MW-86-201501	WT	G			1/15/15	1255		4	X							X		X	X	N	
11	ITMW-19-201501	WT	G			1/15/15	1310		4	X							X		X	X	N	
12	MW-38-201501	WT	G			1/15/15	1155		4	X							X		X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	WendyStonestreet/ENVIRON	1/15/15	1800				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: WendyStonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:

Company:	ENVIRON
Address:	SEEPAGE 1
Email To:	wstonestreet@environcorp.com
Phone:	Fax:
Requested Due Date/TAT:	STANDARD

Section B Required Project Information:

Report To:	SEE PAGE 1
Copy To:	
Purchase Order No.:	
Project Name:	Whirlpool, Ft Smith
Project Number:	31431399A

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

Page: 6 of 6

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Sodium Phosphate	Analysis Test Y/N	AM 20 GRAX	AM 21 GRAX VFA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TMW-17-201501	WT	G			1/15/15	0947		4	X							X		X	X	N	
2	TMW-12-201501	WT	G			1/15/15	0932		4	X							X		X	X	N	
3	TMW-15-201501	WT	G			1/15/15	1250		4	X							X		X	X	N	
4	TMW-11-201501	WT	G			1/15/15	1022		4	X							X		X	X	N	
5	MW-83-201501	WT	G			1/15/15	1320		4	X							X		X	X	N	
6	MW-25-201501	WT	G			1/15/15	1125		4	X							X		X	X	N	
7																						
8																						
9																						
10																						
11																						
12																						

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet / ENVIRON	1/15/15	1800				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*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

Mark Mikesell

From: Robbin Robl
Sent: Thursday, January 29, 2015 9:07 AM
To: Mark Mikesell
Subject: FW: Fort Smith

Importance: High

From: MaryJane Walls [mailto:mjwalls@pacelabs.com]
Sent: Wednesday, January 28, 2015 5:24 PM
To: Robbin Robl
Subject: Re: Fort Smith

The client would like you to proceed with the analysis outside of holding time.

Regards,

Mary Jane Walls
Project Manager
Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
phone: 913-563-1401
cell: 816-679-8286
fax:913-438-3449
email: mjwalls@pacelabs.com
http://www.pacelabs.com

~Worried about shipping samples to the lab? Click here for a quick video on the best way to pack and ship your coolers.

>>> "Robbin Robl" <rrobl@microseeps.com> 1/28/2015 2:32 PM >>>

Hi Mary Jane,

I have some not so good news. All samples were analyzed for methane, ethane and ethene, however the acetylene was missed on 46 of 60 samples submitted.

The samples were analyzed, however not set up to collect the acetylene at the time of analysis. We can re-run the samples for acetylene, however the acetylene will be analyzed and reported out of hold.

I would appreciate it if you can please check with your client and let me know how we are to proceed.

Thank you,
Robbin

Robbin Robl
Pace Analytical Energy Services, LLC
220 William Pitt Way
Pittsburgh, PA 15238
Direct: 412-826-4483
Fax: 412-826-3433
Main: 412-826-5245

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Cooler Receipt Form

Client Name: Environ Project: A Smith Lab Work Order: 145494

A. Shipping/Container Information (circle appropriate response)

Courier: (FedEx) UPS USPS Client Other:_____ Air bill Present: (Yes) No

Tracking Number: 8005 1350 3069

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: 2.2 ' Radiation Screened: Yes (No) Chain of Custody Present: (Yes) N

Comments:_____

B. Laboratory Assignment/Log-in (check appropriate response)

	YES	NO	N/A	Comment Reference non-Conformar
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	✓			
Microseeps 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: RWelsh Date: 11-16-15

Project Manager Review: AR Date: 11/17/15

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

January 30, 2015

Mary Jane Walls
Pace Analytical Services
9608 Loiret Blvd
Lenexa, KS 66219

RE: **FT. SMITH, AR**
Microseeps Workorder: 14544

Dear Mary Walls:

Enclosed are the analytical results for sample(s) received by the laboratory on Friday, January 16, 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,

Robbin Robl 01/30/2015
rrobl@microseeps.com

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 81

CERTIFICATE OF ANALYSIS

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

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

SAMPLE SUMMARY

Workorder: 14544 FT. SMITH, AR

Lab ID	Sample ID	Matrix	Date Collected	Date Received
145440001	ITMW-1-201501	Water	1/14/2015 15:20	1/16/2015 09:20
145440002	ITMW-1-201501	Bubble Strip	1/15/2015 13:00	1/16/2015 09:20
145440003	ITMW-2-201501	Water	1/13/2015 16:20	1/16/2015 09:20
145440004	ITMW-2-201501	Bubble Strip	1/15/2015 13:22	1/16/2015 09:20
145440005	ITMW-4-201501	Water	1/13/2015 09:30	1/16/2015 09:20
145440006	ITMW-4-201501	Bubble Strip	1/12/2015 12:44	1/16/2015 09:20
145440007	ITMW-6-201501	Water	1/13/2015 11:48	1/16/2015 09:20
145440008	ITMW-6-201501	Bubble Strip	1/12/2015 13:56	1/16/2015 09:20
145440009	ITMW-7-201501	Water	1/14/2015 11:55	1/16/2015 09:20
145440010	ITMW-7-201501	Bubble Strip	1/12/2015 14:35	1/16/2015 09:20
145440011	ITMW-9-201501	Water	1/13/2015 09:20	1/16/2015 09:20
145440012	ITMW-9-201501	Bubble Strip	1/15/2015 14:10	1/16/2015 09:20
145440013	ITMW-10-201501	Water	1/14/2015 16:47	1/16/2015 09:20
145440014	ITMW-10-201501	Bubble Strip	1/12/2015 13:27	1/16/2015 09:20
145440015	ITMW-11-201501	Water	1/15/2015 10:22	1/16/2015 09:20
145440016	ITMW-11-201501	Bubble Strip	1/15/2015 14:31	1/16/2015 09:20
145440017	ITMW-12-201501	Water	1/15/2015 09:32	1/16/2015 09:20
145440018	ITMW-12-201501	Bubble Strip	1/14/2015 17:11	1/16/2015 09:20
145440019	ITMW-13-201501	Water	1/14/2015 15:20	1/16/2015 09:20
145440020	ITMW-13-201501	Bubble Strip	1/15/2015 13:28	1/16/2015 09:20
145440021	ITMW-14-201501	Water	1/14/2015 14:35	1/16/2015 09:20
145440022	ITMW-14-201501	Bubble Strip	1/15/2015 13:51	1/16/2015 09:20
145440023	ITMW-15-201501	Water	1/15/2015 12:50	1/16/2015 09:20
145440024	ITMW-15-201501	Bubble Strip	1/15/2015 14:48	1/16/2015 09:20
145440025	ITMW-16-201501	Water	1/14/2015 12:35	1/16/2015 09:20
145440026	ITMW-16-201501	Bubble Strip	1/15/2015 12:58	1/16/2015 09:20
145440027	ITMW-17-201501	Water	1/15/2015 09:47	1/16/2015 09:20
145440028	ITMW-17-201501	Bubble Strip	1/14/2015 16:46	1/16/2015 09:20
145440029	ITMW-18-201501	Water	1/15/2015 10:00	1/16/2015 09:20
145440030	ITMW-18-201501	Bubble Strip	1/14/2015 15:16	1/16/2015 09:20
145440031	ITMW-19-201501	Water	1/15/2015 13:10	1/16/2015 09:20
145440032	ITMW-19-201501	Bubble Strip	1/15/2015 08:29	1/16/2015 09:20
145440033	ITMW-20-201501	Water	1/12/2015 16:20	1/16/2015 09:20
145440034	ITMW-20-201501	Bubble Strip	1/12/2015 15:08	1/16/2015 09:20
145440035	ITMW-21-201501	Water	1/14/2015 13:50	1/16/2015 09:20

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

SAMPLE SUMMARY

Workorder: 14544 FT. SMITH, AR

Lab ID	Sample ID	Matrix	Date Collected	Date Received
145440036	ITMW-21-201501	Bubble Strip	1/12/2015 16:50	1/16/2015 09:20
145440037	IW-72-201501	Water	1/12/2015 14:00	1/16/2015 09:20
145440038	IW-72-201501	Bubble Strip	1/13/2015 12:35	1/16/2015 09:20
145440039	IW-73-201501	Water	1/14/2015 10:40	1/16/2015 09:20
145440040	IW-73-201501	Bubble Strip	1/13/2015 13:31	1/16/2015 09:20
145440041	IW-74-201501	Water	1/14/2015 12:10	1/16/2015 09:20
145440042	IW-74-201501	Bubble Strip	1/13/2015 12:59	1/16/2015 09:20
145440043	IW-76-201501	Water	1/14/2015 12:25	1/16/2015 09:20
145440044	IW-76-201501	Bubble Strip	1/13/2015 14:52	1/16/2015 09:20
145440045	IW-77-201501	Water	1/14/2015 15:05	1/16/2015 09:20
145440046	IW-77-201501	Bubble Strip	1/14/2015 11:19	1/16/2015 09:20
145440047	IW-80-201501	Water	1/13/2015 13:35	1/16/2015 09:20
145440048	IW-80-201501	Bubble Strip	1/13/2015 15:16	1/16/2015 09:20

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PROJECT SUMMARY

Workorder: 14544 FT. SMITH, AR

Workorder Comments

Samples 14544 (0001-0048; odd numbers) were analyzed outside the hold time of 14 days from collection for analyte Acetylene from the Light Hydrocarbons, method AM20GAx.

Batch Comments

Batch: EDON/2402 - Volatile Fatty Acids

The matrix spike and/or spike duplicate, recovery or relative percent difference; accuracy influenced by the reference sample 145460001. Analyte Acetic and Pyruvic acid. Batch acceptance based on laboratory control sample recovery.

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440001** Date Received: 1/16/2015 09:20 Matrix: Water
Sample ID: **ITMW-1-201501** Date Collected: 1/14/2015 15:20

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 13:17	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 13:17	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 13:17	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 13:17	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 13:17	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**0.33**	ug/l	0.10	0.042	1			1/21/2015 09:38	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/21/2015 09:38	BW	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/21/2015 09:38	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 08:01	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440002** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **ITMW-1-201501** Date Collected: 1/15/2015 13:00

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**5.6**	nM	0.60	0.13	1			1/21/2015 05:50	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440003** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **ITMW-2-201501** Date Collected: 1/13/2015 16:20

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 15:04	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 15:04	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 15:04	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 15:04	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 15:04	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.36**	ug/l	0.10	0.042	1			1/21/2015 09:48	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/21/2015 09:48	BW	
Ethene	**0.049**	ug/l	0.025	0.0030	1			1/21/2015 09:48	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 08:14	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440004** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **ITMW-2-201501** Date Collected: 1/15/2015 13:22

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**35**	nM	0.60	0.13	1			1/17/2015 13:53	TD	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440005** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **ITMW-4-201501** Date Collected: 1/13/2015 09:30

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 15:30	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 15:30	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 15:30	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 15:30	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 15:30	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**18**	ug/l	0.10	0.042	1			1/21/2015 10:00	BW	
Ethane	**0.059**	ug/l	0.025	0.0020	1			1/21/2015 10:00	BW	
Ethene	**0.12**	ug/l	0.025	0.0030	1			1/21/2015 10:00	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 08:27	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440006** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **ITMW-4-201501** Date Collected: 1/12/2015 12:44

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**0.79**	nM	0.60	0.13	1			1/21/2015 06:03	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440007** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **ITMW-6-201501** Date Collected: 1/13/2015 11:48

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 15:57	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 15:57	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 15:57	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 15:57	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 15:57	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**1.2**	ug/l	0.10	0.042	1			1/21/2015 10:42	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/21/2015 10:42	BW	
Ethene	**0.42**	ug/l	0.025	0.0030	1			1/21/2015 10:42	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 08:42	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440008** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **ITMW-6-201501** Date Collected: 1/12/2015 13:56

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**<0.60**	nM	0.60	0.13	1			1/21/2015 06:15	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440009** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **ITMW-7-201501** Date Collected: 1/14/2015 11:55

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 16:23	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 16:23	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 16:23	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 16:23	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 16:23	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**3.2**	ug/l	0.10	0.042	1			1/21/2015 10:52	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/21/2015 10:52	BW	
Ethene	**0.050**	ug/l	0.025	0.0030	1			1/21/2015 10:52	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 09:04	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440010** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **ITMW-7-201501** Date Collected: 1/12/2015 14:35

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**0.67**	nM	0.60	0.13	1			1/21/2015 06:28	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440011** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **ITMW-9-201501** Date Collected: 1/13/2015 09:20

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 16:50	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 16:50	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 16:50	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 16:50	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 16:50	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**16**	ug/l	0.10	0.042	1			1/21/2015 11:03	BW	
Ethane	**0.075**	ug/l	0.025	0.0020	1			1/21/2015 11:03	BW	
Ethene	**0.18**	ug/l	0.025	0.0030	1			1/21/2015 11:03	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 09:19	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440012** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **ITMW-9-201501** Date Collected: 1/15/2015 14:10

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**14**	nM	0.60	0.13	1			1/21/2015 06:40	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440013** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **ITMW-10-201501** Date Collected: 1/14/2015 16:47

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 17:17	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 17:17	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 17:17	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 17:17	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 17:17	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**9.8**	ug/l	0.10	0.042	1			1/21/2015 11:14	BW	
Ethane	**0.064**	ug/l	0.025	0.0020	1			1/21/2015 11:14	BW	
Ethene	**0.045**	ug/l	0.025	0.0030	1			1/21/2015 11:14	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 09:35	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440014** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **ITMW-10-201501** Date Collected: 1/12/2015 13:27

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**0.62**	nM	0.60	0.13	1			1/21/2015 06:52	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440015** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **ITMW-11-201501** Date Collected: 1/15/2015 10:22

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 17:43	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 17:43	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 17:43	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 17:43	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 17:43	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**1.8**	ug/l	0.10	0.042	1			1/21/2015 11:25	BW	
Ethane	**0.035**	ug/l	0.025	0.0020	1			1/21/2015 11:25	BW	
Ethene	**0.14**	ug/l	0.025	0.0030	1			1/21/2015 11:25	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 09:48	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440016** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **ITMW-11-201501** Date Collected: 1/15/2015 14:31

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**0.66**	nM	0.60	0.13	1			1/21/2015 07:05	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440017** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **ITMW-12-201501** Date Collected: 1/15/2015 09:32

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 18:10	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 18:10	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 18:10	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 18:10	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 18:10	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**15**	ug/l	0.10	0.042	1			1/21/2015 11:35	BW	
Ethane	**0.15**	ug/l	0.025	0.0020	1			1/21/2015 11:35	BW	
Ethene	**0.029**	ug/l	0.025	0.0030	1			1/21/2015 11:35	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 10:02	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440018** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **ITMW-12-201501** Date Collected: 1/14/2015 17:11

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**6.2**	nM	0.60	0.13	1			1/21/2015 07:17	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440019** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **ITMW-13-201501** Date Collected: 1/14/2015 15:20

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 18:37	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 18:37	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 18:37	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 18:37	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 18:37	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**1.1**	ug/l	0.10	0.042	1			1/21/2015 11:45	BW	
Ethane	**0.075**	ug/l	0.025	0.0020	1			1/21/2015 11:45	BW	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/21/2015 11:45	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 10:15	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440020** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **ITMW-13-201501** Date Collected: 1/15/2015 13:28

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**0.95**	nM	0.60	0.13	1			1/21/2015 07:30	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440021** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **ITMW-14-201501** Date Collected: 1/14/2015 14:35

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 19:03	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 19:03	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 19:03	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 19:03	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 19:03	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.53**	ug/l	0.10	0.042	1			1/21/2015 11:55	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/21/2015 11:55	BW	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/21/2015 11:55	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 10:27	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440022** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **ITMW-14-201501** Date Collected: 1/15/2015 13:51

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**2.1**	nM	0.60	0.13	1			1/21/2015 07:44	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440023** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **ITMW-15-201501** Date Collected: 1/15/2015 12:50

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 19:30	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 19:30	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 19:30	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 19:30	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 19:30	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**3.0**	ug/l	0.10	0.042	1			1/22/2015 07:43	BW	
Ethane	**0.044**	ug/l	0.025	0.0020	1			1/22/2015 07:43	BW	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/22/2015 07:43	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 10:41	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440024** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **ITMW-15-201501** Date Collected: 1/15/2015 14:48

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX	Analytical Method: AM20GAX									
Hydrogen	**15000**	nM	600	130	1000			1/21/2015 11:41	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440025** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **ITMW-16-201501** Date Collected: 1/14/2015 12:35

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 19:57	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 19:57	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 19:57	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 19:57	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 19:57	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**0.45**	ug/l	0.10	0.042	1			1/22/2015 07:58	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 07:58	BW	
Ethene	**0.10**	ug/l	0.025	0.0030	1			1/22/2015 07:58	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 10:53	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440026** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **ITMW-16-201501** Date Collected: 1/15/2015 12:58

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**2.8**	nM	0.60	0.13	1			1/21/2015 08:10	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440027** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **ITMW-17-201501** Date Collected: 1/15/2015 09:47

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 20:23	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 20:23	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 20:23	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 20:23	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 20:23	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**20**	ug/l	0.10	0.042	1			1/22/2015 08:09	BW	
Ethane	**0.19**	ug/l	0.025	0.0020	1			1/22/2015 08:09	BW	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/22/2015 08:09	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 12:54	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440028** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **ITMW-17-201501** Date Collected: 1/14/2015 16:46

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**7.4**	nM	0.60	0.13	1			1/21/2015 08:22	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440029** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **ITMW-18-201501** Date Collected: 1/15/2015 10:00

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 20:50	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 20:50	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 20:50	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 20:50	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 20:50	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**1.1**	ug/l	0.10	0.042	1			1/22/2015 08:20	BW	
Ethane	**0.079**	ug/l	0.025	0.0020	1			1/22/2015 08:20	BW	
Ethene	**0.067**	ug/l	0.025	0.0030	1			1/22/2015 08:20	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 13:06	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440030** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **ITMW-18-201501** Date Collected: 1/14/2015 15:16

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**1.8**	nM	0.60	0.13	1			1/21/2015 08:37	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440031** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **ITMW-19-201501** Date Collected: 1/15/2015 13:10

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 21:16	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 21:16	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 21:16	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 21:16	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 21:16	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**3.0**	ug/l	0.10	0.042	1			1/22/2015 08:31	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 08:31	BW	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/22/2015 08:31	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 13:19	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440032** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **ITMW-19-201501** Date Collected: 1/15/2015 08:29

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Hydrogen	**260**	nM	30	6.5	50			1/21/2015 12:50	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440033** Date Received: 1/16/2015 09:20 Matrix: Water
Sample ID: **ITMW-20-201501** Date Collected: 1/12/2015 16:20

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 21:43	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 21:43	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 21:43	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 21:43	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 21:43	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.80**	ug/l	0.10	0.042	1			1/22/2015 08:43	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 08:43	BW	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/22/2015 08:43	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 13:33	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440034** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **ITMW-20-201501** Date Collected: 1/12/2015 15:08

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX	Analytical Method: AM20GAX									
Hydrogen	**0.77**	nM	0.60	0.13	1			1/21/2015 10:26	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440035** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **ITMW-21-201501** Date Collected: 1/14/2015 13:50

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 22:10	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 22:10	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 22:10	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 22:10	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 22:10	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**0.76**	ug/l	0.10	0.042	1			1/22/2015 09:00	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 09:00	BW	
Ethene	**0.030**	ug/l	0.025	0.0030	1			1/22/2015 09:00	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 13:46	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440036** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **ITMW-21-201501** Date Collected: 1/12/2015 16:50

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**0.81**	nM	0.60	0.13	1			1/21/2015 10:47	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440037** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **IW-72-201501** Date Collected: 1/12/2015 14:00

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 22:36	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 22:36	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 22:36	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 22:36	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 22:36	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**1.3**	ug/l	0.10	0.042	1			1/22/2015 09:11	BW	
Ethane	**0.054**	ug/l	0.025	0.0020	1			1/22/2015 09:11	BW	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/22/2015 09:11	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 13:59	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440038** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **IW-72-201501** Date Collected: 1/13/2015 12:35

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**0.80**	nM	0.60	0.13	1			1/21/2015 11:03	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440039** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **IW-73-201501** Date Collected: 1/14/2015 10:40

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/20/2015 23:03	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/20/2015 23:03	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/20/2015 23:03	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/20/2015 23:03	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/20/2015 23:03	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**13**	ug/l	0.10	0.042	1			1/22/2015 09:24	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 09:24	BW	
Ethene	**0.10**	ug/l	0.025	0.0030	1			1/22/2015 09:24	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 14:13	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440040** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip
Sample ID: **IW-73-201501** Date Collected: 1/13/2015 13:31

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**0.82**	nM	0.60	0.13	1			1/21/2015 11:15	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440041** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **IW-74-201501** Date Collected: 1/14/2015 12:10

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 10:00	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 10:00	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 10:00	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 10:00	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 10:00	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**4.4**	ug/l	0.10	0.042	1			1/22/2015 09:34	BW	
Ethane	**0.029**	ug/l	0.025	0.0020	1			1/22/2015 09:34	BW	
Ethene	**0.066**	ug/l	0.025	0.0030	1			1/22/2015 09:34	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 14:25	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440042** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **IW-74-201501** Date Collected: 1/13/2015 12:59

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**0.75**	nM	0.60	0.13	1			1/21/2015 11:29	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440043** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **IW-76-201501** Date Collected: 1/14/2015 12:25

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 10:26	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 10:26	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 10:26	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 10:26	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 10:26	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**9.0**	ug/l	0.10	0.042	1			1/22/2015 09:45	BW	
Ethane	**0.035**	ug/l	0.025	0.0020	1			1/22/2015 09:45	BW	
Ethene	**0.036**	ug/l	0.025	0.0030	1			1/22/2015 09:45	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 14:39	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440044** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **IW-76-201501** Date Collected: 1/13/2015 14:52

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**72**	nM	12	2.6	20			1/21/2015 13:05	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440045** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **IW-77-201501** Date Collected: 1/14/2015 15:05

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/27/2015 15:15	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/27/2015 15:15	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/27/2015 15:15	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/27/2015 15:15	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/27/2015 15:15	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**2.6**	ug/l	0.10	0.042	1			1/22/2015 09:57	BW	
Ethane	**0.12**	ug/l	0.025	0.0020	1			1/22/2015 09:57	BW	
Ethene	**0.035**	ug/l	0.025	0.0030	1			1/22/2015 09:57	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 14:56	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440046** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **IW-77-201501** Date Collected: 1/14/2015 11:19

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**52**	nM	12	2.6	20			1/21/2015 13:18	GT	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440047** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **IW-80-201501** Date Collected: 1/13/2015 13:35

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 11:19	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 11:19	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 11:19	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 11:19	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 11:19	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**1.5**	ug/l	0.10	0.042	1			1/22/2015 10:42	BW	
Ethane	**0.042**	ug/l	0.025	0.0020	1			1/22/2015 10:42	BW	
Ethene	**0.058**	ug/l	0.025	0.0030	1			1/22/2015 10:42	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 15:09	BW	

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ANALYTICAL RESULTS

Workorder: 14544 FT. SMITH, AR

Lab ID: **145440048** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **IW-80-201501** Date Collected: 1/13/2015 15:16

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**5.6**	nM	0.60	0.13	1			1/21/2015 12:37	GT	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: 14544 FT. SMITH, AR

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 Quanitation 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).

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QUALITY CONTROL DATA

Workorder: 14544 FT. SMITH, AR

QC Batch: DISG/4325 Analysis Method: AM20GAX
QC Batch Method: AM20GAX
Associated Lab Samples: 145440004

METHOD BLANK: 32863

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Hydrogen	nM	<0.60	0.60	

LABORATORY CONTROL SAMPLE & LCSD: 32864 32865

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Hydrogen	nM	24	24	23	98	93	80-120	5.2	20	

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QUALITY CONTROL DATA

Workorder: 14544 FT. SMITH, AR

QC Batch: DISG/4329 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 145440001, 145440003, 145440005, 145440007, 145440009, 145440011, 145440013, 145440015, 145440017, 145440019, 145440021

METHOD BLANK: 32891

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	<0.10	0.10	
Ethane	ug/l	<0.025	0.025	
Ethene	ug/l	<0.025	0.025	

LABORATORY CONTROL SAMPLE & LCSD: 32893 32895

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	720	700	96	93	80-120	3.2	20	
Ethane	ug/l	38	38	36	99	96	80-120	3.1	20	
Ethene	ug/l	35	35	34	98	96	80-120	2.1	20	

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QUALITY CONTROL DATA

Workorder: 14544 FT. SMITH, AR

QC Batch: EDON/2396 Analysis Method: AM21G

QC Batch Method: AM21G

Associated Lab Samples: 145440001, 145440003, 145440005, 145440007, 145440009, 145440011, 145440013, 145440015, 145440017, 145440019, 145440021, 145440023, 145440025, 145440027, 145440029, 145440031, 145440033, 145440035, 145440037, 145440039

METHOD BLANK: 32897

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
EDonors				
Acetic Acid	mg/l	<5.0	5.0	
Propionic Acid	mg/l	<5.0	5.0	
Pyruvic Acid	mg/l	<5.0	5.0	
Butyric Acid	mg/l	<5.0	5.0	
Lactic Acid	mg/l	<10	10	

LABORATORY CONTROL SAMPLE: 32898

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Acetic Acid	mg/l	100	80	80	70-130	
Propionic Acid	mg/l	100	83	83	70-130	
Pyruvic Acid	mg/l	100	81	81	70-130	
Butyric Acid	mg/l	100	84	84	70-130	
Lactic Acid	mg/l	100	84	84	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32899 32900 Original: 145440001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
EDonors											
Acetic Acid	mg/l	0	100	100	110	105	111	70-130	5.6	20	
Propionic Acid	mg/l	0	100	100	110	104	108	70-130	3.8	20	
Pyruvic Acid	mg/l	0	100	92	98	92	98	70-130	6.3	20	
Butyric Acid	mg/l	0	100	110	110	111	109	70-130	1.8	20	
Lactic Acid	mg/l	0	100	98	110	98	106	70-130	7.8	20	

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QUALITY CONTROL DATA

Workorder: 14544 FT. SMITH, AR

QC Batch: DISG/4330 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 145440023, 145440025, 145440027, 145440029, 145440031, 145440033, 145440035, 145440037, 145440039, 145440041, 145440043, 145440045, 145440047

METHOD BLANK: 32907

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	<0.10	0.10	
Ethane	ug/l	<0.025	0.025	
Ethene	ug/l	<0.025	0.025	

LABORATORY CONTROL SAMPLE & LCSD: 32908 32909

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	750	740	100	99	80-120	1	20	
Ethane	ug/l	38	38	38	101	100	80-120	1	20	
Ethene	ug/l	35	35	35	100	100	80-120	0	20	

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QUALITY CONTROL DATA

Workorder: 14544 FT. SMITH, AR

QC Batch: EDON/2397 Analysis Method: AM21G

QC Batch Method: AM21G

Associated Lab Samples: 145440041, 145440043, 145440047

METHOD BLANK: 32910

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
EDonors				
Acetic Acid	mg/l	<5.0	5.0	
Propionic Acid	mg/l	<5.0	5.0	
Pyruvic Acid	mg/l	<5.0	5.0	
Butyric Acid	mg/l	<5.0	5.0	
Lactic Acid	mg/l	<10	10	

LABORATORY CONTROL SAMPLE: 32911

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Acetic Acid	mg/l	100	110	107	70-130	
Propionic Acid	mg/l	100	120	116	70-130	
Pyruvic Acid	mg/l	100	97	97	70-130	
Butyric Acid	mg/l	100	120	123	70-130	
Lactic Acid	mg/l	100	96	96	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32912 32913 Original: 145450001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
EDonors											
Acetic Acid	mg/l	0.31	100	87	92	87	92	70-130	5.6	20	
Propionic Acid	mg/l	0	100	82	88	82	88	70-130	7.1	20	
Pyruvic Acid	mg/l	0	100	88	91	88	91	70-130	3.4	20	
Butyric Acid	mg/l	0	100	81	86	81	86	70-130	6	20	
Lactic Acid	mg/l	0	100	89	95	89	95	70-130	6.5	20	

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QUALITY CONTROL DATA

Workorder: 14544 FT. SMITH, AR

QC Batch: DISG/4331 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 145440002, 145440006, 145440008, 145440010, 145440012, 145440014, 145440016, 145440018, 145440020, 145440022, 145440026, 145440028, 145440030

METHOD BLANK: 32923

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Hydrogen	nM	<0.60	0.60	

LABORATORY CONTROL SAMPLE & LCSD: 32924 32925

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Hydrogen	nM	24	23	23	95	94	80-120	1.1	20	

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Fax: (412) 826-3433

QUALITY CONTROL DATA

Workorder: 14544 FT. SMITH, AR

QC Batch: DISG/4332 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 145440024, 145440032, 145440034, 145440036, 145440038, 145440040, 145440042, 145440044, 145440046, 145440048

METHOD BLANK: 32926

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Hydrogen	nM	<0.60	0.60	

LABORATORY CONTROL SAMPLE & LCSD: 32927 32928

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Hydrogen	nM	24	25	25	102	102	80-120	0	20	

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QUALITY CONTROL DATA

Workorder: 14544 FT. SMITH, AR

QC Batch: EDON/2402 Analysis Method: AM21G

QC Batch Method: AM21G

Associated Lab Samples: 145440045

METHOD BLANK: 32972

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
EDonors				
Acetic Acid	mg/l	<5.0	5.0	
Propionic Acid	mg/l	<5.0	5.0	
Pyruvic Acid	mg/l	<5.0	5.0	
Butyric Acid	mg/l	<5.0	5.0	
Lactic Acid	mg/l	<10	10	

LABORATORY CONTROL SAMPLE: 32973

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Acetic Acid	mg/l	100	94	94	70-130	
Propionic Acid	mg/l	100	100	106	70-130	
Pyruvic Acid	mg/l	100	100	101	70-130	
Butyric Acid	mg/l	100	110	107	70-130	
Lactic Acid	mg/l	100	98	99	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32921 32922 Original: 145460001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
EDonors											
Acetic Acid	mg/l	0	100	130	100	129	104	70-130	21	20	
Propionic Acid	mg/l	0	100	120	98	119	98	70-130	19	20	
Pyruvic Acid	mg/l	0	100	47	56	47	56	70-130	17	20	
Butyric Acid	mg/l	0	100	120	100	125	104	70-130	18	20	
Lactic Acid	mg/l	0	100	89	85	89	85	70-130	4.6	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32974 32975 Original: 145530001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
EDonors											

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QUALITY CONTROL DATA

Workorder: 14544 FT. SMITH, AR

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32974 32975 Original: 145530001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Acetic Acid	mg/l	180	400	580	540	101	91	70-130	10	20	
Propionic Acid	mg/l	0	400	420	400	105	101	70-130	3.9	20	
Pyruvic Acid	mg/l	0	400	400	380	99	94	70-130	5.2	20	
Butyric Acid	mg/l	0	400	420	410	106	103	70-130	2.9	20	
Lactic Acid	mg/l	0	400	340	360	86	90	70-130	4.5	20	

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QUALITY CONTROL DATA

Workorder: 14544 FT. SMITH, AR

QC Batch: DISG/4344 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 145440001, 145440003, 145440005, 145440007, 145440009, 145440011, 145440013, 145440015, 145440017, 145440019, 145440021, 145440023, 145440025

METHOD BLANK: 33034

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Acetylene	ug/l	<0.50	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 33035 33036

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Acetylene	ug/l	33	38	38	117	115	80-120	1.7	20	

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QUALITY CONTROL DATA

Workorder: 14544 FT. SMITH, AR

QC Batch: DISG/4345 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 145440027, 145440029, 145440031, 145440033, 145440035, 145440037, 145440039, 145440041, 145440043, 145440045, 145440047

METHOD BLANK: 33037

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Acetylene	ug/l	<0.50	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 33038 33039

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Acetylene	ug/l	33	36	35	110	107	80-120	2.8	20	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 14544 FT. SMITH, AR

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
145440004	ITMW-2-201501			AM20GAX	DISG/4325
145440001	ITMW-1-201501			AM20GAX	DISG/4329
145440003	ITMW-2-201501			AM20GAX	DISG/4329
145440005	ITMW-4-201501			AM20GAX	DISG/4329
145440007	ITMW-6-201501			AM20GAX	DISG/4329
145440009	ITMW-7-201501			AM20GAX	DISG/4329
145440011	ITMW-9-201501			AM20GAX	DISG/4329
145440013	ITMW-10-201501			AM20GAX	DISG/4329
145440015	ITMW-11-201501			AM20GAX	DISG/4329
145440017	ITMW-12-201501			AM20GAX	DISG/4329
145440019	ITMW-13-201501			AM20GAX	DISG/4329
145440021	ITMW-14-201501			AM20GAX	DISG/4329
145440001	ITMW-1-201501			AM21G	EDON/2396
145440003	ITMW-2-201501			AM21G	EDON/2396
145440005	ITMW-4-201501			AM21G	EDON/2396
145440007	ITMW-6-201501			AM21G	EDON/2396
145440009	ITMW-7-201501			AM21G	EDON/2396
145440011	ITMW-9-201501			AM21G	EDON/2396
145440013	ITMW-10-201501			AM21G	EDON/2396
145440015	ITMW-11-201501			AM21G	EDON/2396
145440017	ITMW-12-201501			AM21G	EDON/2396
145440019	ITMW-13-201501			AM21G	EDON/2396
145440021	ITMW-14-201501			AM21G	EDON/2396
145440023	ITMW-15-201501			AM21G	EDON/2396
145440025	ITMW-16-201501			AM21G	EDON/2396
145440027	ITMW-17-201501			AM21G	EDON/2396
145440029	ITMW-18-201501			AM21G	EDON/2396
145440031	ITMW-19-201501			AM21G	EDON/2396
145440033	ITMW-20-201501			AM21G	EDON/2396
145440035	ITMW-21-201501			AM21G	EDON/2396
145440037	IW-72-201501			AM21G	EDON/2396
145440039	IW-73-201501			AM21G	EDON/2396

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 14544 FT. SMITH, AR

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
145440023	ITMW-15-201501			AM20GAX	DISG/4330
145440025	ITMW-16-201501			AM20GAX	DISG/4330
145440027	ITMW-17-201501			AM20GAX	DISG/4330
145440029	ITMW-18-201501			AM20GAX	DISG/4330
145440031	ITMW-19-201501			AM20GAX	DISG/4330
145440033	ITMW-20-201501			AM20GAX	DISG/4330
145440035	ITMW-21-201501			AM20GAX	DISG/4330
145440037	IW-72-201501			AM20GAX	DISG/4330
145440039	IW-73-201501			AM20GAX	DISG/4330
145440041	IW-74-201501			AM20GAX	DISG/4330
145440043	IW-76-201501			AM20GAX	DISG/4330
145440045	IW-77-201501			AM20GAX	DISG/4330
145440047	IW-80-201501			AM20GAX	DISG/4330
145440041	IW-74-201501			AM21G	EDON/2397
145440043	IW-76-201501			AM21G	EDON/2397
145440047	IW-80-201501			AM21G	EDON/2397
145440002	ITMW-1-201501			AM20GAX	DISG/4331
145440006	ITMW-4-201501			AM20GAX	DISG/4331
145440008	ITMW-6-201501			AM20GAX	DISG/4331
145440010	ITMW-7-201501			AM20GAX	DISG/4331
145440012	ITMW-9-201501			AM20GAX	DISG/4331
145440014	ITMW-10-201501			AM20GAX	DISG/4331
145440016	ITMW-11-201501			AM20GAX	DISG/4331
145440018	ITMW-12-201501			AM20GAX	DISG/4331
145440020	ITMW-13-201501			AM20GAX	DISG/4331
145440022	ITMW-14-201501			AM20GAX	DISG/4331
145440026	ITMW-16-201501			AM20GAX	DISG/4331
145440028	ITMW-17-201501			AM20GAX	DISG/4331
145440030	ITMW-18-201501			AM20GAX	DISG/4331
145440024	ITMW-15-201501			AM20GAX	DISG/4332
145440032	ITMW-19-201501			AM20GAX	DISG/4332

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 14544 FT. SMITH, AR

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
145440034	ITMW-20-201501			AM20GAX	DISG/4332
145440036	ITMW-21-201501			AM20GAX	DISG/4332
145440038	IW-72-201501			AM20GAX	DISG/4332
145440040	IW-73-201501			AM20GAX	DISG/4332
145440042	IW-74-201501			AM20GAX	DISG/4332
145440044	IW-76-201501			AM20GAX	DISG/4332
145440046	IW-77-201501			AM20GAX	DISG/4332
145440048	IW-80-201501			AM20GAX	DISG/4332
145440045	IW-77-201501			AM21G	EDON/2402
145440001	ITMW-1-201501			AM20GAX	DISG/4344
145440003	ITMW-2-201501			AM20GAX	DISG/4344
145440005	ITMW-4-201501			AM20GAX	DISG/4344
145440007	ITMW-6-201501			AM20GAX	DISG/4344
145440009	ITMW-7-201501			AM20GAX	DISG/4344
145440011	ITMW-9-201501			AM20GAX	DISG/4344
145440013	ITMW-10-201501			AM20GAX	DISG/4344
145440015	ITMW-11-201501			AM20GAX	DISG/4344
145440017	ITMW-12-201501			AM20GAX	DISG/4344
145440019	ITMW-13-201501			AM20GAX	DISG/4344
145440021	ITMW-14-201501			AM20GAX	DISG/4344
145440023	ITMW-15-201501			AM20GAX	DISG/4344
145440025	ITMW-16-201501			AM20GAX	DISG/4344
145440027	ITMW-17-201501			AM20GAX	DISG/4345
145440029	ITMW-18-201501			AM20GAX	DISG/4345
145440031	ITMW-19-201501			AM20GAX	DISG/4345
145440033	ITMW-20-201501			AM20GAX	DISG/4345
145440035	ITMW-21-201501			AM20GAX	DISG/4345
145440037	IW-72-201501			AM20GAX	DISG/4345
145440039	IW-73-201501			AM20GAX	DISG/4345
145440041	IW-74-201501			AM20GAX	DISG/4345
145440043	IW-76-201501			AM20GAX	DISG/4345

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 14544 FT. SMITH, AR

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
145440045	IW-77-201501			AM20GAX	DISG/4345
145440047	IW-80-201501			AM20GAX	DISG/4345

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(913)599-5665

February 10, 2015

Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

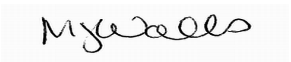
RE: Project: FT. SMITH AR 14545 MICROSEEPS
Pace Project No.: 60186962

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on January 16, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: FT. SMITH AR 14545 MICROSEEPS
Pace Project No.: 60186962

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186962001	MW-22-201501	Water	01/13/15 04:45	01/16/15 09:20
60186962002	MW-22-201501	Water	01/15/15 12:17	01/16/15 09:20
60186962003	MW-25-201501	Water	01/15/15 11:25	01/16/15 09:20
60186962004	MW-25-201501	Water	01/14/15 15:41	01/16/15 09:20
60186962005	MW-26-201501	Water	01/14/15 09:08	01/16/15 09:20
60186962006	MW-26-201501	Water	01/12/15 15:41	01/16/15 09:20
60186962007	MW-27-201501	Water	01/14/15 12:05	01/16/15 09:20
60186962008	MW-27-201501	Water	01/15/15 08:21	01/16/15 09:20
60186962009	MW-28-201501	Water	01/14/15 09:50	01/16/15 09:20
60186962010	MW-28-201501	Water	01/15/15 09:07	01/16/15 09:20
60186962011	MW-29-201501	Water	01/13/15 14:23	01/16/15 09:20
60186962012	MW-29-201501	Water	01/12/15 16:21	01/16/15 09:20
60186962013	MW-31-201501	Water	01/12/15 17:00	01/16/15 09:20
60186962014	MW-31-201501	Water	01/13/15 09:12	01/16/15 09:20
60186962015	MW-32-201501	Water	01/14/15 14:50	01/16/15 09:20
60186962016	MW-32-201501	Water	01/13/15 09:49	01/16/15 09:20
60186962017	MW-33-201501	Water	01/14/15 17:00	01/16/15 09:20
60186962018	MW-33-201501	Water	01/13/15 10:26	01/16/15 09:20
60186962019	MW-34-201501	Water	01/13/15 13:20	01/16/15 09:20
60186962020	MW-34-201501	Water	01/13/15 17:01	01/16/15 09:20
60186962021	MW-35R-201501	Water	01/13/15 10:35	01/16/15 09:20
60186962022	MW-35R-201501	Water	01/13/15 16:11	01/16/15 09:20
60186962023	MW-36-201501	Water	01/12/15 16:35	01/16/15 09:20
60186962024	MW-36-201501	Water	01/13/15 15:41	01/16/15 09:20
60186962025	MW-38-201501	Water	01/15/15 11:55	01/16/15 09:20
60186962026	MW-38-201501	Water	01/15/15 09:44	01/16/15 09:20
60186962027	MW-39-201501	Water	01/12/15 14:30	01/16/15 09:20
60186962028	MW-39-201501	Water	01/13/15 11:29	01/16/15 09:20
60186962029	MW-40-201501	Water	01/12/15 14:45	01/16/15 09:20
60186962030	MW-40-201501	Water	01/13/15 12:10	01/16/15 09:20
60186962031	MW-41-201501	Water	01/14/15 09:55	01/16/15 09:20
60186962032	MW-41-201501	Water	01/13/15 14:14	01/16/15 09:20
60186962033	MW-62-201501	Water	01/13/15 11:20	01/16/15 09:20
60186962034	MW-62-201501	Water	01/14/15 08:51	01/16/15 09:20
60186962035	MW-46R-201501	Water	01/13/15 14:55	01/16/15 09:20
60186962036	MW-46R-201501	Water	01/14/15 08:07	01/16/15 09:20
60186962037	MW-65-201501	Water	01/13/15 10:40	01/16/15 09:20

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: FT. SMITH AR 14545 MICROSEEPS
Pace Project No.: 60186962

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186962038	**MW-65-201501**	Water	01/13/15 16:38	01/16/15 09:20
60186962039	**MW-66-201501**	Water	01/14/15 10:20	01/16/15 09:20
60186962040	**MW-66-201501**	Water	01/14/15 14:37	01/16/15 09:20
60186962041	**MW-67-201501**	Water	01/12/15 14:51	01/16/15 09:20
60186962042	**MW-67-201501**	Water	01/14/15 09:41	01/16/15 09:20
60186962043	**MW-68-201501**	Water	01/12/15 14:10	01/16/15 09:20
60186962044	**MW-68-201501**	Water	01/14/15 11:52	01/16/15 09:20
60186962045	**MW-71-201501**	Water	01/14/15 09:50	01/16/15 09:20
60186962046	**MW-71-201501**	Water	01/14/15 12:23	01/16/15 09:20
60186962047	**RW-69-201501**	Water	01/14/15 11:45	01/16/15 09:20
60186962048	**RW-69-201501**	Water	01/14/15 12:45	01/16/15 09:20

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PROJECT NARRATIVE

Project:
Pace Project No.:

Method:
Description:
Client:
Date:

This data package has been reviewed for quality and completeness and is approved for release.

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Pace Analytical
www.pacelabs.com
Microseeps

220 William Pitt Way
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412-826-5245

14544

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 3 of 6

003653

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: Pace Analytical	Report To: MJ Walls	Attention:
Address: 9608 Loiret Blvd	Copy To:	Company Name:
Lenexa, KS 66219		Address:
Email To: mjwalls@pacelabs.com	Purchase Order No.:	Pace Quote Reference:
Phone: 913-563-1401 Fax:	Project Name: Ft. Smith, AR	Pace Project Manager: MJ Walls
Requested Due Date/TAT:	Project Number:	Pace Profile #:

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA X OTHER

Site Location STATE: AR

Section D Required Client Information

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zinc Acetate & NaOH	Other	Y/N	Analysis Test: Am 10 Day-Hydrogen	AM 2B GAX	AM 2A GAX DFA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-22-201501	WT	G			1/15/15	1217		1									X	X	X	X	N	
2	MW-25-201501	WT				1/14/15	1541												X	X			
3	MW-26-201501	WT				1/12/15	1541												X	X			
4	MW-27-201501	WT				1/15/15	0821												X	X			
5	MW-28-201501	WT				1/15/15	0907												X	X			
6	MW-29-201501	WT				1/12/15	1621												X	X			
7	MW-31-201501	WT				1/13/15	0912												X	X			
8	MW-32-201501	WT				1/13/15	0949												X	X			
9	MW-33-201501	WT				1/13/15	1026												X	X			
10	MW-34-201501	WT				1/13/15	1701												X	X			
11	MW-35R-201501	WT				1/13/15	1611												X	X			
12	MW-36-201501	WT				1/13/15	1541												X	X			

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy StoneStreet/ENVIRON	1/15/15	1900	Elweon PACE	1/16/15	0920	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Wendy StoneStreet

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 1/15/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*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.

Pace Analytical
www.pacelabs.com
220 William Pitt Way
Pittsburgh, PA 15238
412-826-5245
Microseeps

14544

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 4 of 6

003693

Section A Required Client Information:

Company:	Pace Analytical
Address:	9608 Loiret Blvd Lenexa, KS 66219
Email To:	mjwalls@pacelabs.com
Phone:	913-303-140 Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	MJ Walls
Copy To:	
Purchase Order No.:	
Project Name:	Ft. Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER X

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes — MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zinc Acetate & NaOH	Other	Analysis Test ↓ Y/N	AM 20 GRx-hydrogen	AM20 GRX	AM21 GRX VFA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-38-201501	WT	AR	G			1/15/15	0944		1									X	X	X	X	N	
2	MW-39-201501	WT					1/13/15	1129												X	X	X		
3	MW-4D-201501	WT					1/13/15	1210												X	X	X		
4	MW-41-201501	WT					1/13/15	1414												X	X	X		
5	MW-62-201501	WT					1/14/15	0851												X	X	X		
6	MW-66R-201501	WT					1/14/15	0807												X	X	X		
7	MW-65-201501	WT					1/13/15	1638												X	X	X		
8	MW-66-201501	WT					1/14/15	1437												X	X	X		
9	MW-67-201501	WT					1/14/15	0941												X	X	X		
10	MW-68-201501	WT					1/14/15	1152												X	X	X		
11	MW-71-201501	WT					1/14/15	1223												X	X	X		
12	RW-69-201501	WT					1/14/15	1245												X	X	X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet/ENVIRON	1/15/15	1800	R Weldon PACE	1/16/15	0920	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Wendy Stonestreet

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*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.

NON-CONFORMANCE FORM

Microseeps Project Number: 14545

Date: 1-16-15 Time of Receipt: 0920 Receiver: R. Welsh

Client: Pace - KS

REASON FOR NON-CONFORMANCE:

All H_2 vials match COC

Water vials for MW-50-201501, MW-58-201501, MW-60-201501 MW-61-201501, MW-63-201501 match COC

Samples MW-56-201501, MW-57-201501 date on vials match COC no times reported on vials

All other water vials do not match COC for date & time of collection

ACTION TAKEN:

Client name: Mary Jane Wells Date: 1/16/15 Time: email

Client sent another set of COC's with collection dates and times that match sample vials for water analysis.

Customer Service Initials: RR Date: 1/21/15

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14545

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 1 of 6

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ENVIRON	Report To: wstonestreet@environcorp.com	Attention:
Address: 7500 College Blvd Overland Park, KS	Copy To: tgleason@environcorp.com	Company Name:
Email To: wstonestreet@environcorp.com	Purchase Order No.:	Address:
Phone: 913-553-5926 Fax:	Project Name: Whirlpool Ft Smith	Pace Quote Reference:
Requested Due Date/TAT: Standard	Project Number: 34343994	Pace Project Manager:
		Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ITEM #	SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Sodium Phosphate	Requested Analysis Filtered (Y/N) ↓Analysis Test↓ Y/N: 2 2	AM 20 GAX	AM 21 GAX VFA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-72-201501	WT	G			1/12/15	1400		4	X							X		X	X	N	
2	MW-67-201501	WT	G			1/12/15	1451		4	X							X		X	X	N	
3	MW-68-201501	WT	G			1/12/15	1410		4	X							X		X	X	N	
4	ITMW-20-201501	WT	G			1/12/15	1620		4	X							X		X	X	N	
5	MW-31-201501	WT	G			1/12/15	1700		4	X							X		X	X	N	
6	MW-40-201501	WT	G			1/12/15	1445		4	X							X		X	X	N	
7	MW-36-201501	WT	G			1/12/15	1635		4	X							X		X	X	N	
8	MW-90-201501	WT	G			1/12/15	1625		4	X							X		X	X	N	
9	MW-39-201501	WT	G			1/12/15	1430		4	X							X		X	X	N	
10	MW-56-201501	WT	G			1/13/15	1115		4	X							X		X	X	N	
11	MW-97-201501	WT	G			1/13/15	1437		4	X							X		X	X	N	
12	ITMW-9-201501	WT	G			1/13/15	920		4	X							X		X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet/ENVIRON	1/15/15	1800				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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161545

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Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ENVIRON	Report To: SEE PAGE 1	Attention:
Address: SEE PAGE 1	Copy To:	Company Name:
		Address:
Email To: wstonestreet@environcorp.com	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Whirlpool	Pace Project Manager:
Requested Due Date/TAT: Standard	Project Number: 343439917	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

ITEM #	Section D Required Client Information / SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Sodium Phosphate	Requested Analysis Filtered (Y/N) Y/N	Analysis Test ↓ AM20GAX	AM21GAX VFA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	IW-80-201501	WT	G			1/13/15	1335		4	X							X		X	X	N	
2	MW-35R-201501	WT	G			1/13/15	1035		4	X							X		X	X	N	
3	MW-65-201501	WT	G			1/13/15	1040		4	X							X		X	X	N	
4	MW-34-201501	WT	G			1/13/15	1320		4	X							X		X	X	N	
5	ITMW-6-201501	WT	G			1/13/15	1148		4	X							X		X	X	N	
6	ITMW-4-201501	WT	G			1/13/15	0930		4	X							X		X	X	N	
7	MW-88-201501	WT	G			1/13/15	1158		4	X							X		X	X	N	
8	MW-82-201501	WT	G			1/13/15	1120		4	X							X		X	X	N	
9	MW-29-201501	WT	G			1/13/15	1423		4	X							X		X	X	N	
10	ITMW-2-201501	WT	G			1/13/15	1620		4	X							X		X	X	N	
11	MW-22-201501	WT	G			1/13/15	0945		4	X							X		X	X	N	
12	MW-46R-201501	WT	G			1/13/15	1455		4	X							X		X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet/ENVIRON	1/15/15	1800				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ENVIRON	Report To:	Attention:
Address: SEE PAGE 1	Copy To: SEE PAGE 1	Company Name:
	Purchase Order No.:	Address:
Email To: wstonestreet@environcorp.com	Project Name: Whirlpool Ft Smith	Pace Quote Reference:
Phone: Fax:	Project Number: 343439919	Pace Project Manager:
Requested Due Date/TAT: Standard		Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information: SAMPLE ID (A-Z, 0-9 / ,) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Sodium Phosphate	Y/N	Analysis Test: AM 20 GRAX	AM 21 GRAX VEA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-91-201501	WT	G			1/13/15	1631		4	X							X		X	X	N	
2	MW-89-201501	WT	G			1/13/15	1441		4	X							X		X	X	N	
3	MW-81-201501	WT	G			1/13/15	1600		4	X							X		X	X	N	
4	MW-61-201501	WT	G			1/13/15	1600		4	X							X		X	X	N	
5	MW-50-201501	WT	G			1/13/15	1430		4	X							X		X	X	N	
6	MW-60-201501	WT	G			1/13/15	1300		4	X							X		X	X	N	
7	MW-82-201501	WT	G			1/13/15	1615		4	X							X		X	X	N	
8	MW-63-201501	WT	G			1/13/15	1625		4	X							X		X	X	N	
9	ITMW-1-201501	WT	G			1/14/15	1520		4	X							X		X	X	N	
10	MW-32-201501	WT	G			1/14/15	1450		4	X							X		X	X	N	
11	ITMW-21-201501	WT	G			1/14/15	1350		4	X							X		X	X	N	
12	ITMW-16-201501	WT	G			1/14/15	1235		4	X							X		X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet/ENVIRON	1/15/15	1800				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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Page: 4 of 6

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ENVIRON	Report To:	Attention:
Address: SEE PAGE 1	Copy To: SEE PAGE 1	Company Name:
		Address:
Email To: wstonestreet@environcorp.com	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Whirlpool Ft. Smith	Pace Project Manager:
Requested Due Date/TAT: STANDARD	Project Number: 31343994	Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX / CODE: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Sodium Phosphate	Analysis Test Y/N	8M 20 GFX	2MAL GFA N VFA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-66-201501		WT	G			1/14/15	1020		4	X							X		X	X	N	
2	TMW-14-201501		WT	G			1/14/15	1436		4	X							X		X	X	N	
3	MW-87-201501		WT	G			1/14/15	1513		4	X							X		X	X	N	
4	IW-77-201501		WT	G			1/14/15	1505		4	X							X		X	X	N	
5	IW-73-201501		WT	G			1/14/15	1040		4	X							X		X	X	N	
6	IW-74-201501		WT	G			1/14/15	1210		4	X							X		X	X	N	
7	IW-76-201501		WT	G			1/14/15	1225		4	X							X		X	X	N	
8	MW-84-201501		WT	G			1/14/15	1530		4	X							X		X	X	N	
9	MW-28-201501		WT	G			1/14/15	0950		4	X							X		X	X	N	
10	TMW-7-201501		WT	G			1/14/15	1155		4	X							X		X	X	N	
11	MW-41-201501		WT	G			1/14/15	0955		4	X							X		X	X	N	
12	MW-27-201501		WT	G			1/14/15	1205		4	X							X		X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet / ENVIRON	1/15/15	1800				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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

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Page: 5 of 6

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ENVIRON	Report To:	Attention:
Address: SEE PAGE 1	Copy To: SEE PAGE 1	Company Name:
		Address:
Email To: wstonestreet@environcorp.com	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Whirlpool Ft. Smith	Pace Project Manager:
Requested Due Date/TAT: STANDARD	Project Number: 343439917	Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,) Sample IDs MUST BE UNIQUE	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Sodium Phosphate	Y/N	Analysis Test ↓	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
	Valid Matrix Codes: DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS																		Y/N		
																			Analysis Test ↓	N	N
																				Am 2b GRX	Am 3i GRX VFA
1	ITMW-13-201501	WT	G			1/14/15	1520		4	X							X			X	X
2	RW-69-201501	WT	G			1/14/15	1145		4	X							X			X	X
3	MW-71-201501	WT	G			1/14/15	0950		4	X							X			X	X
4	MW-58-201501	WT	G			1/14/15	0935		4	X							X			X	X
5	ITMW-10-201501	WT	G			1/14/15	1647		4	X							X			X	X
6	MW-33-201501	WT	G			1/14/15	1701		4	X							X			X	X
7	MW-26-201501	WT	G			1/14/15	0908		4	X							X			X	X
8	ITMW-18-201501	WT	G			1/15/15	1000		4	X							X			X	X
9	MW-85-201501	WT	G			1/15/15	1400		4	X							X			X	X
10	MW-86-201501	WT	G			1/15/15	1255		4	X							X			X	X
11	ITMW-19-201501	WT	G			1/15/15	1310		4	X							X			X	X
12	MW-38-201501	WT	G			1/15/15	1155		4	X							X			X	X

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet / Environ	1/15/15	1800				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*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.

14545

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Section A Required Client Information:

Company: ENVIRON
Address: SEEPAGE 1
Email To: WStonestreet@environcorp.com
Phone: Fax:
Requested Due Date/TAT: STANDARD

Section B Required Project Information:

Report To:
Copy To: SEE PAGE 1
Purchase Order No.:
Project Name: Whirlpool, Ft Smith
Project Number: 34343994

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY
☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,) Sample IDs MUST BE UNIQUE	Valid Matrix Codes: MATRIX / CODE — DRINKING WATER OW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Sodium Phosphate	Y/N	Analysis Test: AM 20 GRX	AM 21 GRX	VOA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TMW-17-201501		WT	G			1/15/15	0947		4	X							X		X	X		N	
2	TMW-12-201501		WT	G			1/15/15	0932		4	X							X		X	X		N	
3	TMW-15-201501		WT	G			1/15/15	1250		4	X							X		X	X		N	
4	TMW-11-201501		WT	G			1/15/15	1022		4	X							X		X	X		N	
5	MW-83-201501		WT	G			1/15/15	1320		4	X							X		X	X		N	
6	MW-25-201501		WT	G			1/15/15	1125		4	X							X		X	X		N	
7																								
8																								
9																								
10																								
11																								
12																								

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet / ENVIRON	1/15/15	1800				

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: WENDY STONESTREET
SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*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

Robbin Robl 14545

From: MaryJane Walls <mjwalls@pacelabs.com>
Sent: Wednesday, January 21, 2015 5:08 PM
To: Robbin Robl
Subject: RE: Fort Smith COC's

MW-62 is the correct ID.

Regards,

Mary Jane Walls
Project Manager
Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
phone: 913-563-1401
cell: 816-679-8286
fax:913-438-3449
email: mjwalls@pacelabs.com
http://www.pacelabs.com

~Worried about shipping samples to the lab? Click here for a quick video on the best way to pack and ship your coolers.

>>> "Robbin Robl" <rrobl@microseeps.com> 1/21/2015 2:36 PM >>>
Hi Mary Jane,

Please see attached.

I found one error on the new set of COC's that you sent to me. On page 2, sample 8 is referenced as MW-82-201501. On the original COC (page 4, sample 5) and vial labels, this is noted as MW-62-201501 with a collection date and time of 1/13/15 at 11:20, which matches all COC's and sample vials.

Can you please double check on the sample ID?

Thanks!
Robbin

From: MaryJane Walls [mailto:mjwalls@pacelabs.com]
Sent: Wednesday, January 21, 2015 1:31 PM
To: Robbin Robl
Subject: RE: Fort Smith COC's

14545

Perfect! Thanks, that works for me.

Regards,

Mary Jane Walls
Project Manager
Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
phone: 913-563-1401
cell: 816-679-8286
fax:913-438-3449
email: mjwalls@pacelabs.com
http://www.pacelabs.com

~Worried about shipping samples to the lab? Click here for a quick video on the best way to pack and ship your coolers.

>>> "Robbin Robl" <rrobl@microseeps.com> 1/21/2015 12:25 PM >>>
Yes – I haven't printed it yet – was waiting on this information! Looks like we logged everything correctly, however the COC's you just sent me are in a different order than the originals. I'm not re-numbering anything at this point, just comparing the collection dates and times for accuracy!

I'll send the login over once I do a good review of it this afternoon. ☺

Robbin

From: MaryJane Walls [mailto:mjwalls@pacelabs.com]
Sent: Wednesday, January 21, 2015 1:24 PM
To: Robbin Robl
Subject: Re: Fort Smith COC's

Can I get your login summary?

Thanks!

Regards,

14545

Mary Jane Walls
Project Manager
Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
phone: 913-563-1401
cell: 816-679-8286
fax:913-438-3449
email: mjwalls@pacelabs.com
http://www.pacelabs.com

~Worried about shipping samples to the lab? Click here for a quick video on the best way to pack and ship your coolers.

>>> "Robbin Robl" <rrobl@microseeps.com> 1/21/2015 10:28 AM >>>
Hi Mary Jane,

Please see attached.

Thank you!
Robbin

Robbin Robl
Pace Analytical Energy Services, LLC
220 William Pitt Way
Pittsburgh, PA 15238
Direct: 412-826-4483
Fax: 412-826-3433
Main: 412-826-5245

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Mark Mikesell

From: Robbin Robl
Sent: Thursday, January 29, 2015 9:07 AM
To: Mark Mikesell
Subject: FW: Fort Smith

Importance: High

From: MaryJane Walls [mailto:mjwalls@pacelabs.com]
Sent: Wednesday, January 28, 2015 5:24 PM
To: Robbin Robl
Subject: Re: Fort Smith

The client would like you to proceed with the analysis outside of holding time.

Regards,

Mary Jane Walls
Project Manager
Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
phone: 913-563-1401
cell: 816-679-8286
fax:913-438-3449
email: mjwalls@pacelabs.com
http://www.pacelabs.com

~Worried about shipping samples to the lab? Click here for a quick video on the best way to pack and ship your coolers.

>>> "Robbin Robl" <rrobl@microseeps.com> 1/28/2015 2:32 PM >>>
Hi Mary Jane,

I have some not so good news. All samples were analyzed for methane, ethane and ethene, however the acetylene was missed on 46 of 60 samples submitted.

The samples were analyzed, however not set up to collect the acetylene at the time of analysis. We can re-run the samples for acetylene, however the acetylene will be analyzed and reported out of hold.

I would appreciate it if you can please check with your client and let me know how we are to proceed.

Thank you,
Robbin

Robbin Robl
Pace Analytical Energy Services, LLC
220 William Pitt Way
Pittsburgh, PA 15238
Direct: 412-826-4483
Fax: 412-826-3433
Main: 412-826-5245

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Cooler Receipt Form

Client Name: Environ Project: A Smith Lab Work Order: 14545

A. Shipping/Container Information (circle appropriate response)

Courier: (FedEx) UPS USPS Client Other:_____ Air bill Present: (Yes) No

Tracking Number: 8005 1350 3069

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: 2.2 ' Radiation Screened: Yes (No) Chain of Custody Present: (Yes) N

Comments:_____

B. Laboratory Assignment/Log-in (check appropriate response)

	YES	NO	N/A	Comment Reference non-Conformar
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	✓			
Microseeps 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: RWelsh Date: 1-16-15

Project Manager Review: RL Date: 1/16/15

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

January 30, 2015

Mary Jane Walls
Pace Analytical Services
9608 Loiret Blvd
Lenexa, KS 66219

RE: **FT. SMITH, AR**
Microseeps Workorder: 14545

Dear Mary Walls:

Enclosed are the analytical results for sample(s) received by the laboratory on Friday, January 16, 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,

Robbin Robl 01/30/2015
rrobl@microseeps.com

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 82

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Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

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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Fax: (412) 826-3433

SAMPLE SUMMARY

Workorder: 14545 FT. SMITH, AR

Lab ID	Sample ID	Matrix	Date Collected	Date Received
145450001	MW-22-201501	Water	1/13/2015 09:45	1/16/2015 09:20
145450002	MW-22-201501	Bubble Strip	1/15/2015 12:17	1/16/2015 09:20
145450003	MW-25-201501	Water	1/15/2015 11:25	1/16/2015 09:20
145450004	MW-25-201501	Bubble Strip	1/14/2015 15:41	1/16/2015 09:20
145450005	MW-26-201501	Water	1/14/2015 09:08	1/16/2015 09:20
145450006	MW-26-201501	Bubble Strip	1/12/2015 15:41	1/16/2015 09:20
145450007	MW-27-201501	Water	1/14/2015 12:05	1/16/2015 09:20
145450008	MW-27-201501	Bubble Strip	1/15/2015 08:21	1/16/2015 09:20
145450009	MW-28-201501	Water	1/14/2015 09:50	1/16/2015 09:20
145450010	MW-28-201501	Bubble Strip	1/15/2015 09:07	1/16/2015 09:20
145450011	MW-29-201501	Water	1/13/2015 14:23	1/16/2015 09:20
145450012	MW-29-201501	Bubble Strip	1/12/2015 16:21	1/16/2015 09:20
145450013	MW-31-201501	Water	1/12/2015 17:00	1/16/2015 09:20
145450014	MW-31-201501	Bubble Strip	1/13/2015 09:12	1/16/2015 09:20
145450015	MW-32-201501	Water	1/14/2015 14:50	1/16/2015 09:20
145450016	MW-32-201501	Bubble Strip	1/13/2015 09:49	1/16/2015 09:20
145450017	MW-33-201501	Water	1/14/2015 17:00	1/16/2015 09:20
145450018	MW-33-201501	Bubble Strip	1/13/2015 10:26	1/16/2015 09:20
145450019	MW-34-201501	Water	1/13/2015 13:20	1/16/2015 09:20
145450020	MW-34-201501	Bubble Strip	1/13/2015 17:01	1/16/2015 09:20
145450021	MW-35R-201501	Water	1/13/2015 10:35	1/16/2015 09:20
145450022	MW-35R-201501	Bubble Strip	1/13/2015 16:11	1/16/2015 09:20
145450023	MW-36-201501	Water	1/12/2015 16:35	1/16/2015 09:20
145450024	MW-36-201501	Bubble Strip	1/13/2015 15:41	1/16/2015 09:20
145450025	MW-38-201501	Water	1/15/2015 11:55	1/16/2015 09:20
145450026	MW-38-201501	Bubble Strip	1/15/2015 09:44	1/16/2015 09:20
145450027	MW-39-201501	Water	1/12/2015 14:30	1/16/2015 09:20
145450028	MW-39-201501	Bubble Strip	1/13/2015 11:29	1/16/2015 09:20
145450029	MW-40-201501	Water	1/12/2015 14:45	1/16/2015 09:20
145450030	MW-40-201501	Bubble Strip	1/13/2015 12:10	1/16/2015 09:20
145450031	MW-41-201501	Water	1/14/2015 09:55	1/16/2015 09:20
145450032	MW-41-201501	Bubble Strip	1/13/2015 14:14	1/16/2015 09:20
145450033	MW-62-201501	Water	1/13/2015 11:20	1/16/2015 09:20
145450034	MW-62-201501	Bubble Strip	1/14/2015 08:51	1/16/2015 09:20
145450035	MW-46R-201501	Water	1/13/2015 14:55	1/16/2015 09:20

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Fax: (412) 826-3433

SAMPLE SUMMARY

Workorder: 14545 FT. SMITH, AR

Lab ID	Sample ID	Matrix	Date Collected	Date Received
145450036	MW-46R-201501	Bubble Strip	1/14/2015 08:07	1/16/2015 09:20
145450037	MW-65-201501	Water	1/13/2015 10:40	1/16/2015 09:20
145450038	MW-65-201501	Bubble Strip	1/13/2015 16:38	1/16/2015 09:20
145450039	MW-66-201501	Water	1/14/2015 10:20	1/16/2015 09:20
145450040	MW-66-201501	Bubble Strip	1/14/2015 14:37	1/16/2015 09:20
145450041	MW-67-201501	Water	1/12/2015 14:51	1/16/2015 09:20
145450042	MW-67-201501	Bubble Strip	1/14/2015 09:41	1/16/2015 09:20
145450043	MW-68-201501	Water	1/12/2015 14:10	1/16/2015 09:20
145450044	MW-68-201501	Bubble Strip	1/14/2015 11:52	1/16/2015 09:20
145450045	MW-71-201501	Water	1/14/2015 09:50	1/16/2015 09:20
145450046	MW-71-201501	Bubble Strip	1/14/2015 12:23	1/16/2015 09:20
145450047	RW-69-201501	Water	1/14/2015 11:45	1/16/2015 09:20
145450048	RW-69-201501	Bubble Strip	1/14/2015 12:45	1/16/2015 09:20

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PROJECT SUMMARY

Workorder: 14545 FT. SMITH, AR

Workorder Comments

Samples 14545 (0001-0014; odd numbers) were analyzed outside the hold time of 14 days from collection for analyte Acetylene from the Light Hydrocarbons, method AM20GAx.

Sample Comments

Lab ID: 145450014 **Sample ID:** MW-31-201501 **Sample Type:** N

Sample headspace vial not sufficiently pressurized for analysis. Vial pressurized with an equal volume of UHP Nitrogen and analyzed. Results reported at a dilution.

Batch Comments

Batch: EDON/2398 - Volatile Fatty Acids

The batch matrix spike and/or spike duplicate recovery exceeded laboratory control limits. Analyte Acetic, Propionic, Pyruvic and Butyric acids. Assigned reference sample and MS/MSD reanalyzed to confirm accuracy of results. Results reported with batch EDON/2402. Batch acceptance based on laboratory conrtol sample recovery.

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450001** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-22-201501** Date Collected: 1/13/2015 09:45

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 11:46	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 11:46	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 11:46	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 11:46	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 11:46	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**1.3**	ug/l	0.10	0.042	1			1/22/2015 10:53	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 10:53	BW	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/22/2015 10:53	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 15:22	BW	

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Pittsburgh, PA 15238
Phone: (412) 826-5245
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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450002** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-22-201501** Date Collected: 1/15/2015 12:17

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**14**	nM	0.60	0.13	1			1/21/2015 13:30	GT	

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Pittsburgh, PA 15238
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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450003** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-25-201501** Date Collected: 1/15/2015 11:25

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 13:33	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 13:33	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 13:33	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 13:33	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 13:33	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**92**	ug/l	0.10	0.042	1			1/22/2015 11:07	BW	
Ethane	**4.6**	ug/l	0.025	0.0020	1			1/22/2015 11:07	BW	
Ethene	**0.16**	ug/l	0.025	0.0030	1			1/22/2015 11:07	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 15:39	BW	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450004** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-25-201501** Date Collected: 1/14/2015 15:41

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**2500**	nM	300	65	500			1/24/2015 05:15	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450005** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-26-201501** Date Collected: 1/14/2015 09:08

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 13:59	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 13:59	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 13:59	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 13:59	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 13:59	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.11**	ug/l	0.10	0.042	1			1/22/2015 11:28	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 11:28	BW	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/22/2015 11:28	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 10:49	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450006** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-26-201501** Date Collected: 1/12/2015 15:41

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Hydrogen	**0.82**	nM	0.60	0.13	1			1/21/2015 13:58	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450007** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-27-201501** Date Collected: 1/14/2015 12:05

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 14:26	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 14:26	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 14:26	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 14:26	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 14:26	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**1.0**	ug/l	0.10	0.042	1			1/22/2015 11:39	BW	
Ethane	**0.034**	ug/l	0.025	0.0020	1			1/22/2015 11:39	BW	
Ethene	**0.033**	ug/l	0.025	0.0030	1			1/22/2015 11:39	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 11:01	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450008** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-27-201501** Date Collected: 1/15/2015 08:21

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**1.9**	nM	0.60	0.13	1			1/21/2015 14:11	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450009** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-28-201501** Date Collected: 1/14/2015 09:50

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 14:53	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 14:53	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 14:53	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 14:53	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 14:53	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.63**	ug/l	0.10	0.042	1			1/22/2015 11:51	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 11:51	BW	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/22/2015 11:51	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 11:15	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450010** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-28-201501** Date Collected: 1/15/2015 09:07

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**1.8**	nM	0.60	0.13	1			1/21/2015 14:23	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450011** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-29-201501** Date Collected: 1/13/2015 14:23

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 15:19	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 15:19	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 15:19	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 15:19	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 15:19	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**0.50**	ug/l	0.10	0.042	1			1/22/2015 12:05	BW	
Ethane	**0.031**	ug/l	0.025	0.0020	1			1/22/2015 12:05	BW	
Ethene	**0.034**	ug/l	0.025	0.0030	1			1/22/2015 12:05	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 11:27	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450012** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-29-201501** Date Collected: 1/12/2015 16:21

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**0.76**	nM	0.60	0.13	1			1/24/2015 05:28	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450013** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-31-201501** Date Collected: 1/12/2015 17:00

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 15:46	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 15:46	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 15:46	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 15:46	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 15:46	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**3.6**	ug/l	0.10	0.042	1			1/22/2015 12:14	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 12:14	BW	
Ethene	**0.026**	ug/l	0.025	0.0030	1			1/22/2015 12:14	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 11:40	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450014** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-31-201501** Date Collected: 1/13/2015 09:12

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**<1.2**	nM	1.2	0.26	2			1/24/2015 05:42	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450015** Date Received: 1/16/2015 09:20 Matrix: Water
Sample ID: **MW-32-201501** Date Collected: 1/14/2015 14:50

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 16:12	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 16:12	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 16:12	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 16:12	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 16:12	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**7.7**	ug/l	0.10	0.042	1			1/22/2015 09:08	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 09:08	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/22/2015 09:08	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 09:08	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450016** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-32-201501** Date Collected: 1/13/2015 09:49

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**0.88**	nM	0.60	0.13	1			1/24/2015 05:55	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450017** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-33-201501** Date Collected: 1/14/2015 17:00

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 16:39	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 16:39	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 16:39	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 16:39	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 16:39	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**1.4**	ug/l	0.10	0.042	1			1/22/2015 09:21	GT	
Ethane	**0.035**	ug/l	0.025	0.0020	1			1/22/2015 09:21	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/22/2015 09:21	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 09:21	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450018** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-33-201501** Date Collected: 1/13/2015 10:26

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**0.87**	nM	0.60	0.13	1			1/24/2015 06:07	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450019** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-34-201501** Date Collected: 1/13/2015 13:20

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 17:06	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 17:06	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 17:06	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 17:06	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 17:06	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**3.8**	ug/l	0.10	0.042	1			1/22/2015 09:35	GT	
Ethane	**0.029**	ug/l	0.025	0.0020	1			1/22/2015 09:35	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/22/2015 09:35	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 09:35	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450020** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-34-201501** Date Collected: 1/13/2015 17:01

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**16**	nM	0.60	0.13	1			1/24/2015 06:20	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450021** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-35R-201501** Date Collected: 1/13/2015 10:35

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 17:32	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 17:32	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 17:32	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 17:32	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 17:32	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**19**	ug/l	0.10	0.042	1			1/22/2015 09:48	GT	
Ethane	**0.18**	ug/l	0.025	0.0020	1			1/22/2015 09:48	GT	
Ethene	**0.026**	ug/l	0.025	0.0030	1			1/22/2015 09:48	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 09:48	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450022** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip
Sample ID: **MW-35R-201501** Date Collected: 1/13/2015 16:11

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**6.1**	nM	0.60	0.13	1			1/24/2015 06:32	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450023** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-36-201501** Date Collected: 1/12/2015 16:35

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 17:59	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 17:59	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 17:59	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 17:59	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 17:59	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**6.9**	ug/l	0.10	0.042	1			1/22/2015 10:00	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 10:00	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/22/2015 10:00	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 10:00	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450024** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-36-201501** Date Collected: 1/13/2015 15:41

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**56**	nM	1.2	0.26	2			1/24/2015 07:49	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450025** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-38-201501** Date Collected: 1/15/2015 11:55

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 18:26	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 18:26	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 18:26	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 18:26	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 18:26	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**18**	ug/l	0.10	0.042	1			1/22/2015 10:17	GT	
Ethane	**1.2**	ug/l	0.025	0.0020	1			1/22/2015 10:17	GT	
Ethene	**12**	ug/l	0.025	0.0030	1			1/22/2015 10:17	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 10:17	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450026** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-38-201501** Date Collected: 1/15/2015 09:44

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**13**	nM	0.60	0.13	1			1/24/2015 06:57	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450027** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-39-201501** Date Collected: 1/12/2015 14:30

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 18:52	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 18:52	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 18:52	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 18:52	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 18:52	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.24**	ug/l	0.10	0.042	1			1/22/2015 10:30	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 10:30	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/22/2015 10:30	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 10:30	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450028** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-39-201501** Date Collected: 1/13/2015 11:29

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**0.80**	nM	0.60	0.13	1			1/24/2015 07:12	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450029** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-40-201501** Date Collected: 1/12/2015 14:45

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 19:19	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 19:19	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 19:19	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 19:19	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 19:19	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.31**	ug/l	0.10	0.042	1			1/22/2015 10:42	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 10:42	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/22/2015 10:42	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 10:42	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450030** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-40-201501** Date Collected: 1/13/2015 12:10

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**0.83**	nM	0.60	0.13	1			1/24/2015 08:01	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450031** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-41-201501** Date Collected: 1/14/2015 09:55

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/21/2015 19:45	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/21/2015 19:45	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/21/2015 19:45	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/21/2015 19:45	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/21/2015 19:45	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**9.5**	ug/l	0.10	0.042	1			1/22/2015 10:54	GT	
Ethane	**0.027**	ug/l	0.025	0.0020	1			1/22/2015 10:54	GT	
Ethene	**0.036**	ug/l	0.025	0.0030	1			1/22/2015 10:54	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 10:54	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450032** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-41-201501** Date Collected: 1/13/2015 14:14

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**2.3**	nM	0.60	0.13	1			1/24/2015 08:13	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450033** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-62-201501** Date Collected: 1/13/2015 11:20

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 12:25	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 12:25	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 12:25	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 12:25	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 12:25	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**<0.10**	ug/l	0.10	0.042	1			1/22/2015 11:07	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 11:07	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/22/2015 11:07	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 11:07	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450034** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-62-201501** Date Collected: 1/14/2015 08:51

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**2.9**	nM	0.60	0.13	1			1/24/2015 08:26	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450035** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-46R-201501** Date Collected: 1/13/2015 14:55

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 12:52	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 12:52	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 12:52	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 12:52	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 12:52	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**11**	ug/l	0.10	0.042	1			1/22/2015 11:20	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 11:20	GT	
Ethene	**0.045**	ug/l	0.025	0.0030	1			1/22/2015 11:20	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 11:20	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450036** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-46R-201501** Date Collected: 1/14/2015 08:07

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**2.9**	nM	0.60	0.13	1			1/24/2015 08:38	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450037** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-65-201501** Date Collected: 1/13/2015 10:40

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 13:18	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 13:18	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 13:18	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 13:18	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 13:18	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**8.0**	ug/l	0.10	0.042	1			1/22/2015 12:09	GT	
Ethane	**0.22**	ug/l	0.025	0.0020	1			1/22/2015 12:09	GT	
Ethene	**0.054**	ug/l	0.025	0.0030	1			1/22/2015 12:09	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 12:09	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450038** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-65-201501** Date Collected: 1/13/2015 16:38

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Hydrogen	**120**	nM	12	2.6	20			1/24/2015 10:10	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450039** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-66-201501** Date Collected: 1/14/2015 10:20

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 13:45	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 13:45	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 13:45	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 13:45	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 13:45	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**<0.10**	ug/l	0.10	0.042	1			1/22/2015 12:22	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 12:22	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/22/2015 12:22	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 12:22	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450040** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-66-201501** Date Collected: 1/14/2015 14:37

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**2.1**	nM	0.60	0.13	1			1/24/2015 09:04	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450041** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-67-201501** Date Collected: 1/12/2015 14:51

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 14:11	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 14:11	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 14:11	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 14:11	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 14:11	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.22**	ug/l	0.10	0.042	1			1/22/2015 12:34	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 12:34	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/22/2015 12:34	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 12:34	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450042** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-67-201501** Date Collected: 1/14/2015 09:41

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**3.0**	nM	0.60	0.13	1			1/24/2015 09:17	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450043** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-68-201501** Date Collected: 1/12/2015 14:10

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 14:38	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 14:38	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 14:38	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 14:38	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 14:38	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**3.2**	ug/l	0.10	0.042	1			1/22/2015 12:46	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 12:46	GT	
Ethene	**0.026**	ug/l	0.025	0.0030	1			1/22/2015 12:46	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 12:46	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450044** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-68-201501** Date Collected: 1/14/2015 11:52

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**2.2**	nM	0.60	0.13	1			1/24/2015 09:30	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450045** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-71-201501** Date Collected: 1/14/2015 09:50

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 15:05	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 15:05	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 15:05	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 15:05	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 15:05	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**40**	ug/l	0.10	0.042	1			1/22/2015 12:59	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 12:59	GT	
Ethene	**0.029**	ug/l	0.025	0.0030	1			1/22/2015 12:59	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 12:59	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450046** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-71-201501** Date Collected: 1/14/2015 12:23

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**2.2**	nM	0.60	0.13	1			1/24/2015 09:43	TD	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450047** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **RW-69-201501** Date Collected: 1/14/2015 11:45

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 15:31	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 15:31	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 15:31	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 15:31	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 15:31	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**2.3**	ug/l	0.10	0.042	1			1/22/2015 13:12	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/22/2015 13:12	GT	
Ethene	**0.052**	ug/l	0.025	0.0030	1			1/22/2015 13:12	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 13:12	GT	

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ANALYTICAL RESULTS

Workorder: 14545 FT. SMITH, AR

Lab ID: **145450048** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **RW-69-201501** Date Collected: 1/14/2015 12:45

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**4.0**	nM	0.60	0.13	1			1/24/2015 09:55	TD	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: 14545 FT. SMITH, AR

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 Quanitation 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).

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QUALITY CONTROL DATA

Workorder: 14545 FT. SMITH, AR

QC Batch: DISG/4330 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 145450001, 145450003, 145450005, 145450007, 145450009, 145450011, 145450013

METHOD BLANK: 32907

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	<0.10	0.10	
Ethane	ug/l	<0.025	0.025	
Ethene	ug/l	<0.025	0.025	

LABORATORY CONTROL SAMPLE & LCSD: 32908 32909

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	750	740	100	99	80-120	1	20	
Ethane	ug/l	38	38	38	101	100	80-120	1	20	
Ethene	ug/l	35	35	35	100	100	80-120	0	20	

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QUALITY CONTROL DATA

Workorder: 14545 FT. SMITH, AR

QC Batch: EDON/2397 Analysis Method: AM21G

QC Batch Method: AM21G

Associated Lab Samples: 145450001, 145450003, 145450005, 145450007, 145450009, 145450011, 145450013, 145450015, 145450017, 145450019, 145450021, 145450023, 145450025, 145450027, 145450029, 145450031

METHOD BLANK: 32910

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
EDonors				
Acetic Acid	mg/l	<5.0	5.0	
Propionic Acid	mg/l	<5.0	5.0	
Pyruvic Acid	mg/l	<5.0	5.0	
Butyric Acid	mg/l	<5.0	5.0	
Lactic Acid	mg/l	<10	10	

LABORATORY CONTROL SAMPLE: 32911

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Acetic Acid	mg/l	100	110	107	70-130	
Propionic Acid	mg/l	100	120	116	70-130	
Pyruvic Acid	mg/l	100	97	97	70-130	
Butyric Acid	mg/l	100	120	123	70-130	
Lactic Acid	mg/l	100	96	96	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32912 32913 Original: 145450001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
EDonors											
Acetic Acid	mg/l	0.31	100	87	92	87	92	70-130	5.6	20	
Propionic Acid	mg/l	0	100	82	88	82	88	70-130	7.1	20	
Pyruvic Acid	mg/l	0	100	88	91	88	91	70-130	3.4	20	
Butyric Acid	mg/l	0	100	81	86	81	86	70-130	6	20	
Lactic Acid	mg/l	0	100	89	95	89	95	70-130	6.5	20	

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QUALITY CONTROL DATA

Workorder: 14545 FT. SMITH, AR

QC Batch: EDON/2398 Analysis Method: AM21G

QC Batch Method: AM21G

Associated Lab Samples: 145450033, 145450035, 145450037, 145450039, 145450041, 145450043, 145450045, 145450047

METHOD BLANK: 32919

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
EDonors				
Acetic Acid	mg/l	<5.0	5.0	
Propionic Acid	mg/l	<5.0	5.0	
Pyruvic Acid	mg/l	<5.0	5.0	
Butyric Acid	mg/l	<5.0	5.0	
Lactic Acid	mg/l	<10	10	

LABORATORY CONTROL SAMPLE: 32920

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Acetic Acid	mg/l	100	80	80	70-130	
Propionic Acid	mg/l	100	82	82	70-130	
Pyruvic Acid	mg/l	100	76	76	70-130	
Butyric Acid	mg/l	100	80	80	70-130	
Lactic Acid	mg/l	100	75	75	70-130	

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QUALITY CONTROL DATA

Workorder: 14545 FT. SMITH, AR

QC Batch: DISG/4332 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 145450002, 145450006, 145450008, 145450010

METHOD BLANK: 32926

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Hydrogen	nM	<0.60	0.60	

LABORATORY CONTROL SAMPLE & LCSD: 32927 32928

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Hydrogen	nM	24	25	25	102	102	80-120	0	20	

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QUALITY CONTROL DATA

Workorder: 14545 FT. SMITH, AR

QC Batch: DISG/4333 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 145450015, 145450017, 145450019, 145450021, 145450023, 145450025, 145450027, 145450029, 145450031, 145450033, 145450035, 145450037, 145450039, 145450041, 145450043, 145450045, 145450047

METHOD BLANK: 32929

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	<0.10	0.10	
Ethane	ug/l	<0.025	0.025	
Ethene	ug/l	<0.025	0.025	
Acetylene	ug/l	<0.50	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 32931 32933

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	750	740	101	99	80-120	2	20	
Ethane	ug/l	38	44	43	116	113	80-120	2.6	20	
Ethene	ug/l	35	41	40	116	113	80-120	2.6	20	
Acetylene	ug/l	33	27	26	84	80	80-120	4.9	20	

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QUALITY CONTROL DATA

Workorder: 14545 FT. SMITH, AR

QC Batch: DISG/4337 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 145450004, 145450012, 145450014, 145450016, 145450018, 145450020, 145450022, 145450024, 145450026, 145450028, 145450030, 145450032, 145450034, 145450036, 145450038, 145450040, 145450042, 145450044, 145450046, 145450048

METHOD BLANK: 32986

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Hydrogen	nM	<0.60	0.60	

LABORATORY CONTROL SAMPLE & LCSD: 32987 32988

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Hydrogen	nM	24	23	23	96	94	80-120	2.1	20	

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QUALITY CONTROL DATA

Workorder: 14545 FT. SMITH, AR

QC Batch: DISG/4345 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 145450001, 145450003

METHOD BLANK: 33037

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Acetylene	ug/l	<0.50	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 33038 33039

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Acetylene	ug/l	33	36	35	110	107	80-120	2.8	20	

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QUALITY CONTROL DATA

Workorder: 14545 FT. SMITH, AR

QC Batch: DISG/4346 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 145450005, 145450007, 145450009, 145450011, 145450013

METHOD BLANK: 33059

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Acetylene	ug/l	<0.50	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 33060 33061

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Acetylene	ug/l	33	37	36	112	111	80-120	0.9	20	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 14545 FT. SMITH, AR

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
145450001	MW-22-201501			AM20GAX	DISG/4330
145450003	MW-25-201501			AM20GAX	DISG/4330
145450005	MW-26-201501			AM20GAX	DISG/4330
145450007	MW-27-201501			AM20GAX	DISG/4330
145450009	MW-28-201501			AM20GAX	DISG/4330
145450011	MW-29-201501			AM20GAX	DISG/4330
145450013	MW-31-201501			AM20GAX	DISG/4330
145450001	MW-22-201501			AM21G	EDON/2397
145450003	MW-25-201501			AM21G	EDON/2397
145450005	MW-26-201501			AM21G	EDON/2397
145450007	MW-27-201501			AM21G	EDON/2397
145450009	MW-28-201501			AM21G	EDON/2397
145450011	MW-29-201501			AM21G	EDON/2397
145450013	MW-31-201501			AM21G	EDON/2397
145450015	MW-32-201501			AM21G	EDON/2397
145450017	MW-33-201501			AM21G	EDON/2397
145450019	MW-34-201501			AM21G	EDON/2397
145450021	MW-35R-201501			AM21G	EDON/2397
145450023	MW-36-201501			AM21G	EDON/2397
145450025	MW-38-201501			AM21G	EDON/2397
145450027	MW-39-201501			AM21G	EDON/2397
145450029	MW-40-201501			AM21G	EDON/2397
145450031	MW-41-201501			AM21G	EDON/2397
145450033	MW-62-201501			AM21G	EDON/2398
145450035	MW-46R-201501			AM21G	EDON/2398
145450037	MW-65-201501			AM21G	EDON/2398
145450039	MW-66-201501			AM21G	EDON/2398
145450041	MW-67-201501			AM21G	EDON/2398
145450043	MW-68-201501			AM21G	EDON/2398
145450045	MW-71-201501			AM21G	EDON/2398
145450047	RW-69-201501			AM21G	EDON/2398

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Fax: (412) 826-3433

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 14545 FT. SMITH, AR

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
145450002	MW-22-201501			AM20GAX	DISG/4332
145450006	MW-26-201501			AM20GAX	DISG/4332
145450008	MW-27-201501			AM20GAX	DISG/4332
145450010	MW-28-201501			AM20GAX	DISG/4332
145450015	MW-32-201501			AM20GAX	DISG/4333
145450017	MW-33-201501			AM20GAX	DISG/4333
145450019	MW-34-201501			AM20GAX	DISG/4333
145450021	MW-35R-201501			AM20GAX	DISG/4333
145450023	MW-36-201501			AM20GAX	DISG/4333
145450025	MW-38-201501			AM20GAX	DISG/4333
145450027	MW-39-201501			AM20GAX	DISG/4333
145450029	MW-40-201501			AM20GAX	DISG/4333
145450031	MW-41-201501			AM20GAX	DISG/4333
145450033	MW-62-201501			AM20GAX	DISG/4333
145450035	MW-46R-201501			AM20GAX	DISG/4333
145450037	MW-65-201501			AM20GAX	DISG/4333
145450039	MW-66-201501			AM20GAX	DISG/4333
145450041	MW-67-201501			AM20GAX	DISG/4333
145450043	MW-68-201501			AM20GAX	DISG/4333
145450045	MW-71-201501			AM20GAX	DISG/4333
145450047	RW-69-201501			AM20GAX	DISG/4333
145450004	MW-25-201501			AM20GAX	DISG/4337
145450012	MW-29-201501			AM20GAX	DISG/4337
145450014	MW-31-201501			AM20GAX	DISG/4337
145450016	MW-32-201501			AM20GAX	DISG/4337
145450018	MW-33-201501			AM20GAX	DISG/4337
145450020	MW-34-201501			AM20GAX	DISG/4337
145450022	MW-35R-201501			AM20GAX	DISG/4337
145450024	MW-36-201501			AM20GAX	DISG/4337
145450026	MW-38-201501			AM20GAX	DISG/4337
145450028	MW-39-201501			AM20GAX	DISG/4337
145450030	MW-40-201501			AM20GAX	DISG/4337

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 14545 FT. SMITH, AR

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
145450032	MW-41-201501			AM20GAX	DISG/4337
145450034	MW-62-201501			AM20GAX	DISG/4337
145450036	MW-46R-201501			AM20GAX	DISG/4337
145450038	MW-65-201501			AM20GAX	DISG/4337
145450040	MW-66-201501			AM20GAX	DISG/4337
145450042	MW-67-201501			AM20GAX	DISG/4337
145450044	MW-68-201501			AM20GAX	DISG/4337
145450046	MW-71-201501			AM20GAX	DISG/4337
145450048	RW-69-201501			AM20GAX	DISG/4337
145450001	MW-22-201501			AM20GAX	DISG/4345
145450003	MW-25-201501			AM20GAX	DISG/4345
145450005	MW-26-201501			AM20GAX	DISG/4346
145450007	MW-27-201501			AM20GAX	DISG/4346
145450009	MW-28-201501			AM20GAX	DISG/4346
145450011	MW-29-201501			AM20GAX	DISG/4346
145450013	MW-31-201501			AM20GAX	DISG/4346

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Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

February 04, 2015

Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FT. SMITH 14546 MICROSEEPS
Pace Project No.: 60187008

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on January 16, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses have been subcontracted outside of the Pace Network. The subcontracted laboratory report has been attached.

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

Sincerely,

Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: FT. SMITH 14546 MICROSEEPS
Pace Project No.: 60187008

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60187008001	MW-81-201501	Water	01/13/15 16:00	01/16/15 09:20
60187008002	MW-81-201501	Water	01/14/15 10:56	01/16/15 09:20
60187008003	MW-82-201501	Water	01/13/15 16:15	01/16/15 09:20
60187008004	MW-82-201501	Water	01/14/15 10:29	01/16/15 09:20
60187008005	MW-83-201501	Water	01/15/15 13:20	01/16/15 09:20
60187008006	MW-83-201501	Water	01/15/15 11:26	01/16/15 09:20
60187008007	MW-84-201501	Water	01/14/15 15:30	01/16/15 09:20
60187008008	MW-84-201501	Water	01/15/15 11:25	01/16/15 09:20
60187008009	MW-85-201501	Water	01/15/15 14:00	01/16/15 09:20
60187008010	MW-85-201501	Water	01/14/15 16:21	01/16/15 09:20
60187008011	MW-86-201501	Water	01/15/15 12:55	01/16/15 09:20
60187008012	MW-86-201501	Water	01/15/15 09:02	01/16/15 09:20
60187008013	MW-87-201501	Water	01/14/15 15:13	01/16/15 09:20
60187008014	MW-87-201501	Water	01/15/15 10:41	01/16/15 09:20
60187008015	MW-88-201501	Water	01/13/15 11:58	01/16/15 09:20
60187008016	MW-88-201501	Water	01/15/15 10:02	01/16/15 09:20
60187008017	MW-89-201501	Water	01/13/15 14:41	01/16/15 09:20
60187008018	MW-89-201501	Water	01/14/15 17:31	01/16/15 09:20
60187008019	MW-90-201501	Water	01/12/15 16:25	01/16/15 09:20
60187008020	MW-90-201501	Water	01/15/15 09:47	01/16/15 09:20
60187008021	MW-91-201501	Water	01/13/15 16:31	01/16/15 09:20
60187008022	MW-91-201501	Water	01/14/15 16:50	01/16/15 09:20
60187008023	MW-50-201501	Water	01/13/15 14:30	01/16/15 09:20
60187008024	MW-56-201501	Water	01/13/15 11:15	01/16/15 09:20
60187008025	MW-57-201501	Water	01/13/15 14:37	01/16/15 09:20
60187008026	MW-58-201501	Water	01/14/15 09:35	01/16/15 09:20
60187008027	MW-60-201501	Water	01/13/15 13:00	01/16/15 09:20
60187008028	MW-61-201501	Water	01/13/15 16:00	01/16/15 09:20
60187008029	MW-63-201501	Water	01/13/15 16:25	01/16/15 09:20

REPORT OF LABORATORY ANALYSIS

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project:
Pace Project No.:

Method:
Description:
Client:
Date:

This data package has been reviewed for quality and completeness and is approved for release.

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www.pacelabs.com

220 William Pitt Way
Pittsburgh, PA 15238
412-826-5245

14544

Microseeps

CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 5 of 6

003694

Section A Required Client Information:

Company:	Pace Analytical
Address:	9608 Loiret Blvd Lenexa, KS 66219
Email To:	mjwalls@pacelabs.com
Phone: 913-563-1401	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	MJ Walls
Copy To:	
Purchase Order No.:	
Project Name:	Ft Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: AR

Section D Required Client Information

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zinc Acetate & NaOH	Other	Analysis Test Y/N: AM20 GX - hydrazin	AM20	AM21 GAM YFA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-81-201501	WT	AC	G			1/14/15	1056		4									X	X	X	N	
2	MW-82-201501	WT					1/14/15	1029												X	X		
3	MW-83-201501	WT					1/15/15	1126												X	X		
4	MW-84-201501	WT					1/15/15	1129												X	X		
5	MW-85-201501	WT					1/14/15	1621												X	X		
6	MW-86-201501	WT					1/15/15	0902												X	X		
7	MW-87-201501	WT					1/15/15	1041												X	X		
8	MW-88-201501	WT					1/15/15	1002												X	X		
9	MW-89-201501	WT					1/14/15	1731												X	X		
10	MW-90-201501	WT					1/15/15	0947												X	X		
11	MW-91-201501	WT					1/14/15	1650												X	X		
12	MW-50-201501	WT	WT	G			1/13/15	1430												X	X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet	1/15/15	1800	R Welch PACE	1/16/15	0900	

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Wendy Stonestreet

SIGNATURE of SAMPLER: Wendy Stonestreet

DATE Signed (MM/DD/YY): 1/15/15

Temp In °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 6 of 6

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Environ	Report To:	~~Wendy Stonestreet~~	Attention:	Tamara Gleason
Address:	7500 College Blvd., Ste. 925	Copy To:	~~Tamara Gleason~~	Company Name:	
	Overland Park, KS 66210		~~tgleason@environcorp.com~~	Address:	
Email To:	wstonestreet@environcorp.com	Purchase Order No.:		Pace Quote Reference:	
Phone: 913-553-5926	Fax:	Project Name:	Fort Smith, AR	Pace Project Manager:	MJ Walls
Requested Due Date/TAT:		Project Number:		Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Requested Analysis Filtered (Y/N)

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	HM 20	AM 21 GAX VFA											Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-56-201501	WT	G			1/13/15	1115												X	X	X										Z	
2	MW-57-201501	WT	G			1/13/15	1437												X	X	X											
3	MW-58-201501	WT	G			1/14/15	0935												X	X	X											
4	MW-60-201501	WT	G			1/13/15	1300												X	X	X											
5	MW-61-201501	WT	G			1/13/15	1600												X	X	X											
6	MW-63-201501	WT	G			1/13/15	1625												X	X	X											2
7																																
8																																
9																																
10																																
11																																
12																																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet	1/15/15	1800	RWelch PAES	1/16/15	0920	

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Wendy Stonestreet

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

NON-CONFORMANCE FORM

Microseeps Project Number: 14546

Date: 1-16-15 Time of Receipt: 0920 Receiver: R. Welsh

Client: Pace - KS

REASON FOR NON-CONFORMANCE:

All H_2 vials match COC

Water vials for MW-50-201501, MW-58-201501, MW-60-201501 MW-61-201501, MW-63-201501 match COC

Samples MW-56-201501, MW-57-201501 date on vials match COC no times reported on vials

All other water vials do not match COC for date & time of collection

ACTION TAKEN:

Client name: Mary Jane Wells Date: 1/16/15 Time: email

Client sent another set of COC's with collection dates and times that match sample vials for water analysis.

Customer Service Initials: RR Date: 1/21/15

14546

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CHAIN-OF-CUSTODY / Analytical Request Document

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Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:	Page: 1 of 6
Company: ENVIRON	Report To: wstonestreet@environcorp.com	Attention:	
Address: 7500 College Blvd Overland Park, KS	Copy To: tgleason@environcorp.com	Company Name:	REGULATORY AGENCY
Email To: wstonestreet@environcorp.com	Purchase Order No.:	Address:	☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
Phone: 913-553-5926 Fax:	Project Name: Whirlpool Ft Smith	Pace Quote Reference:	☐ UST ☐ RCRA ☒ OTHER ADEQ
Requested Due Date/TAT: Standard	Project Number: 34341399A	Pace Project Manager:	Site Location STATE: AR
		Pace Profile #:	

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Sodium Phosphate	Requested Analysis Filtered (Y/N): Y/N	Analysis Test ↓	AM 20 GRX	AM 21 GRX VFA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-72-201501		WT	G			1/12/15	1400		4	X							X		X	X	N	
2	MW-67-201501		WT	G			1/12/15	1451		4	X							X		X	X	N	
3	MW-68-201501		WT	G			1/12/15	1410		4	X							X		X	X	N	
4	ITMW-20-201501		WT	G			1/12/15	1620		4	X							X		X	X	N	
5	MW-31-201501		WT	G			1/12/15	1700		4	X							X		X	X	N	
6	MW-40-201501		WT	G			1/12/15	1445		4	X							X		X	X	N	
7	MW-36-201501		WT	G			1/12/15	1635		4	X							X		X	X	N	
8	MW-90-201501		WT	G			1/12/15	1625		4	X							X		X	X	N	
9	MW-39-201501		WT	G			1/12/15	1430		4	X							X		X	X	N	
10	MW-56-201501		WT	G			1/13/15	1115		4	X							X		X	X	N	
11	MW-57-201501		WT	G			1/13/15	1437		4	X							X		X	X	N	
12	ITMW-9-201501		WT	G			1/13/15	920		4	X							X		X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet/ENVIRON	1/15/15	1800				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 2 of 6

Section A Required Client Information:

Company: ENVIRON

Address: SEE PAGE 1

Email To: wstonestreet@environcorp.com

Phone: Fax:

Requested Due Date/TAT: Standard

Section B Required Project Information:

Report To: SEE PAGE 1

Copy To:

Purchase Order No.:

Project Name: Whirlpool

Project Number: 343139917

Section C Invoice Information:

Attention:

Company Name:

Address:

Pace Quote Reference:

Pace Project Manager:

Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER

☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Sodium Phosphate	Y/N	Analysis Test: AM20GAX	AM21GAX VFA	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-BD-201501	WT	G			1/13/15	1335		4	X							X		X	X	N	
2	MW-35R-201501	WT	G			1/13/15	1035		4	X							X		X	X	N	
3	MW-65-201501	WT	G			1/13/15	1040		4	X							X		X	X	N	
4	MW-34-201501	WT	G			1/13/15	1320		4	X							X		X	X	N	
5	ITMW-6-201501	WT	G			1/13/15	1148		4	X							X		X	X	N	
6	ITMW-4-201501	WT	G			1/13/15	0950		4	X							X		X	X	N	
7	MW-8B-201501	WT	G			1/13/15	1158		4	X							X		X	X	N	
8	MW-82-201501	WT	G			1/13/15	1120		4	X							X		X	X	N	
9	MW-29-201501	WT	G			1/13/15	1423		4	X							X		X	X	N	
10	ITMW-2-201501	WT	G			1/13/15	1620		4	X							X		X	X	N	
11	MW-22-201501	WT	G			1/13/15	0945		4	X							X		X	X	N	
12	MW-46R-201501	WT	G			1/13/15	1455		4	X							X		X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet/ENVIRON	1/15/15	1800				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

F-ALL-Q-020rev.08, 12-Oct-2007

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Page: 3 of 6

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ENVIRON	Report To:	Attention:
Address: SEE PAGE 1	Copy To: SEE PAGE 1	Company Name:
		Address:
Email To: wstonestreet@environcorp.com	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Whirlpool Ft Smith	Pace Project Manager:
Requested Due Date/TAT: Standard	Project Number: 34313997.19	Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,) Sample IDs MUST BE UNIQUE	Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Sodium Phosphate	Y/N	Analysis Test: AM20 GRAX	AM21 GRAX VFA											Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-91-201501		WT	G			1/13/15	1631		4	X							X		X	X											N	
2	MW-89-201501		WT	G			1/13/15	1441		4	X							X		X	X											N	
3	MW-81-201501		WT	G			1/13/15	1600		4	X							X		X	X											N	
4	MW-61-201501		WT	G			1/13/15	1600		4	X							X		X	X											N	
5	MW-50-201501		WT	G			1/13/15	1430		4	X							X		X	X											N	
6	MW-60-201501		WT	G			1/13/15	1300		4	X							X		X	X											N	
7	MW-82-201501		WT	G			1/13/15	1615		4	X							X		X	X											N	
8	MW-63-201501		WT	G			1/13/15	1625		4	X							X		X	X											N	
9	ITMW-1-201501		WT	G			1/14/15	1520		4	X							X		X	X											N	
10	MW-32-201501		WT	G			1/14/15	1450		4	X							X		X	X											N	
11	ITMW-21-201501		WT	G			1/14/15	1350		4	X							X		X	X											N	
12	ITMW-16-201501		WT	G			1/14/15	1235		4	X							X		X	X											N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet/ENVIRON	1/15/15	1900				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*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.

14546

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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.

Page: 4 of 6

Section A Required Client Information:

Company:	ENVIRON
Address:	SEE PAGE 1
Email To:	wstonestreet@environcorp.com
Phone:	Fax:
Requested Due Date/TAT:	STANDARD

Section B Required Project Information:

Report To:	
Copy To:	SEE PAGE 1
Purchase Order No.:	
Project Name:	Whirlpool Ft. Smith
Project Number:	31313990A

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Sodium Phosphate	Requested Analysis Filtered (Y/N): Y/N	Analysis Test ↓	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		N	AM 20 GRX		
																		N	8260 GCMS VEA		
1	MW-66-201501	WT	G			1/14/15	1020		4	X							X		X X	N	
2	TMW-14-201501	WT	G			1/14/15	1436		4	X							X		X X	N	
3	MW-87-201501	WT	G			1/14/15	1513		4	X							X		X X	N	
4	IW-77-201501	WT	G			1/14/15	1505		4	X							X		X X	N	
5	IW-73-201501	WT	G			1/14/15	1040		4	X							X		X X	N	
6	IW-74-201501	WT	G			1/14/15	1210		4	X							X		X X	N	
7	IW-76-201501	WT	G			1/14/15	1225		4	X							X		X X	N	
8	MW-84-201501	WT	G			1/14/15	1530		4	X							X		X X	N	
9	MW-28-201501	WT	G			1/14/15	0950		4	X							X		X X	N	
10	TMW-7-201501	WT	G			1/14/15	1155		4	X							X		X X	N	
11	MW-41-201501	WT	G			1/14/15	0955		4	X							X		X X	N	
12	MW-27-201501	WT	G			1/14/15	1205		4	X							X		X X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet / ENVIRON	1/15/15	1800				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

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Page: 5 of 6

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ENVIRON	Report To:	Attention:
Address: SEE PAGE 1	Copy To: SEE PAGE 1	Company Name:
		Address:
Email To: wstonestreet@environcorp.com	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Whirlpool Ft. Smith	Pace Project Manager:
Requested Due Date/TAT: STANDARD	Project Number: 34343917	Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information / SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE	Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Sodium Phosphate	Analysis Test (Y/N)	Am 2b GRX (Y/N)	Am 8i GRX VFA (Y/N)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	ITMW-13-201501	WT	G				1/14/15	1520		4	X							X		X	X	N	
2	RW-69-201501	WT	G				1/14/15	1145		4	X							X		X	X	N	
3	MW-71-201501	WT	G				1/14/15	0950		4	X							X		X	X	N	
4	MW-58-201501	WT	G				1/14/15	0935		4	X							X		X	X	N	
5	ITMW-10-201501	WT	G				1/14/15	1647		4	X							X		X	X	N	
6	MW-33-201501	WT	G				1/14/15	1701		4	X							X		X	X	N	
7	MW-26-201501	WT	G				1/14/15	0908		4	X							X		X	X	N	
8	ITMW-18-201501	WT	G				1/15/15	1000		4	X							X		X	X	N	
9	MW-85-201501	WT	G				1/15/15	1400		4	X							X		X	X	N	
10	MW-86-201501	WT	G				1/15/15	1255		4	X							X		X	X	N	
11	ITMW-19-201501	WT	G				1/15/15	1310		4	X							X		X	X	N	
12	MW-38-201501	WT	G				1/15/15	1155		4	X							X		X	X	N	

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet / ENVIRON	1/15/15	1800				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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CHAIN-OF-CUSTODY / Analytical Request Document

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Page: 6 of 6

Section A Required Client Information:	Section B Required Project Information:	Section C Invoice Information:
Company: ENVIRON	Report To:	Attention:
Address: SEE PAGE 1	Copy To: SEE PAGE 1	Company Name:
		Address:
Email To: westonestreet@environcorp.com	Purchase Order No.:	Pace Quote Reference:
Phone: Fax:	Project Name: Whirlpool, Ft Smith	Pace Project Manager:
Requested Due Date/TAT: STANDARD	Project Number: 34434399A	Pace Profile #:

REGULATORY AGENCY: ☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER ☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information — SAMPLE ID (A-Z, 0-9 / ,) Sample IDs MUST BE UNIQUE	Valid Matrix Codes: MATRIX / CODE — DRINKING WATER DW; WATER WT; WASTE WATER WW; PRODUCT P; SOIL/SOLID SL; OIL OL; WIPE WP; AIR AR; OTHER OT; TISSUE TS	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Sodium Phosphate	Y/N	Analysis Test ↓	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																				N	N		
																					AM 20 GRX		
																					AM 21 GRX VEA		
1	TMW-17-201501		WT	G			1/15/15	0947		4	X							X		X	X	N	
2	TMW-12-201501		WT	G			1/15/15	0932		4	X							X		X	X	N	
3	TMW-15-201501		WT	G			1/15/15	1250		4	X							X		X	X	N	
4	TMW-11-201501		WT	G			1/15/15	1022		4	X							X		X	X	N	
5	MW-83-201501		WT	G			1/15/15	1320		4	X							X		X	X	N	
6	MW-25-201501		WT	G			1/15/15	1125		4	X							X		X	X	N	
7																							
8																							
9																							
10																							
11																							
12																							

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
	Wendy Stonestreet / ENVIRON	1/15/15	1800				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 1/15/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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

Mark Mikesell

From: Robbin Robl
Sent: Thursday, January 29, 2015 9:07 AM
To: Mark Mikesell
Subject: FW: Fort Smith

Importance: High

From: MaryJane Walls [mailto:mjwalls@pacelabs.com]
Sent: Wednesday, January 28, 2015 5:24 PM
To: Robbin Robl
Subject: Re: Fort Smith

The client would like you to proceed with the analysis outside of holding time.

Regards,

Mary Jane Walls
Project Manager
Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
phone: 913-563-1401
cell: 816-679-8286
fax:913-438-3449
email: mjwalls@pacelabs.com
http://www.pacelabs.com

~Worried about shipping samples to the lab? Click here for a quick video on the best way to pack and ship your coolers.

>>> "Robbin Robl" <rrobl@microseeps.com> 1/28/2015 2:32 PM >>>
Hi Mary Jane,

I have some not so good news. All samples were analyzed for methane, ethane and ethene, however the acetylene was missed on 46 of 60 samples submitted.

The samples were analyzed, however not set up to collect the acetylene at the time of analysis. We can re-run the samples for acetylene, however the acetylene will be analyzed and reported out of hold.

I would appreciate it if you can please check with your client and let me know how we are to proceed.

Thank you,
Robbin

Robbin Robl
Pace Analytical Energy Services, LLC
220 William Pitt Way
Pittsburgh, PA 15238
Direct: 412-826-4483
Fax: 412-826-3433
Main: 412-826-5245

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Cooler Receipt Form

Client Name: Environ Project: A Smith Lab Work Order: 14574

A. Shipping/Container Information (circle appropriate response)

Courier: (FedEx) UPS USPS Client Other:_____ Air bill Present: (Yes) No

Tracking Number: 8065 1350 3669

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: 2.2 ' Radiation Screened: Yes (No) Chain of Custody Present: (Yes)

Comments:_____

B. Laboratory Assignment/Log-in (check appropriate response)

	YES	NO	N/A	Comment Reference non-Conform
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	✓			
Microseeps 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: RWelsh Date: 1-16-15

Project Manager Review: RC Date: 1/16/15

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

January 30, 2015

Mary Jane Walls
Pace Analytical Services
9608 Loiret Blvd
Lenexa, KS 66219

RE: **FT. SMITH, AR**

Microseeps Workorder: 14546

Dear Mary Walls:

Enclosed are the analytical results for sample(s) received by the laboratory on Friday, January 16, 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,

Robbin Robl 01/30/2015
rrobl@microseeps.com

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 59

CERTIFICATE OF ANALYSIS

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

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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220 William Pitt Way
Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

SAMPLE SUMMARY

Workorder: 14546 FT. SMITH, AR

Lab ID	Sample ID	Matrix	Date Collected	Date Received
145460001	MW-81-201501	Water	1/13/2015 16:00	1/16/2015 09:20
145460002	MW-81-201501	Bubble Strip	1/14/2015 10:56	1/16/2015 09:20
145460003	MW-82-201501	Water	1/13/2015 16:15	1/16/2015 09:20
145460004	MW-82-201501	Bubble Strip	1/14/2015 10:29	1/16/2015 09:20
145460005	MW-83-201501	Water	1/15/2015 13:20	1/16/2015 09:20
145460006	MW-83-201501	Bubble Strip	1/15/2015 11:26	1/16/2015 09:20
145460007	MW-84-201501	Water	1/14/2015 15:30	1/16/2015 09:20
145460008	MW-84-201501	Bubble Strip	1/15/2015 11:25	1/16/2015 09:20
145460009	MW-85-201501	Water	1/15/2015 14:00	1/16/2015 09:20
145460010	MW-85-201501	Bubble Strip	1/14/2015 16:21	1/16/2015 09:20
145460011	MW-86-201501	Water	1/15/2015 12:55	1/16/2015 09:20
145460012	MW-86-201501	Bubble Strip	1/15/2015 09:02	1/16/2015 09:20
145460013	MW-87-201501	Water	1/14/2015 15:13	1/16/2015 09:20
145460014	MW-87-201501	Bubble Strip	1/15/2015 10:41	1/16/2015 09:20
145460015	MW-88-201501	Water	1/13/2015 11:58	1/16/2015 09:20
145460016	MW-88-201501	Bubble Strip	1/15/2015 10:02	1/16/2015 09:20
145460017	MW-89-201501	Water	1/13/2015 14:41	1/16/2015 09:20
145460018	MW-89-201501	Bubble Strip	1/14/2015 17:31	1/16/2015 09:20
145460019	MW-90-201501	Water	1/12/2015 16:25	1/16/2015 09:20
145460020	MW-90-201501	Bubble Strip	1/15/2015 09:47	1/16/2015 09:20
145460021	MW-91-201501	Water	1/13/2015 16:31	1/16/2015 09:20
145460022	MW-91-201501	Bubble Strip	1/14/2015 16:50	1/16/2015 09:20
145460023	MW-50-201501	Water	1/13/2015 14:30	1/16/2015 09:20
145460024	MW-56-201501	Water	1/13/2015 11:15	1/16/2015 09:20
145460025	MW-57-201501	Water	1/13/2015 14:37	1/16/2015 09:20
145460026	MW-58-201501	Water	1/14/2015 09:35	1/16/2015 09:20
145460027	MW-60-201501	Water	1/13/2015 13:00	1/16/2015 09:20
145460028	MW-61-201501	Water	1/13/2015 16:00	1/16/2015 09:20
145460029	MW-63-201501	Water	1/13/2015 16:25	1/16/2015 09:20

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

PROJECT SUMMARY

Workorder: 14546 FT. SMITH, AR

Workorder Comments

Samples 14546 (0007-0022; odd numbers and 0023-0029) were analyzed outside the hold time of 14 days from collection for analyte Acetylene from the Light Hydrocarbons, method AM20GAx.

Sample Comments

Lab ID: 145460020 **Sample ID:** MW-90-201501 **Sample Type:** N

Sample headspace vial not sufficiently pressurized for analysis. Vial pressurized with an equal volume of UHP Nitrogen and analyzed. Results reported at a dilution.

Batch Comments

Batch: EDON/2398 - Volatile Fatty Acids

The batch matrix spike and/or spike duplicate recovery exceeded laboratory control limits. Analyte Acetic, Propionic, Pyruvic and Butyric acids. Assigned reference sample and MS/MSD reanalyzed to confirm accuracy of results. Results reported with batch EDON/2402. Batch acceptance based on laboratory conrtol sample recovery.

Batch: DISG/4334 - AM20GAX Water QC

The matrix spike and/or spike duplicate, recovery or relative percent difference; accuracy influenced by the concentration of the reference sample 145510002. Analyte Methane and Ethane. Batch acceptance based on laboratory control sample recovery.

Batch: EDON/2402 - Volatile Fatty Acids

The matrix spike and/or spike duplicate, recovery or relative percent difference; accuracy influenced by the reference sample 145460001. Analyte Acetic and Pyruvic acid. Batch acceptance based on laboratory control sample recovery.

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460001** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-81-201501** Date Collected: 1/13/2015 16:00

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/27/2015 15:41	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/27/2015 15:41	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/27/2015 15:41	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/27/2015 15:41	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/27/2015 15:41	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**0.93**	ug/l	0.10	0.042	1			1/22/2015 13:24	GT	
Ethane	**0.082**	ug/l	0.025	0.0020	1			1/22/2015 13:24	GT	
Ethene	**0.31**	ug/l	0.025	0.0030	1			1/22/2015 13:24	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 13:24	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460002** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-81-201501** Date Collected: 1/14/2015 10:56

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**120**	nM	12	2.6	20			1/28/2015 13:33	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460003** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-82-201501** Date Collected: 1/13/2015 16:15

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 17:44	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 17:44	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 17:44	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 17:44	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 17:44	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**13**	ug/l	0.10	0.042	1			1/22/2015 13:38	GT	
Ethane	**0.11**	ug/l	0.025	0.0020	1			1/22/2015 13:38	GT	
Ethene	**0.045**	ug/l	0.025	0.0030	1			1/22/2015 13:38	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/22/2015 13:38	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460004** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-82-201501** Date Collected: 1/14/2015 10:29

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**1900**	nM	48	10	80			1/28/2015 14:13	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460005** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-83-201501** Date Collected: 1/15/2015 13:20

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 18:11	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 18:11	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 18:11	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 18:11	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 18:11	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**1.3**	ug/l	0.10	0.042	1			1/29/2015 09:00	GT	
Ethane	**0.12**	ug/l	0.025	0.0020	1			1/29/2015 09:00	GT	
Ethene	**0.12**	ug/l	0.025	0.0030	1			1/29/2015 09:00	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/29/2015 09:00	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460006** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-83-201501** Date Collected: 1/15/2015 11:26

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**1700**	nM	60	13	100			1/28/2015 14:26	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460007** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-84-201501** Date Collected: 1/14/2015 15:30

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 18:38	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 18:38	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 18:38	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 18:38	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 18:38	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**7.3**	ug/l	0.10	0.042	1			1/23/2015 07:45	BW	
Ethane	**0.14**	ug/l	0.025	0.0020	1			1/23/2015 07:45	BW	
Ethene	**0.10**	ug/l	0.025	0.0030	1			1/23/2015 07:45	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 11:53	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460008** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-84-201501** Date Collected: 1/15/2015 11:25

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**5200**	nM	120	26	200			1/28/2015 14:50	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460009** Date Received: 1/16/2015 09:20 Matrix: Water
Sample ID: **MW-85-201501** Date Collected: 1/15/2015 14:00

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 19:04	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 19:04	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 19:04	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 19:04	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 19:04	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**29**	ug/l	0.10	0.042	1			1/23/2015 07:54	BW	
Ethane	**4.2**	ug/l	0.025	0.0020	1			1/23/2015 07:54	BW	
Ethene	**0.41**	ug/l	0.025	0.0030	1			1/23/2015 07:54	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 12:05	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460010** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-85-201501** Date Collected: 1/14/2015 16:21

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**520**	nM	24	5.2	40			1/28/2015 15:26	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460011** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-86-201501** Date Collected: 1/15/2015 12:55

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 19:31	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 19:31	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 19:31	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 19:31	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 19:31	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**22**	ug/l	0.10	0.042	1			1/23/2015 08:15	BW	
Ethane	**2.8**	ug/l	0.025	0.0020	1			1/23/2015 08:15	BW	
Ethene	**0.78**	ug/l	0.025	0.0030	1			1/23/2015 08:15	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 12:18	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460012** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-86-201501** Date Collected: 1/15/2015 09:02

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**17000**	nM	480	100	800			1/28/2015 16:03	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460013** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-87-201501** Date Collected: 1/14/2015 15:13

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 19:58	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 19:58	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 19:58	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 19:58	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 19:58	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**2.8**	ug/l	0.10	0.042	1			1/23/2015 08:26	BW	
Ethane	**0.067**	ug/l	0.025	0.0020	1			1/23/2015 08:26	BW	
Ethene	**0.14**	ug/l	0.025	0.0030	1			1/23/2015 08:26	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 13:14	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460014** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-87-201501** Date Collected: 1/15/2015 10:41

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**42**	nM	0.60	0.13	1			1/28/2015 09:25	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460015** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-88-201501** Date Collected: 1/13/2015 11:58

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 20:24	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 20:24	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 20:24	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 20:24	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 20:24	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**1.7**	ug/l	0.10	0.042	1			1/23/2015 08:36	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/23/2015 08:36	BW	
Ethene	**0.42**	ug/l	0.025	0.0030	1			1/23/2015 08:36	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 13:26	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460016** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-88-201501** Date Collected: 1/15/2015 10:02

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**11**	nM	0.60	0.13	1			1/28/2015 09:37	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460017** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-89-201501** Date Collected: 1/13/2015 14:41

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 20:51	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 20:51	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 20:51	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 20:51	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 20:51	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**3.0**	ug/l	0.10	0.042	1			1/23/2015 08:50	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/23/2015 08:50	BW	
Ethene	**0.10**	ug/l	0.025	0.0030	1			1/23/2015 08:50	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 13:39	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460018** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-89-201501** Date Collected: 1/14/2015 17:31

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Hydrogen	**0.93**	nM	0.60	0.13	1			1/28/2015 09:50	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460019** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-90-201501** Date Collected: 1/12/2015 16:25

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 21:18	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 21:18	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 21:18	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 21:18	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 21:18	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**14**	ug/l	0.10	0.042	1			1/23/2015 09:01	BW	
Ethane	**0.66**	ug/l	0.025	0.0020	1			1/23/2015 09:01	BW	
Ethene	**2.7**	ug/l	0.025	0.0030	1			1/23/2015 09:01	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 13:52	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460020** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-90-201501** Date Collected: 1/15/2015 09:47

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**1.7**	nM	1.2	0.26	2			1/28/2015 10:07	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460021** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-91-201501** Date Collected: 1/13/2015 16:31

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 21:44	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 21:44	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 21:44	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 21:44	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 21:44	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**47**	ug/l	0.10	0.042	1			1/23/2015 09:13	BW	
Ethane	**0.46**	ug/l	0.025	0.0020	1			1/23/2015 09:13	BW	
Ethene	**0.41**	ug/l	0.025	0.0030	1			1/23/2015 09:13	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 14:04	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460022** Date Received: 1/16/2015 09:20 Matrix: Bubble Strip

Sample ID: **MW-91-201501** Date Collected: 1/14/2015 16:50

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**0.72**	nM	0.60	0.13	1			1/28/2015 10:19	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460023** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-50-201501** Date Collected: 1/13/2015 14:30

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/22/2015 22:11	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/22/2015 22:11	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/22/2015 22:11	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/22/2015 22:11	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/22/2015 22:11	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.43**	ug/l	0.10	0.042	1			1/23/2015 09:23	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/23/2015 09:23	BW	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/23/2015 09:23	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 14:17	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460024** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-56-201501** Date Collected: 1/13/2015 11:15

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/23/2015 11:23	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/23/2015 11:23	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/23/2015 11:23	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/23/2015 11:23	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/23/2015 11:23	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.96**	ug/l	0.10	0.042	1			1/23/2015 09:35	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/23/2015 09:35	BW	
Ethene	**0.050**	ug/l	0.025	0.0030	1			1/23/2015 09:35	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 14:29	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460025** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-57-201501** Date Collected: 1/13/2015 14:37

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/23/2015 13:10	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/23/2015 13:10	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/23/2015 13:10	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/23/2015 13:10	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/23/2015 13:10	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**1.9**	ug/l	0.10	0.042	1			1/23/2015 09:45	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/23/2015 09:45	BW	
Ethene	**0.087**	ug/l	0.025	0.0030	1			1/23/2015 09:45	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 14:42	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460026** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-58-201501** Date Collected: 1/14/2015 09:35

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/23/2015 13:36	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/23/2015 13:36	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/23/2015 13:36	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/23/2015 13:36	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/23/2015 13:36	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**44**	ug/l	0.10	0.042	1			1/23/2015 09:56	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/23/2015 09:56	BW	
Ethene	**0.037**	ug/l	0.025	0.0030	1			1/23/2015 09:56	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 14:54	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460027** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-60-201501** Date Collected: 1/13/2015 13:00

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/23/2015 14:03	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/23/2015 14:03	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/23/2015 14:03	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/23/2015 14:03	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/23/2015 14:03	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.23**	ug/l	0.10	0.042	1			1/23/2015 10:49	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/23/2015 10:49	BW	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/23/2015 10:49	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 15:07	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460028** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-61-201501** Date Collected: 1/13/2015 16:00

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G			Analytical Method: AM21G							
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/23/2015 14:29	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/23/2015 14:29	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/23/2015 14:29	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/23/2015 14:29	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/23/2015 14:29	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**0.50**	ug/l	0.10	0.042	1			1/23/2015 11:03	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/23/2015 11:03	BW	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			1/23/2015 11:03	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 15:18	GT	

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ANALYTICAL RESULTS

Workorder: 14546 FT. SMITH, AR

Lab ID: **145460029** Date Received: 1/16/2015 09:20 Matrix: Water

Sample ID: **MW-63-201501** Date Collected: 1/13/2015 16:25

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
EDonors - MICR										
Analysis Desc: AM21G		Analytical Method: AM21G								
Acetic Acid	**<5.0**	mg/l	5.0	0.89	1			1/23/2015 14:56	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.73	1			1/23/2015 14:56	BW	
Pyruvic Acid	**<5.0**	mg/l	5.0	0.41	1			1/23/2015 14:56	BW	
Butyric Acid	**<5.0**	mg/l	5.0	1.4	1			1/23/2015 14:56	BW	
Lactic Acid	**<10**	mg/l	10	2.4	1			1/23/2015 14:56	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.45**	ug/l	0.10	0.042	1			1/23/2015 11:14	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			1/23/2015 11:14	BW	
Ethene	**0.054**	ug/l	0.025	0.0030	1			1/23/2015 11:14	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			1/30/2015 15:31	GT	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: 14546 FT. SMITH, AR

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 Quanitation 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).

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QUALITY CONTROL DATA

Workorder: 14546 FT. SMITH, AR

QC Batch: EDON/2398 Analysis Method: AM21G

QC Batch Method: AM21G

Associated Lab Samples: 145460003, 145460005, 145460007, 145460009, 145460011, 145460013, 145460015, 145460017, 145460019, 145460021, 145460023

METHOD BLANK: 32919

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
EDonors				
Acetic Acid	mg/l	<5.0	5.0	
Propionic Acid	mg/l	<5.0	5.0	
Pyruvic Acid	mg/l	<5.0	5.0	
Butyric Acid	mg/l	<5.0	5.0	
Lactic Acid	mg/l	<10	10	

LABORATORY CONTROL SAMPLE: 32920

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Acetic Acid	mg/l	100	80	80	70-130	
Propionic Acid	mg/l	100	82	82	70-130	
Pyruvic Acid	mg/l	100	76	76	70-130	
Butyric Acid	mg/l	100	80	80	70-130	
Lactic Acid	mg/l	100	75	75	70-130	

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QUALITY CONTROL DATA

Workorder: 14546 FT. SMITH, AR

QC Batch: DISG/4333 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 145460001, 145460003

METHOD BLANK: 32929

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	<0.10	0.10	
Ethane	ug/l	<0.025	0.025	
Ethene	ug/l	<0.025	0.025	
Acetylene	ug/l	<0.50	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 32931 32933

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	750	740	101	99	80-120	2	20	
Ethane	ug/l	38	44	43	116	113	80-120	2.6	20	
Ethene	ug/l	35	41	40	116	113	80-120	2.6	20	
Acetylene	ug/l	33	27	26	84	80	80-120	4.9	20	

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QUALITY CONTROL DATA

Workorder: 14546 FT. SMITH, AR

QC Batch: DISG/4334 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 145460007, 145460009, 145460011, 145460013, 145460015, 145460017, 145460019, 145460021, 145460023, 145460024, 145460025, 145460026, 145460027, 145460028, 145460029

METHOD BLANK: 32935

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	<0.10	0.10	
Ethane	ug/l	<0.025	0.025	
Ethene	ug/l	<0.025	0.025	

LABORATORY CONTROL SAMPLE & LCSD: 32936 32937

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	740	750	99	100	80-120	1	20	
Ethane	ug/l	38	40	42	104	111	80-120	6.5	20	
Ethene	ug/l	35	36	38	103	109	80-120	5.7	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32970 32971 Original: 145510002

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK											
Methane	ug/l	21000	750	24000	23000	422	292	70-130	36	20	
Ethane	ug/l	180	38	240	220	140	99	70-130	34	20	
Ethene	ug/l	0.22	35	30	30	86	84	70-130	2.4	20	

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QUALITY CONTROL DATA

Workorder: 14546 FT. SMITH, AR

QC Batch: EDON/2401 Analysis Method: AM21G

QC Batch Method: AM21G

Associated Lab Samples: 145460024, 145460025, 145460026, 145460027, 145460028, 145460029

METHOD BLANK: 32956

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
EDonors				
Acetic Acid	mg/l	<5.0	5.0	
Propionic Acid	mg/l	<5.0	5.0	
Pyruvic Acid	mg/l	<5.0	5.0	
Butyric Acid	mg/l	<5.0	5.0	
Lactic Acid	mg/l	<10	10	

LABORATORY CONTROL SAMPLE: 32957

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Acetic Acid	mg/l	100	110	111	70-130	
Propionic Acid	mg/l	100	120	118	70-130	
Pyruvic Acid	mg/l	100	100	105	70-130	
Butyric Acid	mg/l	100	120	118	70-130	
Lactic Acid	mg/l	100	110	106	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32958 32959 Original: 145460024

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
EDonors											
Acetic Acid	mg/l	0	100	86	94	86	94	70-130	8.9	20	
Propionic Acid	mg/l	0	100	92	100	92	104	70-130	12	20	
Pyruvic Acid	mg/l	0	100	84	94	84	94	70-130	11	20	
Butyric Acid	mg/l	0	100	97	100	97	105	70-130	7.9	20	
Lactic Acid	mg/l	0	100	85	89	85	89	70-130	4.6	20	

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220 William Pitt Way
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Phone: (412) 826-5245
Fax: (412) 826-3433

QUALITY CONTROL DATA

Workorder: 14546 FT. SMITH, AR

QC Batch: EDON/2402 Analysis Method: AM21G

QC Batch Method: AM21G

Associated Lab Samples: 145460001

METHOD BLANK: 32972

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
EDonors				
Acetic Acid	mg/l	<5.0	5.0	
Propionic Acid	mg/l	<5.0	5.0	
Pyruvic Acid	mg/l	<5.0	5.0	
Butyric Acid	mg/l	<5.0	5.0	
Lactic Acid	mg/l	<10	10	

LABORATORY CONTROL SAMPLE: 32973

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Acetic Acid	mg/l	100	94	94	70-130	
Propionic Acid	mg/l	100	100	106	70-130	
Pyruvic Acid	mg/l	100	100	101	70-130	
Butyric Acid	mg/l	100	110	107	70-130	
Lactic Acid	mg/l	100	98	99	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32921 32922 Original: 145460001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
EDonors											
Acetic Acid	mg/l	0	100	130	100	129	104	70-130	21	20	
Propionic Acid	mg/l	0	100	120	98	119	98	70-130	19	20	
Pyruvic Acid	mg/l	0	100	47	56	47	56	70-130	17	20	
Butyric Acid	mg/l	0	100	120	100	125	104	70-130	18	20	
Lactic Acid	mg/l	0	100	89	85	89	85	70-130	4.6	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32974 32975 Original: 145530001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
EDonors											

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QUALITY CONTROL DATA

Workorder: 14546 FT. SMITH, AR

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 32974 32975 Original: 145530001

Parameter	Units	Original Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
Acetic Acid	mg/l	180	400	580	540	101	91	70-130	10	20	
Propionic Acid	mg/l	0	400	420	400	105	101	70-130	3.9	20	
Pyruvic Acid	mg/l	0	400	400	380	99	94	70-130	5.2	20	
Butyric Acid	mg/l	0	400	420	410	106	103	70-130	2.9	20	
Lactic Acid	mg/l	0	400	340	360	86	90	70-130	4.5	20	

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QUALITY CONTROL DATA

Workorder: 14546 FT. SMITH, AR

QC Batch: DISG/4341 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 145460014, 145460016, 145460018, 145460020, 145460022

METHOD BLANK: 33012

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Hydrogen	nM	<0.60	0.60	

LABORATORY CONTROL SAMPLE & LCSD: 33013 33014

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Hydrogen	nM	24	22	20	89	83	80-120	7	20	

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QUALITY CONTROL DATA

Workorder: 14546 FT. SMITH, AR

QC Batch: DISG/4342 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 145460005

METHOD BLANK: 33023

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Methane	ug/l	<0.10	0.10	
Ethane	ug/l	<0.025	0.025	
Ethene	ug/l	<0.025	0.025	
Acetylene	ug/l	<0.50	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 33025 33027

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	760	770	102	103	80-120	0.98	20	
Ethane	ug/l	38	41	44	108	116	80-120	7.1	20	
Ethene	ug/l	35	37	40	105	113	80-120	7.3	20	
Acetylene	ug/l	33	33	33	100	101	80-120	1	20	

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QUALITY CONTROL DATA

Workorder: 14546 FT. SMITH, AR

QC Batch: DISG/4346 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 145460007, 145460009, 145460011, 145460013, 145460015, 145460017, 145460019, 145460021, 145460023, 145460024, 145460025, 145460026, 145460027, 145460028, 145460029

METHOD BLANK: 33059

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Acetylene	ug/l	<0.50	0.50	

LABORATORY CONTROL SAMPLE & LCSD: 33060 33061

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Acetylene	ug/l	33	37	36	112	111	80-120	0.9	20	

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QUALITY CONTROL DATA

Workorder: 14546 FT. SMITH, AR

QC Batch: DISG/4347 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 145460002, 145460004, 145460006, 145460008, 145460010, 145460012

METHOD BLANK: 33062

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Hydrogen	nM	<0.60	0.60	

LABORATORY CONTROL SAMPLE & LCSD: 33063 33064

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Hydrogen	nM	24	24	26	100	107	80-120	6.8	20	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 14546 FT. SMITH, AR

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
145460003	MW-82-201501			AM21G	EDON/2398
145460005	MW-83-201501			AM21G	EDON/2398
145460007	MW-84-201501			AM21G	EDON/2398
145460009	MW-85-201501			AM21G	EDON/2398
145460011	MW-86-201501			AM21G	EDON/2398
145460013	MW-87-201501			AM21G	EDON/2398
145460015	MW-88-201501			AM21G	EDON/2398
145460017	MW-89-201501			AM21G	EDON/2398
145460019	MW-90-201501			AM21G	EDON/2398
145460021	MW-91-201501			AM21G	EDON/2398
145460023	MW-50-201501			AM21G	EDON/2398
145460001	MW-81-201501			AM20GAX	DISG/4333
145460003	MW-82-201501			AM20GAX	DISG/4333
145460007	MW-84-201501			AM20GAX	DISG/4334
145460009	MW-85-201501			AM20GAX	DISG/4334
145460011	MW-86-201501			AM20GAX	DISG/4334
145460013	MW-87-201501			AM20GAX	DISG/4334
145460015	MW-88-201501			AM20GAX	DISG/4334
145460017	MW-89-201501			AM20GAX	DISG/4334
145460019	MW-90-201501			AM20GAX	DISG/4334
145460021	MW-91-201501			AM20GAX	DISG/4334
145460023	MW-50-201501			AM20GAX	DISG/4334
145460024	MW-56-201501			AM20GAX	DISG/4334
145460025	MW-57-201501			AM20GAX	DISG/4334
145460026	MW-58-201501			AM20GAX	DISG/4334
145460027	MW-60-201501			AM20GAX	DISG/4334
145460028	MW-61-201501			AM20GAX	DISG/4334
145460029	MW-63-201501			AM20GAX	DISG/4334
145460024	MW-56-201501			AM21G	EDON/2401
145460025	MW-57-201501			AM21G	EDON/2401
145460026	MW-58-201501			AM21G	EDON/2401

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 14546 FT. SMITH, AR

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
145460027	MW-60-201501			AM21G	EDON/2401
145460028	MW-61-201501			AM21G	EDON/2401
145460029	MW-63-201501			AM21G	EDON/2401
145460001	MW-81-201501			AM21G	EDON/2402
145460014	MW-87-201501			AM20GAX	DISG/4341
145460016	MW-88-201501			AM20GAX	DISG/4341
145460018	MW-89-201501			AM20GAX	DISG/4341
145460020	MW-90-201501			AM20GAX	DISG/4341
145460022	MW-91-201501			AM20GAX	DISG/4341
145460005	MW-83-201501			AM20GAX	DISG/4342
145460007	MW-84-201501			AM20GAX	DISG/4346
145460009	MW-85-201501			AM20GAX	DISG/4346
145460011	MW-86-201501			AM20GAX	DISG/4346
145460013	MW-87-201501			AM20GAX	DISG/4346
145460015	MW-88-201501			AM20GAX	DISG/4346
145460017	MW-89-201501			AM20GAX	DISG/4346
145460019	MW-90-201501			AM20GAX	DISG/4346
145460021	MW-91-201501			AM20GAX	DISG/4346
145460023	MW-50-201501			AM20GAX	DISG/4346
145460024	MW-56-201501			AM20GAX	DISG/4346
145460025	MW-57-201501			AM20GAX	DISG/4346
145460026	MW-58-201501			AM20GAX	DISG/4346
145460027	MW-60-201501			AM20GAX	DISG/4346
145460028	MW-61-201501			AM20GAX	DISG/4346
145460029	MW-63-201501			AM20GAX	DISG/4346
145460002	MW-81-201501			AM20GAX	DISG/4347
145460004	MW-82-201501			AM20GAX	DISG/4347
145460006	MW-83-201501			AM20GAX	DISG/4347

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 14546 FT. SMITH, AR

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
145460008	MW-84-201501			AM20GAX	DISG/4347
145460010	MW-85-201501			AM20GAX	DISG/4347
145460012	MW-86-201501			AM20GAX	DISG/4347

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Client: Wendy Stonestreet
Environ
7500 College Boulevard
Suite 925
Overland Park, KS 66210

Phone:

Fax:

Identifier: 027MA **Date Rec:** 01/13/2015 **Report Date:** 01/21/2015

Client Project #: 3434399A **Client Project Name:** Whirlpool, Ft. Smith

Purchase Order #: 3434399A

Analysis Requested: CENSUS, Miscellaneous

Reviewed By:



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CENSUS

Client: **Environ**
Project: Whirlpool, Ft. Smith

MI Project Number: **027MA**
Date Received: 01/13/2015

Sample Information

Client Sample ID:		**IW-72-201501**	**MW-67-201501**	**MW-68-201501**	**ITMW-20-201501**	**MW-31-201501**
Sample Date:		01/12/2015	01/12/2015	01/12/2015	01/12/2015	01/12/2015
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:		RW	RW	RW	RW	RW
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	<5.00E-01	<5.00E-01	**4.00E-01 (J)**	<5.00E-01	**1.10E+00**
tceA Reductase	TCE	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
Vinyl Chloride Reductase	VCR	<5.00E-01	<5.00E-01	<5.00E-01	<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

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CENSUS

Client: **Environ**
Project: Whirlpool, Ft. Smith

MI Project Number: **027MA**
Date Received: 01/13/2015

Sample Information

Client Sample ID:		**MW-40-201501**	**MW-36-201501**	**MW-90-201501**	**MW-39-201501**	**MW-56-201501**
Sample Date:		01/12/2015	01/12/2015	01/12/2015	01/12/2015	01/13/2015
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:		RW	RW	RW	RW	RW
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	**2.60E+00**	<5.00E-01	**1.06E+01**	<5.00E-01	**6.50E-01**
tceA Reductase	TCE	<5.00E-01	<5.00E-01	<7.00E-01	<5.00E-01	**5.00E-01**
BAV1 Vinyl Chloride Reductase	BVC	<5.00E-01	<5.00E-01	<7.00E-01	<5.00E-01	<5.00E-01
Vinyl Chloride Reductase	VCR	<5.00E-01	<5.00E-01	<7.00E-01	<5.00E-01	<5.00E-01

Legend:
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CENSUS

Client: **Environ**
Project: Whirlpool, Ft. Smith

MI Project Number: **027MA**
Date Received: 01/13/2015

Sample Information

Client Sample ID:		**MW-57-201501**	**ITMW-9-201501**	**IW-8D-201501**	**MW-35R-201501**	**MW-65-201501**
Sample Date:		01/13/2015	01/13/2015	01/13/2015	01/13/2015	01/13/2015
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:		RW	RW	RW	RW	RW
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	**4.79E+02**	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
tceA Reductase	TCE	<2.50E+00	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	**6.35E+01**	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
Vinyl Chloride Reductase	VCR	<2.50E+00	<5.00E-01	<5.00E-01	<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

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CENSUS

Client: **Environ**
Project: Whirlpool, Ft. Smith

MI Project Number: **027MA**
Date Received: 01/13/2015

Sample Information

Client Sample ID:		**MW-34-201501**	**ITMW-6-201501**	**ITMW-4-201501**	**MW-88-201501**	**MW-62-201501**
Sample Date:		01/13/2015	01/13/2015	01/13/2015	01/13/2015	01/13/2015
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:		RW	RW	RW	RW	RW
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	<5.00E-01	<5.00E-01	**7.10E+00**	**8.70E+00**	<5.00E-01
tceA Reductase	TCE	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
Vinyl Chloride Reductase	VCR	<5.00E-01	<5.00E-01	<5.00E-01	<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

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CENSUS

Client: **Environ**
Project: Whirlpool, Ft. Smith

MI Project Number: **027MA**
Date Received: 01/13/2015

Sample Information

Client Sample ID:		**MW-29-201501**	**ITMW-2-201501**	**MW-22-201501**	**MW-46R-201501**	**MW-91-201501**
Sample Date:		01/13/2015	01/13/2015	01/13/2015	01/13/2015	01/13/2015
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:		RW	RW	RW	RW	RW
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	<7.00E-01	<5.00E-01	**5.04E+01**	**2.80E+00**	**3.90E+00**
tceA Reductase	TCE	<7.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<7.00E-01	<5.00E-01	<5.00E-01	**2.00E-01 (J)**	<5.00E-01
Vinyl Chloride Reductase	VCR	<7.00E-01	<5.00E-01	<5.00E-01	<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

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CENSUS

Client: **Environ**
Project: Whirlpool, Ft. Smith

MI Project Number: **027MA**
Date Received: 01/13/2015

Sample Information

Client Sample ID:		**MW-89-201501**	**MW-81-201501**	**MW-61-201501**	**MW-50-201501**	**MW-60-201501**
Sample Date:		01/13/2015	01/13/2015	01/13/2015	01/13/2015	01/13/2015
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:		RW	RW	RW	RW	RW
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	**1.48E+01**	<5.00E-01	<5.00E+00	<5.00E+00	<8.30E+00
tceA Reductase	TCE	**1.10E+00**	<5.00E-01	<5.00E+00	<5.00E+00	<8.30E+00
BAV1 Vinyl Chloride Reductase	BVC	<1.00E+00	<5.00E-01	<5.00E+00	<5.00E+00	<8.30E+00
Vinyl Chloride Reductase	VCR	<1.00E+00	<5.00E-01	<5.00E+00	<5.00E+00	<8.30E+00

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

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CENSUS

Client: **Environ**
Project: Whirlpool, Ft. Smith

MI Project Number: **027MA**
Date Received: 01/13/2015

Sample Information

Client Sample ID:		**MW-82-201501**	**IW-76-201501**	**MW-84-201501**	**MW-28-201501**	**ITMW-7-201501**
Sample Date:		01/13/2015	01/14/2015	01/14/2015	01/14/2015	01/14/2015
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:		RW	RW	RW	RW	RW
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	<4.00E-01	<5.00E-01	<5.00E-01	**6.90E+00**	<5.00E-01
tceA Reductase	TCE	<4.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<4.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
Vinyl Chloride Reductase	VCR	<4.00E-01	<5.00E-01	<5.00E-01	<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

MICROBIAL INSIGHTS, INC.

10515 Research Dr., Knoxville, TN 37932
Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: **Environ**
Project: Whirlpool, Ft. Smith

MI Project Number: **027MA**
Date Received: 01/13/2015

Sample Information

Client Sample ID:		**MW-41-201501**	**MW-27-201501**	**ITMW-13-201501**	**RW-09-201501**	**MW-71-201501**
Sample Date:		01/14/2015	01/14/2015	01/14/2015	01/14/2015	01/14/2015
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:		RW	RW	RW	RW	RW
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	**3.40E+02**	**5.50E-01**	<5.00E-01	**2.60E+00**	**6.20E+00**
tceA Reductase	TCE	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	**2.80E+00**	<5.00E-01	<5.00E-01	**1.00E-01 (J)**	<5.00E-01
Vinyl Chloride Reductase	VCR	<5.00E-01	<5.00E-01	<5.00E-01	<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

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Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: **Environ**
Project: Whirlpool, Ft. Smith

MI Project Number: **027MA**
Date Received: 01/13/2015

Sample Information

Client Sample ID:		**MW-58-201501**	**ITMW-1-201501**	**MW-32-201501**	**ITMW-21-201501**	**ITMW-16-201501**
Sample Date:		01/14/2015	01/14/2015	01/14/2015	01/14/2015	01/14/2015
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:		RW	RW	RW	RW	RW
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	**1.22E+02**	**1.00E+00**	<5.00E-01	<5.00E-01	**4.90E+00**
tceA Reductase	TCE	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	**3.80E+00**	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
Vinyl Chloride Reductase	VCR	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
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CENSUS

Client: **Environ**
Project: Whirlpool, Ft. Smith

MI Project Number: **027MA**
Date Received: 01/13/2015

Sample Information

Client Sample ID:		**MW-66-201501**	**ITMW-14-201501**	**MW-87-201501**	**IW-77-201501**	**IW-73-201501**
Sample Date:		01/14/2015	01/14/2015	01/14/2015	01/14/2015	01/14/2015
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:		RW	RW	RW	RW	RW
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	**7.00E-01**	**6.40E+00**	<5.00E-01	<5.00E-01	**3.53E+03**
tceA Reductase	TCE	<5.00E-01	<1.00E+00	<5.00E-01	<5.00E-01	**3.00E-01 (J)**
BAV1 Vinyl Chloride Reductase	BVC	<5.00E-01	<1.00E+00	<5.00E-01	<5.00E-01	**2.74E+02**
Vinyl Chloride Reductase	VCR	<5.00E-01	<1.00E+00	<5.00E-01	<5.00E-01	<5.00E-01

Legend:
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< = Result not detected

MICROBIAL INSIGHTS, INC.

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CENSUS

Client: **Environ**
Project: Whirlpool, Ft. Smith

MI Project Number: **027MA**
Date Received: 01/13/2015

Sample Information

Client Sample ID:		**IW-74-201501**	**ITMW-10-201501**	**MW-33-201501**	**MW-63-201501**	**MW-26-201501**
Sample Date:		01/14/2015	01/14/2015	01/14/2015	01/14/2015	01/14/2015
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:		RW	RW	RW	RW	RW
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	**1.20E+02**	<5.00E-01	<5.00E-01	<2.00E+00	**8.00E-01**
tceA Reductase	TCE	<5.00E-01	<5.00E-01	<5.00E-01	<2.00E+00	**2.00E-01 (J)**
BAV1 Vinyl Chloride Reductase	BVC	**6.80E+00**	<5.00E-01	<5.00E-01	<2.00E+00	<5.00E-01
Vinyl Chloride Reductase	VCR	<5.00E-01	<5.00E-01	<5.00E-01	<2.00E+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

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Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: **Environ**
Project: Whirlpool, Ft. Smith

MI Project Number: **027MA**
Date Received: 01/13/2015

Sample Information

Client Sample ID:		**ITMW-18-201501**	**MW-85-201501**	**MW-86-201501**	**ITMW-19-201501**	**MW-38-201501**
Sample Date:		01/15/2015	01/15/2015	01/15/2015	01/15/2015	01/15/2015
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:		RW	RW	RW	RW	RW
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	**5.20E+03**
tceA Reductase	TCE	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	**3.34E+03**
Vinyl Chloride Reductase	VCR	<5.00E-01	<5.00E-01	<5.00E-01	<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

MICROBIAL INSIGHTS, INC.

10515 Research Dr., Knoxville, TN 37932
Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: **Environ**
Project: Whirlpool, Ft. Smith

MI Project Number: **027MA**
Date Received: 01/13/2015

Sample Information

Client Sample ID:		**ITMW-17-201501**	**ITMW-12-201501**	**ITMW-15-201501**	**ITMW-11-201501**	**MW-83-201501**
Sample Date:		01/15/2015	01/15/2015	01/15/2015	01/15/2015	01/15/2015
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst:		RW	RW	RW	RW	RW
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	**2.70E+00**	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
tceA Reductase	TCE	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	**9.00E-01**	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
Vinyl Chloride Reductase	VCR	<5.00E-01	<5.00E-01	<5.00E-01	<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

MICROBIAL INSIGHTS, INC.

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Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: **Environ**
Project: Whirlpool, Ft. Smith

MI Project Number: **027MA**
Date Received: 01/13/2015

Sample Information

Client Sample ID:	**MW-25-201501**
Sample Date:	01/15/2015
Units:	cells/mL
Analyst:	RW

Dechlorinating Bacteria

Dehalococcoides	*DHC*	<5.00E-01
tceA Reductase	TCE	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<5.00E-01
Vinyl Chloride Reductase	VCR	<5.00E-01

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

Appendix C

Data Validation Report

DATA VALIDATION REVIEW
1st Quarter Groundwater Monitoring Event 2015
Whirlpool Corporation
Fort Smith, Arkansas

Laboratory Sample Delivery Groups (SDGs): 60186000, 60186097, 60186183 and 60186334

Laboratory: PACE Analytical, Lenexa, Kansas

Reviewer: Wendy Stonestreet **Date Reviewed: February 9, 2015**

This data validation report has been prepared by ENVIRON International Corporation (ENVIRON) to assess the validity and usability of laboratory analytical data generated from samples collected during the 1st quarter groundwater sampling event at the Whirlpool Corporation, Fort Smith, Arkansas Site (the "site") from January 12, 2015 to January 15, 2015.

The analytical data were evaluated for quality assurance and quality control (QA/QC) based on the following document: *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (June 2008). Analytical services for volatile organic compounds (VOC) analysis of 99 aqueous samples was provided by PACE Analytical of Lenexa, Kansas.

This report summarizes the QA/QC evaluation of the data according to precision, accuracy, representativeness, completeness and comparability relative to the project data quality objectives. This report provides a quantitative and qualitative assessment of the data and identifies potential sources of error, uncertainty, and bias that may affect the overall usability of the data.

Eighty-six (66) ground water samples, seven (7) blind ground water field duplicates, three (3) matrix spike/matrix spike duplicate (MS/MSD), six (6) equipment rinsate blanks and twenty (20) trip blanks were submitted to the laboratory for VOC analysis. The following table lists the sample identifications by SDG.

Field ID	Sample Type	Lab ID	Matrix	Analyses
				VOCs
SDG: 60186000				
IW-72-201501	SA	60186000001	Aqueous	X
MW-67-201501	SA	60186000002	Aqueous	X
MW-68-201501	SA	60186000003	Aqueous	X
ITMW-20-201501	SA/MS/MSD	60186000004	Aqueous	X
MW-31-201501	SA	60186000005	Aqueous	X
MW-40-201501	SA	60186000006	Aqueous	X
MW-36-201501	SA	60186000007	Aqueous	X
MW-90-201501	SA	60186000008	Aqueous	X
MW-39-201501	SA	60186000009	Aqueous	X
EB-05-201501	EB	60186000010	Aqueous	X
TB-06-201501	TB	60186000011	Aqueous	X
TB-10-201501	TB	60186000012	Aqueous	X
TB-05-201501	TB	60186000013	Aqueous	X

Field ID	Sample Type	Lab ID	Matrix	Analyses
				VOCs
SDG: 60186097				
MW-57-201501	SA	60186097001	Aqueous	X
ITMW-9-201501	SA	60186097002	Aqueous	X
MW-35R-201501	SA	60186097003	Aqueous	X
MW-65-201501	SA	60186097004	Aqueous	X
ITMW-6-201501	SA/MS/MSD	60186097005	Aqueous	X
ITMW-4-201501	SA	60186097006	Aqueous	X
MW-62-201501	SA	60186097007	Aqueous	X
MW-29-201501	SA	60186097008	Aqueous	X
ITMW-2-201501	SA	60186097009	Aqueous	X
MW-22-201501	SA	60186097010	Aqueous	X
MW-46R-201501	SA	60186097011	Aqueous	X
DUP-03-201501	FD	60186097012	Aqueous	X
MW-91-201501	SA	60186097013	Aqueous	X
DUP-07-201501	FD	60186097014	Aqueous	X
MW-89-201501	SA	60186097015	Aqueous	X
MW-82-201501	SA	60186097016	Aqueous	X
MW-61-201501	SA	60186097017	Aqueous	X
MW-50-201501	SA	60186097018	Aqueous	X
MW-60-201501	SA	60186097019	Aqueous	X
MW-81-201501	SA	60186097020	Aqueous	X
MW-63-201501	SA	60180441021	Aqueous	X
TB-02-201501	TB	60180441022	Aqueous	X
TB-01-201501	TB	60180441023	Aqueous	X
EB-01-201501	EB	60180441024	Aqueous	X
TB-08-201501	TB	60180441025	Aqueous	X
DUP-02-201501	FD	60180441026	Aqueous	X
TB-06-201501	TB	60180441027	Aqueous	X
EB-02-201501	EB	60180441028	Aqueous	X
TB-03-201501	TB	60180441029	Aqueous	X
TB-04-201501	TB	60180441030	Aqueous	X
TB-09-201501	TB	60180441031	Aqueous	X
TB-10-201501	TB	60180441032	Aqueous	X
MW-56-201501	SA	60180441033	Aqueous	X
IW-80-201501	SA	60180441034	Aqueous	X
MW-34-201501	SA	60180441035	Aqueous	X
MW-88-201501	SA	60180441036	Aqueous	X
TB-07-201501	SA	60180441037	Aqueous	X
SDG: 60186183				
ITMW-1-201501	SA	60186183001	Aqueous	X
MW-32-201501	SA	60186183002	Aqueous	X
ITMW-21-201501	SA	60186183003	Aqueous	X
ITMW-16-201501	SA	60186183004	Aqueous	X
MW-66-201501	SA	60186183005	Aqueous	X
ITMW-14-201501	SA	60186183006	Aqueous	X
MW-87-201501	SA	60186183007	Aqueous	X
TB-15-201501	TB	60186183008	Aqueous	X

Field ID	Sample Type	Lab ID	Matrix	Analyses
				VOCs
IW-77-201501	SA	60186183009	Aqueous	X
IW-73-201501	SA	60186183010	Aqueous	X
TB-16-201501	TB	60186183011	Aqueous	X
DUP-01-201501	FD	60186183012	Aqueous	X
IW-74-201501	SA	60186183013	Aqueous	X
IW-76-201501	SA	60186183014	Aqueous	X
MW-84-201501	SA	60186183015	Aqueous	X
MW-28-201501	SA/MS/MSD	60186183016	Aqueous	X
ITMW-7-201501	SA	60186183017	Aqueous	X
MW-41-201501	SA	60186183018	Aqueous	X
MW-27-201501	SA	60186183019	Aqueous	X
TB-18-201501	TB	60186183020	Aqueous	X
ITMW-13-201501	SA	60186183021	Aqueous	X
RW-69-201501	SA	60186183022	Aqueous	X
MW-71-201501	SA	60186183023	Aqueous	X
MW-58-201501	SA	60186183024	Aqueous	X
TB-05-201501	TB	60186183025	Aqueous	X
EB-03-201501	EB	60186183026	Aqueous	X
ITMW-10-201501	SA	60186183027	Aqueous	X
MW-33-201501	SA	60186183028	Aqueous	X
TB-19-201501	TB	60186183029	Aqueous	X
EB-06-201501	EB	60186183030	Aqueous	X
MW-26-201501	SA	60186183031	Aqueous	X
TB-17-201501	TB	60186183032	Aqueous	X
SDG: 60186334				
ITMW-18-201501	SA	30186334001	Aqueous	X
MW-85-201501	SA	30186334002	Aqueous	X
MW-86-201501	SA	30186334003	Aqueous	X
ITMW-19-201501	SA	30186334004	Aqueous	X
MW-38-201501	SA	30186334005	Aqueous	X
DUP-06-201501	FD	30186334006	Aqueous	X
ITMW-17-201501	SA	30186334007	Aqueous	X
DUP-04-201501	FD	30186334008	Aqueous	X
ITMW-12-201501	SA	30186334009	Aqueous	X
TB-20-201501	TB	30186334010	Aqueous	X
ITMW-11-201501	SA	30186334011	Aqueous	X
DUP-05-201501	FD	30186334012	Aqueous	X
MW-83-201501	SA	30186334013	Aqueous	X
MW-25-201501	SA	30186334014	Aqueous	X
TB-2-201501	TB	30186334015	Aqueous	X
TB-22-201501	TB	30186334016	Aqueous	X
EB-04-201501	EB	30186334017	Aqueous	X

Sample Type: SA = Sample TB = Trip Blank FD = Field Duplicate RB = Rinsate Blank
MS =Matrix Spike MSD = Matrix Spike Duplicate
VOCs = Volatile Organic Compounds by USEPA Method SW-846 8260B by Gas Chromatography/Mass Spectrometry (GC/MS) Medium Level.

The following laboratory submittals were evaluated:

- Data Package Completeness,
- Sample Prevention and Holding Times,
- Blanks,
- Surrogate Compound Recoveries
- Laboratory Control Samples,
- Matrix Spike/Matrix Spike Duplicates,
- Laboratory and Field Precision,
- Overall Assessment of Data.

General Overall Assessment:

_____ Data are usable without qualification.

__X__ Data are usable with qualification (noted below).

_____ Some or all data are unusable for any purpose (detailed below).

Case Narrative Comments: Any case narrative comments concerning data qualification were noted below.

1.0 Data Package Completeness

Were all items delivered as specified on the COC and is the data package complete?

Yes, the laboratory followed adequate corrective action processes and all anomalies were discussed in the case narratives. The laboratory submitted all required deliverables.

2.0 Laboratory Case Narrative, Sample Preservation and Cooler Receipt Form

Were problems noted in the laboratory case narrative or cooler receipt form?

Yes, the laboratory case narrative indicated the following:

- **SDG: 60186000:** The laboratory indicated that the matrix spike duplicate (MSD) relative percent difference was reported outside of laboratory control requirements for vinyl chloride. See Section 11.0 for further discussion and resultant data qualification.
- **SDG: 60186097:** The laboratory indicated that sample MW-50-201501 was not properly preserved due to pH post analysis greater than 2.0. However, the data sheets indicated that samples MW-35R-201501, MW-65-201501 and MW-81-201501 had a pH post analysis result of 7.0. See Section 3.0 for further discussion and resultant data qualification.
- **SDG: 60186344:** The laboratory indicated that the laboratory control sample (LCS) was reported outside of laboratory control requirements for carbon tetrachloride. See Section 10.0 for further discussion and resultant data qualification. The laboratory indicated that the matrix spike duplicate (MSD) relative percent difference was reported outside of laboratory control requirements for carbon tetrachloride. See Section 11.0 for further discussion and resultant data qualification. The laboratory indicated that three analytes exceeded the instrument calibration range in sample MW-86-201501. See Section 14.0 for further discussion and resultant data qualification.

Samples were received at the PACE, Lenexa, Kansas laboratory in good condition and at proper temperature 4˚C ± 2˚C (fifteen coolers at 0.5˚C, 1.7˚C, 3.7˚C, 3.3˚C, 2.1 ˚C, 3.9˚C, 4.7˚C, 2.5˚C, 3.9˚C,, 2.5˚C,, 2.1˚C, 2.9˚C, 5.3˚C, 4.7˚C and 2.7˚C). Sample preservation requirements were

met. Temperature upon receipt for two coolers was 0.1˚C and 0.3˚C respectively. However, given that the temperature was taken using an Infrared thermometer, which has an error tolerance of +/-1.0 degrees Celsius, and the laboratory did not note any freezing of the samples, this non-conformance does not affect the usability of the data.

Trip blanks TB-03-201501, TB-04-201501, TB-09-201501 and TB-10-201501 were not listed on the COC for SDG 60186097, and TB-17-201501 was not listed on the COC for SDG 60186183 but were included in separate coolers. The laboratory submitted them for analysis as directed by Wendy Stonestreet, Project Chemist of ENVIRON Corporation.

3.0 Technical Holding Times

Were samples extracted/analyzed within method specific holding time requirements?

Yes. All samples were prepared and/or analyzed within the method specific required holding time of 14 days for hydrochloric (HCl) acid preserved samples. Samples which were preserved with ascorbic acid and samples with pH preservation recorded above 2.0 (MW-35R-201501, MW-65-201501, MW-81-201501, MW-32-201501, IW-77-201501, IW-76-201501, MW-84-201501 ITMW-19-201501, DUP-04-201501, DUP-05-201501) whose holding time was reduced to seven days also were analyzed within holding time.

4.0 Blank Contamination

Were any analytes detected in the associated laboratory or field blanks?

No. Laboratory and field blanks indicated the presence and magnitude of contamination resulting from laboratory or field activities. Analytes were not detected in any field or laboratory blanks. Qualification of data was not required.

8.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

Yes. Surrogates are added to all samples prior to purging to evaluate the laboratory performance on individual samples. Three volatile surrogates (4-bromofluorobenzene, 1,2-dichloroethane-d4 and toluene-d8) were added to each sample. Percent recoveries (%R) for all volatile surrogates in all samples were within the method acceptance limits of 70-130%.

No analytical data were qualified based on the recoveries of the surrogate compounds.

9.0 Internal Standards

Were the Internal standard areas within control limits and was the retention time criteria met?

Yes. Internal standards indicate whether GC/MS sensitivity and response were stable during each analysis. The laboratory reported that all criteria were within method requirements.

No analytical data were qualified based on the results of internal standard recovery.

10.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No. The laboratory control sample (LCS) provides information on the accuracy of the analytical method and on the laboratory performance. The following table summarizes the LCS results that were outside the acceptance limits.

SDG	LCS ID	Parameter	Analyte	LCS/ (%)	LCS/ (Recovery %)
60186334	1509650	8260B	Carbon tetrachloride	**150**	67-146

ID = Identification LCS/D = Laboratory Control Sample/Duplicate RPD = Relative Percent Difference % = Percent

Analytical data reported as non-detect and associated with LCS/LCSD recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.

11.0 Matrix Spike and Matrix Spike Duplicate Recoveries

Were MS/MSD samples reported as part of these SDGs?

Yes. A matrix spike was performed from a site specific sample at the required frequency of 1:20 samples. MS/MSD data are used to assess long-term precision and accuracy of the analytical method on various matrices and to demonstrate acceptable compound recovery at the time of sample analysis. The laboratory reported a matrix spike in SDG 60186334 from a non-site specific sample with spike recoveries outside of laboratory control limits for carbon tetrachloride. Non-site specific samples are not appropriate for evaluating site matrix effects and therefore will not be discussed in further detail.

Were MS/MSD recoveries within evaluation criteria?

No. MS/MSD recoveries which were outside acceptance evaluation criteria are summarized in the table below.

SDG	Sample ID	Parameter	Analyte	MS/MSD Recovery (%)	RPD (%)	MS/MSD/ RPD Criteria (%)
60186000	ITMW-20-201501	8260B	Vinyl chloride	79/89	**12**	58-130/11

MS = Matrix Spike MSD = Matrix Spike Duplicate RPD = Relative Percent Difference % = Percent

Analytical results reported as non-detect and associated with MS/MSD recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Parent sample results at concentrations greater than 4 times the matrix spike concentration were not considered appropriate for evaluating matrix interference. The RPD reported for vinyl chloride is slightly above laboratory control criteria which may indicate poor precision. However as the laboratory control sample RPD was reported within evaluation criteria, it was the opinion of the reviewer that qualification of data was not required.

12.0 Laboratory Duplicate Results

Were laboratory duplicate samples performed as part of this SDG?

Yes, but only as spiked duplicates, which are discussed in the previous section.

13.0 Field Duplicate Results (Field Precision)

Were field duplicate samples collected as part of the evaluated SDGs?

Yes. The table below summarizes field duplicate pairs.

SDG	Field ID	Field Duplicate ID
60186097	MW-46R-201510	DUP-03-201501
60186097	MW-91-201501	DUP-07-201501
60186097	ITMW-9-201501	DUP-02-201501
60186097	ITMW-15-201410	DUP-05-201410
60186183	IW-74-201501	DUP-01-201501
60186334	MW-38-201501	DUP-06-201501
60186334	ITMW-12-201501	DUP-04-201501
60186334	ITMW-15-201501	DUP-05-201501

Were field duplicates within evaluation criteria?

Yes. RPD values were less than the control limit of <40% for all compounds with concentrations greater than the reporting limit with the exception of two analytes where a difference in the dilution factor was not observed. While this non-conformance may indicate slightly poor precision, it did affect the usability of the data. The following table summarizes sample and duplicate result concentrations and their relative percent difference.

SDG	Field ID	Duplicate ID	Analyte	Sample Result (ug/L)	Duplicate Result (ug/L)	RPD (%)
60186097	MW-46R-201501	DUP-03-201501	1,1-Dichloroethene	1.3	1.3	0.00
			cis-1,2-Dichloroethene	11.6	12.0	3.38
			Tetrachloroethene	0.90 J*	0.88 J*	2.24
			Trichloroethene	452	428	5.45
			Vinyl chloride	0.71 J*	0.90 J*	23.6
60186097	MW-91-201501	DUP-07-201501	1,1-Dichloroethane	1.1	1.2	8.70
			1,1-Dichloroethene	3.0	3.1	3.28
			cis-1,2-Dichloroethene	31.5	31.0	1.60
			Tetrachloroethene	1.6	1.2	28.6
			Trichloroethene	354	317	11.02
60186097	ITMW-9-201501	DUP-02-201501	1,1-Dichloroethene	1.4	1.4	0.00
			cis-1,2-Dichloroethene	39.1	39.1	0.00
			Methylene chloride	1.0	1.1	9.52
			Trichloroethene	89.6	89.4	0.22
			Vinyl chloride	1.4	1.4	0.00
60186097	ITMW-15-201410	DUP-05-201410	1,1-Dichloroethene	3.4 J*	3.9 J*	13.70
			cis-1,2-Dichloroethene	63.0	66.4	5.26
			Trichloroethene	1490	1660	10.79
			Vinyl chloride	2.0	1.8 J*	10.53
60186183	IW-74-201501	DUP-01-201501	Benzene	0.70 J*	0.71 J*	1.41
			cis-1,2-Dichloroethene	3.8	3.5	8.22
			Trichloroethene	141	139	1.43
60186334	MW-38-201501	DUP-06-201501	Benzene	0.97 J*	0.95 J*	2.08
			Chloroform	0.65 J*	0.64 J*	1.55
			1,1-Dichloroethene	15.6	17.3	10.33
			cis-1,2-Dichloroethene	1900	1190	**45.9**
			trans-1,2-Dichloroethene	16.8	18.3	8.5
			Methylene chloride	0.65 J*	0.94 J*	36.5
			1,1,2,2-Tetrachloroethane	0.71 J*	0.60 J*	16.8
			Tetrachloroethene	2.5	2.1	17.4
			Toluene	0.76 J*	0.73 J*	4.03

SDG	Field ID	Duplicate ID	Analyte	Sample Result (ug/L)	Duplicate Result (ug/L)	RPD (%)
60186334	MW-38-201501	60186334	Trichloroethene	5440	3910	32.73
			Vinyl chloride	133	143	7.25
60186334	ITMW-12-201501	DUP-04-201501	Acetone	18.9	19.0	0.53
			Bromomethane	6.2	7.3	16.3
			Chloromethane	1.9	4.4	**79.4**
			cis-1,2-Dichloroethene	4.2	4.8	13.3
			trans-1,2-Dichloroethene	0.77J*	0.87J*	12.2
			Methylene chloride	0.51 J*	1.6	**103.3**
			1,1,2,2-Tetrachloroethane	0.66J*	ND	NE
			Trichloroethene	57.1	59.3	3.78
60186334	ITMW-15-201501	DUP-05-201501	Acetone	29.1	28.2	3.14
			Bromomethane	7.9	10.8	31.0
			Chloromethane	8.3	10.3	21.5
			cis-1,2-Dichloroethene	2.9	3.8	26.9
			trans-1,2-Dichloroethene	0.55 J*	0.60 J*	8.70
			Methylene chloride	0.67 J*	0.61 J*	9.38
			Trichloroethene	56.5	61.7	8.80

ug/L = micrograms/Li RPD = Relative Percent Difference * = Results reported below reporting limit. ND = Not Detected. NE = Not evaluated

14.0 Detects and Calibration Range

For samples that were diluted and nondetect, were undiluted results also reported?

Not Applicable. All samples which were diluted had detections.

For samples that were not diluted and detected, were the results within calibration range?

No. For sample MW-86-201501 three analytes were reported with detections above the instrument calibration range at a 1x dilution factor. 1,1,2,2-Tetrachloroethane was detected at 1,080 ug/L **E**, 1,1,1-Trichloroethane was detected at 1,100 ug/L **E** and Trichloroethene was detected at 10,900 ug/L **E**. In the subsequent 2,000X dilution due to high concentrations of the target compounds 1,1,2,2-Tetrachloroethane and 1,1,1-Trichloroethane were reported as non-detect and trichloroethene was detected at 81,200 ug/L. Therefore, the original 1x analysis of 1,1,2,2-Tetrachloroethane and 1,1,1-Trichloroethane above the calibration range are "**J**" qualified as estimated values and trichloroethene is reported at the 2,000X dilution without qualification.

15.0 Additional Qualifications

Were additional qualifications applied?

No

16.0 Overall Data Assessment

The data are usable for its intended purpose based on an evaluation of the QC parameters discussed in this report. Some data are qualified as estimated due to the inability to meet all QC criteria. The table below summarizes the final qualifications for the analytical data.

Data Qualifier Summary:

SDG	Field ID	Analysis	Analyte	Qualifier	Reason Code
60186334	MW-86-201501	8260B	1,1,2,2-Tetrachloroethane	**J**	1
60186334	MW-86-201501	8260B	1,1,1-Trichloroethane	**J**	1

Data Validation Qualifier Codes:

U = Non-detect. The compound was analyzed for, but not detected.

J = Estimated. The associated numerical value is an estimated quantity. The analyte was detected but the reported value may not be accurate or precise.

UJ = Estimated Non-detect. The analyte was not detected above the method detection limit. However, it is an estimated quantity due to poor accuracy or precision. This qualification is also used to flag possible false negative results in the case where low bias in the analytical system is indicated by low calibration response, surrogate or other spike recovery.

R = Rejected. The sample results are unusable due to the quality of the data generated.

Data Qualifier Reason Codes:

1 Results exceeded the calibration range of the instrument and were ND at dilution.

Appendix D

Waste Manifest

American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

Non-Hazardous Waste Manifest

4/9/16

21

Generator

Generator's Name: Whirlpool Corp

Mailing Address: 6400 Tenny Lane Rd

El Dorado AR

City State Zip

Point of Generation Address: Same

City State Zip

Contact: Ken Duckworth

Name Phone

Manifest Job No. AUN 233 JFC02

Bill to Name: FES

Address: 1165 N. Peoria

Tulsa OK 74106

City State Zip

Contact: Ken Duckworth 918-832-8888

Name Phone

Common Name of Waste Material	Container No.	Container Type	Total Quantity	Unit
Purge Water	2	PT	500	G
Purge Water	5	DM	275	G

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Tammy Grace — Generator Authorized Agent Name

Signature

1-21-15 — Shipment Date

Transporter

Transporter Name: FES

Address: 1165 N. Peoria

City, State Zip: Tulsa, OK, 74106

Driver Name (Print): Rick Albertson

Tag No. 667907 State: OK

USDOT No. 875510

I hereby certify that the above material was picked up at the generator site listed above.

Driver Signature

1-21-15 — Ship Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature

Delivery Date

Destination

American Environmental Landfill, Inc.
212 N. 177th W Ave.
Sand Springs, OK 74063

Phone: (918) 245-7786
Fax: (918) 245-7774
Permit No: 3557021

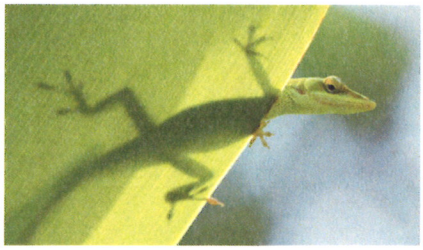
I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is accurate.

Mickiking — Name of Authorized Agent

Signature

1-22-15 — Receipt Date

White – Destination Retention • Yellow – Return to Bill to • Pink – Transporter Retain • Goldenrod – Generator Retain





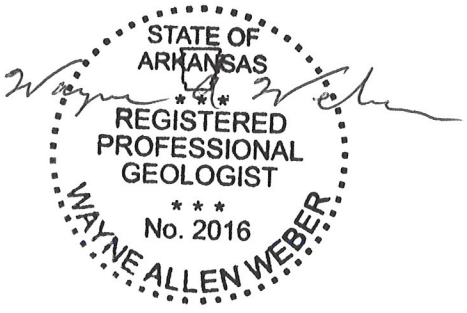
ATTACHMENT B
First Quarter 2015 Soil Vapor Monitoring and Vapor Intrusion Assessment Report
Whirlpool Corporation
Fort Smith, AR

Prepared for:
Whirlpool Corporation

Prepared by:
ENVIRON International Corporation

Date:
May 2015

Project Number:
34-37470A



ENVIRON

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1 Introduction

ENVIRON International Corporation (ENVIRON) has prepared this First Quarter 2015 Quarterly Soil Vapor Monitoring and Vapor Intrusion Assessment Report for the Fort Smith, Arkansas Site (Site) on behalf of Whirlpool Corporation, in accordance with the December 27, 2013, Remedial Action Decision Document (RADD) issued by the Arkansas Department of Environmental Quality (ADEQ).

Whirlpool has been monitoring groundwater at the Site since 1989. In 2012, the potential for vapor intrusion from groundwater into buildings in the neighborhood north of the Site was evaluated in a human health risk assessment, which was presented as Appendix A of the Revised Risk Management Plan (RRMP) (ENVIRON 2013). The risk assessment included the use of groundwater and soil vapor data as multiple lines of evidence in the evaluation of the potential for vapor intrusion. This report is Attachment B of the First Quarter 2015 Progress Report for the Site, and provides an updated evaluation of the potential for vapor intrusion based on the data collected in January 2015 from groundwater monitoring wells and vapor monitoring points, including those that were installed in January 2015.

2 Soil Vapor Monitoring Point Installation & Sample Collection

The following subsections summarize the installation and sampling of the soil vapor monitoring points during the January 2015 monitoring event, as well as the sample collection methods and procedures that were used.

2.1 Installation of Soil Vapor Monitoring Points in 2012 and 2014

In May 2012, Whirlpool installed two sets of soil vapor points. One set (locations SV-03S and SV-04D) was installed offsite at the Whirlpool property (1501 Jacobs Avenue) on Figure 1, and the other set (locations SV-01S and SV-02D) was installed onsite on the Whirlpool property, as shown on Figure 1. During subsequent monitoring events, both sets of soil vapor points eventually filled with water and became ineffective for sampling soil vapor.

Two additional sets of soil vapor points were installed in February 2014. Locations VP-1S/VP-1D and VP-2S/VP-2D were installed, as shown on Figure 1. These soil vapor points also filled with water over time and became ineffective for sampling soil vapor.

Before the vapor points filled with water, Whirlpool collected soil vapor data from these vapor points as an additional line of evidence to complement a vapor intrusion modeling analysis of the potential for vapor intrusion from groundwater. The soil vapor data and the vapor intrusion modeling results were presented in ENVIRON's Revised Risk Management Plan (RRMP) and ADEQ's Remedial Action Decision Document (RADD)[1]. Soil vapor sampling locations SV-01S and SV-02D were located near monitoring well MW-33, where the highest detected concentration of trichloroethylene (TCE) has been found at the north property boundary. Soil vapor sampling locations SV-03S and SV-04D were located near MW-71.

In using the soil vapor data, TCE concentrations in the shallow soil vapor collected 7 feet below ground surface (bgs) (i.e. collected from the shallower vapor point in each set of vapor points), were conservatively combined with the United States Environmental Protection Agency's (USEPA's) 95th percentile subslab soil gas attenuation factor of 0.03 (USEPA 2012a) to estimate the potential for significant vapor intrusion into indoor air. The results of the 2012 sampling indicated that the TCE concentrations in shallow soil gas would not result in unacceptable risk estimates for indoor air exposure. These risk estimates are believed to be more conservative than necessary, because they ignored attenuation in the approximately 7 feet of silty clay soil between the soil gas sample depth and subslab depth which is likely to be substantial (i.e. a factor of 10 or more) based on the observed attenuation between shallow and deep TCE soil vapor concentrations. Accounting for this attenuation would result in even lower risk estimates (ENVIRON 2013).

[1] Included in Appendix A of the April 2013 RRMP (ENVIRON 2013) and Section 3.A of the December 2013 Remedial Action Decision Document (ADEQ 2013).

The soil vapor data collected through 2014 over the groundwater plume[2] in the neighborhood have shown that TCE vapor from the groundwater is not indicative of a public health concern associated with vapor intrusion. These findings corroborate the vapor intrusion modeling results which indicate vapor intrusion is not occurring at levels that would present a public health concern.

2.2 First Quarter 2015 Abandonment of Historical Soil Vapor Points

While conducting additional investigation on December 18, 2014, onsite locations SV-03S and SV-04D were abandoned. The abandonment consisted of over-drilling the vapor points to a depth of 13 feet bgs, sealing the borehole with cement/bentonite grout to approximately 2 feet bgs, and then filling with top soil. All other soil vapor points (SV-01S, SV-02D, VP-1S/D, and VP-2S/D) were abandoned in January 2015. VP-1S/D were over-drilled to 12 feet bgs and sealed with cement/bentonite grout to approximately 2 feet bgs, and completed with top soil to the ground surface. Soil vapor points VP-2S/D were over-drilled to a depth of 13 feet bgs, and SV-01S/SV-02D were over-drilled to 15 feet bgs. These locations were similarly sealed and completed at ground surface with asphalt patches.

2.3 First Quarter 2015 Installation of New Soil Vapor Points

Per the ADEQ-approved Offsite Shallow Groundwater Investigation Work Plan (ENVIRON 2014d), Whirlpool installed co-located soil vapor monitoring points and shallow groundwater monitoring wells at five locations (identified as Parcels 1 through 5 on Figure 2). From January 14 through January 16, 2015, Whirlpool installed eight soil vapor monitoring points (VP-5 through VP-10, VP-12, and VP-14) at these Parcels. Whirlpool also attempted to install two additional vapor points (VP-11 on Parcel 4 and VP-13 on Parcel 5); however, installation was unsuccessful because of water in the borings. VP-11 and VP-13 were instead installed as MW-181 and MW-180, respectively.

At each new vapor point location, an 8 inch protective casing within a 12 inch borehole was initially installed and grouted in place at a depth immediately above the zone to be screened. Protective casing was installed at each location to attempt to preclude vapor points from filling with water. The grout was allowed to set for approximately 48 hours prior to drilling a 6 inch borehole inside the 8-inch casing and to the desired depth for the completion of the vapor point. Vapor points were constructed with a 6 inch stainless steel screen produced by Geoprobe. Teflon tubing was connected to the 6 inch screen. A 20/40 grade sand pack was installed in the well annulus, around the screen to approximately 0.25 feet above the top of the screen. This was followed by an annular seal consisting of bentonite chips 1 to 2 feet above the top of sand pack. Bentonite grout was placed in the annular space above the seal to ground surface. The soil vapor points were completed with flush-mount protectors set in concrete with bolted covers. Vapor point construction logs are provided in Appendix A. Locations of the new soil vapor points are presented in Figure 2.

[2] Included in: Table 4 of Appendix A in the April 2013 Revised Risk Management Plan (ENVIRON 2013); Attachment B of the First Quarter 2014 Progress Report (ENVIRON May 2014); Attachment B of the Second Quarter 2014 Progress Report (ENVIRON August 2014); Attachment B of the Third Quarter 2014 Progress Report (ENVIRON November 2014).

2.4 First Quarter 2015 Sampling

Soil vapor sampling was completed from January 16 through 21, 2015, following USEPA and industry standard methods.

The field procedures used during the soil vapor sampling event were consistent with the methodology described in the First Quarter 2014 Soil Vapor Monitoring/Vapor Intrusion Report (ENVIRON 2014a), and the modifications discussed in the Second Quarter Soil Vapor Monitoring/Vapor Intrusion Report (ENVIRON 2014b), except the sampling attempt was not preceded by at least five consecutive days with less than 0.1 inch of rain: 0.17 inches of rain were recorded on January 11, 2015, five days prior to the soil gas sample collected at VP-5. There were no other days in January prior to or during sampling with measured precipitation. Precipitation data for the month of January are provided in Appendix C.

Soil vapor samples were collected from VP-5, VP-7, VP-9 and VP-14. However, water filled the vapor points at locations VP-6, VP-8, VP-10 and VP-12, and the water could not be purged from the sampling train. Consistent with the modifications to the sampling plan proposed in the Second Quarter Soil Vapor Monitoring/Vapor Intrusion Report (ENVIRON 2014b), water samples were collected from these latter vapor points, except VP-8. At VP-8, the water volume available was insufficient for sampling despite using sustained vacuum for 20 minutes. Table 1 summarizes the matrices encountered at the soil vapor monitoring points and the types of samples that were collected in January 2015.

The volatile organic compound (VOC) results for the soil vapor samples collected from VP-5, VP-7, VP-9, and VP-14, and for the water samples collected from VP-6, VP-10, and VP-12 are discussed in Section 3. The analytical data reports for the samples are provided in Appendix B.

3 Results

Groundwater data from the First Quarter 2015 monitoring event from groundwater monitoring wells (which have identifiers beginning with "MW-") in the neighborhood (Figure 3) are summarized in Table 2. Groundwater data from MW-33, which is located south of the neighborhood, is also summarized on Table 2 because it is near VP-14 and where the highest detected concentration of TCE has been found at the property boundary. Water data and soil vapor data from soil vapor points sampled during the First Quarter 2015 monitoring event are included in Tables 3a and 3b, respectively. As discussed in Attachment A of this progress report, the concentration of TCE in groundwater under the neighborhood, including at MW-71 (Parcel 4) and MW-33 (Parcel 5), has been stable or decreasing since May 2012.

The maximum detected groundwater concentrations among the monitoring wells in the neighborhood that were sampled in January 2015 are summarized in Table 4. These concentrations were used to calculate upper-bound risk estimates for potential vapor intrusion from groundwater into residences in the neighborhood, using the approach in Section 6.5.2 of the ADEQ-approved RRMP. The calculation of and input parameters for these risk estimates are included as Appendix D. As shown in Table 4, these calculations resulted in upper-bound cumulative cancer risk and non-cancer hazard index (HI) estimates of 3×10^{-6} and 0.6, respectively. These risk estimates are below ADEQ's risk management limits of 10^{-5} and 1, respectively.

As described in Section 2.3, new soil vapor monitoring points and groundwater monitoring wells were installed at five Parcels to provide additional lines of evidence to evaluate the potential for vapor intrusion from groundwater. At each Parcel where soil vapor data could be collected, the soil vapor data were used to check the conclusions based on the groundwater vapor intrusion risk estimates, consistent with the approach used in prior Quarterly Soil Vapor Monitoring/Vapor Intrusion Reports (ENVIRON 2014a,b,e, 2015) and as discussed in Section 6.8.2 of the RRMP (ENVIRON 2013).

The following sections describe the evaluation of groundwater and soil vapor data from each of the five Parcels.

3.1 Parcel 1

At Parcel 1, groundwater vapor intrusion risks were calculated using the water data from VP-6, using the approach for groundwater (as described in Section 6.5.2 of the ADEQ-approved RRMP) except the depth to water was increased to 14 feet bgs to match the depth of the water sample at VP-6. As shown on Table 5, the cumulative cancer risk and non-cancer HI estimates from water at VP-6 are 2×10^{-8} and 0.003, respectively, which are well within ADEQ's risk management limits.

Risk estimates were also calculated using the soil vapor data from VP-5, which is located adjacent to VP-6, as an additional line of evidence for assessing the degree of vapor intrusion from groundwater. These risk estimates were calculated using USEPA's highly conservative 95th percentile subslab soil vapor attenuation factor of 0.03 (USEPA 2012). As shown in Table

5, these cumulative cancer risk and non-cancer HI estimates from soil vapor at VP-5 are 1×10^{-6} and 0.01, respectively, which are slightly higher than those based on the water data from VP-6. These slightly higher risk estimates should not be interpreted as an indication that the risk estimates from the water data are not adequately conservative. Rather, the interpretation should be that the risk estimate based on the soil vapor data are likely more conservative than necessary. As discussed in Section 6.8.2 of the RRMP, these risk estimates ignore the attenuation due to the approximately 7 feet of silty clay between the soil vapor sample depth and the subslab depth, which is likely to be substantial (i.e. a factor of 10 or more) based on the observed attenuation between shallow and deep TCE soil vapor concentrations at other soil vapor monitoring points. Accounting for such attenuation would result in risk estimates for VP-5 that are lower than those shown in Table 5.

3.2 Parcel 2

At Parcel 2, groundwater vapor intrusion risks were calculated using the groundwater data from MW-175 and the approach discussed above for groundwater, except the depth to water was increased to 14.5 feet bgs. As shown in Table 5, the cumulative cancer risk and non-cancer HI estimates from groundwater at MW-175 are 4×10^{-7} and 0.09, respectively, which are well within ADEQ's risk management limits.

Risk estimates were also calculated using the soil vapor data from VP-7, which is located adjacent to MW-175, as an additional line of evidence for assessing the degree of vapor intrusion from groundwater. These risk estimates were calculated following the approach discussed above for soil vapor at Parcel 1. As shown in Table 5, the cumulative cancer risk and non-cancer HI estimates from soil vapor at VP-7 are 5×10^{-7} and 0.04, respectively, which are well within ADEQ's risk management limits and confirm that vapor intrusion from groundwater does not pose unacceptable risks at Parcel 2. As discussed in Section 3.1, these soil vapor risk estimates are more conservative than necessary because they ignore the attenuation due to the approximately 5 feet of silty clay between the soil gas sample and the subslab.

3.3 Parcel 3

At Parcel 3, groundwater vapor intrusion risks were calculated using the groundwater data from MW-176 and the approach discussed above for groundwater, except the depth to water was increased to 14 feet bgs. As shown in Table 5, the cumulative cancer risk and non-cancer HI estimates from groundwater at MW-176 are 3×10^{-6} and 0.5, respectively, which are well within ADEQ's risk management limits.

Risk estimates were also calculated using the soil vapor data from VP-9, which is located adjacent to MW-176, as an additional line of evidence for assessing the degree of vapor intrusion from groundwater. These risk estimates were calculated following the approach discussed above for soil vapor at Parcel 1. As shown in Table 5, the cumulative cancer risk and non-cancer HI estimates from soil vapor at VP-9 are 4×10^{-6} and 0.5, respectively, which are well within ADEQ's risk management limits and confirm that vapor intrusion from groundwater does not pose unacceptable risks at Parcel 3. As discussed in Section 3.1, these soil vapor risk

estimates are more conservative than necessary because they ignore the attenuation due to the approximately 5 feet of silty clay between the soil gas sample and the subslab.

3.4 Parcel 4

At Parcel 4, groundwater vapor intrusion risks were calculated conservatively using the groundwater data from MW-71, which had the highest concentrations in groundwater from monitoring wells at this parcel, and the approach discussed above for groundwater. As shown in Table 5, the cumulative cancer risk and non-cancer HI estimates from groundwater at MW-71 are 6×10^{-7} and 0.1, respectively, which are well within ADEQ's risk management limits.

Risk estimates were also calculated using the shallow groundwater data from MW-177, which is located adjacent to MW-71, as an additional line of evidence for assessing the degree of vapor intrusion from groundwater. Only groundwater data were evaluated at this parcel because a soil vapor sample could not be collected from the vapor monitoring point (VP-12) at Parcel 4. Vapor intrusion risks were calculated using the groundwater from MW-177, and the approach discussed above for groundwater, except the depth to water was decreased to 9.5 feet bgs. As shown in Table 5, the cumulative cancer risk and non-cancer HI estimates from groundwater at MW-177 are 8×10^{-9} and 0.00002, respectively, which are well within ADEQ's risk management limits and confirm that vapor intrusion from groundwater does not pose unacceptable risks at Parcel 4. Further, TCE was non-detect in groundwater from MW-177, which is primary reason the risk estimates for groundwater from MW-177 are almost two orders of magnitude lower than those for groundwater from MW-71.

3.5 Parcel 5

Risk estimates for potential vapor intrusion from groundwater in residential buildings were conservatively calculated based on the data collected at Parcel 5, which is located south of Ingersoll Avenue and the residential neighborhood. Groundwater vapor intrusion risks were conservatively calculated using the groundwater data from MW-33, which is adjacent to VP-14 at this Parcel, and the approach discussed above for groundwater. As shown in Table 6, the cumulative cancer risk and non-cancer HI estimates from groundwater at MW-33 are 4×10^{-6} and 0.8, respectively, which are well within below ADEQ's risk management limits.

Risk estimates were also calculated using shallow groundwater data from MW-180 and MW-178 (which are located within 40 feet of MW-33), and the approach discussed above for groundwater, except the depth to groundwater was reduced to 6.5 feet bgs and 7.5 feet bgs, respectively. Shallow groundwater data was evaluated at this parcel because a shallow soil vapor monitoring point (VP-13) could not be installed due to the presence of shallow water, as discussed in Section 2.3, at Parcel 5. As shown in Table 6, the cumulative cancer risk and non-cancer HI estimates from groundwater at MW-180 are 9×10^{-8} and 0.02, respectively, and at MW-178 are 2×10^{-8} and 0.004, respectively, all of which are well within ADEQ's risk management limits. These risk estimates show that vapor intrusion from groundwater would not pose an unacceptable risk if there was a residence at Parcel 5.

Risk estimates were not calculated based on the soil vapor data at VP-14, because VP-14 is screened at a depth of 10.5 feet bgs, which is deeper than the shallow groundwater at MW-178 and MW-180. As such, an assessment of vapor intrusion potential at Parcel 5 should be based on the shallow water data from MW-178 and MW-180 which would be closer to the foundation of a future building on this Parcel.

The calculation of single-chemical risk estimates is included in Appendix D.

4 Summary and Conclusion

- The concentrations of TCE in groundwater are stable or decreasing compared to previous reporting periods and historic results;
- Risk estimates for vapor intrusion from groundwater in the neighborhood are below ADEQ's risk management limits of 10^{-5} and 1 for cumulative cancer risk and non-cancer hazards, respectively; and
- Vapor intrusion modeling using shallow water and soil gas confirms the modeling results using VOC concentrations in water collected from groundwater monitoring wells.

5 References

ADEQ. RADD for Corrective Action. Facility Identification Number: 66-00048. December 27.

ENVIRON. 2013. Revised Risk Management Plan. April 24.

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ENVIRON. 2014b. Second Quarter 2014 Progress Report, Attachment B: Soil Vapor Monitoring/Vapor Intrusion Report. August 15.

ENVIRON. 2014c. Addendum to the Soil Vapor Monitoring Plan. October 2.

ENVIRON. 2014d. Offsite Shallow Groundwater Investigation Work Plan. October.

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Tables

TABLE 1
SUMMARY OF MATRICES ENCOUNTERED AND SAMPLED AT SOIL VAPOR MONITORING POINTS
Whirlpool Facility - Fort Smith, Arkansas

Quarter of Collection	Date of Collection	In Neighborhood								South of Neighborhood	
		Parcel 1		Parcel 2		Parcel 3		Parcel 4		Parcel 5	
		VP-5	VP-6	VP-7	VP-8	VP-9	VP-10	VP-1S	VP-1D / VP-12	VP-2S	VP-2D / VP-14
1st Q 2015	1/2015	**Air**	**Water**	**Air**	*Water*	**Air**	**Water**	--	**Water**	--	**Air**
4th Q 2014	10/2014	--	--	--	--	--	--	**Water**	*Air*	**Water**	**Water**
3rd Q 2014	9/2014	--	--	--	--	--	--	**Water**	*Air**	**Water**	**Water**
3rd Q 2014	7/2014	--	--	--	--	--	--	*Water*	*Water*	**Water**	**Water**
2nd Q 2014	5/2014	--	--	--	--	--	--	Water	**Air**	Water	Water
1st Q 2014	3/2014	--	--	--	--	--	--	**Air**	**Air**	Water	**Air**

Notes:
* During the September 2014 sampling event, no air or water sample could be collected at VP-1D; a water sample was collected at the nearby port SV-04D to characterize VOC concentrations in the area.
Shaded and **bolded** cells indicate that a sample was collected.
Italicized cells indicate that insufficient volume was available for sample collection.
Dashes (indicate) indicate the location was not installed or was abandoned during this sampling event.
Prior to the Third Quarter 2014, water encountered in the soil vapor monitoring points was not sampled per the quarterly sampling plan.
During the First Quarter 2015, locations VP-1D and VP-2D were replaced by VP-12 and VP-14, respectively.
During the First Quarter 2015, installation of VP-11 and VP-13 was attempted in Parcels 4 and 5, respectively; however, because of water in borings, VP-11 and VP-13 were instead installed as monitoring wells MW-181 and MW-180, respectively.

TABLE 2a
FIRST QUARTER 2015 GROUNDWATER VOC DATA FOR MONITORING WELLS IN THE NEIGHBORHOOD
Whirlpool Facility - Fort Smith, Arkansas

Location	MW-34	MW-35R	MW-36	MW-39	MW-40	MW-41	MW-46R	MW-46R
ENVIRON Sample ID	MW-34-201501	MW-35R-201501	MW-36-201501	MW-39-201501	MW-40-201501	MW-41-201501	MW-46R-201501	DUP-03-201501
Lab Sample ID	60186097035	60186097003	60186000007	60186000009	60186000006	60186183018	60186097011	60186097012
Sample Date	01/13/2015	01/13/2015	01/12/2015	01/12/2015	01/12/2015	01/14/2015	01/13/2015	01/13/2015
Volatile Organic Compounds								
Acetone	42.7 (5.0)	56.6 (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Bromoform	2.2 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	18.1 (2.5)	40.0 (2.5)	16.4 (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Chloroform	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	7.4 (0.50)	46.2 (0.50)	1.2 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.3 (0.50)	1.3 (0.50)	1.3 (0.50)
cis-1,2-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	15.6 (0.50)	11.6 (0.50)	12.0 (0.50)
trans-1,2-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Methylene Chloride	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.90 J (0.50)	0.88 J (0.50)
Trichloroethene	22.0 (0.50)	10.9 (0.50)	U (0.50)	U (0.50)	U (0.50)	425 (5.0)	452 (5.0)	428 (2.5)
Vinyl Chloride	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.71 J (0.50)	0.90 J (0.50)

Notes:

1 All concentrations are presented in µg/L (parts per billion).

2 Only compounds with at least one detection are shown.

3 Well MW-173 is dry and was not sampled.

U = Not detected
NA = Not Applicable
NS = Not Sampled/Dry
J = Estimated concentration
( ) = Detection limit
µg/L = Micrograms per liter

TABLE 2a
FIRST QUARTER 2015 GROUNDWATER VOC DATA FOR MONITORING WELLS IN THE NEIGHBORHOOD
Whirlpool Facility - Fort Smith, Arkansas

Location	MW-50	MW-56	MW-57	MW-58	MW-60	MW-61	MW-62	MW-63
ENVIRON Sample ID	MW-50-201501	MW-56-201501	MW-57-201501	MW-58-201501	MW-60-201501	MW-61-201501	MW-62-201501	MW-63-201501
Lab Sample ID	60186097018	60186097033	60186097001	60186183024	60186097019	60186097017	60186097007	60186097021
Sample Date	01/13/2015	01/13/2015	01/13/2015	01/14/2015	01/13/2015	01/13/2015	01/13/2015	01/13/2015
Volatile Organic Compounds								
Acetone	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Bromoform	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Chloroform	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	U (0.50)	0.79 J (0.50)	0.77 J (0.50)	2.0 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	U (0.50)	10 (0.50)	5.4 (0.50)	14.7 (0.50)	U (0.50)	U (0.50)	U (0.50)	1.0 (0.50)
trans-1,2-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Methylene Chloride	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	U (0.50)	326 (2.5)	177 (0.50)	385 (2.5)	U (0.50)	10.2 (0.50)	U (0.50)	8.2 (0.50)
Vinyl Chloride	U (0.50)	U (0.50)	U (0.50)	0.71 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)

Notes:

1 All concentrations are presented in µg/L (parts per billion).

2 Only compounds with at least one detection are shown.

3 Well MW-173 is dry and was not sampled.

U = Not detected
NA = Not Applicable
NS = Not Sampled/Dry
J = Estimated concentration
( ) = Detection limit
µg/L = Micrograms per liter

TABLE 2a
FIRST QUARTER 2015 GROUNDWATER VOC DATA FOR MONITORING WELLS IN THE NEIGHBORHOOD
Whirlpool Facility - Fort Smith, Arkansas

Location	MW-65	MW-66	MW-67	MW-68	MW-71	MW-81	MW-82	MW-96
ENVIRON Sample ID	MW-65-201501	MW-66-201501	MW-67-201501	MW-68-201501	MW-71-201501	MW-81-201501	MW-82-201501	MW-96-201501
Lab Sample ID	60186097004	60186183005	60186000002	60186000003	60186183023	60186097020	60186097016	60186371003
Sample Date	01/13/2015	01/14/2015	01/12/2015	01/12/2015	01/14/2015	01/13/2015	01/13/2015	01/15/2015
Volatile Organic Compounds								
Acetone	38.7 (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	110 (5.0)	88.0 (5.0)	U (5.0)
Bromoform	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	11.2 (0.50)	4.0 (0.50)	U (0.50)
Bromomethane	3.0 J (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	38.2 (2.5)	9.7 (2.5)	U (2.5)
2-Butanone	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Chloroform	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	3.5 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.4 (0.50)	1.0 (0.50)	U (0.50)
1,1-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.4 (0.50)	0.94 J (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	6.0 (0.50)	9.9 (0.50)	1.2 (0.50)	U (0.50)
trans-1,2-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Methylene Chloride	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	19.2 (0.50)	2.4 (0.50)	1.3 (0.50)	U (0.50)	170 (0.50)	385 (2.5)	66.0 (0.50)	0.59 J (0.50)
Vinyl Chloride	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)

Notes:

1 All concentrations are presented in µg/L (parts per billion).

2 Only compounds with at least one detection are shown.

3 Well MW-173 is dry and was not sampled.

U = Not detected
NA = Not Applicable
NS = Not Sampled/Dry
J = Estimated concentration
( ) = Detection limit
µg/L = Micrograms per liter

TABLE 2a
FIRST QUARTER 2015 GROUNDWATER VOC DATA FOR MONITORING WELLS IN THE NEIGHBORHOOD
Whirlpool Facility - Fort Smith, Arkansas

Location	MW-97	MW-98	MW-99	MW-173	MW-174	MW-175	MW-176
ENVIRON Sample ID	MW-97-201501	MW-98-201501	MW-99-201501	NA	MW-174-GW-20150120	MW-175-GW-20150120	MW-176-GW-20150120
Lab Sample ID	60186371004	60186371002	60186371005	NA	60186563001	60186566001	60186564001
Sample Date	01/15/2015	01/15/2015	01/15/2015	NA	01/20/2015	01/20/2015	01/20/2015
Volatile Organic Compounds							
Acetone	U (5.0)	U (5.0)	U (5.0)	NS	51.1 (5.0)	16.1 (5.0)	U (5.0)
Bromoform	U (0.50)	U (0.50)	U (0.50)	NS	U (0.50)	U (0.50)	U (0.50)
Bromomethane	U (2.5)	U (2.5)	U (2.5)	NS	U (2.5)	U (2.5)	U (2.5)
2-Butanone	U (5.0)	U (5.0)	U (5.0)	NS	11.3 (5.0)	U (5.0)	U (5.0)
Chloroform	U (0.50)	U (0.50)	U (0.50)	NS	U (0.50)	U (0.50)	U (0.50)
Chloromethane	U (0.50)	U (0.50)	U (0.50)	NS	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	NS	U (0.50)	U (0.50)	2.6 (0.50)
cis-1,2-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	NS	U (0.50)	2.0 (0.50)	16.8 (0.50)
trans-1,2-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	NS	U (0.50)	U (0.50)	U (0.50)
Methylene Chloride	U (0.50)	U (0.50)	U (0.50)	NS	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	U (0.50)	U (0.50)	U (0.50)	NS	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	U (0.50)	U (0.50)	U (0.50)	NS	U (0.50)	123 (0.50)	720 (5.0)
Vinyl Chloride	U (0.50)	U (0.50)	U (0.50)	NS	U (0.50)	U (0.50)	0.57 J (0.50)

Notes:

1 All concentrations are presented in µg/L (parts per billion).

2 Only compounds with at least one detection are shown.

3 Well MW-173 is dry and was not sampled.

U = Not detected
NA = Not Applicable
NS = Not Sampled/Dry
J = Estimated concentration
( ) = Detection limit
µg/L = Micrograms per liter

TABLE 2a
FIRST QUARTER 2015 GROUNDWATER VOC DATA FOR MONITORING WELLS IN THE NEIGHBORHOOD
Whirlpool Facility - Fort Smith, Arkansas

Location	MW-177	MW-181
ENVIRON Sample ID	MW-177-GW-20150121	MW-181-GW-20150121
Lab Sample ID	60186643002	60186643001
Sample Date	1/21/2015	01/21/2015
Volatile Organic Compounds		
Acetone	6.0 J (5.0)	U (5.0)
Bromoform	U (0.50)	U (0.50)
Bromomethane	U (2.5)	U (2.5)
2-Butanone	U (5.0)	U (5.0)
Chloroform	0.67 J (0.50)	U (0.50)
Chloromethane	U (0.50)	U (0.50)
1,1-Dichloroethene	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	U (0.50)	U (0.50)
trans-1,2-Dichloroethene	U (0.50)	U (0.50)
Methylene Chloride	U (0.50)	U (0.50)
Tetrachloroethene	U (0.50)	U (0.50)
Trichloroethene	U (0.50)	U (0.50)
Vinyl Chloride	U (0.50)	U (0.50)

Notes:

1 All concentrations are presented in µg/L (parts per billion).

2 Only compounds with at least one detection are shown.

3 Well MW-173 is dry and was not sampled.

U = Not detected
NA = Not Applicable
NS = Not Sampled/Dry
J = Estimated concentration
( ) = Detection limit
µg/L = Micrograms per liter

TABLE 2b
FIRST QUARTER 2015 GROUNDWATER VOC DATA FOR MONITORING WELLS SOUTH OF THE NEIGHBORHOOD
Whirlpool Facility - Fort Smith, Arkansas

Location	MW-33	MW-178	MW-179	MW-180
Area	South of Neighborhood	South of Neighborhood	South of Neighborhood	South of Neighborhood
ENVIRON Sample ID	MW-33R-GW-20150118	MW-178-GW-20150118	NA	MW-180-GW-20150119
Lab Sample ID	60186478001	60186465002	NA	60186465001
Sample Date	01/18/2015	1/18/2015	NA	01/19/2015
Volatile Organic Compounds				
Acetone	U (5.0)	9.5 J (5.0)	NS	U (5.0)
Bromoform	1.0 (0.50)	U (0.50)	NS	U (0.50)
Bromomethane	U (2.5)	U (2.5)	NS	U (2.5)
2-Butanone	U (5.0)	U (5.0)	NS	U (5.0)
Chloroform	0.99 J (0.50)	U (0.50)	NS	U (0.50)
Chloromethane	0.70 J (0.50)	U (0.50)	NS	U (0.50)
1,1-Dichloroethene	0.67 J (0.50)	U (0.50)	NS	U (0.50)
cis-1,2-Dichloroethene	9.9 (0.50)	0.99 J (0.50)	NS	3.4 (0.50)
trans-1,2-Dichloroethene	0.83 J (0.50)	U (0.50)	NS	0.57 J (0.50)
Methylene Chloride	0.64 J (0.50)	U (0.50)	NS	U (0.50)
Tetrachloroethene	U (0.50)	U (0.50)	NS	U (0.50)
Trichloroethene	799 (2.5)	5.2 (0.50)	NS	23.7 (0.50)
Vinyl Chloride	U (0.50)	U (0.50)	NS	U (0.50)

Notes:

1 All concentrations are presented in µg/L (parts per billion)

2 Only compounds with at least one detection are shown

3 Well MW-179 is dry and was not sampled.

U = Not detected
NA = Not Applicable
NS = Not Sampled/Dry
J = Estimated concentration
( ) = Detection limit
µg/L = Micrograms per liter

TABLE 3a
FIRST QUARTER 2015 WATER DATA FROM SOIL VAPOR MONITORING POINTS
Whirlpool Facility - Fort Smith, Arkansas

Parcel	1	3	4
Location	VP-6	VP-10	VP-12
ENVIRON Sample ID	VP-06-GW-20150120	VP-10-GW-20150120	VP-12-GW-20150121
Lab Sample ID	60186563002	60186564002	60186643003
Collection Depth (ft bgs)	14	11	12.5
Sample Date	01/20/2015	01/20/2015	01/21/2015
Volatile Organic Compounds			
Acetone	5.7 J (5.0)	5.8 J (5.0)	U (5.0)
1,1-Dichloroethene	U (0.50)	2.8 (0.50)	U (0.50)
cis-1,2-Dichloroethene	U (0.50)	18.8 (0.50)	U (0.50)
trans-1,2-Dichloroethene	U (0.50)	0.51 J (0.50)	U (0.50)
Trichloroethene	4.3 (0.50)	636 (5.0)	U (0.50)
Vinyl Chloride	U (0.50)	0.61 J (0.50)	U (0.50)

Notes:

1 All concentrations are presented in µg/L (parts per billion)
2 Only compounds with at least one detection are shown
U = Not detected
J = Estimated concentration
( ) = Method detection limit
µg/L = Micrograms per liter
ft bgs = Feet below ground surface

ENVIRON

TABLE 3b
FIRST QUARTER 2015 SOIL VAPOR DATA
Whirlpool Facility - Fort Smith, Arkansas

Parcel	1	2	3	5
Location	VP-5	VP-7	VP-9	VP-14
ENVIRON Sample ID	VP-05-201501	VP-7-201501	VP-9-201501	VP-14-201501
Lab Sample ID	P1500238-001	P1500228-001	P1500223-001	P1500210-001
Collection Depth (ft bgs)	7.5	5.5	5.5	10.5
Sample Date	01/16/2015	01/19/2015	01/19/2015	01/18/2015
Volatile Organic Compounds				
1,1-Dichloroethane	U (0.0091)	U (0.011)	0.36 (0.011)	U (0.012)
1,2-Dichloroethane	0.20 (0.0092)	0.20 (0.011)	2.3 (0.011)	0.28 (0.012)
1,1-Dichloroethene	0.85 (0.0088)	0.42 (0.011)	1.7 (0.010)	48 D (0.11)
cis-1,2-Dichloroethene	0.084 (0.0082)	0.25 (0.010)	0.14 (0.0096)	27 (0.010)
trans-1,2-Dichloroethene	0.15 (0.0086)	U (0.011)	0.14 (0.010)	4.6 (0.011)
Tetrachloroethene	0.79 (0.0099)	0.44 (0.012)	0.29 (0.012)	0.31 (0.013)
1,1,1-Trichloroethane	U (0.0076)	U (0.0094)	0.045 (0.0090)	0.076 (0.0097)
Trichloroethene	0.84 (0.0096)	2.8 (0.012)	31 (0.011)	350 D (0.12)
Vinyl Chloride	4.6 (0.0091)	1.5 (0.011)	4.1 (0.011)	4.2 (0.012)

Notes:

1 All concentrations are presented in $\mu g/m^3$

2 Only compounds with at least one detection are shown.

U = Not detected

D = Reported result is from a dilution

( ) = Method detection limit

$\mu g/m^3$ = Micrograms per cubic meter

ft bgs = Feet below ground surface

ENVIRON

TABLE 4
UPPER-BOUND VAPOR INTRUSION RISK ESTIMATES BASED ON FIRST QUARTER 2015 GROUNDWATER DATA IN THE NEIGHBORHOOD
Whirlpool Facility - Fort Smith, Arkansas

Chem Group	Chemical	CASRN	Maximum Detected Concentration in Groundwater in Neighborhood (mg/L)	Location of Maximum Detected Concentration in Groundwater in Neighborhood	Residential VI	
					Risk	HQ
VOC	Acetone	67-64-1	1.10E-01	MW-81		7.2E-07
VOC	Bromoform	75-25-2	1.12E-02	MW-81	1.2E-09	
VOC	Bromomethane	74-83-9	4.00E-02	MW-35R		1.2E-02
VOC	2-Butanone	78-93-3	1.13E-02	MW-174		4.4E-07
VOC	Chloromethane	74-87-3	4.62E-02	MW-35R		8.0E-04
VOC	1,1-Dichloroethene	75-35-4	2.60E-03	MW-176		3.4E-05
VOC	cis-1,2-Dichloroethene	156-59-2	1.68E-02	MW-176		
VOC	trans-1,2-Dichloroethene	156-60-5	5.70E-04	MW-180		
VOC	Tetrachloroethene	127-18-4	9.00E-04	MW-46R	1.7E-10	3.8E-05
VOC	Trichloroethene	79-01-6	7.20E-01	MW-176	2.7E-06	5.5E-01
VOC	Vinyl Chloride	75-01-4	9.00E-04	MW-46R	1.8E-08	2.8E-05
Cumulative Risk and HI:					3E-06	6E-01

Notes:
Only volatile organic compounds (VOCs) detected in monitoring wells in the neighborhood are shown
Detected concentrations are from samples collected from groundwater monitoring wells in the First Quarter of 2015
Risks were calculated using the model derived by Johnson & Ettinger (1991) as discussed in Section 3.3.1 of the April 2013 Revised Risk Management Plan
mg/L = Milligrams per liter

ENVIRON

TABLE 5
EVALUATION OF VOCs IN SOIL GAS AND WATER AT PARCELS IN THE NEIGHBORHOOD
Whirlpool Facility - Fort Smith, Arkansas

Chem Group	Chemical	CASRN	Parcel 1				Parcel 2				Parcel 3				Parcel 4			
			7.5 ft bgs		14 ft bgs		5.5 ft bgs		14.5 ft bgs		5.5 ft bgs		14 ft bgs		9.5 ft bgs		12 ft bgs	
			VP-5		VP-6		VP-7		MW-175		VP-9		MW-176		MW-177		MW-71	
			Soil Gas		Water		Soil Gas		Groundwater		Soil Gas		Groundwater		Shallow Groundwater		Groundwater	
			Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ
VOC	Acetone	67-64-1				3.3E-08				8.9E-08						5.0E-08		
VOC	Chloroform	67-66-3													8.3E-09	1.7E-05		
VOC	1,1-Dichloroethane	75-34-3										2.1E-05						
VOC	1,2-Dichloroethane	107-06-2	6.4E-08	8.2E-04			6.4E-08	8.2E-04			7.4E-07	9.5E-03						
VOC	1,1-Dichloroethene	75-35-4		1.2E-04				6.0E-05				2.4E-04		3.3E-05				1.8E-05
VOC	Tetrachloroethene	127-18-4	2.5E-09	5.7E-04			1.4E-09	3.2E-04			9.3E-10	2.1E-04						
VOC	1,1,1-Trichloroethane	71-55-6										2.6E-07						
VOC	Trichloroethene	79-01-6	5.8E-08	1.2E-02	1.6E-08	3.3E-03	1.9E-07	4.0E-02	4.5E-07	9.3E-02	2.2E-06	4.5E-01	2.6E-06	5.5E-01			6.3E-07	1.3E-01
VOC	Vinyl Chloride	75-01-4	8.6E-07	1.3E-03			2.8E-07	4.3E-04			7.6E-07	1.2E-03	1.2E-08	1.8E-05				
	Cumulative Risk and HI:		1E-06	1E-02	2E-08	3E-03	5E-07	4E-02	4E-07	9E-02	4E-06	5E-01	3E-06	5E-01	8E-09	2E-05	6E-07	1E-01

Notes:
Only volatile organic compounds (VOCs) detected in the First Quarter 2015 samples at locations listed on the table are shown.
Risk and HQ estimates were not calculated for detected chemicals with inadequate toxicity or physical/chemical parameters or where chemical concentrations were non-detect.
Risks based on soil vapor data were calculated using USEPA's default attenuation factor for subslab gas to indoor air of 0.03, as discussed in Section 6.8.2 of the April 2013 Revised Risk Management Plan.
Risks based on concentrations measured in groundwater were calculated using the model derived by Johnson & Ettinger (1991), as discussed in Section 3.3.1 of the April 2013 Revised Risk Management Plan.
Risks based on concentrations measured in water from the soil vapor ports or shallow groundwater were calculated using the same approach used for groundwater, except the depth was assumed to be the depth of the port or the depth of the screen, respectively, as discussed in Section 3 of the First Quarter 2015 Vapor Intrusion Report.
Cumulative cancer risk and HI estimates were below Arkansas Department of Environmental Quality (ADEQ)'s risk limits (1E-5 and 1, respectively).
ft bgs = Feet below ground surface

TABLE 6
EVALUATION OF VOCs IN SOIL GAS AMD WATER AT PARCEL 5 (South of Neighborhood)
Whirlpool Facility - Fort Smith, Arkansas

Chem Group	Chemical	CASRN	South of Neighborhood					
			Parcel 5					
			6.5 ft bgs		7.5 ft bgs		12 ft bgs	
			MW-180		MW-178		MW-33	
			Shallow Groundwater		Shallow Groundwater		Groundwater	
			Risk	HQ	Risk	HQ	Risk	HQ
VOC	Acetone	67-64-1				1.0E-07		
VOC	1,1-Dichloroethene	75-35-4						1.1E-05
VOC	Trichloroethene	79-01-6	9.3E-08	1.9E-02	2.0E-08	4.1E-03	4.0E-06	8.3E-01
	Cumulative Risk and HI:		9E-08	2E-02	2E-08	4E-03	4E-06	8E-01

Notes:

Only VOCs detected in the First Quarter 2015 samples at locations listed on the table are shown.

Risk and HQ estimates were not calculated for detected chemicals with inadequate toxicity or physical/chemical parameters or where chemical concentrations were non-detect.

Risks based on concentrations measured in groundwater were calculated using the model derived by Johnson & Ettinger (1991), as discussed in Section 3.3.1 of the April 2013 Revised Risk Management Plan.

groundwater, except the depth was assumed to be the depth of the screen, as discussed in Section 3 of the First Quarter 2015 Vapor Intrusion Report.

Cumulative cancer risk and HI estimates were below Arkansas Department of Environmental Quality (ADEQ)'s risk limits (1E-5 and 1, respectively).

ft bgs = Feet below ground surface

ENVIRON

Figures



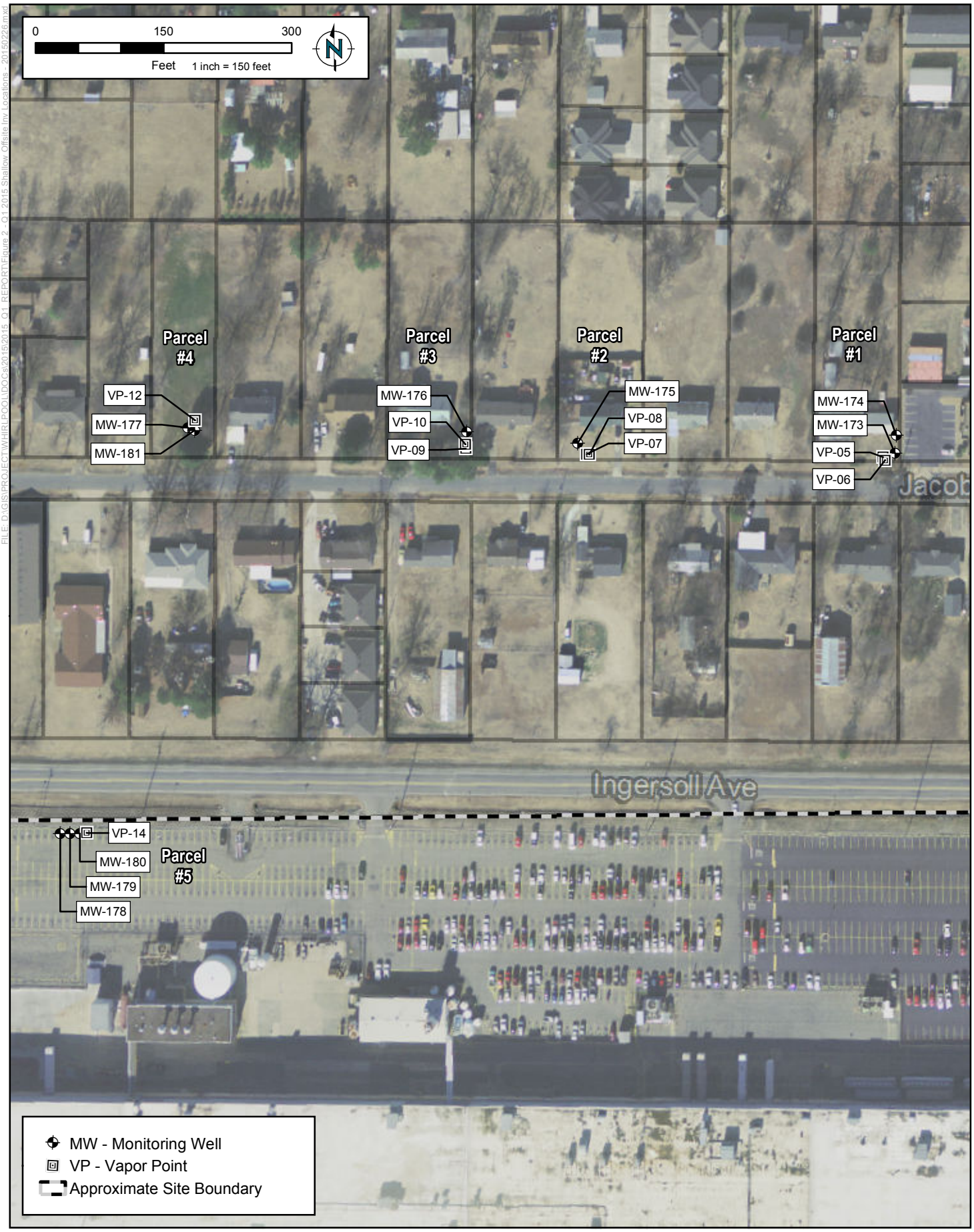
ENVIRON

HISTORIC VAPOR MONITORING POINT LOCATIONS ABANDONED IN 2015

Whirlpool Facility - Fort Smith, Arkansas

Figure 1

DRAFTED BY: KTS | DATE: 12/04/2014 | PROJECT: 3433253A



FILE: D:\GIS\PROJECT\WHIRLPOOL\DOCS\2015\2015_Q1_REPORT\Figure 2 - Q1 2015 Shallow Offsite Inv Locations - 20150226.mxd

ENVIRON

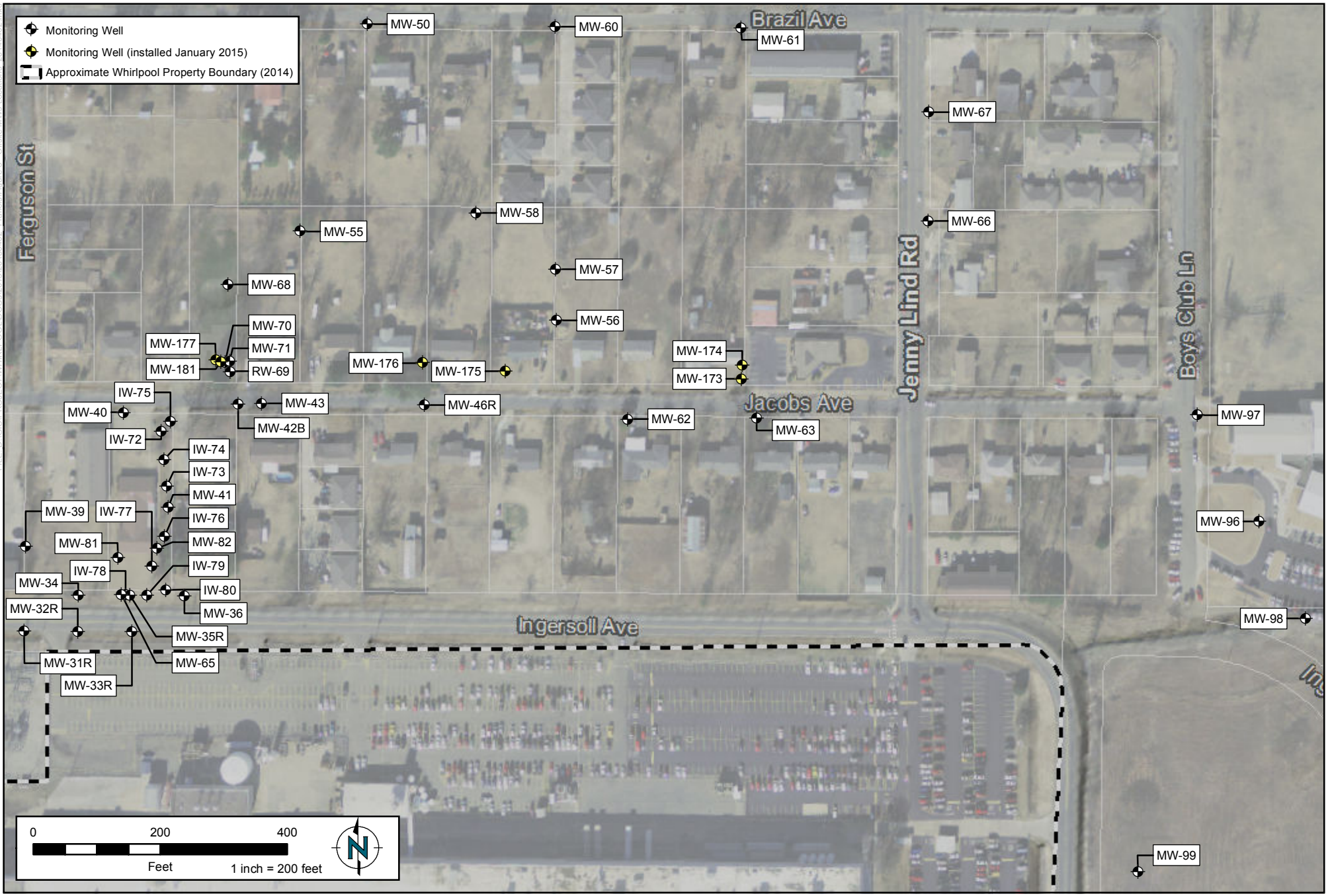
DRAFTED BY: KTS | DATE: 03/06/2015

SHALLOW MONITORING WELL AND VAPOR POINT LOCATIONS INSTALLED IN 2015

Whirlpool Facility - Fort Smith, Arkansas

Figure 2

PROJECT: 3436269



ENVIRON

DRAFTED BY: KTS | DATE: 04/02/2015

OFFSITE MONITORING WELL LOCATIONS

Whirlpool Facility - Fort Smith, Arkansas

Figure 3

PROJECT: 3437470A

Appendix A

Soil Vapor Point Logs

Appendix A: Correlation Between Soil Boring Logs and Monitoring Points Installed in the First Quarter 2015 Whirlpool, Fort Smith, Arkansas

Shallow Monitoring Wells

Parcel	Boring Log	Monitoring Well	Notes
Parcel 3	DP-65	MW-176	
Parcel 2	DP-64	MW-175	
Parcel 1	DP-63	MW-173	dry
Parcel 1	DP-63	MW-174	
Parcel 4	DP-66	MW-181	
Parcel 4	DP-66	MW-177	
Parcel 5	DP-67	MW-180	
Parcel 5	DP-67	MW-178	
Parcel 5	DP-67	MW-179	dry

Vapor Points

Parcel	Boring Log	Vapor Point	Notes
Parcel 3	DP-65	VP-9	
Parcel 3	DP-65	VP-10	water in VP
Parcel 2	DP-64	VP-7	
Parcel 2	DP-64	VP-8	water in VP
Parcel 1	DP-63	VP-5	
Parcel 1	DP-63	VP-6	water in VP
Parcel 4	DP-66	VP-11	converted to shallow MW-181 due to water in the casing.
Parcel 4	DP-66	VP-12	water in VP
Parcel 5	DP-67	VP-13	converted to shallow MW-180 due to water in the casing.
Parcel 5	DP-67	VP-14	

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: DP-63		Date(s): **12/17/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**			
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**		
Contractor: **Walker-Hill**	Purpose: **Soil Boring**		
Drilling Method: **Sonic**	Datum: **NAVD88**	Elevation: **463.86 ft amsl**	
Sampling Method: **Sonic**	North: **369626.02**	East: **591973.26**	
Remarks:	Borehole Dia.: **3 inches**	Total Depth: **15.5 feet**	
	Project Number: **3433244A**		
	Project Name: **Whirlpool Corporation**		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
				0.0		TOPSOIL, DARK BROWN, SANDY, LOOSE, MOIST, OCCASIONAL ROOT HAIRS
		4		0.0	CL	SILTY CLAY, DARK BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, STIFF, PLASTIC, MOIST
460	5		DP-63 (5.5)	0.0		SILTY CLAY, DARK BROWN/RED BROWN/GRAY, MOTTLED,SOFT, PLASTIC, MOIST
		6				SILTY CLAY, RED BROWN, FREQUENT GRAVEL, SUB ROUND, FINE GRAIN, SAND, FINE TO MEDIUM GRAIN, STIFF, SLIGHTLY PLASTIC, MOIST, WITH ORGANIC NODULES
455				0.0		
	10		DP-63 (10.5)			SILTY CLAY, DARK BROWN/RED BROWN, TRACE GRAVEL, FINE GRAIN, SOFT, PLASTIC, MOIST
				0.0	CH	SANDY CLAY, RED BROWN, FINE TO MEDIUM GRAIN, WITH GRAVEL, FINE GRAIN, SUB ROUND, COHESIVE, MOIST
		5.5			CL	SILTY CLAY, RED BROWN/GRAY, MOTTLED, WITH GRAVEL, FINE TO COURSE GRAIN, SUB ROUND, SAND, FINE TO MEDIUM GRAIN, VERY STIFF, COHESIVE, MOIST
450				0.0		
	15					
445						
	20					
440						
	25					
435						

Report: SOIL_LOG_REV_1_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: DP-64		Date(s): **12/17/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**			
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**		
Contractor: **Walker-Hill**	Purpose: **Soil Boring**		
Drilling Method: **Sonic**	Datum: **NAVD88**	Elevation: **464.47 ft amsl**	
Sampling Method: **Sonic**	North: **369642.10**	East: **591606.66**	
Remarks:	Borehole Dia.: **3 inches**	Total Depth: **15.0 feet**	
	Project Number: **3433244A**		
	Project Name: **Whirlpool Corporation**		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
				0.0		TOPSOIL, DARK BROWN, ROOT HAIRS, WET(SATURATED)
		4		0.0	CL	SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, SILT DECREASING WITH DEPTH, TRACE GRAVEL, FINE GRAIN, SUB ROUND, STIFF, PLASTIC, MOIST
460	5	6		0.0		SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, TRACE GRAVEL, FINE GRAIN, SUB ROUND, VERY STIFF, PLASTIC, MOIST
455	10	5	DP-64 (14.5)	0.0		SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT GRAVEL, FINE GRAIN, TRACE SAND, FINE GRAIN, STIFF, SLIGHTLY PLASTIC, MOIST
				0.0		SILTY CLAY, RED BROWN, WITH GRAVEL, SUB ROUND, FINE GRAIN, TRACE SAND, FINE GRAIN, STIFF, COHESIVE, MOIST
450	15			0.1	SM	SILTY SAND, RED BROWN, SLIGHTLY CLAYEY, FINE TO MEDIUM GRAIN, SLIGHTLY COHESIVE, MOIST
					CL	SILTY CLAY, RED BROWN, WITH GRAVEL, SUB ROUND, FINE TO COURSE GRAIN, HARD, DRY
445	20					
440	25					
435						

Report: SOIL_LOG_REV_1_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: DP-65		Date(s): **12/17/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**			
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**		
Contractor: **Walker-Hill**	Purpose: **Soil Boring**		
Drilling Method: **Sonic**	Datum: **NAVD88**	Elevation: **465.53 ft amsl**	
Sampling Method: **Sonic**	North: **369663.84**	East: **591470.36**	
Remarks:	Borehole Dia.: **3 inches**	Total Depth: **15.0 feet**	
	Project Number: **3433244A**		
	Project Name: **Whirlpool Corporation**		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
465		4		0.1	CL	SILTY CLAY, GRAY/BROWN, MOTTLED, SOFT, PLASTIC, WET, OCCASIONAL ROOT HAIR
				0.8		SILTY CLAY, RED BROWN/GRAY, MOTTLED, TRACE GRAVEL, FINE GRAIN, SUB ROUND, VERY STIFF, PLASTIC, MOIST, OCCASIONAL ORGANIC NODULES
	5	6		1.8		
460				8.7		
	10					
455		5	DP-65 (14)	2.1		
				2.8	SM	SILTY SAND, RED BROWN, FINE TO MEDIUM GRAIN, SLIGHTLY CLAYEY, SLIGHTLY COHESIVE, MOIST
	15				CL	SILTY CLAY, RED BROWN/GRAY, MOTTLED, SLIGHTLY SANDY, FINE GRAIN, STIFF, PLASTIC, MOIST
450						SILTY CLAY, RED BROWN, WITH GRAVEL, FINE TO COARSE GRAIN, SUB ROUND, STIFF, COHESIVE, MOIST, CRUMBLES
	20					
445						
	25					
440						

Report: SOIL_LOG_REV_1_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID:	DP-66	Date(s):	**12/18/2014**
Location:	**Fort Smith, Arkansas**		
Logged By:	**N. Zurweller**		
Consulting Firm:	**ENVIRON**	Checked By:	**K. Stonestreet**
Contractor:	**Walker-Hill**	Purpose:	**Soil Boring**
Drilling Method:	**Sonic**	Datum: **NAVD88**	Elevation: **472.18 ft amsl**
Sampling Method:	**Sonic**	North: **369690.10**	East: **591139.10**
Remarks:		Borehole Dia.: **3 inches**	Total Depth: **15.0 feet**
		Project Number: **3433244A**	
		Project Name: **Whirlpool Corporation**	

Elevation (ft)	Water Level	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description
470		0	4		0.3		CL	TOP SOIL SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, STIFF, PLASTIC, MOIST, OCCASIONAL ROOT HAIR TO 2 FEET
					0.1			
		5			0.4			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, OCCASIONAL ORGANIC NODULE, STIFF, SLIGHTLY PLASTIC, SLIGHTLY MOIST
465			6					
					0.2			
		10						SILTY CLAY, RED BROWN/GRAY, MOTTLED, WITH ORGANIC NODULE, VERY STIFF, PLASTIC, MOIST
460			5		0.3			
				DP-66 (14.5)	0.4			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULE, TRACE SAND, FINE GRAIN, STIFF, PLASTIC, MOIST
		15						
455								
		20						
450								
		25						
445								

Report: SOIL_LOG_REV_1_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID:	DP-67	Date(s):	**12/18/2014**
Location:	**Fort Smith, Arkansas**		
Logged By:	**N. Zurweller**		
Consulting Firm:	**ENVIRON**	Checked By:	**K. Stonestreet**
Contractor:	**Walker-Hill**	Purpose:	**Soil Boring**
Drilling Method:	**Sonic**	Datum: **NAVD88**	Elevation: **475.66 ft amsl**
Sampling Method:	**Sonic**	North: **369226.87**	East: **591005.61**
Remarks:		Borehole Dia.: **3 inches**	Total Depth: **15.0 feet**
		Project Number:	**3433244A**
		Project Name:	**Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
475				0.0	ML	ASPHALT
						GRAVEL, FILL
						CLAYEY SILT, GRAY/BROWN, NON PLASTIC, SLIGHTLY COHESIVE, DRY
				0.0	CL	SILTY CLAY, RED BROWN/GRAY, MOTTLED, ABUNDANT ORGANIC NODULES, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, STIFF, PLASTIC, MOIST
		6				
	5			0.1		
470						SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, VERY STIFF, PLASTIC, MOIST
		5		0.1		
	10			0.0		
465						
		4		0.3		
			DP-67 (14.5)	0.3		
	15					SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, TRACE SAND, STIFF, SLIGHTLY PLASTIC, MOIST
460						
	20					
455						
	25					
450						

Report: SOIL_LOG_REV_1_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

Appendix B

Laboratory Analytical Data

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

January 20, 2015

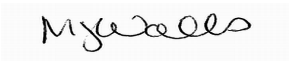
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on January 20, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186465001	**MW-180-GW-20150119**	Water	01/19/15 11:30	01/20/15 06:15
60186465002	**MW-178-GW-20150118**	Water	01/18/15 13:45	01/20/15 06:15
60186465003	**TB-01**	Water	01/18/15 13:45	01/20/15 06:15

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60186465001	**MW-180-GW-20150119**	EPA 5030B/8260	PRG	38
60186465002	**MW-178-GW-20150118**	EPA 5030B/8260	PRG	38
60186465003	**TB-01**	EPA 5030B/8260	PRG	38

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: January 20, 2015

General Information:
3 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/67076

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

Sample: MW-180-GW-20150119 **Lab ID: 60186465001** Collected: 01/19/15 11:30 Received: 01/20/15 06:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/20/15 12:13	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 12:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 12:13	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/20/15 12:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 12:13	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 12:13	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 12:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 12:13	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 12:13	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 12:13	75-35-4	
cis-1,2-Dichloroethene	**3.4**	ug/L	1.0	0.50	1		01/20/15 12:13	156-59-2	
trans-1,2-Dichloroethene	**0.57J**	ug/L	1.0	0.50	1		01/20/15 12:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 12:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 12:13	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 12:13	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 12:13	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/20/15 12:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 12:13	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 12:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 12:13	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 12:13	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	79-00-5	
Trichloroethene	**23.7**	ug/L	1.0	0.50	1		01/20/15 12:13	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 12:13	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 12:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/20/15 12:13	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/20/15 12:13	17060-07-0	
Toluene-d8 (S)	103	%	80-120		1		01/20/15 12:13	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 12:13		

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ANALYTICAL RESULTS

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

Sample: MW-178-GW-20150118 **Lab ID: 60186465002** Collected: 01/18/15 13:45 Received: 01/20/15 06:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**9.5J**	ug/L	10.0	5.0	1		01/20/15 12:29	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 12:29	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/20/15 12:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 12:29	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 12:29	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 12:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 12:29	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	75-35-4	
cis-1,2-Dichloroethene	**0.99J**	ug/L	1.0	0.50	1		01/20/15 12:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 12:29	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/20/15 12:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 12:29	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	79-00-5	
Trichloroethene	**5.2**	ug/L	1.0	0.50	1		01/20/15 12:29	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 12:29	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 12:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/20/15 12:29	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/20/15 12:29	17060-07-0	
Toluene-d8 (S)	103	%	80-120		1		01/20/15 12:29	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 12:29		

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ANALYTICAL RESULTS

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

Sample: TB-01 **Lab ID: 60186465003** Collected: 01/18/15 13:45 Received: 01/20/15 06:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/20/15 11:56	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 11:56	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/20/15 11:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 11:56	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 11:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 11:56	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 11:56	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 11:56	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/20/15 11:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 11:56	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 11:56	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 11:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/20/15 11:56	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		01/20/15 11:56	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/20/15 11:56	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 11:56		

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QUALITY CONTROL DATA

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

QC Batch: MSV/67076 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186465001, 60186465002, 60186465003

METHOD BLANK: 1508718 Matrix: Water
Associated Lab Samples: 60186465001, 60186465002, 60186465003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1-Dichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1-Dichloroethene	ug/L	ND	1.0	01/20/15 11:37	
1,2-Dichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,2-Dichloropropane	ug/L	ND	1.0	01/20/15 11:37	
2-Butanone (MEK)	ug/L	ND	10.0	01/20/15 11:37	
2-Hexanone	ug/L	ND	10.0	01/20/15 11:37	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/20/15 11:37	
Acetone	ug/L	ND	10.0	01/20/15 11:37	
Benzene	ug/L	ND	1.0	01/20/15 11:37	
Bromodichloromethane	ug/L	ND	1.0	01/20/15 11:37	
Bromoform	ug/L	ND	1.0	01/20/15 11:37	
Bromomethane	ug/L	ND	5.0	01/20/15 11:37	
Carbon disulfide	ug/L	ND	5.0	01/20/15 11:37	
Carbon tetrachloride	ug/L	ND	1.0	01/20/15 11:37	
Chlorobenzene	ug/L	ND	1.0	01/20/15 11:37	
Chloroethane	ug/L	ND	1.0	01/20/15 11:37	
Chloroform	ug/L	ND	1.0	01/20/15 11:37	
Chloromethane	ug/L	ND	1.0	01/20/15 11:37	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/20/15 11:37	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/20/15 11:37	
Dibromochloromethane	ug/L	ND	1.0	01/20/15 11:37	
Ethylbenzene	ug/L	ND	1.0	01/20/15 11:37	
Methylene chloride	ug/L	ND	1.0	01/20/15 11:37	
Styrene	ug/L	ND	1.0	01/20/15 11:37	
Tetrachloroethene	ug/L	ND	1.0	01/20/15 11:37	
Toluene	ug/L	ND	1.0	01/20/15 11:37	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/20/15 11:37	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/20/15 11:37	
Trichloroethene	ug/L	ND	1.0	01/20/15 11:37	
Vinyl chloride	ug/L	ND	1.0	01/20/15 11:37	
Xylene (Total)	ug/L	ND	3.0	01/20/15 11:37	
1,2-Dichloroethane-d4 (S)	%	101	80-120	01/20/15 11:37	
4-Bromofluorobenzene (S)	%	98	80-120	01/20/15 11:37	
Toluene-d8 (S)	%	102	80-120	01/20/15 11:37	

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QUALITY CONTROL DATA

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

LABORATORY CONTROL SAMPLE: 1508719

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.5	107	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.5	102	73-121	
1,1,2-Trichloroethane	ug/L	20	20.0	100	80-120	
1,1-Dichloroethane	ug/L	20	17.8	89	80-120	
1,1-Dichloroethene	ug/L	20	19.2	96	80-120	
1,2-Dichloroethane	ug/L	20	21.1	105	81-120	
1,2-Dichloropropane	ug/L	20	20.7	104	80-120	
2-Butanone (MEK)	ug/L	100	86.2	86	67-122	
2-Hexanone	ug/L	100	92.1	92	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	96.4	96	76-120	
Acetone	ug/L	100	83.1	83	72-120	
Benzene	ug/L	20	20.2	101	80-120	
Bromodichloromethane	ug/L	20	21.7	108	80-120	
Bromoform	ug/L	20	20.2	101	73-138	
Bromomethane	ug/L	20	16.0	80	38-137	
Carbon disulfide	ug/L	20	18.5	92	71-129	
Carbon tetrachloride	ug/L	20	19.6	98	67-146	
Chlorobenzene	ug/L	20	20.7	104	80-120	
Chloroethane	ug/L	20	16.2	81	76-120	
Chloroform	ug/L	20	20.3	102	80-120	
Chloromethane	ug/L	20	11.9	59	34-165	
cis-1,2-Dichloroethene	ug/L	20	18.7	93	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.3	106	80-120	
Dibromochloromethane	ug/L	20	20.5	102	80-126	
Ethylbenzene	ug/L	20	20.5	102	80-120	
Methylene chloride	ug/L	20	18.7	94	80-120	
Styrene	ug/L	20	20.2	101	80-123	
Tetrachloroethene	ug/L	20	22.0	110	80-123	
Toluene	ug/L	20	20.0	100	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.6	93	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.0	105	80-129	
Trichloroethene	ug/L	20	20.3	101	80-120	
Vinyl chloride	ug/L	20	17.8	89	62-125	
Xylene (Total)	ug/L	60	59.2	99	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			102	80-120	

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QUALIFIERS

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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BATCH QUALIFIERS

Batch: MSV/67076

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186465001	**MW-180-GW-20150119**	EPA 5030B/8260	MSV/67076		
60186465002	**MW-178-GW-20150118**	EPA 5030B/8260	MSV/67076		
60186465003	**TB-01**	EPA 5030B/8260	MSV/67076		

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Sample Condition Upon Receipt

WO# : 60186465

60186465

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☑ ✓

Tracking #: _____ Pace Shipping Label Used? Yes ☑ No ☐

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☑ None ☐ Other ☐

Thermometer Used: T-239 / T-194 **Type of Ice:** Wet Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 1.7

Temperature should be above freezing to 6°C

Date and initials of person examining contents: BB 1/20/15

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time requested:	☑Yes ☐No ☐N/A	7. Rush
Sufficient volume:	☑Yes ☐No ☐N/A	8.
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	9.
Containers intact:	☑Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	12.
Sample labels match COC: Includes date/time/ID/analyses Y Matrix: water	☑Yes ☐No ☐N/A	13.
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present: Pace Trip Blank lot # (if purchased): 120814 3,3 ZM	☑Yes ☐No ☐N/A	15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MW Date: 1/20/15

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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.

Page: | of |

Section A — **Required** Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	24HR

Section B — **Required** Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tamara Gleason
	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	3434446A

Section C — Invoice Information:

Attention:	Tamara Gleason
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: AR

Section D — **Required** Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-180-GW-20150119	WT	G			1/19/15	1130		3				3					X	X		60186465
2	MW-17B-GW-20150118	WT	G			1/18/15	1345		3				3					X	X		3DG9H
3	TRIP-BLANK-01	WT							2				2					X	X		1DG9H
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Michael Edmonds / ENVIRON	1/19/15	1745	Ben Ruyle / Pace	1/20/15	0615	1.7	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: ~~Michael Edmonds~~ NICK ZURKWELLER

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 1/19/15

*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.

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January 27, 2015

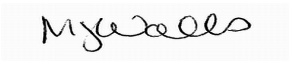
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH AR
Pace Project No.: 60186563

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on January 21, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: FORT SMITH AR
Pace Project No.: 60186563

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: FORT SMITH AR
Pace Project No.: 60186563

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186563001	**MW-174-GW-20150120**	Water	01/20/15 13:40	01/21/15 08:30
60186563002	**VP-06-GW-20150120**	Water	01/20/15 15:50	01/21/15 08:30

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR
Pace Project No.: 60186563

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60186563001	**MW-174-GW-20150120**	EPA 5030B/8260	PRG	38
60186563002	**VP-06-GW-20150120**	EPA 5030B/8260	PRG	38

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PROJECT NARRATIVE

Project: FORT SMITH AR
Pace Project No.: 60186563

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: January 27, 2015

General Information:
2 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/67171

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60186563

Sample: MW-174-GW-20150120 **Lab ID: 60186563001** Collected: 01/20/15 13:40 Received: 01/21/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**51.1**	ug/L	10.0	5.0	1		01/23/15 19:41	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/23/15 19:41	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/23/15 19:41	74-83-9	
2-Butanone (MEK)	**11.3**	ug/L	10.0	5.0	1		01/23/15 19:41	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/23/15 19:41	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/23/15 19:41	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/23/15 19:41	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/23/15 19:41	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/23/15 19:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/23/15 19:41	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/23/15 19:41	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/23/15 19:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/23/15 19:41	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		01/23/15 19:41	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/23/15 19:41	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/23/15 19:41		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60186563

Sample: VP-06-GW-20150120 **Lab ID: 60186563002** Collected: 01/20/15 15:50 Received: 01/21/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**5.7J**	ug/L	10.0	5.0	1		01/23/15 19:56	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/23/15 19:56	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/23/15 19:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/23/15 19:56	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/23/15 19:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/23/15 19:56	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/23/15 19:56	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/23/15 19:56	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/23/15 19:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/23/15 19:56	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	79-00-5	
Trichloroethene	**4.3**	ug/L	1.0	0.50	1		01/23/15 19:56	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/23/15 19:56	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/23/15 19:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/23/15 19:56	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/23/15 19:56	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		01/23/15 19:56	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/23/15 19:56		

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60186563

QC Batch: MSV/67171 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186563001, 60186563002

METHOD BLANK: 1510745 Matrix: Water
Associated Lab Samples: 60186563001, 60186563002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/23/15 15:12	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/23/15 15:12	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/23/15 15:12	
1,1-Dichloroethane	ug/L	ND	1.0	01/23/15 15:12	
1,1-Dichloroethene	ug/L	ND	1.0	01/23/15 15:12	
1,2-Dichloroethane	ug/L	ND	1.0	01/23/15 15:12	
1,2-Dichloropropane	ug/L	ND	1.0	01/23/15 15:12	
2-Butanone (MEK)	ug/L	ND	10.0	01/23/15 15:12	
2-Hexanone	ug/L	ND	10.0	01/23/15 15:12	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/23/15 15:12	
Acetone	ug/L	ND	10.0	01/23/15 15:12	
Benzene	ug/L	ND	1.0	01/23/15 15:12	
Bromodichloromethane	ug/L	ND	1.0	01/23/15 15:12	
Bromoform	ug/L	ND	1.0	01/23/15 15:12	
Bromomethane	ug/L	ND	5.0	01/23/15 15:12	
Carbon disulfide	ug/L	ND	5.0	01/23/15 15:12	
Carbon tetrachloride	ug/L	ND	1.0	01/23/15 15:12	
Chlorobenzene	ug/L	ND	1.0	01/23/15 15:12	
Chloroethane	ug/L	ND	1.0	01/23/15 15:12	
Chloroform	ug/L	ND	1.0	01/23/15 15:12	
Chloromethane	ug/L	ND	1.0	01/23/15 15:12	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 15:12	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 15:12	
Dibromochloromethane	ug/L	ND	1.0	01/23/15 15:12	
Ethylbenzene	ug/L	ND	1.0	01/23/15 15:12	
Methylene chloride	ug/L	ND	1.0	01/23/15 15:12	
Styrene	ug/L	ND	1.0	01/23/15 15:12	
Tetrachloroethene	ug/L	ND	1.0	01/23/15 15:12	
Toluene	ug/L	ND	1.0	01/23/15 15:12	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 15:12	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 15:12	
Trichloroethene	ug/L	ND	1.0	01/23/15 15:12	
Vinyl chloride	ug/L	ND	1.0	01/23/15 15:12	
Xylene (Total)	ug/L	ND	3.0	01/23/15 15:12	
1,2-Dichloroethane-d4 (S)	%	102	80-120	01/23/15 15:12	
4-Bromofluorobenzene (S)	%	100	80-120	01/23/15 15:12	
Toluene-d8 (S)	%	100	80-120	01/23/15 15:12	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60186563

LABORATORY CONTROL SAMPLE: 1510746

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.3	102	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.8	99	73-121	
1,1,2-Trichloroethane	ug/L	20	21.1	105	80-120	
1,1-Dichloroethane	ug/L	20	20.6	103	80-120	
1,1-Dichloroethene	ug/L	20	20.2	101	80-120	
1,2-Dichloroethane	ug/L	20	21.5	107	81-120	
1,2-Dichloropropane	ug/L	20	20.6	103	80-120	
2-Butanone (MEK)	ug/L	100	100	100	67-122	
2-Hexanone	ug/L	100	102	102	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	102	102	76-120	
Acetone	ug/L	100	95.9	96	72-120	
Benzene	ug/L	20	22.1	111	80-120	
Bromodichloromethane	ug/L	20	21.3	107	80-120	
Bromoform	ug/L	20	20.3	102	73-138	
Bromomethane	ug/L	20	14.1	71	38-137	
Carbon disulfide	ug/L	20	21.5	107	71-129	
Carbon tetrachloride	ug/L	20	20.6	103	67-146	
Chlorobenzene	ug/L	20	22.0	110	80-120	
Chloroethane	ug/L	20	17.9	89	76-120	
Chloroform	ug/L	20	20.1	100	80-120	
Chloromethane	ug/L	20	16.0	80	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.9	105	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.5	103	80-120	
Dibromochloromethane	ug/L	20	20.9	105	80-126	
Ethylbenzene	ug/L	20	21.0	105	80-120	
Methylene chloride	ug/L	20	18.7	94	80-120	
Styrene	ug/L	20	22.1	110	80-123	
Tetrachloroethene	ug/L	20	21.0	105	80-123	
Toluene	ug/L	20	21.5	108	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.5	102	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.1	106	80-129	
Trichloroethene	ug/L	20	20.7	103	80-120	
Vinyl chloride	ug/L	20	18.3	92	62-125	
Xylene (Total)	ug/L	60	65.7	109	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			104	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: FORT SMITH AR
Pace Project No.: 60186563

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/67171

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR
Pace Project No.: 60186563

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186563001	**MW-174-GW-20150120**	EPA 5030B/8260	MSV/67171		
60186563002	**VP-06-GW-20150120**	EPA 5030B/8260	MSV/67171		

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Sample Condition Upon Receipt

WO#: 60186563

60186563

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 5689 1283 9504 Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☑ None ☐ Other ☐

Thermometer Used: T-239 / T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 1-7

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JW 1/21/15

Chain of Custody present:	☑Yes	☐No	☐N/A	1.
Chain of Custody filled out:	☑Yes	☐No	☐N/A	2.
Chain of Custody relinquished:	☑Yes	☐No	☐N/A	3.
Sampler name & signature on COC:	☑Yes	☐No	☐N/A	4.
Samples arrived within holding time:	☑Yes	☐No	☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes	☑No	☐N/A	6.
Rush Turn Around Time requested:	☐Yes	☑No	☐N/A	7.
Sufficient volume:	☑Yes	☐No	☐N/A	8.
Correct containers used:	☑Yes	☐No	☐N/A	
Pace containers used:	☑Yes	☐No	☐N/A	9.
Containers intact:	☑Yes	☐No	☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes	☐No	☑N/A	11.
Filtered volume received for dissolved tests?	☐Yes	☑No	☐N/A	12.
Sample labels match COC:	☑Yes	☐No	☐N/A	
Includes date/time/ID/analyses Matrix: WT				13.
All containers needing preservation have been checked.	☐Yes	☐No	☑N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	☑Yes	☐No		Initial when completed / Lot # of added preservative
Trip Blank present:	☑Yes	☐No	☐N/A	
Pace Trip Blank lot # (if purchased): OCT 09 2014				15.
Headspace in VOA vials (>6mm):	☐Yes	☑No	☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes	☐No	☑N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MW Date: 1/21/14

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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.

Page: / of /

Section A — Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STANDARD

Section B — Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tamara Gleason
	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	34344466

Section C — Invoice Information:

Attention:	Tamara Gleason
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Section D — Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-174-GW-20150120	WT	G			1/20/15	1340		3				3						X		60186563
2	VP-06-GW-20150120	WT	G			1/20/15	1550		3				3						X		(60186563)
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / ENVIRON	1/20/15	1715	[signature] / PACE	1/21/15	830	1-7	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Michael Eddings

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 1/20/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*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.

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January 27, 2015

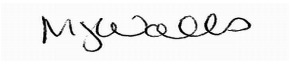
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on January 21, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

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SAMPLE SUMMARY

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186566001	**MW-175-GW-20150120**	Water	01/20/15 13:45	01/21/15 08:30
60186566002	**TB-02**	Water	01/20/15 13:45	01/21/15 08:30

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60186566001	**MW-175-GW-20150120**	EPA 5030B/8260	PRG	38
60186566002	**TB-02**	EPA 5030B/8260	PRG	38

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PROJECT NARRATIVE

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: January 27, 2015

General Information:
2 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

Sample: MW-175-GW-20150120 **Lab ID: 60186566001** Collected: 01/20/15 13:45 Received: 01/21/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**16.1**	ug/L	10.0	5.0	1		01/24/15 01:38	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/24/15 01:38	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/24/15 01:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/24/15 01:38	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/24/15 01:38	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/24/15 01:38	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/24/15 01:38	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	75-35-4	
cis-1,2-Dichloroethene	**2.0**	ug/L	1.0	0.50	1		01/24/15 01:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/24/15 01:38	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/24/15 01:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/24/15 01:38	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	79-00-5	
Trichloroethene	**123**	ug/L	1.0	0.50	1		01/24/15 01:38	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/24/15 01:38	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/24/15 01:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		01/24/15 01:38	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		01/24/15 01:38	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/24/15 01:38	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/24/15 01:38		

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ANALYTICAL RESULTS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

Sample: TB-02 **Lab ID: 60186566002** Collected: 01/20/15 13:45 Received: 01/21/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/23/15 21:55	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/23/15 21:55	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/23/15 21:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/23/15 21:55	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/23/15 21:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/23/15 21:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/23/15 21:55	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/23/15 21:55	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/23/15 21:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/23/15 21:55	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/23/15 21:55	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/23/15 21:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/23/15 21:55	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		01/23/15 21:55	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		01/23/15 21:55	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/23/15 21:55		

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

QC Batch: MSV/67172 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186566001, 60186566002

METHOD BLANK: 1510757 Matrix: Water
Associated Lab Samples: 60186566001, 60186566002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1-Dichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1-Dichloroethene	ug/L	ND	1.0	01/23/15 21:25	
1,2-Dichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,2-Dichloropropane	ug/L	ND	1.0	01/23/15 21:25	
2-Butanone (MEK)	ug/L	ND	10.0	01/23/15 21:25	
2-Hexanone	ug/L	ND	10.0	01/23/15 21:25	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/23/15 21:25	
Acetone	ug/L	ND	10.0	01/23/15 21:25	
Benzene	ug/L	ND	1.0	01/23/15 21:25	
Bromodichloromethane	ug/L	ND	1.0	01/23/15 21:25	
Bromoform	ug/L	ND	1.0	01/23/15 21:25	
Bromomethane	ug/L	ND	5.0	01/23/15 21:25	
Carbon disulfide	ug/L	ND	5.0	01/23/15 21:25	
Carbon tetrachloride	ug/L	ND	1.0	01/23/15 21:25	
Chlorobenzene	ug/L	ND	1.0	01/23/15 21:25	
Chloroethane	ug/L	ND	1.0	01/23/15 21:25	
Chloroform	ug/L	ND	1.0	01/23/15 21:25	
Chloromethane	ug/L	ND	1.0	01/23/15 21:25	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 21:25	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 21:25	
Dibromochloromethane	ug/L	ND	1.0	01/23/15 21:25	
Ethylbenzene	ug/L	ND	1.0	01/23/15 21:25	
Methylene chloride	ug/L	ND	1.0	01/23/15 21:25	
Styrene	ug/L	ND	1.0	01/23/15 21:25	
Tetrachloroethene	ug/L	ND	1.0	01/23/15 21:25	
Toluene	ug/L	ND	1.0	01/23/15 21:25	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 21:25	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 21:25	
Trichloroethene	ug/L	ND	1.0	01/23/15 21:25	
Vinyl chloride	ug/L	ND	1.0	01/23/15 21:25	
Xylene (Total)	ug/L	ND	3.0	01/23/15 21:25	
1,2-Dichloroethane-d4 (S)	%	101	80-120	01/23/15 21:25	
4-Bromofluorobenzene (S)	%	100	80-120	01/23/15 21:25	
Toluene-d8 (S)	%	99	80-120	01/23/15 21:25	

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

LABORATORY CONTROL SAMPLE: 1510758

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.1	105	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.9	100	73-121	
1,1,2-Trichloroethane	ug/L	20	20.4	102	80-120	
1,1-Dichloroethane	ug/L	20	20.5	103	80-120	
1,1-Dichloroethene	ug/L	20	20.6	103	80-120	
1,2-Dichloroethane	ug/L	20	21.2	106	81-120	
1,2-Dichloropropane	ug/L	20	20.3	101	80-120	
2-Butanone (MEK)	ug/L	100	101	101	67-122	
2-Hexanone	ug/L	100	99.7	100	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	109	109	76-120	
Acetone	ug/L	100	101	101	72-120	
Benzene	ug/L	20	21.9	110	80-120	
Bromodichloromethane	ug/L	20	21.7	109	80-120	
Bromoform	ug/L	20	20.0	100	73-138	
Bromomethane	ug/L	20	15.4	77	38-137	
Carbon disulfide	ug/L	20	22.3	112	71-129	
Carbon tetrachloride	ug/L	20	21.5	108	67-146	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	20.2	101	76-120	
Chloroform	ug/L	20	20.1	100	80-120	
Chloromethane	ug/L	20	19.3	97	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.5	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.4	107	80-120	
Dibromochloromethane	ug/L	20	20.4	102	80-126	
Ethylbenzene	ug/L	20	21.0	105	80-120	
Methylene chloride	ug/L	20	20.3	102	80-120	
Styrene	ug/L	20	21.8	109	80-123	
Tetrachloroethene	ug/L	20	20.6	103	80-123	
Toluene	ug/L	20	20.3	101	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.5	103	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.7	104	80-129	
Trichloroethene	ug/L	20	20.4	102	80-120	
Vinyl chloride	ug/L	20	20.7	104	62-125	
Xylene (Total)	ug/L	60	65.3	109	80-120	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1510759 1510760

Parameter	Units	60186403027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	22.1	22.4	111	112	88-124	1	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.0	19.9	95	100	78-116	5	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	18.7	20.6	93	103	84-112	10	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1510759 1510760

Parameter	Units	60186403027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	ND	20	20	20.8	20.6	104	103	82-121	1	9	
1,1-Dichloroethene	ug/L	ND	20	20	21.8	21.7	109	109	78-124	0	12	
1,2-Dichloroethane	ug/L	ND	20	20	20.5	21.3	103	107	79-121	4	12	
1,2-Dichloropropane	ug/L	ND	20	20	19.6	20.3	98	102	82-119	4	10	
2-Butanone (MEK)	ug/L	ND	100	100	86.1	91.4	86	91	66-114	6	13	
2-Hexanone	ug/L	ND	100	100	86.7	93.5	87	94	71-116	8	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	95.6	97.7	96	98	72-122	2	12	
Acetone	ug/L	ND	100	100	111	86.8	109	85	65-113	24	27	
Benzene	ug/L	ND	20	20	22.6	21.9	113	109	46-155	3	13	
Bromodichloromethane	ug/L	ND	20	20	21.1	21.0	106	105	77-127	0	10	
Bromoform	ug/L	ND	20	20	18.5	19.2	93	96	70-125	4	11	
Bromomethane	ug/L	ND	20	20	12.2	15.8	61	79	41-140	25	30	
Carbon disulfide	ug/L	ND	20	20	24.8	23.2	124	116	68-140	7	10	
Carbon tetrachloride	ug/L	ND	20	20	22.7	22.6	114	113	68-147	1	11	
Chlorobenzene	ug/L	ND	20	20	21.0	21.4	105	107	83-121	2	9	
Chloroethane	ug/L	ND	20	20	20.9	17.3	105	86	69-126	19	19	
Chloroform	ug/L	ND	20	20	20.1	20.2	101	101	86-119	0	9	
Chloromethane	ug/L	ND	20	20	19.1	13.0	96	65	23-168	38	49	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.8	20.8	102	103	85-117	0	10	
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.5	19.9	98	99	74-115	2	12	
Dibromochloromethane	ug/L	ND	20	20	19.0	19.7	95	98	65-134	4	11	
Ethylbenzene	ug/L	ND	20	20	21.2	20.9	106	104	51-148	2	14	
Methylene chloride	ug/L	ND	20	20	19.7	18.3	99	92	75-118	7	11	
Styrene	ug/L	ND	20	20	21.3	21.2	107	106	17-174	1	10	
Tetrachloroethene	ug/L	12.2	20	20	32.1	33.3	100	105	78-127	3	9	
Toluene	ug/L	ND	20	20	20.9	21.3	105	106	47-149	2	16	
trans-1,2-Dichloroethene	ug/L	ND	20	20	21.7	21.5	108	108	84-119	1	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.7	19.7	93	98	71-120	5	10	
Trichloroethene	ug/L	0.82J	20	20	21.2	21.1	102	102	70-135	0	10	
Vinyl chloride	ug/L	ND	20	20	21.5	19.5	107	97	58-130	10	11	
Xylene (Total)	ug/L	ND	60	60	65.6	64.0	109	107	39-158	2	15	
1,2-Dichloroethane-d4 (S)	%						102	101	80-120			
4-Bromofluorobenzene (S)	%						98	102	80-120			
Toluene-d8 (S)	%						98	100	80-120			
Preservation pH		1.0			1.0	1.0				0		

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186566001	**MW-175-GW-20150120**	EPA 5030B/8260	MSV/67172		
60186566002	**TB-02**	EPA 5030B/8260	MSV/67172		

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Sample Condition Upon Receipt

WO# : 60186566

60186566

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 5689 1283 9504 Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☑ None ☐ Other ☐

Thermometer Used: T-239 / T-194 **Type of Ice:** ~~Wet~~ Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 1-7

Temperature should be above freezing to 6°C

Date and initials of person examining contents: MW 1/21/15

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	7.
Sufficient volume:	☑Yes ☐No ☐N/A	8.
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	9.
Containers intact:	☑Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☑No ☐N/A	12.
Sample labels match COC:	☑Yes ☐No ☐N/A	
Includes date/time/ID/analyses Matrix: WT		13.
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☑Yes ☐No ☐N/A	
Pace Trip Blank lot # (if purchased): OCT 09 2014		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MW Date: 1/21/15

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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.

Page: 1 of 1

Section A Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	Standard TAT

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tamara Gleason
	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	3434446A

Section C Invoice Information:

Attention:	Tamara Gleason
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-175-GW-20150120	WT	G			1/20/15	1345		3				X					X			60186566 (3VOA HCl) a1
2	Trip Blank-02	WT							2				X					X			60186566 (2VOA HCl) a2
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	ENVIRON	1/20/15	1715		1/21/15	830	1-7	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Nick Zurweller

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 1/20/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

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January 27, 2015

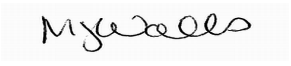
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on January 21, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

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SAMPLE SUMMARY

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186564001	**MW-176-GW-20150120**	Water	01/20/15 16:15	01/21/15 08:30
60186564002	**VP-10-GW-20150120**	Water	01/20/15 15:55	01/21/15 08:30

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60186564001	**MW-176-GW-20150120**	EPA 5030B/8260	PRG	38
60186564002	**VP-10-GW-20150120**	EPA 5030B/8260	PRG	38

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PROJECT NARRATIVE

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: January 27, 2015

General Information:
2 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/67208

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

Sample: MW-176-GW-20150120 **Lab ID: 60186564001** Collected: 01/20/15 16:15 Received: 01/21/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/24/15 01:08	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/24/15 01:08	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/24/15 01:08	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/24/15 01:08	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/24/15 01:08	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/24/15 01:08	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/24/15 01:08	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/24/15 01:08	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/24/15 01:08	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	107-06-2	
1,1-Dichloroethene	**2.6**	ug/L	1.0	0.50	1		01/24/15 01:08	75-35-4	
cis-1,2-Dichloroethene	**16.8**	ug/L	1.0	0.50	1		01/24/15 01:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/24/15 01:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/24/15 01:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/24/15 01:08	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/24/15 01:08	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/24/15 01:08	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/24/15 01:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/24/15 01:08	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/24/15 01:08	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/24/15 01:08	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/24/15 01:08	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	79-00-5	
Trichloroethene	**720**	ug/L	10.0	5.0	10		01/27/15 01:46	79-01-6	
Vinyl chloride	**0.57J**	ug/L	1.0	0.50	1		01/24/15 01:08	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/24/15 01:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/24/15 01:08	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/24/15 01:08	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/24/15 01:08	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/24/15 01:08		

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ANALYTICAL RESULTS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

Sample: VP-10-GW-20150120 **Lab ID: 60186564002** Collected: 01/20/15 15:55 Received: 01/21/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**5.8J**	ug/L	10.0	5.0	1		01/24/15 01:23	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/24/15 01:23	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/24/15 01:23	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/24/15 01:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/24/15 01:23	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/24/15 01:23	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/24/15 01:23	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/24/15 01:23	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/24/15 01:23	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	107-06-2	
1,1-Dichloroethene	**2.8**	ug/L	1.0	0.50	1		01/24/15 01:23	75-35-4	
cis-1,2-Dichloroethene	**18.8**	ug/L	1.0	0.50	1		01/24/15 01:23	156-59-2	
trans-1,2-Dichloroethene	**0.51J**	ug/L	1.0	0.50	1		01/24/15 01:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/24/15 01:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/24/15 01:23	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/24/15 01:23	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/24/15 01:23	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/24/15 01:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/24/15 01:23	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/24/15 01:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/24/15 01:23	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/24/15 01:23	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	79-00-5	
Trichloroethene	**636**	ug/L	10.0	5.0	10		01/27/15 02:01	79-01-6	
Vinyl chloride	**0.61J**	ug/L	1.0	0.50	1		01/24/15 01:23	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/24/15 01:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/24/15 01:23	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		01/24/15 01:23	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		01/24/15 01:23	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/24/15 01:23		

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QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

QC Batch: MSV/67172
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186564001, 60186564002

METHOD BLANK: 1510757
Matrix: Water
Associated Lab Samples: 60186564001, 60186564002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1-Dichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1-Dichloroethene	ug/L	ND	1.0	01/23/15 21:25	
1,2-Dichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,2-Dichloropropane	ug/L	ND	1.0	01/23/15 21:25	
2-Butanone (MEK)	ug/L	ND	10.0	01/23/15 21:25	
2-Hexanone	ug/L	ND	10.0	01/23/15 21:25	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/23/15 21:25	
Acetone	ug/L	ND	10.0	01/23/15 21:25	
Benzene	ug/L	ND	1.0	01/23/15 21:25	
Bromodichloromethane	ug/L	ND	1.0	01/23/15 21:25	
Bromoform	ug/L	ND	1.0	01/23/15 21:25	
Bromomethane	ug/L	ND	5.0	01/23/15 21:25	
Carbon disulfide	ug/L	ND	5.0	01/23/15 21:25	
Carbon tetrachloride	ug/L	ND	1.0	01/23/15 21:25	
Chlorobenzene	ug/L	ND	1.0	01/23/15 21:25	
Chloroethane	ug/L	ND	1.0	01/23/15 21:25	
Chloroform	ug/L	ND	1.0	01/23/15 21:25	
Chloromethane	ug/L	ND	1.0	01/23/15 21:25	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 21:25	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 21:25	
Dibromochloromethane	ug/L	ND	1.0	01/23/15 21:25	
Ethylbenzene	ug/L	ND	1.0	01/23/15 21:25	
Methylene chloride	ug/L	ND	1.0	01/23/15 21:25	
Styrene	ug/L	ND	1.0	01/23/15 21:25	
Tetrachloroethene	ug/L	ND	1.0	01/23/15 21:25	
Toluene	ug/L	ND	1.0	01/23/15 21:25	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 21:25	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 21:25	
Vinyl chloride	ug/L	ND	1.0	01/23/15 21:25	
Xylene (Total)	ug/L	ND	3.0	01/23/15 21:25	
1,2-Dichloroethane-d4 (S)	%	101	80-120	01/23/15 21:25	
4-Bromofluorobenzene (S)	%	100	80-120	01/23/15 21:25	
Toluene-d8 (S)	%	99	80-120	01/23/15 21:25	

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QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

LABORATORY CONTROL SAMPLE: 1510758

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.1	105	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.9	100	73-121	
1,1,2-Trichloroethane	ug/L	20	20.4	102	80-120	
1,1-Dichloroethane	ug/L	20	20.5	103	80-120	
1,1-Dichloroethene	ug/L	20	20.6	103	80-120	
1,2-Dichloroethane	ug/L	20	21.2	106	81-120	
1,2-Dichloropropane	ug/L	20	20.3	101	80-120	
2-Butanone (MEK)	ug/L	100	101	101	67-122	
2-Hexanone	ug/L	100	99.7	100	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	109	109	76-120	
Acetone	ug/L	100	101	101	72-120	
Benzene	ug/L	20	21.9	110	80-120	
Bromodichloromethane	ug/L	20	21.7	109	80-120	
Bromoform	ug/L	20	20.0	100	73-138	
Bromomethane	ug/L	20	15.4	77	38-137	
Carbon disulfide	ug/L	20	22.3	112	71-129	
Carbon tetrachloride	ug/L	20	21.5	108	67-146	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	20.2	101	76-120	
Chloroform	ug/L	20	20.1	100	80-120	
Chloromethane	ug/L	20	19.3	97	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.5	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.4	107	80-120	
Dibromochloromethane	ug/L	20	20.4	102	80-126	
Ethylbenzene	ug/L	20	21.0	105	80-120	
Methylene chloride	ug/L	20	20.3	102	80-120	
Styrene	ug/L	20	21.8	109	80-123	
Tetrachloroethene	ug/L	20	20.6	103	80-123	
Toluene	ug/L	20	20.3	101	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.5	103	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.7	104	80-129	
Vinyl chloride	ug/L	20	20.7	104	62-125	
Xylene (Total)	ug/L	60	65.3	109	80-120	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1510759 1510760

Parameter	Units	60186403027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	22.1	22.4	111	112	88-124	1	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.0	19.9	95	100	78-116	5	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	18.7	20.6	93	103	84-112	10	10	
1,1-Dichloroethane	ug/L	ND	20	20	20.8	20.6	104	103	82-121	1	9	

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QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1510759 1510760

Parameter	Units	60186403027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	20	20	21.8	21.7	109	109	78-124	0	12	
1,2-Dichloroethane	ug/L	ND	20	20	20.5	21.3	103	107	79-121	4	12	
1,2-Dichloropropane	ug/L	ND	20	20	19.6	20.3	98	102	82-119	4	10	
2-Butanone (MEK)	ug/L	ND	100	100	86.1	91.4	86	91	66-114	6	13	
2-Hexanone	ug/L	ND	100	100	86.7	93.5	87	94	71-116	8	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	95.6	97.7	96	98	72-122	2	12	
Acetone	ug/L	ND	100	100	111	86.8	109	85	65-113	24	27	
Benzene	ug/L	ND	20	20	22.6	21.9	113	109	46-155	3	13	
Bromodichloromethane	ug/L	ND	20	20	21.1	21.0	106	105	77-127	0	10	
Bromoform	ug/L	ND	20	20	18.5	19.2	93	96	70-125	4	11	
Bromomethane	ug/L	ND	20	20	12.2	15.8	61	79	41-140	25	30	
Carbon disulfide	ug/L	ND	20	20	24.8	23.2	124	116	68-140	7	10	
Carbon tetrachloride	ug/L	ND	20	20	22.7	22.6	114	113	68-147	1	11	
Chlorobenzene	ug/L	ND	20	20	21.0	21.4	105	107	83-121	2	9	
Chloroethane	ug/L	ND	20	20	20.9	17.3	105	86	69-126	19	19	
Chloroform	ug/L	ND	20	20	20.1	20.2	101	101	86-119	0	9	
Chloromethane	ug/L	ND	20	20	19.1	13.0	96	65	23-168	38	49	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.8	20.8	102	103	85-117	0	10	
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.5	19.9	98	99	74-115	2	12	
Dibromochloromethane	ug/L	ND	20	20	19.0	19.7	95	98	65-134	4	11	
Ethylbenzene	ug/L	ND	20	20	21.2	20.9	106	104	51-148	2	14	
Methylene chloride	ug/L	ND	20	20	19.7	18.3	99	92	75-118	7	11	
Styrene	ug/L	ND	20	20	21.3	21.2	107	106	17-174	1	10	
Tetrachloroethene	ug/L	12.2	20	20	32.1	33.3	100	105	78-127	3	9	
Toluene	ug/L	ND	20	20	20.9	21.3	105	106	47-149	2	16	
trans-1,2-Dichloroethene	ug/L	ND	20	20	21.7	21.5	108	108	84-119	1	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.7	19.7	93	98	71-120	5	10	
Vinyl chloride	ug/L	ND	20	20	21.5	19.5	107	97	58-130	10	11	
Xylene (Total)	ug/L	ND	60	60	65.6	64.0	109	107	39-158	2	15	
1,2-Dichloroethane-d4 (S)	%						102	101	80-120			
4-Bromofluorobenzene (S)	%						98	102	80-120			
Toluene-d8 (S)	%						98	100	80-120			
Preservation pH		1.0			1.0	1.0				0		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

QC Batch: MSV/67208
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186564001, 60186564002

METHOD BLANK: 1511906
Matrix: Water
Associated Lab Samples: 60186564001, 60186564002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	ug/L	ND	1.0	01/26/15 21:49	
1,2-Dichloroethane-d4 (S)	%	101	80-120	01/26/15 21:49	
4-Bromofluorobenzene (S)	%	98	80-120	01/26/15 21:49	
Toluene-d8 (S)	%	97	80-120	01/26/15 21:49	

LABORATORY CONTROL SAMPLE: 1511907

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	20	20.3	101	80-120	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			104	80-120	
Toluene-d8 (S)	%			98	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/67208

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186564001	**MW-176-GW-20150120**	EPA 5030B/8260	MSV/67172		
60186564001	**MW-176-GW-20150120**	EPA 5030B/8260	MSV/67208		
60186564002	**VP-10-GW-20150120**	EPA 5030B/8260	MSV/67172		
60186564002	**VP-10-GW-20150120**	EPA 5030B/8260	MSV/67208		

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Sample Condition Upon Receipt

WO# : 60186564

60186564

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 5689 1283 9504 Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☑ None ☐ Other ☐

Thermometer Used: T-239 / T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 1-7

Temperature should be above freezing to 6°C

Date and initials of person examining contents: MW 1/21/15

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	7.
Sufficient volume:	☑Yes ☐No ☐N/A	8.
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	9.
Containers intact:	☑Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☑No ☐N/A	12.
Sample labels match COC:	☑Yes ☐No ☐N/A	
Includes date/time/ID/analyses Matrix: WT		13.
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☑Yes ☐No ☐N/A	
Pace Trip Blank lot # (if purchased): OCT 09 2014		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MW Date: 1/21/15

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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.

Page: 1 of 1

Section A — **Required** Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	Standard TAT

Section B — **Required** Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tamara Gleason
	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	343444 61

Section C — Invoice Information:

Attention:	Tamara Gleason
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Section D — **Required** Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-176-GW-20150120	WT	G			1/20/15	1615		3				X					X	X		60186564
2	VP-10-GW-20150120	WT	G			1/20/15	1555		3				X					X	X		3106411
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / ENVIRON	1/20/15	1715	[signature] / PACE	1/21/15	830	1-7	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Nick Zurweller

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 1/20/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

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January 23, 2015

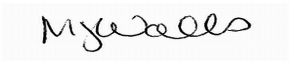
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH AR
Pace Project No.: 60186643

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on January 22, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: FORT SMITH AR
Pace Project No.: 60186643

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

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SAMPLE SUMMARY

Project: FORT SMITH AR
Pace Project No.: 60186643

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186643001	**MW-181-GW-20150121**	Water	01/21/15 09:10	01/22/15 08:20
60186643002	**MW-177-GW-20150121**	Water	01/21/15 09:35	01/22/15 08:20
60186643003	**VP-12-GW-20150121**	Water	01/21/15 10:05	01/22/15 08:20
60186643004	**TB-03**	Water	01/21/15 10:05	01/22/15 08:20

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR
Pace Project No.: 60186643

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60186643001	**MW-181-GW-20150121**	EPA 5030B/8260	PRG	38
60186643002	**MW-177-GW-20150121**	EPA 5030B/8260	PRG	38
60186643003	**VP-12-GW-20150121**	EPA 5030B/8260	PRG	38
60186643004	**TB-03**	EPA 5030B/8260	PRG	38

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORT SMITH AR
Pace Project No.: 60186643

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: January 23, 2015

General Information:
4 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/67164

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60186643

Sample: MW-181-GW-20150121 **Lab ID: 60186643001** Collected: 01/21/15 09:10 Received: 01/22/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/23/15 09:45	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/23/15 09:45	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/23/15 09:45	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/23/15 09:45	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/23/15 09:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/23/15 09:45	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/23/15 09:45	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/23/15 09:45	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/23/15 09:45	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/23/15 09:45	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/23/15 09:45	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/23/15 09:45	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/23/15 09:45	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 09:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 09:45	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 09:45	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 09:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 09:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/23/15 09:45	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 09:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 09:45	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/23/15 09:45	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/23/15 09:45	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/23/15 09:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/23/15 09:45	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/23/15 09:45	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/23/15 09:45	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/23/15 09:45	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/23/15 09:45	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 09:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 09:45	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 09:45	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/23/15 09:45	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/23/15 09:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/23/15 09:45	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		01/23/15 09:45	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		01/23/15 09:45	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/23/15 09:45		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60186643

Sample: MW-177-GW-20150121 **Lab ID: 60186643002** Collected: 01/21/15 09:35 Received: 01/22/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**6.0J**	ug/L	10.0	5.0	1		01/23/15 09:59	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/23/15 09:59	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/23/15 09:59	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/23/15 09:59	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/23/15 09:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/23/15 09:59	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/23/15 09:59	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/23/15 09:59	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/23/15 09:59	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/23/15 09:59	75-00-3	
Chloroform	**0.67J**	ug/L	1.0	0.50	1		01/23/15 09:59	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/23/15 09:59	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/23/15 09:59	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 09:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 09:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 09:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 09:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 09:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/23/15 09:59	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 09:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 09:59	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/23/15 09:59	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/23/15 09:59	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/23/15 09:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/23/15 09:59	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/23/15 09:59	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/23/15 09:59	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/23/15 09:59	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/23/15 09:59	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 09:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 09:59	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 09:59	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/23/15 09:59	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/23/15 09:59	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/23/15 09:59	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		01/23/15 09:59	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		01/23/15 09:59	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/23/15 09:59		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60186643

Sample: VP-12-GW-20150121 **Lab ID: 60186643003** Collected: 01/21/15 10:05 Received: 01/22/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/23/15 10:14	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/23/15 10:14	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/23/15 10:14	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/23/15 10:14	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/23/15 10:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/23/15 10:14	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/23/15 10:14	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/23/15 10:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/23/15 10:14	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/23/15 10:14	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/23/15 10:14	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/23/15 10:14	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/23/15 10:14	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 10:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 10:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 10:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 10:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 10:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/23/15 10:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 10:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 10:14	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/23/15 10:14	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/23/15 10:14	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/23/15 10:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/23/15 10:14	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/23/15 10:14	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/23/15 10:14	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/23/15 10:14	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/23/15 10:14	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 10:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 10:14	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 10:14	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/23/15 10:14	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/23/15 10:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		01/23/15 10:14	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/23/15 10:14	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		01/23/15 10:14	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/23/15 10:14		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60186643

Sample: TB-03 **Lab ID: 60186643004** Collected: 01/21/15 10:05 Received: 01/22/15 08:20 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/23/15 09:30	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/23/15 09:30	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/23/15 09:30	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/23/15 09:30	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/23/15 09:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/23/15 09:30	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/23/15 09:30	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/23/15 09:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/23/15 09:30	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/23/15 09:30	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/23/15 09:30	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/23/15 09:30	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/23/15 09:30	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 09:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 09:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 09:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 09:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 09:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/23/15 09:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 09:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 09:30	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/23/15 09:30	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/23/15 09:30	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/23/15 09:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/23/15 09:30	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/23/15 09:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/23/15 09:30	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/23/15 09:30	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/23/15 09:30	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 09:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 09:30	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 09:30	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/23/15 09:30	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/23/15 09:30	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/23/15 09:30	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		01/23/15 09:30	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		01/23/15 09:30	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/23/15 09:30		

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60186643

QC Batch: MSV/67164 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186643001, 60186643002, 60186643003, 60186643004

METHOD BLANK: 1510554 Matrix: Water
Associated Lab Samples: 60186643001, 60186643002, 60186643003, 60186643004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/23/15 09:15	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/23/15 09:15	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/23/15 09:15	
1,1-Dichloroethane	ug/L	ND	1.0	01/23/15 09:15	
1,1-Dichloroethene	ug/L	ND	1.0	01/23/15 09:15	
1,2-Dichloroethane	ug/L	ND	1.0	01/23/15 09:15	
1,2-Dichloropropane	ug/L	ND	1.0	01/23/15 09:15	
2-Butanone (MEK)	ug/L	ND	10.0	01/23/15 09:15	
2-Hexanone	ug/L	ND	10.0	01/23/15 09:15	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/23/15 09:15	
Acetone	ug/L	ND	10.0	01/23/15 09:15	
Benzene	ug/L	ND	1.0	01/23/15 09:15	
Bromodichloromethane	ug/L	ND	1.0	01/23/15 09:15	
Bromoform	ug/L	ND	1.0	01/23/15 09:15	
Bromomethane	ug/L	ND	5.0	01/23/15 09:15	
Carbon disulfide	ug/L	ND	5.0	01/23/15 09:15	
Carbon tetrachloride	ug/L	ND	1.0	01/23/15 09:15	
Chlorobenzene	ug/L	ND	1.0	01/23/15 09:15	
Chloroethane	ug/L	ND	1.0	01/23/15 09:15	
Chloroform	ug/L	ND	1.0	01/23/15 09:15	
Chloromethane	ug/L	ND	1.0	01/23/15 09:15	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 09:15	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 09:15	
Dibromochloromethane	ug/L	ND	1.0	01/23/15 09:15	
Ethylbenzene	ug/L	ND	1.0	01/23/15 09:15	
Methylene chloride	ug/L	ND	1.0	01/23/15 09:15	
Styrene	ug/L	ND	1.0	01/23/15 09:15	
Tetrachloroethene	ug/L	ND	1.0	01/23/15 09:15	
Toluene	ug/L	ND	1.0	01/23/15 09:15	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 09:15	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 09:15	
Trichloroethene	ug/L	ND	1.0	01/23/15 09:15	
Vinyl chloride	ug/L	ND	1.0	01/23/15 09:15	
Xylene (Total)	ug/L	ND	3.0	01/23/15 09:15	
1,2-Dichloroethane-d4 (S)	%	102	80-120	01/23/15 09:15	
4-Bromofluorobenzene (S)	%	98	80-120	01/23/15 09:15	
Toluene-d8 (S)	%	101	80-120	01/23/15 09:15	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60186643

LABORATORY CONTROL SAMPLE: 1510555

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.8	104	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	21.0	105	73-121	
1,1,2-Trichloroethane	ug/L	20	19.9	100	80-120	
1,1-Dichloroethane	ug/L	20	20.7	104	80-120	
1,1-Dichloroethene	ug/L	20	20.5	102	80-120	
1,2-Dichloroethane	ug/L	20	20.7	104	81-120	
1,2-Dichloropropane	ug/L	20	20.5	103	80-120	
2-Butanone (MEK)	ug/L	100	95.4	95	67-122	
2-Hexanone	ug/L	100	97.7	98	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	101	101	76-120	
Acetone	ug/L	100	93.5	94	72-120	
Benzene	ug/L	20	22.1	110	80-120	
Bromodichloromethane	ug/L	20	21.0	105	80-120	
Bromoform	ug/L	20	20.0	100	73-138	
Bromomethane	ug/L	20	21.0	105	38-137	
Carbon disulfide	ug/L	20	21.7	108	71-129	
Carbon tetrachloride	ug/L	20	21.2	106	67-146	
Chlorobenzene	ug/L	20	21.1	105	80-120	
Chloroethane	ug/L	20	19.0	95	76-120	
Chloroform	ug/L	20	19.9	100	80-120	
Chloromethane	ug/L	20	19.7	98	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.5	103	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.1	105	80-120	
Dibromochloromethane	ug/L	20	20.2	101	80-126	
Ethylbenzene	ug/L	20	20.7	103	80-120	
Methylene chloride	ug/L	20	19.1	96	80-120	
Styrene	ug/L	20	21.7	108	80-123	
Tetrachloroethene	ug/L	20	21.2	106	80-123	
Toluene	ug/L	20	20.9	105	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.1	101	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.1	105	80-129	
Trichloroethene	ug/L	20	19.6	98	80-120	
Vinyl chloride	ug/L	20	20.4	102	62-125	
Xylene (Total)	ug/L	60	64.6	108	80-120	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALIFIERS

Project: FORT SMITH AR
Pace Project No.: 60186643

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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BATCH QUALIFIERS

Batch: MSV/67164

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR
Pace Project No.: 60186643

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186643001	**MW-181-GW-20150121**	EPA 5030B/8260	MSV/67164		
60186643002	**MW-177-GW-20150121**	EPA 5030B/8260	MSV/67164		
60186643003	**VP-12-GW-20150121**	EPA 5030B/8260	MSV/67164		
60186643004	**TB-03**	EPA 5030B/8260	MSV/67164		

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Sample Condition Upon Receipt

WO# : 60186643

60186643

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 6113 5277 3438 Pace Shipping Label Used? Yes ☐ No ☐

Custody Seal on Cooler/Box Present: Yes ☒ No ☒ JD 1/22 Seals intact: Yes ☒ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☒ None ☐ Other ☐

Thermometer Used: T-238 / T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 3.5

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JD 1/22

Chain of Custody present:	☒Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☒Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☒Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☒Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☒Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☒No ☐N/A	6.
Rush Turn Around Time requested:	☐Yes ☒No ☐N/A	7.
Sufficient volume:	☒Yes ☐No ☐N/A	8.
Correct containers used:	☒Yes ☐No ☐N/A	
Pace containers used:	☒Yes ☐No ☐N/A	9.
Containers intact:	☒Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☒N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☐No ☒N/A	12.
Sample labels match COC: Includes date/time/ID/analyses Matrix: WT	☒Yes ☐No ☐N/A	13.
All containers needing preservation have been checked.	☐Yes ☐No ☒N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☒N/A	14.
Exceptions: (VOA), coliform, TOC, O&G, WI-DRO (water), Phenolics	☒Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present: Pace Trip Blank lot # (if purchased): 12/31/14	☒Yes ☐No ☐N/A	15.
Headspace in VOA vials (>6mm):	☐Yes ☒No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☒N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MW Date: 1/

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Section A Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	Standard

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	34344446A

Section C Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	9010-Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-181-GW-20150121	WT	G			1/21/15	0910		3				X					X											(3) DG9H	6a1
2	MW-177-GW-20150121	WT	G			1/21/15	0935		3				X					X												6a2
3	VP-12-GW-20150121	WT	G			1/21/15	1005		3				X					X												6a3
4	TripBlank-03	WT	G						2				X					X											(2) DG9H	6a4
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

6a186643

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
~~Level IV data package required~~ N2	Nick Zurweller / ENVIRON	1/21/15	1230	Pace	1/22	0820	3.5	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Nick Zurweller

SIGNATURE of SAMPLER: Nick Zurweller

DATE Signed (MM/DD/YY): 1/21/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*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.

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
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www.alsglobal.com

LABORATORY REPORT

January 29, 2015

Wendy Stonestreet
Environ International Corporation
7500 College Boulevard, Suite 925
Overland Park, KS 66210

RE: Whirlpool, Ft Smith 1st Quarter Vapor / 3434399A

Dear Wendy:

Enclosed are the results of the sample submitted to our laboratory on January 21, 2015. For your reference, these analyses have been assigned our service request number P1500238.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Kelly Horiuchi at 4:49 pm, Jan 29, 2015

Kelly Horiuchi
Laboratory Director

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

Client: Environ International Corporation Service Request No: P1500238
Project: Whirlpool, Ft Smith 1st Quarter Vapor / 3434399A

CASE NARRATIVE

The sample was received intact under chain of custody on January 21, 2015 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Volatile Organic Compound Analysis

The sample was analyzed in SIM mode for selected volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is not included on the laboratory's AIHA-LAP scope of accreditation.

The Summa canister was cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

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www.alsglobal.com

ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L14-2
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	838341
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	CA200007
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-14-5
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA016272014-4
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Environ International Corporation Service Request: P1500238

Project ID: Whirlpool, Ft Smith 1st Quarter Vapor / 3434399A

Date Received: 1/21/2015

Time Received: 09:35

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-15 - VOC SIM
VP-05-201501	P1500238-001	Air	1/16/2015	17:30	SC01520	-1.00	3.69	X

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) (10-Day-Standard)

ALS Project No: P1500238

Company Name & Address (Reporting Information)
ENVIRON
7500 College Blvd Ste 925
Overland Park, KS 66210

Project Name: Whirlpool, Ft Smith 1st Quarter Vapor

Project Number: 343439GA

Project Manager: Tammy Gleason

P.O. # / Billing Information
ENVIRON 7500 College Blvd Ste 925
Overland Park, KS wstonestreet@environcorp.com

Phone: 913-553-5926

Fax:

Email Address for Result Reporting: wstonestreet@environcorp.com & tgleason@environcorp.com

Sampler (Print & Sign):

ALS Contact: Kelly H

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	Analysis Method: MOD TO-15		Comments e.g. Actual Preservative or specific instructions
VP-05-201501	(1)	1/16/15	1730	SC01520	0A00976	-30"Hg	-5" Hg	25	X		Normal TAT

5 of 10

Report Tier Levels - please select
Tier I - Results (Default in not specified) ____ Tier III (Results + QC & Calibration Summaries) ____
Tier II (Results + QC Summaries X Tier IV (Date Validation Package) 10% Surcharge ____

EDD required (YES) No
Type: EQuIS Units: ____

Chain of Custody Seal: (Circle)
INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Wendy Stonestreet FEDEX	1/16/15	1800	FEDEX		
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
FEDEX				1/21/15	0935

Cooler / Blank Temperature ____°C

ALS Environmental
Sample Acceptance Check Form

Client: Environ International Corporation Work order: P1500238

Project: Whirlpool, Ft Smith 1st Quarter Vapor / 3434399A

Sample(s) received on: 1/21/15 Date opened: 1/21/15 by: ADAVID

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by ALS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☒	☐	☐
	Location of seal(s)? _____ Sealing Lid?	☒	☐	☐
	Were signature and date included?	☒	☐	☐
	Were seals intact?	☒	☐	☐
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1500238-001.01	6.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environ International Corporation**
Client Sample ID: **VP-05-201501** ALS Project ID: P1500238
Client Project ID: **Whirlpool, Ft Smith 1st Quarter Vapor / 3434399A** ALS Sample ID: P1500238-001

Test Code: EPA TO-15 SIM Date Collected: 1/16/15
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 1/21/15
Analyst: Wida Ang Date Analyzed: 1/23/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SC01520

Initial Pressure (psig): -1.00 Final Pressure (psig): 3.69

Canister Dilution Factor: 1.34

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	**4.6**	0.034	**1.8**	0.013	
75-35-4	1,1-Dichloroethene	**0.85**	0.034	**0.21**	0.0085	
156-60-5	trans-1,2-Dichloroethene	**0.15**	0.034	**0.038**	0.0085	
75-34-3	1,1-Dichloroethane	ND	0.034	ND	0.0083	
156-59-2	cis-1,2-Dichloroethene	**0.084**	0.034	**0.021**	0.0085	
107-06-2	1,2-Dichloroethane	**0.20**	0.034	**0.050**	0.0083	
71-55-6	1,1,1-Trichloroethane	ND	0.034	ND	0.0061	
79-01-6	Trichloroethene	**0.84**	0.034	**0.16**	0.0062	
127-18-4	Tetrachloroethene	**0.79**	0.034	**0.12**	0.0049	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environ International Corporation**
Client Sample ID: **Method Blank** ALS Project ID: P1500238
Client Project ID: **Whirlpool, Ft Smith 1st Quarter Vapor / 3434399A** ALS Sample ID: P150123-MB

Test Code: EPA TO-15 SIM Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: NA
Analyst: Wida Ang Date Analyzed: 1/23/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.025	ND	0.0098	
75-35-4	1,1-Dichloroethene	ND	0.025	ND	0.0063	
156-60-5	trans-1,2-Dichloroethene	ND	0.025	ND	0.0063	
75-34-3	1,1-Dichloroethane	ND	0.025	ND	0.0062	
156-59-2	cis-1,2-Dichloroethene	ND	0.025	ND	0.0063	
107-06-2	1,2-Dichloroethane	ND	0.025	ND	0.0062	
71-55-6	1,1,1-Trichloroethane	ND	0.025	ND	0.0046	
79-01-6	Trichloroethene	ND	0.025	ND	0.0047	
127-18-4	Tetrachloroethene	ND	0.025	ND	0.0037	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Environ International Corporation**
Client Project ID: **Whirlpool, Ft Smith 1st Quarter Vapor / 3434399A** ALS Project ID: P1500238

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date(s) Collected: 1/16/15
Analyst: Wida Ang Date(s) Received: 1/21/15
Sample Type: 6.0 L Summa Canister(s) Date(s) Analyzed: 1/23/15
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 % Recovered	Toluene-d8 % Recovered	Bromofluorobenzene % Recovered	Acceptance Limits	Data Qualifier
Method Blank	P150123-MB	**96**	**106**	**92**	70-130	
Lab Control Sample	P150123-LCS	**97**	**89**	**94**	70-130	
VP-05-201501	P1500238-001	**90**	**94**	**71**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environ International Corporation**
Client Sample ID: **Lab Control Sample** ALS Project ID: P1500238
Client Project ID: **Whirlpool, Ft Smith 1st Quarter Vapor / 3434399A** ALS Sample ID: P150123-LCS

Test Code: EPA TO-15 SIM Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: NA
Analyst: Wida Ang Date Analyzed: 1/23/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	**Result µg/m³**	**% Recovery**	ALS Acceptance Limits	**Data Qualifier**
75-01-4	Vinyl Chloride	4.04	**3.55**	**88**	63-120	
75-35-4	1,1-Dichloroethene	4.28	**4.44**	**104**	67-114	
156-60-5	trans-1,2-Dichloroethene	4.24	**3.93**	**93**	66-115	
75-34-3	1,1-Dichloroethane	4.16	**4.03**	**97**	65-117	
156-59-2	cis-1,2-Dichloroethene	4.28	**4.18**	**98**	66-116	
107-06-2	1,2-Dichloroethane	4.20	**3.67**	**87**	61-118	
71-55-6	1,1,1-Trichloroethane	4.16	**4.01**	**96**	65-114	
79-01-6	Trichloroethene	4.16	**3.78**	**91**	66-116	
127-18-4	Tetrachloroethene	3.96	**3.86**	**97**	65-118	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

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Simi Valley, CA 93065
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www.alsglobal.com

LABORATORY REPORT

January 21, 2015

Wendy Stonestreet
Environ International Corporation
7500 College Boulevard, Suite 925
Overland Park, KS 66210

RE: Whirlpool Fort Smith / 3433244A

Dear Wendy:

Enclosed are the results of the sample submitted to our laboratory on January 20, 2015. For your reference, this analysis has been assigned our service request number P1500210.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Sue Anderson at 1:27 pm, Jan 21, 2015

For Kelly Horiuchi
Laboratory Director

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

Client: Environ International Corporation
Project: Whirlpool Fort Smith / 3433244A

Service Request No: P1500210

CASE NARRATIVE

The sample was received intact under chain of custody on January 20, 2015 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Volatile Organic Compound Analysis

The sample was analyzed in SIM mode for selected volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is not included on the laboratory's AIHA-LAP scope of accreditation.

The Summa canister was cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L14-2
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	838341
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	CA200007
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-14-5
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA016272014-4
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Environ International Corporation Service Request: P1500210
Project ID: Whirlpool Fort Smith / 3433244A

Date Received: 1/20/2015
Time Received: 10:10

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	TO-15 - VOC SIM
VP-14-201501	P1500210-001	Air	1/18/2015	14:12	SC01841	X

Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10-Day-Standard

ALS Project No: P1500210

Company Name & Address (Reporting Information):
ENVIRON
7500 College Blvd., Suite 925
Overland Park, KS 66210

Project Name: Whirlpool Fort Smith

Project Number: 3433244A

Project Manager: Tamara Gleason

P.O. # / Billing Information:

Phone: 913-553-5926

Fax:

Email Address for Result Reporting: LCundiff@environcorp.com
wstonestreet@environcorp.com

Sampler (Print & Sign): Nick Zarweller

ALS Contact:

Analysis Method: Modified TO-15 (Client specific) List

Comments e.g. Actual Preservative or specific instructions

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	Analysis Method		Comments
VP-14-201501		1/18/15	1412	10805	AVG03580	-30	-13	6L	X		client specific list of analytes
											24 Hr TAT

Report Tier Levels - please select
Tier I - Results (Default in not specified) _____ Tier III (Results + QC & Calibration Summaries) _____
Tier II (Results + QC Summaries _____ Tier IV (Date Validation Package) 10% Surcharge _____

EDD required YES / No
Type: _____ Units: _____

Chain of Custody Seal: (Circle)
INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Nick Zarweller	1/19/15	1845			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
			Kelly Hunt	1/20/15	10:19am

Cooler / Blank Temperature _____ °C

5 of 10

ALS Environmental
Sample Acceptance Check Form

Client: Environ International Corporation Work order: P1500210

Project: Whirlpool Fort Smith / 3433244A

Sample(s) received on: 1/20/15 Date opened: 1/20/15 by: KHORIUCHI

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by ALS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1500210-001.01	6.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environ International Corporation**
Client Sample ID: **VP-14-201501** ALS Project ID: P1500210
Client Project ID: **Whirlpool Fort Smith / 3433244A** ALS Sample ID: P1500210-001

Test Code: EPA TO-15 SIM Date Collected: 1/18/15
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 1/20/15
Analyst: Wida Ang Date Analyzed: 1/20/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes: 0.10 Liter(s)
Container ID: SC01841
Initial Pressure (psig): -6.06 Final Pressure (psig): 0.0

Canister Dilution Factor: 1.70

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	**4.2**	0.043	**1.6**	0.017	
75-35-4	1,1-Dichloroethene	**48**	0.43	**12**	0.11	**D**
156-60-5	trans-1,2-Dichloroethene	**4.6**	0.043	**1.2**	0.011	
75-34-3	1,1-Dichloroethane	ND	0.043	ND	0.011	
156-59-2	cis-1,2-Dichloroethene	**27**	0.043	**6.9**	0.011	
107-06-2	1,2-Dichloroethane	**0.28**	0.043	**0.068**	0.011	
71-55-6	1,1,1-Trichloroethane	**0.076**	0.043	**0.014**	0.0078	
79-01-6	Trichloroethene	**350**	0.43	**65**	0.079	**D**
127-18-4	Tetrachloroethene	**0.31**	0.043	**0.045**	0.0063	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.
D = The reported result is from a dilution.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environ International Corporation**
Client Sample ID: **Method Blank** ALS Project ID: P1500210
Client Project ID: **Whirlpool Fort Smith / 3433244A** ALS Sample ID: P150120-MB

Test Code: EPA TO-15 SIM Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: NA
Analyst: Wida Ang Date Analyzed: 1/20/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.025	ND	0.0098	
75-35-4	1,1-Dichloroethene	ND	0.025	ND	0.0063	
156-60-5	trans-1,2-Dichloroethene	ND	0.025	ND	0.0063	
75-34-3	1,1-Dichloroethane	ND	0.025	ND	0.0062	
156-59-2	cis-1,2-Dichloroethene	ND	0.025	ND	0.0063	
107-06-2	1,2-Dichloroethane	ND	0.025	ND	0.0062	
71-55-6	1,1,1-Trichloroethane	ND	0.025	ND	0.0046	
79-01-6	Trichloroethene	ND	0.025	ND	0.0047	
127-18-4	Tetrachloroethene	ND	0.025	ND	0.0037	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Environ International Corporation**
Client Project ID: **Whirlpool Fort Smith / 3433244A** ALS Project ID: P1500210

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date(s) Collected: 1/18/15
Analyst: Wida Ang Date(s) Received: 1/20/15
Sample Type: 6.0 L Summa Canister(s) Date(s) Analyzed: 1/20/15
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 % Recovered	Toluene-d8 % Recovered	Bromofluorobenzene % Recovered	Acceptance Limits	Data Qualifier
Method Blank	P150120-MB	**106**	**99**	**87**	70-130	
Lab Control Sample	P150120-LCS	**101**	**94**	**94**	70-130	
VP-14-201501	P1500210-001	**95**	**100**	**88**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environ International Corporation**
Client Sample ID: **Lab Control Sample** ALS Project ID: P1500210
Client Project ID: **Whirlpool Fort Smith / 3433244A** ALS Sample ID: P150120-LCS

Test Code: EPA TO-15 SIM Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: NA
Analyst: Wida Ang Date Analyzed: 1/20/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	Result µg/m³	% Recovery	ALS Acceptance Limits	Data Qualifier
75-01-4	Vinyl Chloride	4.04	**3.75**	**93**	63-120	
75-35-4	1,1-Dichloroethene	4.28	**4.28**	**100**	67-114	
156-60-5	trans-1,2-Dichloroethene	4.24	**3.88**	**92**	66-115	
75-34-3	1,1-Dichloroethane	4.16	**4.16**	**100**	65-117	
156-59-2	cis-1,2-Dichloroethene	4.28	**4.07**	**95**	66-116	
107-06-2	1,2-Dichloroethane	4.20	**4.16**	**99**	61-118	
71-55-6	1,1,1-Trichloroethane	4.16	**4.03**	**97**	65-114	
79-01-6	Trichloroethene	4.16	**4.02**	**97**	66-116	
127-18-4	Tetrachloroethene	3.96	**3.92**	**99**	65-118	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

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www.alsglobal.com

LABORATORY REPORT

January 29, 2015

Wendy Stonestreet
Environ International Corporation
7500 College Boulevard, Suite 925
Overland Park, KS 66210

RE: Whirlpool Fort Smith / 3433244A

Dear Wendy:

Enclosed are the results of the sample submitted to our laboratory on January 20, 2015. For your reference, this analysis has been assigned our service request number P1500223.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Kelly Horiuchi at 4:53 pm, Jan 29, 2015

Kelly Horiuchi
Laboratory Director

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

Client: Environ International Corporation
Project: Whirlpool Fort Smith / 3433244A

Service Request No: P1500223

CASE NARRATIVE

The sample was received intact under chain of custody on January 20, 2015 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Volatile Organic Compound Analysis

The sample was analyzed in SIM mode for selected volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is not included on the laboratory's AIHA-LAP scope of accreditation.

The response for the Chlorobenzene-d5 internal standard in the sample was unacceptable because of suspected matrix interference. The Bromofluorobenzene surrogate recovery was below the acceptance limit due to Chlorobenzene-d5 response. Since the target compounds reported were not associated with this internal standard, the data quality has not been affected. No corrective action was necessary.

The Summa canister was cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

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www.alsglobal.com

ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L14-2
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	838341
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	CA200007
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-14-5
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA016272014-4
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Environ International Corporation Service Request: P1500223

Project ID: Whirlpool Fort Smith / 3433244A

Date Received: 1/20/2015

Time Received: 10:10

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-15 - VOC SIM
VP-9-201501	P1500223-001	Air	1/19/2015	16:05	SC02030	-3.04	3.78	X

Air - Chain of Custody Record & Analytical Service Request

Page 1 of 1

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Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10-Day-Standard

ALS Project No P1500223

Company Name & Address (Reporting Information)	ENVIRON 7500 College Blvd., Suite 925 Overland Park, KS 66210
Project Manager	Tamara Gleason
Phone	913-553-5926
Fax	
Email Address for Result Reporting	Lcundiff@environcorp.com wstonestreet@environcorp.com
Project Name	Whirlpool Fort Smith
Project Number	34332444A
P.O. # / Billing Information	
Sampler (Print & Sign)	Nick Zurweller
ALS Contact:	

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)-	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	Analysis Method: Modified TO-15 (client specific list)		Comments e.g. Actual Preservative or specific instructions
VP-9-201501		1605	1/19/15	004288	AVG04173	-27	-5	6L	X		client specific list of analytes

5 of 10

Report Tier Levels - please select

Tier I - Results (Default in not specified) _____ Tier III (Results + QC & Calibration Summaries) _____
Tier II (Results + QC Summaries _____ Tier IV (Date Validation Package) 10% Surcharge _____

EDD required YES / No
Type: _____ Units: _____

Chain of Custody Seal: (Circle)
INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date: 1/19/15	Time: 1845	Received by: (Signature)	Date:	Time:
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date: 01/20/15	Time: 10:10am

Cooler / Blank Temperature _____ °C

ALS Environmental
Sample Acceptance Check Form

Client: Environ International Corporation Work order: P1500223

Project: Whirlpool Fort Smith / 3433244A

Sample(s) received on: 1/20/15 Date opened: 1/20/15 by: KKELPE

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by ALS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1500223-001.01	6.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environ International Corporation**
Client Sample ID: **VP-9-201501** ALS Project ID: P1500223
Client Project ID: **Whirlpool Fort Smith / 3433244A** ALS Sample ID: P1500223-001

Test Code: EPA TO-15 SIM Date Collected: 1/19/15
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 1/20/15
Analyst: Wida Ang Date Analyzed: 1/23/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SC02030
Initial Pressure (psig): -3.04 Final Pressure (psig): 3.78

Canister Dilution Factor: 1.58

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	**4.1**	0.040	**1.6**	0.015	
75-35-4	1,1-Dichloroethene	**1.7**	0.040	**0.42**	0.010	
156-60-5	trans-1,2-Dichloroethene	**0.14**	0.040	**0.035**	0.010	
75-34-3	1,1-Dichloroethane	**0.36**	0.040	**0.089**	0.0098	
156-59-2	cis-1,2-Dichloroethene	**0.14**	0.040	**0.035**	0.010	
107-06-2	1,2-Dichloroethane	**2.3**	0.040	**0.56**	0.0098	
71-55-6	1,1,1-Trichloroethane	**0.045**	0.040	**0.0083**	0.0072	
79-01-6	Trichloroethene	**31**	0.040	**5.8**	0.0074	
127-18-4	Tetrachloroethene	**0.29**	0.040	**0.043**	0.0058	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environ International Corporation**
Client Sample ID: **Method Blank** ALS Project ID: P1500223
Client Project ID: **Whirlpool Fort Smith / 3433244A** ALS Sample ID: P150123-MB

Test Code: EPA TO-15 SIM Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: NA
Analyst: Wida Ang Date Analyzed: 1/23/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.025	ND	0.0098	
75-35-4	1,1-Dichloroethene	ND	0.025	ND	0.0063	
156-60-5	trans-1,2-Dichloroethene	ND	0.025	ND	0.0063	
75-34-3	1,1-Dichloroethane	ND	0.025	ND	0.0062	
156-59-2	cis-1,2-Dichloroethene	ND	0.025	ND	0.0063	
107-06-2	1,2-Dichloroethane	ND	0.025	ND	0.0062	
71-55-6	1,1,1-Trichloroethane	ND	0.025	ND	0.0046	
79-01-6	Trichloroethene	ND	0.025	ND	0.0047	
127-18-4	Tetrachloroethene	ND	0.025	ND	0.0037	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Environ International Corporation**
Client Project ID: **Whirlpool Fort Smith / 3433244A** ALS Project ID: P1500223

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date(s) Collected: 1/19/15
Analyst: Wida Ang Date(s) Received: 1/20/15
Sample Type: 6.0 L Summa Canister(s) Date(s) Analyzed: 1/23/15
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 % Recovered	Toluene-d8 % Recovered	Bromofluorobenzene % Recovered	Acceptance Limits	Data Qualifier
Method Blank	P150123-MB	**96**	**106**	**92**	70-130	
Lab Control Sample	P150123-LCS	**97**	**89**	**94**	70-130	
VP-9-201501	P1500223-001	**92**	**90**	**16**	70-130	**S**

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.
S = Surrogate recovery not within specified limits.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environ International Corporation**
Client Sample ID: **Lab Control Sample** ALS Project ID: P1500223
Client Project ID: **Whirlpool Fort Smith / 3433244A** ALS Sample ID: P150123-LCS

Test Code: EPA TO-15 SIM Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: NA
Analyst: Wida Ang Date Analyzed: 1/23/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	Result µg/m³	% Recovery	ALS Acceptance Limits	Data Qualifier
75-01-4	Vinyl Chloride	4.04	**3.55**	**88**	63-120	
75-35-4	1,1-Dichloroethene	4.28	**4.44**	**104**	67-114	
156-60-5	trans-1,2-Dichloroethene	4.24	**3.93**	**93**	66-115	
75-34-3	1,1-Dichloroethane	4.16	**4.03**	**97**	65-117	
156-59-2	cis-1,2-Dichloroethene	4.28	**4.18**	**98**	66-116	
107-06-2	1,2-Dichloroethane	4.20	**3.67**	**87**	61-118	
71-55-6	1,1,1-Trichloroethane	4.16	**4.01**	**96**	65-114	
79-01-6	Trichloroethene	4.16	**3.78**	**91**	66-116	
127-18-4	Tetrachloroethene	3.96	**3.86**	**97**	65-118	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

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LABORATORY REPORT

January 29, 2015

Wendy Stonestreet
Environ International Corporation
7500 College Boulevard, Suite 925
Overland Park, KS 66210

RE: Whirlpool Fort Smith / 3433244 A

Dear Wendy:

Enclosed are the results of the sample submitted to our laboratory on January 20, 2015. For your reference, this analysis has been assigned our service request number P1500228.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Kelly Horiuchi at 4:50 pm, Jan 29, 2015

Kelly Horiuchi
Laboratory Director

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

Client: Environ International Corporation
Project: Whirlpool Fort Smith / 3433244 A

Service Request No: P1500228

CASE NARRATIVE

The sample was received intact under chain of custody on January 20, 2015 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Volatile Organic Compound Analysis

The sample was analyzed in SIM mode for selected volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is not included on the laboratory's AIHA-LAP scope of accreditation.

The Summa canister was cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

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ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L14-2
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	838341
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	CA200007
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-14-5
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA016272014-4
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Environ International Corporation Service Request: P1500228

Project ID: Whirlpool Fort Smith / 3433244 A

Date Received: 1/20/2015

Time Received: 10:10

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-15 - VOC SIM
VP-7-201501	P1500228-001	Air	1/19/2015	18:20	SC01519	-3.44	3.90	X

Air - Chain of Custody Record & Analytical Service Request

P1500228

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10-Day-Standard

ALS Project No. ~~P1500224~~

Company Name & Address (Reporting Information)
ENVIRON
7500 College Blvd., Suite 925
Overland Park, KS 66210

Project Name: Whirlpool Fort Smith

Project Number: 343324.4A

Project Manager: Tamara Gleason

P.O. # / Billing Information

Phone: 913-553-5926

Fax:

Email Address for Result Reporting: Lcundriff@environcorp.com
wstonestreet@environcorp.com

Sampler (Print & Sign): Nick Zurweller

ALS Contact:

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	Analysis Method: Modified TO-15 (client specific list)		Comments e.g. Actual Preservative or specific instructions
VP-7-201501	1	1/19/15	1820	01901	AVG03498	-27.5	-8	6L	X		client specific list of analytes

5 of 10

Report Tier Levels - please select

Tier I - Results (Default in not specified) _____
Tier II (Results + QC Summaries _____
Tier III (Results + QC & Calibration Summaries) _____
Tier IV (Date Validation Package) 10% Surcharge _____

EDD required YES / No
Type: _____ Units: _____

Chain of Custody Seal: (Circle)
INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
	1/19/15	1845			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
			Kelly Hmiel	01/20/15	1019am

Cooler / Blank Temperature _____°C

ALS Environmental
Sample Acceptance Check Form

Client: Environ International Corporation Work order: P1500228

Project: Whirlpool Fort Smith / 3433244 A

Sample(s) received on: 1/20/15 Date opened: 1/20/15 by: KKELPE

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by ALS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1500228-001.01	6.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environ International Corporation**
Client Sample ID: **VP-7-201501** ALS Project ID: P1500228
Client Project ID: **Whirlpool Fort Smith / 3433244 A** ALS Sample ID: P1500228-001

Test Code: EPA TO-15 SIM Date Collected: 1/19/15
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 1/20/15
Analyst: Wida Ang Date Analyzed: 1/23/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SC01519

Initial Pressure (psig): -3.44 Final Pressure (psig): 3.90

Canister Dilution Factor: 1.65

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	**1.5**	0.041	**0.58**	0.016	
75-35-4	1,1-Dichloroethene	**0.42**	0.041	**0.11**	0.010	
156-60-5	trans-1,2-Dichloroethene	ND	0.041	ND	0.010	
75-34-3	1,1-Dichloroethane	ND	0.041	ND	0.010	
156-59-2	cis-1,2-Dichloroethene	**0.25**	0.041	**0.063**	0.010	
107-06-2	1,2-Dichloroethane	**0.20**	0.041	**0.049**	0.010	
71-55-6	1,1,1-Trichloroethane	ND	0.041	ND	0.0076	
79-01-6	Trichloroethene	**2.8**	0.041	**0.52**	0.0077	
127-18-4	Tetrachloroethene	**0.44**	0.041	**0.065**	0.0061	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environ International Corporation**
Client Sample ID: **Method Blank** ALS Project ID: P1500228
Client Project ID: **Whirlpool Fort Smith / 3433244 A** ALS Sample ID: P150123-MB

Test Code: EPA TO-15 SIM Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: NA
Analyst: Wida Ang Date Analyzed: 1/23/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.025	ND	0.0098	
75-35-4	1,1-Dichloroethene	ND	0.025	ND	0.0063	
156-60-5	trans-1,2-Dichloroethene	ND	0.025	ND	0.0063	
75-34-3	1,1-Dichloroethane	ND	0.025	ND	0.0062	
156-59-2	cis-1,2-Dichloroethene	ND	0.025	ND	0.0063	
107-06-2	1,2-Dichloroethane	ND	0.025	ND	0.0062	
71-55-6	1,1,1-Trichloroethane	ND	0.025	ND	0.0046	
79-01-6	Trichloroethene	ND	0.025	ND	0.0047	
127-18-4	Tetrachloroethene	ND	0.025	ND	0.0037	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Environ International Corporation**
Client Project ID: **Whirlpool Fort Smith / 3433244 A** ALS Project ID: P1500228

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date(s) Collected: 1/19/15
Analyst: Wida Ang Date(s) Received: 1/20/15
Sample Type: 6.0 L Summa Canister(s) Date(s) Analyzed: 1/23/15
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 % Recovered	Toluene-d8 % Recovered	Bromofluorobenzene % Recovered	Acceptance Limits	Data Qualifier
Method Blank	P150123-MB	**96**	**106**	**92**	70-130	
Lab Control Sample	P150123-LCS	**97**	**89**	**94**	70-130	
VP-7-201501	P1500228-001	**92**	**87**	**93**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environ International Corporation**
Client Sample ID: **Lab Control Sample** ALS Project ID: P1500228
Client Project ID: **Whirlpool Fort Smith / 3433244 A** ALS Sample ID: P150123-LCS

Test Code: EPA TO-15 SIM Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: NA
Analyst: Wida Ang Date Analyzed: 1/23/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	Result µg/m³	% Recovery	ALS Acceptance Limits	Data Qualifier
75-01-4	Vinyl Chloride	4.04	**3.55**	**88**	63-120	
75-35-4	1,1-Dichloroethene	4.28	**4.44**	**104**	67-114	
156-60-5	trans-1,2-Dichloroethene	4.24	**3.93**	**93**	66-115	
75-34-3	1,1-Dichloroethane	4.16	**4.03**	**97**	65-117	
156-59-2	cis-1,2-Dichloroethene	4.28	**4.18**	**98**	66-116	
107-06-2	1,2-Dichloroethane	4.20	**3.67**	**87**	61-118	
71-55-6	1,1,1-Trichloroethane	4.16	**4.01**	**96**	65-114	
79-01-6	Trichloroethene	4.16	**3.78**	**91**	66-116	
127-18-4	Tetrachloroethene	3.96	**3.86**	**97**	65-118	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Appendix C

Vapor Monitoring Port Field Notes and Weather History

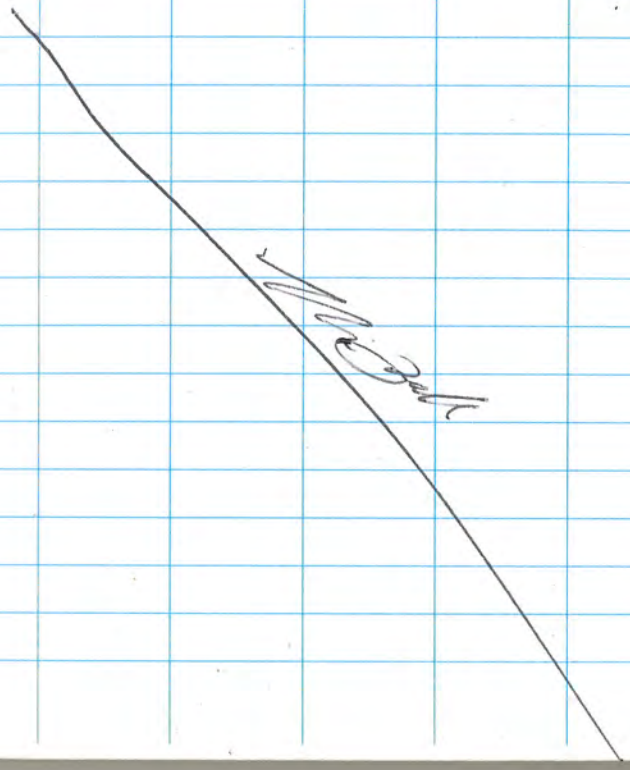
40

1/15/15 Whirlpool Fort Smith 35°F rain

Sample FB-04-20150115 @ 1710

1805 Sample prep & demobilization activities complete. All sampling crew personnel demobilizing except, NZ, WS, ME, & KS

1830 All personnel off-site



41

30°F

1/16/15 Whirlpool Fort Smith

0640 Nick Zurwelle (ENVIRON) on-site. Mike Edelings (ENVIRON) already on-site. Discuss work.

0730 Able on-site & WHE (same drilling crews as previous).

0745 Conduct H&S meeting. WS & KS on-site (ENVIRON)

0845 Arrive @ MW-176 (1605 records)

0900 Begin well installation @ MW-176.

TD of MW-176 prior to well installation (inside of surface casing) approx 9.9' (btoc) w/ approx 1" of water @ TD.

VP-10 pre-well TD: 9.4' btoc

VP-9 pre-well TD: 4.5' btoc

0930 Installation of MW-176 complete: TD: ~14' bgs, filter pack sand to 12' bgs, bentonite chips to 10' bgs, will install cement/bentonite seal later in the day.

Note: wet drill cuttings @ TD

Rite in the Rain

35°F Sunny

1/16/15 Whirlpool Fort Smith

0940 Begin installation of VP-10

1025 Installation complete @ VP-10, TD: 11.5', filter pack sand to ~11.55' bgs, 15 screen to ~10.75' bgs, then filter pack sand to ~10.50' bgs, bentonite chips ~8.50 bgs, bentonite gel to near surface; ~~surface casing to 10.5'~~ bgs, note: dry cuttings, surface casing to 10.5' (previously installed)

VP-10 (not to scale)



1040 Begin installation of VP-9

1125 Installation complete @ VP-9, TD: 6' bgs, 0.05' filter pack sand below 5' 0.05' screen, then filter pack sand to 5' bgs (0.25' above screen), bentonite chips to 3' bgs, bentonite gel to near surface, 3/8" OD x 1/4" ID LDPE tubing above surface, surface casing to 5' bgs (previously installed), dry cuttings.

VP-9 (not to scale)



1215 Demobilize from 1605 Jacobs

1210 cement bentonite seal installed @ MW-176 to near surface

40°F Sunny

1/16/15 Whirlpool Fort Smith

1255 Begin developing MW-33R. Will develop until clear. ME to take over development

1420 DTW's in parking lot adjacent to Ingersoll (south) (btoc)

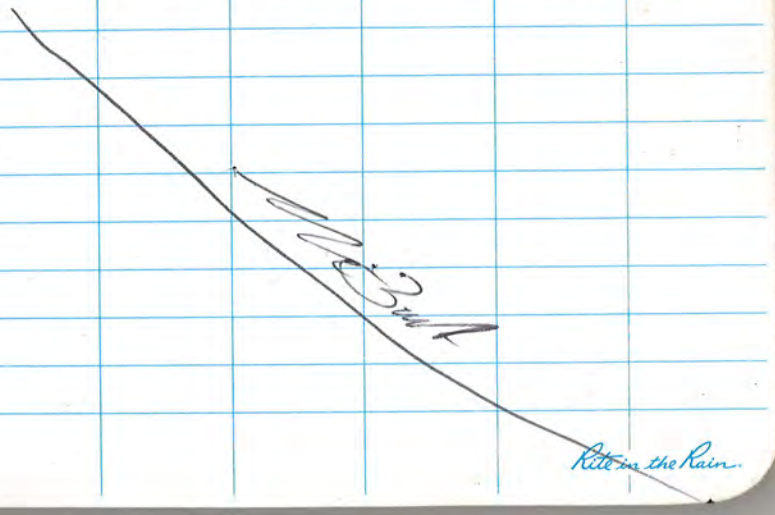
N

MW-178	MW-179	MW-180
DTW: 3.35'	DTW: Dry	DTW: 5.90'
TD: 8.0'	TD: 12.95'	TD: 7.0'

1620 Development complete @ MW-33R. See ME notes for volumes.

1630 Prepare to soil vapor sample

1810 All personnel (ME, WS, NZ) off-site. WS demobilizing



Rite in the Rain

30°F Sunny

1/17/15 Whirlpool Fort Smith

0700 Nick Zumwalter (ENVIRON) on-site. Mike Eddings already on-site (ENVIRON). Discuss work & prepare to soil vapor sample.

0730 Able on-site (same 3-man crew as previous.

0735 Walker-Hill on-site (3-man crew). Conduct H&S meeting.

Arrive @ VP-14

0845 Begin sampling process. (See vapor monitoring report log). While purging sample line vacuum held @ ~7 "Hg for >1 min. All shutrin test passed. Helium in shroud ~10.1%. No helium detected in sample line.

0930 start sampling VP-14 w/ 8 hr timed regulator. Initial Summa vacuum -30 "Hg

1010 Begin developing MW-33R to remove silt accumulation from previous development

see ME notes

40°F Sunny

1/17/15 Whirlpool Fort Smith

MW-180 DTW: 5.25' btoc

1055 Begin developing purging MW-180 w/ peristaltic pump & associated tubing.

Very turbid initially

1109 MW-180 dry ~0.5 gal purged

1546 Development complete @ MW-180 ~1.5 gal purged

Development of MW-33R complete (see ME notes).

1730 VP-14 Summa canister regulator @ 15" Hg. Will (continue to) pull sample overnight

1735 All personnel off-site. Able drilling demobilized early afternoon.

Rite in the Rain

46

30°F Sunny

1/18/14 Whirlpool Fort Smith

0730 Nick Zurweller & Mike Eddings (ENVIRON) on-site.

0735 Summa Canister regulator @ 14" Hg. will allow to pull vapor.

0740 Walker-Hill on-site. Prepare for demobilization.

0810 Walker-Hill off-site

0830 Prepare to GW sample

1020 YSI calibration complete (SN: 07H102076, see calibration checklist)

1024 Begin purging MW-180 w/ peristaltic pump (see GW sampling log) Initial DTW: 4.43

1210 MW-180 dry @ ~ 0.6 gal purged. Will allow to recharge & then sample w/ tubing set @ 6.4' btoc

1238 Begin purging MW-178 w/ peristaltic pumple (see GW sampling log)

1340 Purging complete @ MW-178 unable to stabilize parameters after 1 hr.

3 vobs Sample MW-178-GW-20150118 @ 1345

47

60°F Sunny

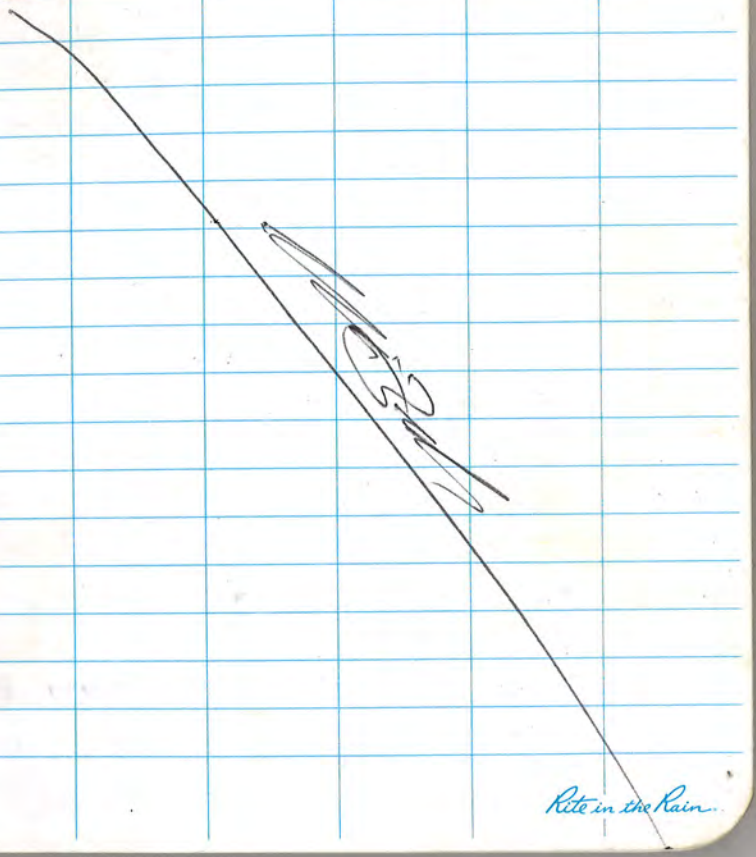
1/18/15 Whirlpool Fort Smith

1407 MW-180 DTW: 6.65' btoc

1412 Final pressure @ VP-14: 13" Hg. Disconnect Summa

1415 Set up summas for sampling on 1/19/15 (perform shut-in test).

1500 N2 & ME off-site.



Rite in the Rain

48

40°F

1/19/15 Whirlpool Fort Smith

0700 Nick Zurweller (ENVIRON) on-site. Mike Edding (ENVIRON) already on-site. Discuss work.

0730 Begin calibrating YSI & prepare for soil vapor sampling

0810 YSI calibration complete (see calibration check/ISK)

0830 Arrive @ VP-7 (5' TD)

0840 Purged sample line until vacuumm hold @ 7.5 "Hg

0850 Purge VP-8 (10' TD). Water in sample line.

0920 15% Helium in shroud. No leak detected in sample line

0940 Begin sampling VP-7 Initial Pressure: -27.5" Hg

0950 Arrive @ VP-12 on off-site Whirlpool property

0955 Begin purging VP-12. Water in sample line immediately.

1000 Begin purging VP-9 (1605 gallons/ 15' TD).

1010 Unable to achieve vacuumm @ VP-9

1025 Begin sampling VP-9, All shut-in tests passed, no helium detected in sample line, initial pressure -27"Hg

49

5°F Sunny

1/19/15 Whirlpool Fort Smith

See vapor monitoring report for sampling information for VPs

1035 Achieve vacuumm @ VP-10. Will sample on 1/20/15 due to 8-hour time restraints.

1120 Arrive @ MW-180 OTV: 4.38' BTOC

1130 Sample MW-180-GW-20150119 @ 1130

Clear sample, 3 VOAs Persulfate: 0 ppm (5 drops)

Development ~~off~~ of off-site wells complete. See ME notes

1400 Arrive @ MW-32R

1424 Begin purging MW-32R Slightly turbid (light brown initially)

1529 Purging complete @ MW-32R

Sample MW-32R-GW-20150119 @ 1530

Clear sample, persulfate ~420 mg/L 3 Ascorbic Acid VOAs used to sample VOCs

Rite in the Rain

50

60°F

1/19/15 Whirlpool Fort Smith Sunny

1605 Disconnect VP-9 Summa from vapor point. Final pressure: ~5" Hg

Sample VP-9-201501 @ 1605

1620 Prepare GW samples for courier pickup & soil vapor samples for shipment.

1650 N2 1720 Prepare summa canisters for soil vapor sampling on 1/20/15.

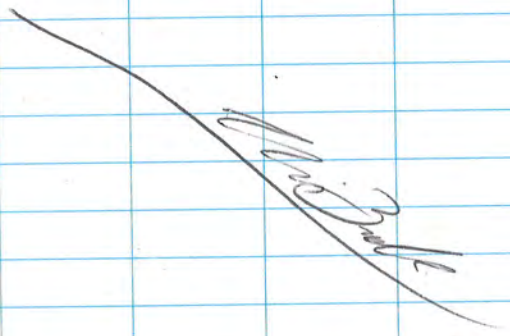
1730 GW sampler relinqurshed to courier

1820 Disconnect VP-7 Summa from vapor point. Final pressure: -8" Hg

Sample VP-7-201501 @ 1820

1830 N2 & ME off-site

1845 Soil vapor samples relinqurshed



51

30°F?

1/20/15 Whirlpool Fort Smith

0630 Nick Zurweller (ENVIRON) on-site. Mike Eddings already on-site (ENVIRON)

0635 Prepare & edit boring & well construction logs in GINT

0725 Boring & well construction logs updated & generated.

0730 Status table updated & generated.

0735 Prepare to soil vapor sample (1605 Jacobs)

0824 Begin purging VP-10. Water immediately in sample line. Demobilize from 1605 Jacobs.

0900 YSI calibration complete (see calibration log).

0920 Arrive @ MW-175. Prepare to GW sample

1000 Open well caps to allow off-site wells to equilibrate for gauging

N2 MW-175

	DTW (from bracket)	TD (Lee Brad)	Time
MW-175	4.92	14.6	1017
MW-176	1.67	14.02	1022
MW-181	5.93	6.42	1033
MW-177	9.81	10.04	1029

Rite in the Rain

52

1/20/15 Whirlpool Fort Smith 45°F clouds

1045 Continue gauging w/ on-site shallow wells after allowing to equilibrate

	DTW (ft btoc)	TD (ft btoc)	Time
MW-178	3.42	8.00	1054
MW-179	Dry	12.95'	1048
MW-180	4.50	7.00	1051

1235 MW-175 DTW: 4.57' btoc (no tubing in well)

Begin purging MW-175 w/ peristaltic pump & associated tubing

DTW: 4.33' btoc w/ tubing & tubing weight in well (see GW sampling log)

1343 Purging complete @ MW-175

Sample MW-175-GW-20150120 @ 1345

1412 Begin purging VP-8 (GW in vapor point)

1422 Purged ~ 75 ml water Insufficient volume for GW sample; air in sample line, intermittent flow out of sample line

53

1/20/15 Whirlpool Fort Smith 55°F mostly sunny

1505 MW-176 DTW: 1.64' btoc (without tubing)

" " DTW: 1.54' btoc (w/ tubing & tubing weight)

1510 Begin purging MW-176

1533 Begin purging VP-10 for GW sample. Initially turbid (light brown); Rate: 100 ml/min.

Sample VP-10-GW-20150120 @ 1555

light brown turbid sample

Purging complete @ MW-176 Unable to stabilize after 1 hr. of purging.

Sample MW-176-GW-20150120 @ 1615

slightly turbid light brown

1620 Demobilize from MW-176

1640 Prepare samples for shipment.

1715 Samples prepared for shipment

1720 Update MW-85 & MW-86 logs in GINT

1730 NZ & ME off-site

54 35°F

1/21/15 Whirlpool Fort Smith

0700 Nick Zarweller (ENVIRON) on-site. Mike Eddings (ENVIRON) already on-site. Prepare for work.

0810 Mobilize to ~~B~~ N2 off-site Whirlpool property

~~0820 Arrive @ MW-181~~

0835 MW-177 DTW: 9.69' btoc
MW-181 DTW: 5.82' btoc

0907 Begin purging MW-181 w/ peristaltic pump. See GW sampling log

MW-181 Dry @ 0919

Sample MW-181-GW-20150121 @ 0910

turbid brown sample

0932 Begin purging MW-177 w/ peristaltic pump. See GW sampling log.

Sample MW-177-GW-20150121 @ 0935

clear sample, dry @ 0939
No parameters collected.

1002 Begin purging VP-12 w/ peristaltic pump for GW sample @ 100 ml/min

55 40°F sunny

1/21/15 Whirlpool Fort Smith

Sample VP-12-GW-20150121 @ 1005

Clear sample

1006 Increase purge rate & attempt to purge dry.

1007 Intermittent flow observed, clear water.

1008 No flow observed, moisture in sample line

1009 Intermittent flow observed, end purging

1010 De-mobilize from off-site Whirlpool property.

1020 Prepare for de-mobilization & begin demobilization activities

1130 Demobilization complete. Prepare samples for relinquishment

1230 GW samples relinquished. Off-site Whirlpool @ 1215. ME remains on-site for waste disposal.

Rite in the Rain

ENVIRON – VAPOR MONITORING PORT SAMPLING

PROJECT NUMBER: 3434399A | **Sampler** | NZ

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

FIELD PARAMETERS

Well Location	Depth	Date	Canister ID	Regulator ID	Helium in Shroud during leak test	Start Time	Initial Vacuum Reading	Finish Time	Final Vacuum Reading	Notes
VP-14	10.75'	1/17/15	10805	AVG03580	10.1%	0930	-30 "Hg	1412	1/18/15 -13 "Hg	
VP-7	5.0'	1/19/15	01901	AVG03498	15%	0940	-27.5 "Hg	1820	-8 "Hg	
VP-9	5.0'	1/19/15	004288	AVG04173	30%	1025	-27 "Hg	1605	-5 "Hg	

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: East

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 35°F

COMMENTS

ENVIRON – VAPOR MONITORING PORT SAMPLING

PROJECT NUMBER: 3434399A

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

Sampler: WES

FIELD PARAMETERS

Well Location	Depth	Date	Canister ID	Regulator ID	Helium in Shroud during leak test	Start Time	Initial Vacuum Reading	Finish Time	Final Vacuum Reading	Notes
VP-05	7.75ft	1/16/15	SC01520	0A00976	21.6%	1145	-30" Hg	1730	-5" Hg	

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: SE

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 28°F

COMMENTS

Checked Summa @ 1307 : -22.5" Hg

Checked Summa @ 1555 : -8.5" Hg

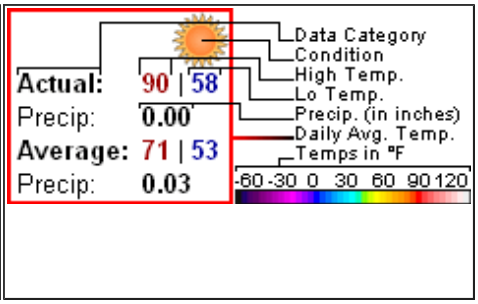
Checked Summa @ 1645 : -6.5" Hg

« Previous Month	« 2014	January 2015			2016 »	Next Month »
Sunday	**Monday**	**Tuesday**	**Wednesday**	**Thursday**	**Friday**	**Saturday**
				1 **Actual:** 36 | 31 Precip: 0.17 **Average:** 49 | 29 Precip: 0.09	2 **Actual:** 41 | 36 Precip: 0.95 **Average:** 49 | 29 Precip: 0.09	3 **Actual:** 47 | 40 Precip: 0.46 **Average:** 49 | 29 Precip: 0.09
4 **Actual:** 42 | 21 Precip: T **Average:** 49 | 29 Precip: 0.09	5 **Actual:** 43 | 19 Precip: 0.00 **Average:** 49 | 29 Precip: 0.09	6 **Actual:** 55 | 25 Precip: 0.00 **Average:** 49 | 29 Precip: 0.09	7 **Actual:** 34 | 14 Precip: 0.00 **Average:** 49 | 29 Precip: 0.09	8 **Actual:** 36 | 9 Precip: 0.00 **Average:** 49 | 29 Precip: 0.08	9 **Actual:** 34 | 18 Precip: 0.00 **Average:** 49 | 29 Precip: 0.09	10 **Actual:** 37 | 14 Precip: 0.00 **Average:** 49 | 29 Precip: 0.08
11 **Actual:** 36 | 30 Precip: 0.17 **Average:** 49 | 29 Precip: 0.08	12 **Actual:** 42 | 32 Precip: 0.00 **Average:** 49 | 29 Precip: 0.09	13 **Actual:** 42 | 26 Precip: 0.00 **Average:** 49 | 29 Precip: 0.09	14 **Actual:** 43 | 21 Precip: 0.00 **Average:** 50 | 29 Precip: 0.08	15 **Actual:** 50 | 30 Precip: T **Average:** 50 | 29 Precip: 0.09	16 **Actual:** 59 | 22 Precip: 0.00 **Average:** 50 | 29 Precip: 0.09	17 **Actual:** 64 | 30 Precip: 0.00 **Average:** 50 | 29 Precip: 0.10
18 **Actual:** 67 | 31 Precip: 0.00 **Average:** 50 | 29 Precip: 0.10	19 **Actual:** 66 | 33 Precip: 0.00 **Average:** 50 | 29 Precip: 0.09	20 **Actual:** 63 | 31 Precip: 0.00 **Average:** 50 | 29 Precip: 0.09	21 **Actual:** 59 | 31 Precip: 0.00 **Average:** 50 | 29 Precip: 0.09	22 **Actual:** 50 | 40 Precip: 0.41 **Average:** 50 | 29 Precip: 0.09	23 **Actual:** 52 | 29 Precip: 0.00 **Average:** 50 | 29 Precip: 0.09	24 **Actual:** 56 | 27 Precip: 0.00 **Average:** 51 | 29 Precip: 0.10
25 **Actual:** 56 | 35 Precip: T **Average:** 51 | 29 Precip: 0.09	26 **Actual:** 62 | 31 Precip: 0.00 **Average:** 51 | 29 Precip: 0.09	27 **Actual:** 72 | 34 Precip: 0.00 **Average:** 51 | 29 Precip: 0.10	28 **Actual:** 70 | 41 Precip: 0.00 **Average:** 51 | 30 Precip: 0.09	29 **Actual:** 57 | 38 Precip: 0.00 **Average:** 51 | 30 Precip: 0.10	30 **Actual:** 52 | 27 Precip: 0.00 **Average:** 52 | 30 Precip: 0.09	31 **Actual:** 53 | 40 Precip: 0.06 **Average:** 52 | 30 Precip: 0.10

Month Precipitation - Actual month total: **2.22** Normal month total: **2.81**

Calendar Key





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Appendix D

Risk Calculations and Input Parameters

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D.2 Physical and Chemical Properties
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D.5 Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater in the Neighborhood
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D.20 Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-177 (Parcel 4)
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D.22 Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-180 (Parcel 5)
D.23 Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-180 (Parcel 5)
D.24 Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-180 (Parcel 5)
D.25 Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-178 (Parcel 5)
D.26 Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-178 (Parcel 5)
D.27 Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-178 (Parcel 5)
D.28 Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-33 (Parcel 5)

Attachment D.1: Toxicity Values
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	Cancer Classification		ADAF			URF ($mg/m^3)^{-1}$			RfC (mg/m^3)			
			Group	Ref	Y/N	f_{oral}	f_{inh}	Value	Ref	Notes	Value	UF	Ref	Notes
VOC	Acetone	67-64-1	ID	1	N						3.1E+01	100	129	111
VOC	Bromoform	75-25-2	B2	1	N			1.1E-03	1				126	90
VOC	Bromomethane	74-83-9	ID	126	N						5.0E-03	100	1	
VOC	2-Butanone	78-93-3	ID	1	N						5.0E+00	300	1	
VOC	Chloroform	67-66-3	B2	1	N			2.3E-02	1		5.0E-02	100	117	
VOC	Chloromethane	74-87-3	D	1	N						9.0E-02	1,000	1	
VOC	1,1-Dichloroethane	75-34-3	SC	126	N				126	90	5.0E-01	1,000	2	3
VOC	1,2-Dichloroethane	107-06-2	B2	1	N			2.6E-02	1		7.0E-03	3,000	126	
VOC	1,1-Dichloroethene	75-35-4	C	1	N						2.0E-01	30	1	
VOC	cis-1,2-Dichloroethene	156-59-2	ID	1	N								1	90
VOC	trans-1,2-Dichloroethene	156-60-5	ID	1	N								1	90
VOC	Tetrachloroethene	127-18-4	LC	1	N			2.6E-04	1		4.0E-02	1,000	1	
VOC	1,1,1-Trichloroethane	71-55-6	ID	1	N						5.0E+00	100	1	
VOC	Trichloroethene	79-01-6	HC	1	Y	0.202	0.244	4.1E-03	1	159	2.0E-03	100	1	
VOC	Vinyl Chloride	75-01-4	A	1	N			4.4E-03	1	79	1.0E-01	30	1	

References

	Toxicity values were selected following the hierarchy of sources defined by USEPA (Human Health Toxicity Values in Superfund Risk Assessment, 2003), as discussed in Appendix A, Section 4 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision. Values are current as of March 5, 2014.
1	USEPA. Integrated Risk Information System (IRIS). On-line database.
2	USEPA. 1997. Health Effects Assessment Summary Tables (HEAST). FY-1997 Update. EPA 540/R-97-036. July.
117	USEPA. NCEA. 2003. Risk Assessment Issue Paper for: Derivation of Provisional Subchronic and Chronic RfCs for Chloroform [CASRN 67-66-3]. January 23.
126	Provisional Peer Reviewed Toxicity Values for Superfund (PPRTV) Database.
129	ATSDR. 2013. Minimal Risk Levels. March.

Notes:

3	HEAST Alternate Method.
79	For evaluating partial lifetime exposures that include early-life exposure, the unit risk factor is also used in risk calculations that do not prorate the early-life exposure, per USEPA's May 2000 Toxicological Review.
90	Inadequate data exist to derive a toxicity value, according to the indicated reference.
111	Value as published is an MRL in the indicated reference.
159	Because the chemical has a mutagenic mode of action according to USEPA, the SF and URF are adjusted by the following age-dependent adjustment factors (ADAFs) before use: 10 for ages 0 to 2; 3 for ages 2 to 16; and 1 for ages 16 and older (USEPA 2005).

Attachment D.2: Physical and Chemical Properties
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	H (unitless)				D_{air} (m^2/d)		D_{water} (m^2/d)		HENRY Ref Temp (°C)
			Value	Adjusted	Ref	Notes	Value	Ref	Value	Ref	Value
VOC	Acetone	67-64-1	1.6E-03	1.1E-03	44		1.1E+00	44	9.8E-05	44	2.5E+01
VOC	Bromoform	75-25-2	2.2E-02	1.3E-02	44		1.3E-01	44	8.9E-05	44	2.5E+01
VOC	Bromomethane	74-83-9	2.6E-01	2.0E-01	44		6.3E-01	44	1.0E-04	44	2.5E+01
VOC	2-Butanone	78-93-3	2.3E-03	2.0E-03	50.1	92, 123	7.0E-01	69	8.5E-05	69	2.0E+01
VOC	Chloroform	67-66-3	1.5E-01	1.1E-01	44		9.0E-01	44	8.6E-05	44	2.5E+01
VOC	Chloromethane	74-87-3	3.6E-01	3.3E-01	50.1	92, 123	1.1E+00	69	5.6E-05	69	2.0E+01
VOC	1,1-Dichloroethane	75-34-3	2.3E-01	1.7E-01	44		6.4E-01	44	9.1E-05	44	2.5E+01
VOC	1,2-Dichloroethane	107-06-2	4.0E-02	2.7E-02	44		9.0E-01	44	8.6E-05	44	2.5E+01
VOC	1,1-Dichloroethene	75-35-4	1.1E+00	8.1E-01	44		7.8E-01	44	9.0E-05	44	2.5E+01
VOC	cis-1,2-Dichloroethene	156-59-2	1.7E-01	1.2E-01	44		6.4E-01	44	9.8E-05	44	2.5E+01
VOC	trans-1,2-Dichloroethene	156-60-5	3.9E-01	2.8E-01	44		6.1E-01	44	1.0E-04	44	2.5E+01
VOC	Tetrachloroethene	127-18-4	7.5E-01	4.9E-01	44		6.2E-01	44	7.1E-05	44	2.5E+01
VOC	1,1,1-Trichloroethane	71-55-6	7.1E-01	5.0E-01	44		6.7E-01	44	7.6E-05	44	2.5E+01
VOC	Trichloroethene	79-01-6	4.2E-01	2.9E-01	44		6.8E-01	44	7.9E-05	44	2.5E+01
VOC	Vinyl Chloride	75-01-4	1.1E+00	9.0E-01	44		9.2E-01	44	1.1E-04	71	2.5E+01

References:

Physical and chemical parameters were selected following the hierarchy of sources used by USEPA (Soil Screening Guidance: Technical Background Document, 1996), as discussed in Appendix A, Section 54 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

44 USEPA. 1996. Soil Screening Guidance: Technical Background Document and User Guide. Office of Emergency and Remedial Response. EPA/540/R-95/128. May.

50.1 USEPA. 1997. Superfund Chemical Data Matrix (SCDM). Office of Emergency and Remedial Response. September 12.

69 USEPA. 2004. WATER9. Version 2.0.0. Office of Air Quality Planning and Standards. July.

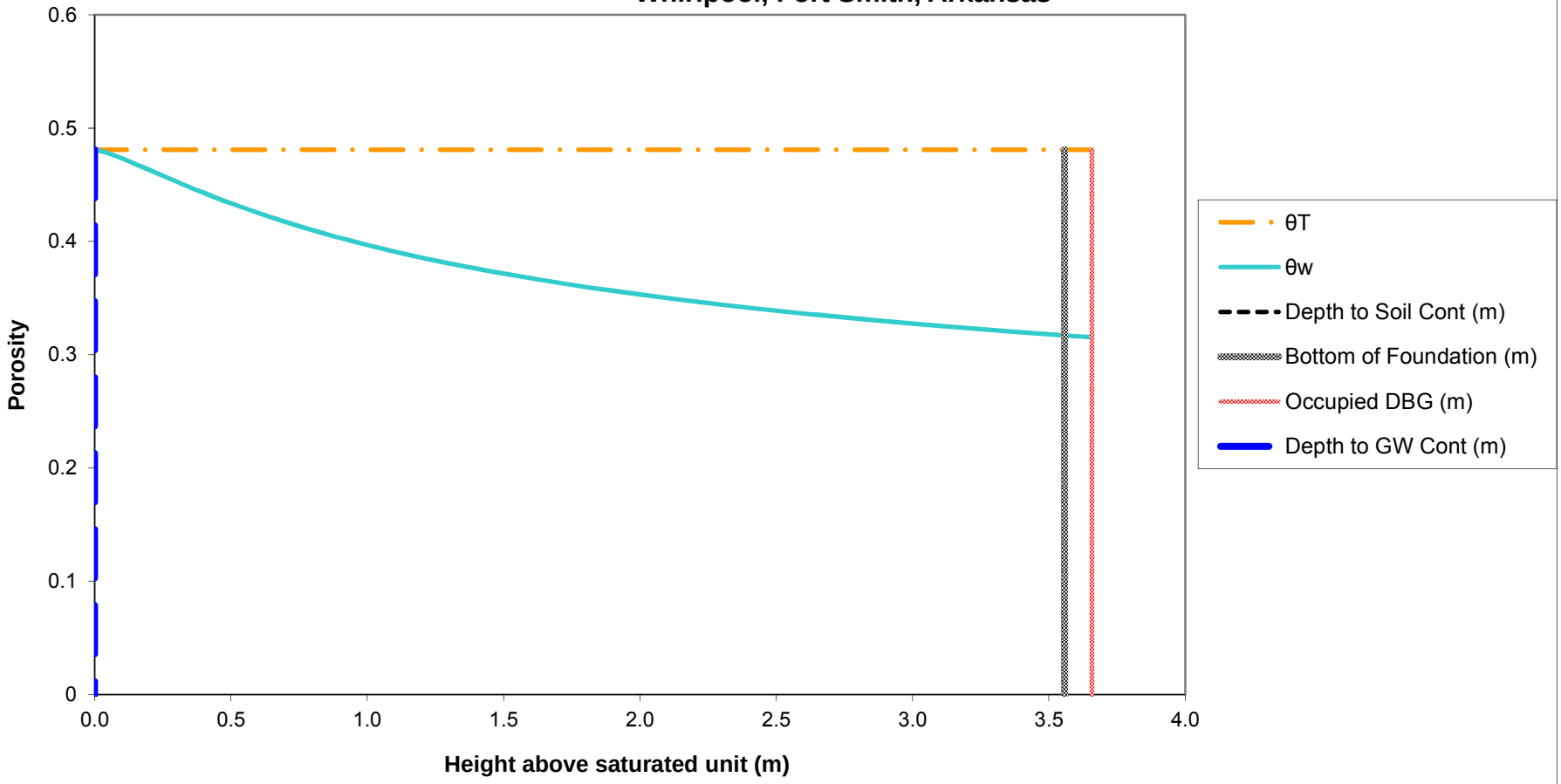
71 USEPA. 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. Office of Solid Waste and Emergency Response. OSWER 9355.4-24. December.

Notes:

92 Indicated source cites CHEMFATE.

123 Value has been assigned a default reference temperature.

Attachment D.3: Soil Moisture Profile for Residential Building (Slab-on-Grade) for Risk Calculations for Groundwater in Monitoring Wells Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

Attachment D.4: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater in Monitoring Wells
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	Acetone	67-64-1	1.07E+00	9.85E-05	1.14E-03	1.72E-01	1.87E-02	6.80E-02	2.73E-03	1.86E-04	2.12E-04
VOC	Bromoform	75-25-2	1.29E-01	8.90E-05	1.34E-02	2.07E-02	1.64E-03	6.37E-03	2.73E-03	1.74E-05	2.33E-04
VOC	Bromomethane	74-83-9	6.29E-01	1.05E-04	2.01E-01	1.01E-01	7.43E-04	2.89E-03	2.73E-03	7.90E-06	1.59E-03
VOC	2-Butanone	78-93-3	6.98E-01	8.47E-05	1.96E-03	1.12E-01	1.01E-02	3.78E-02	2.73E-03	1.03E-04	2.03E-04
VOC	Chloromethane	74-87-3	1.09E+00	5.62E-05	3.33E-01	1.75E-01	4.61E-04	1.80E-03	2.73E-03	4.90E-06	1.63E-03
VOC	1,1-Dichloroethene	75-35-4	7.78E-01	8.99E-05	8.10E-01	1.25E-01	3.12E-04	1.22E-03	2.73E-03	3.32E-06	2.69E-03
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	1.02E-01	9.72E-04	3.78E-03	2.73E-03	1.03E-05	1.22E-03
VOC	trans-1,2-Dichloroethene	156-60-5	6.11E-01	1.03E-04	2.81E-01	9.81E-02	5.96E-04	2.32E-03	2.73E-03	6.35E-06	1.79E-03
VOC	Tetrachloroethene	127-18-4	6.22E-01	7.08E-05	4.90E-01	9.99E-02	3.40E-04	1.33E-03	2.73E-03	3.63E-06	1.78E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.10E-01	5.23E-04	2.04E-03	2.73E-03	5.57E-06	1.60E-03
VOC	Vinyl Chloride	75-01-4	9.16E-01	1.06E-04	9.00E-01	1.47E-01	3.44E-04	1.34E-03	2.73E-03	3.66E-06	3.30E-03
Notes:	**Crack Soil and Building Characteristics**			**Crack Soil**							
	SCS Soil texture class			Sand							
	Bulk density	kg/L	ρ_b	1.66							
	Total porosity	L/L-soil	θ_T	0.375							
	Water-filled porosity	L/L-soil	θ_w	0.054							
	Air-filled porosity	L/L-soil	θ_a	0.321							
	Residual saturation	L/L-soil	θ_r	0.053							
	Hydraulic conductivity	cm/s	K	7.4E-03							
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307							
	Density of water	g/cm^3	ρ_w	1.0							
	Gravitational acceleration	cm/s^2	g	980.7							
	Intrinsic permeability	cm^2	k	9.9E-08							
	Relative saturation	unitless	S_e	0.004							
	van Genuchten N	unitless	N	3.177							
	van Genuchten M	unitless	M	0.685							
	Relative air permeability	unitless	k_{rg}	0.998							
	Permeability to vapor	cm^2	k_v	9.89E-08							
	Distance from building foundation to source	m	L_{T-gw}	3.56							
	Bldg foundation thickness	m	L_{crack}	0.1							
	Bldg foundation length	m		10.00							
	Bldg foundation width	m		10.00							
	Bldg occupied height	m		2.44							
	Bldg occupied volume	m^3		244.00							
	Occupied depth below ground	m		0.0							
	Bldg area for vapor intrusion	m^2	A_B	100.0							
	Ratio of A_{crack} to A_B		η	4E-04							
	Area of cracks	m^2	A_{crack}	4E-02							
	Air exchange rate	$hour^{-1}$	ach	0.45							
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03							
	Pressure difference between outdoors-indoors	$kg/m\text{-}s^2$	ΔP	1.0							
	Viscosity of air	kg/m-s	μ_a	1.8E-05							
	Crack length (bldg perimeter)	m	X_{crack}	40							
	Crack depth below ground	m	Z_{crack}	0.10							
	Crack radius	m	r_{crack}	1E-03							
	Soil gas flow rate into bldg	m^3/day	Q_{soil}	7.20							
	Indoor air concentrations resulting from groundwater vapor intrusion into a building are estimated using the relationships described by Johnson and Ettinger (Heuristic model for predicting the intrusion rate of contaminant vapors into buildings, 1991), which USEPA recommends for screening level calculations, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.										
	The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.										

Attachment D.5: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater in the Neighborhood Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	Acetone	67-64-1	ID	N	1.10E-01	2.33E-05					3.1E+01	7.2E-07
VOC	Bromoform	75-25-2	B2	N	1.12E-02	2.60E-06	1.1E-03		1.2E-09			
VOC	Bromomethane	74-83-9	ID	N	4.00E-02	6.35E-05					5.0E-03	1.2E-02
VOC	2-Butanone	78-93-3	ID	N	1.13E-02	2.29E-06					5.0E+00	4.4E-07
VOC	Chloromethane	74-87-3	D	N	4.62E-02	7.54E-05					9.0E-02	8.0E-04
VOC	1,1-Dichloroethene	75-35-4	C	N	2.60E-03	7.00E-06					2.0E-01	3.4E-05
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	1.68E-02	2.06E-05						
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	5.70E-04	1.02E-06						
VOC	Tetrachloroethene	127-18-4	LC	N	9.00E-04	1.60E-06	2.6E-04		1.7E-10		4.0E-02	3.8E-05
VOC	Trichloroethene	79-01-6	HC	Y	7.20E-01	1.16E-03	4.1E-03	0.244	2.7E-06		2.0E-03	5.5E-01
VOC	Vinyl Chloride	75-01-4	A	N	9.00E-04	2.97E-06	4.4E-03		1.8E-08		1.0E-01	2.8E-05
							Cumulative Risk:		3E-06		**HI:**	6E-01

Note:

f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.

Only VOCs detected in the 1st Quarter 2015 water samples at monitoring wells in the neighboorhood are shown.

Residential risks were calculated assuming residents could be exposed to soil vapor intrusion into indoor air for 24 hours per day and 350 days per year for 30 years.

Attachment D.6: Cancer Risk and Hazard Index Calculations for Intrusion into a Residential Building (Slab-on-Grade) from Soil Vapor at VP-5 (Parcel 1) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{sv}** (mg/m^3)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	1,2-Dichloroethane	107-06-2	B2	N	2.00E-04	6.00E-06	2.6E-02		6.4E-08		7.0E-03	8.2E-04
VOC	1,1-Dichloroethene	75-35-4	C	N	8.50E-04	2.55E-05					2.0E-01	1.2E-04
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	8.40E-05	2.52E-06						
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	1.50E-04	4.50E-06						
VOC	Tetrachloroethene	127-18-4	LC	N	7.90E-04	2.37E-05	2.6E-04		2.5E-09		4.0E-02	5.7E-04
VOC	Trichloroethene	79-01-6	HC	Y	8.40E-04	2.52E-05	4.1E-03	0.244	5.8E-08		2.0E-03	1.2E-02
VOC	Vinyl Chloride	75-01-4	A	N	4.60E-03	1.38E-04	4.4E-03		8.6E-07		1.0E-01	1.3E-03
						Cumulative Risk:			1E-06		**HI:**	1E-02

Note:

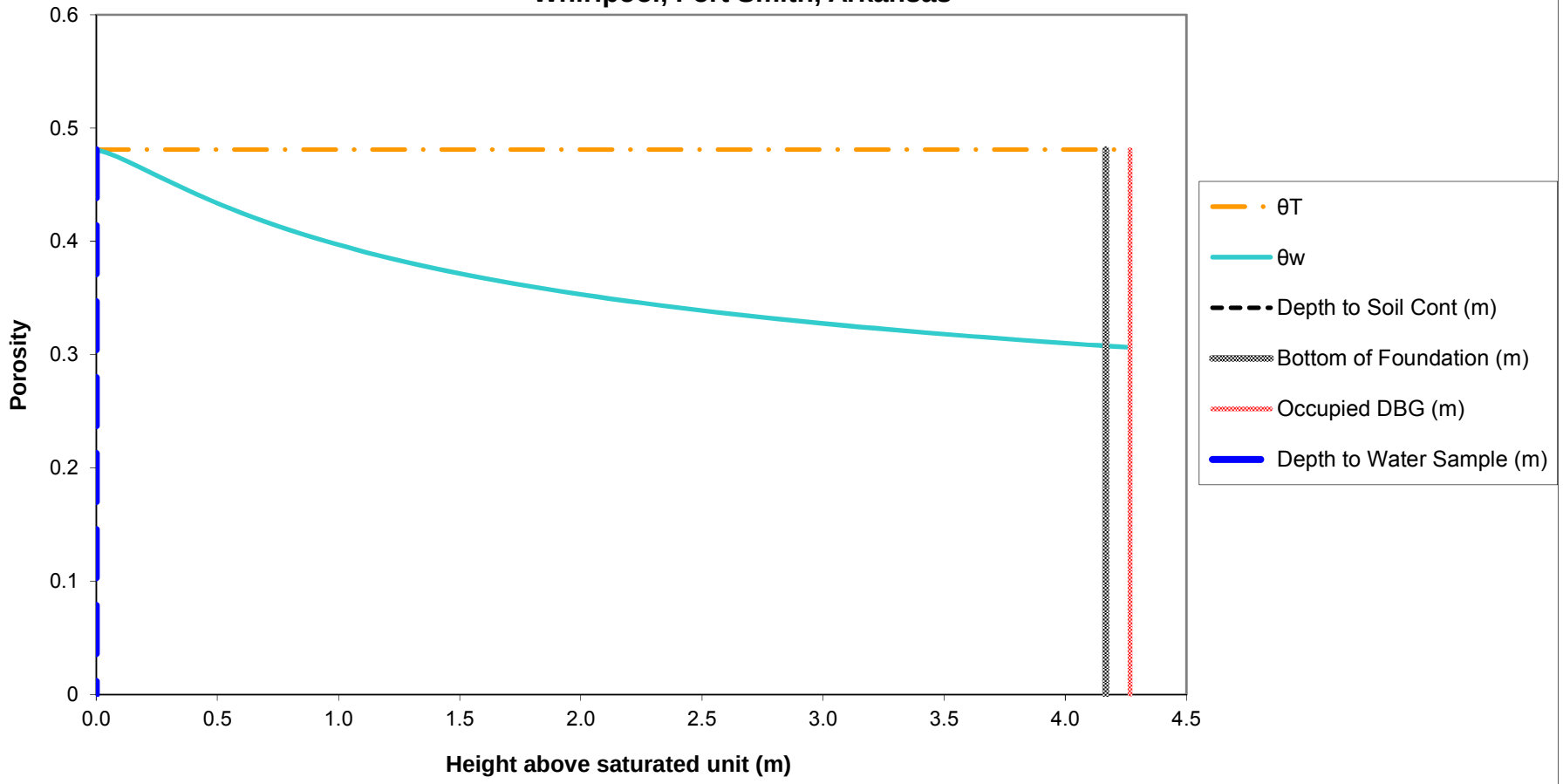
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.

Only VOCs detected in the 1st Quarter 2015 soil vapor sample at VP-5 (Parcel 1) are shown.

Residential risks were calculated assuming residents could be exposed to soil vapor intrusion into indoor air for 24 hours per day and 350 days per year for 30 years.

Indoor air concentrations due to intrusion of soil vapor were calculated using USEPA's 95th percentile subslab soil gas attenuaion factor of 0.03 (EPA's Vapor Intrusion Database: Evaluation and Characterization of Attenuation Factors for Chlorinated Volatile Organic Compounds and Residential Buildings, 2012), as discussed in Appendix A, Section 6.8.2 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

Attachment D.7: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Soil Vapor Monitoring Point VP-6 (Parcel 1) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

Attachment D.8: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Water at VP-6 (Parcel 1)
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	Acetone	67-64-1	1.07E+00	9.85E-05	1.14E-03	1.73E-01	1.89E-02	5.92E-02	2.73E-03	1.62E-04	1.84E-04
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.10E-01	6.04E-04	2.01E-03	2.73E-03	5.49E-06	1.58E-03
Notes:	**Crack Soil and Building Characteristics**			**Crack Soil**							
	SCS Soil texture class			Sand							
	Bulk density	kg/L	ρ_b	1.66							
	Total porosity	L/L-soil	θ_T	0.375							
	Water-filled porosity	L/L-soil	θ_w	0.054							
	Air-filled porosity	L/L-soil	θ_a	0.321							
	Residual saturation	L/L-soil	θ_r	0.053							
	Hydraulic conductivity	cm/s	K	7.4E-03							
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307							
	Density of water	g/cm^3	ρ_w	1.0							
	Gravitational acceleration	cm/s^2	g	980.7							
	Intrinsic permeability	cm^2	k	9.9E-08							
	Relative saturation	unitless	S_e	0.003							
	van Genuchten N	unitless	N	3.177							
	van Genuchten M	unitless	M	0.685							
	Relative air permeability	unitless	k_{rg}	0.998							
	Permeability to vapor	cm^2	k_v	9.90E-08							
	Distance from building foundation to source	m	L_{T-gw}	4.17							
	Bldg foundation thickness	m	L_{crack}	0.1							
	Bldg foundation length	m		10.00							
	Bldg foundation width	m		10.00							
	Bldg occupied height	m		2.44							
	Bldg occupied volume	m^3		244.00							
	Occupied depth below ground	m		0.0							
	Bldg area for vapor intrusion	m^2	A_B	100.0							
	Ratio of A_{crack} to A_B		η	4E-04							
	Area of cracks	m^2	A_{crack}	4E-02							
	Air exchange rate	$hour^{-1}$	ach	0.45							
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03							
	Pressure difference between outdoors-indoors	$kg/m\text{-}s^2$	ΔP	1.0							
	Viscosity of air	kg/m-s	μ_a	1.8E-05							
	Crack length (bldg perimeter)	m	X_{crack}	40							
	Crack depth below ground	m	Z_{crack}	0.10							
	Crack radius	m	r_{crack}	1E-03							
	Soil gas flow rate into bldg	m^3/day	Q_{soil}	7.20							
	Indoor air concentrations resulting from water vapor intrusion into a building are estimated using the relationships described by Johnson and Ettinger (Heuristic model for predicting the intrusion rate of contaminant vapors into buildings, 1991), which USEPA recommends for screening level calculations, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.										
	The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.										

Attachment D.9: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Water at VP-6 (Parcel 1) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	Acetone	67-64-1	ID	N	5.70E-03	1.05E-06					3.1E+01	3.3E-08
VOC	Trichloroethene	79-01-6	HC	Y	4.30E-03	6.80E-06	4.1E-03	0.244	1.6E-08		2.0E-03	3.3E-03
							Cumulative Risk:		2E-08		**HI:**	3E-03
Note:												
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the 1st Quarter 2015 water sample at VP-6 (Parcel 1) are shown.												
Residential risks were calculated assuming residents could be exposed to soil vapor intrusion into indoor air for 24 hours per day and 350 days per year for 30 years.												

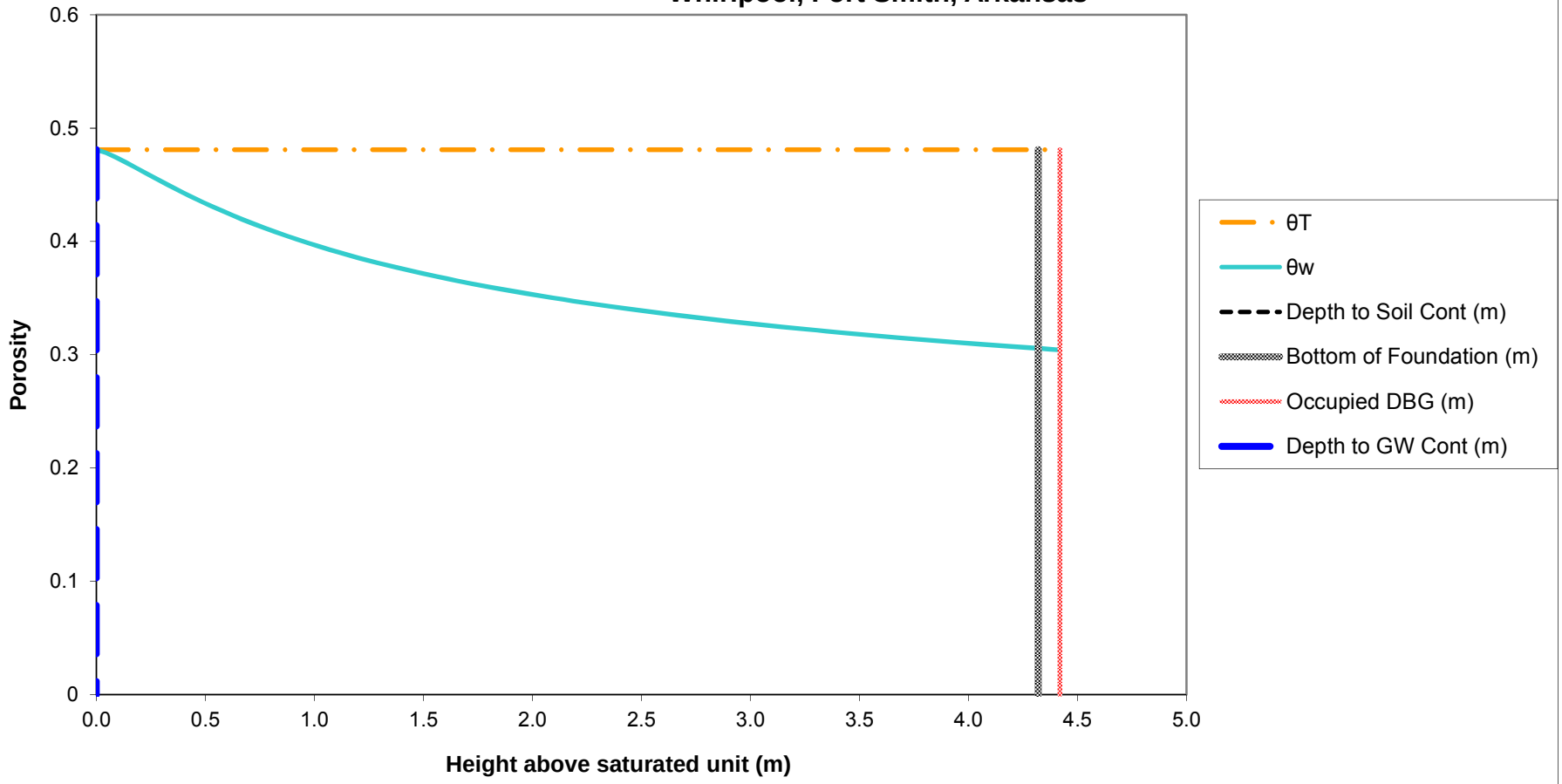
Attachment D.10: Cancer Risk and Hazard Index Calculations for Intrusion into a Residential Building (Slab-on-Grade) from Soil Vapor at VP-7 (Parcel 2) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{sv}** (mg/m^3)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	1,2-Dichloroethane	107-06-2	B2	N	2.00E-04	6.00E-06	2.6E-02		6.4E-08		7.0E-03	8.2E-04
VOC	1,1-Dichloroethene	75-35-4	C	N	4.20E-04	1.26E-05					2.0E-01	6.0E-05
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	2.50E-04	7.50E-06						
VOC	Tetrachloroethene	127-18-4	LC	N	4.40E-04	1.32E-05	2.6E-04		1.4E-09		4.0E-02	3.2E-04
VOC	Trichloroethene	79-01-6	HC	Y	2.80E-03	8.40E-05	4.1E-03	0.244	1.9E-07		2.0E-03	4.0E-02
VOC	Vinyl Chloride	75-01-4	A	N	1.50E-03	4.50E-05	4.4E-03		2.8E-07		1.0E-01	4.3E-04
						Cumulative Risk:			5E-07		**HI:**	4E-02
Note:												
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the 1st Quarter 2015 soil vapor sample at VP-7 (Parcel 2) are shown.												

Residential risks were calculated assuming residents could be exposed to soil vapor intrusion into indoor air for 24 hours per day and 350 days per year for 30 years.

Indoor air concentrations due to intrusion of soil vapor were calculated using USEPA's 95th percentile subslab soil gas attenuaion factor of 0.03 (EPA's Vapor Intrusion Database: Evaluation and Characterization of Attenuation Factors for Chlorinated Volatile Organic Compounds and Residential Buildings, 2012), as discussed in Appendix A, Section 6.8.2 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

Attachment D.11: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-175 (Parcel 2) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

Attachment D.12: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-175 (Parcel 2)
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	Acetone	67-64-1	1.07E+00	9.85E-05	1.14E-03	1.73E-01	1.89E-02	5.74E-02	2.73E-03	1.57E-04	1.79E-04
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	1.03E-01	1.14E-03	3.66E-03	2.73E-03	1.00E-05	1.19E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.10E-01	6.24E-04	2.00E-03	2.73E-03	5.47E-06	1.58E-03
Notes:	**Crack Soil and Building Characteristics**			**Crack Soil**							
	SCS Soil texture class			Sand							
	Bulk density	kg/L	ρ_b	1.66							
	Total porosity	L/L-soil	θ_T	0.375							
	Water-filled porosity	L/L-soil	θ_w	0.054							
	Air-filled porosity	L/L-soil	θ_a	0.321							
	Residual saturation	L/L-soil	θ_r	0.053							
	Hydraulic conductivity	cm/s	K	7.4E-03							
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307							
	Density of water	g/cm^3	ρ_w	1.0							
	Gravitational acceleration	cm/s^2	g	980.7							
	Intrinsic permeability	cm^2	k	9.9E-08							
	Relative saturation	unitless	S_e	0.003							
	van Genuchten N	unitless	N	3.177							
	van Genuchten M	unitless	M	0.685							
	Relative air permeability	unitless	k_{rg}	0.998							
	Permeability to vapor	cm^2	k_v	9.90E-08							
	Distance from building foundation to source	m	L_{T-gw}	4.32							
	Bldg foundation thickness	m	L_{crack}	0.1							
	Bldg foundation length	m		10.00							
	Bldg foundation width	m		10.00							
	Bldg occupied height	m		2.44							
	Bldg occupied volume	m^3		244.00							
	Occupied depth below ground	m		0.0							
	Bldg area for vapor intrusion	m^2	A_B	100.0							
	Ratio of A_{crack} to A_B		η	4E-04							
	Area of cracks	m^2	A_{crack}	4E-02							
	Air exchange rate	$hour^{-1}$	ach	0.45							
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03							
	Pressure difference between outdoors-indoors	$kg/m\text{-}s^2$	ΔP	1.0							
	Viscosity of air	kg/m-s	μ_a	1.8E-05							
	Crack length (bldg perimeter)	m	X_{crack}	40							
	Crack depth below ground	m	Z_{crack}	0.10							
	Crack radius	m	r_{crack}	1E-03							
	Soil gas flow rate into bldg	m^3/day	Q_{soil}	7.20							
	Indoor air concentrations resulting from groundwater vapor intrusion into a building are estimated using the relationships described by Johnson and Ettinger (Heuristic model for predicting the intrusion rate of contaminant vapors into buildings, 1991), which USEPA recommends for screening level calculations, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.										
	The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.										

Attachment D.13: Cancer Risk and Hazard Index Calculations for Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-175 (Parcel 2) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	Acetone	67-64-1	ID	N	1.61E-02	2.88E-06					3.1E+01	8.9E-08
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	2.00E-03	2.37E-06						
VOC	Trichloroethene	79-01-6	HC	Y	1.23E-01	1.94E-04	4.1E-03	0.244	4.5E-07		2.0E-03	9.3E-02
							Cumulative Risk:		4E-07		**HI:**	9E-02
Note:												
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the 1st Quarter 2015 water sample at MW-175 (Parcel 2) are shown.												
Residential risks were calculated assuming residents could be exposed to soil vapor intrusion into indoor air for 24 hours per day and 350 days per year for 30 years.												

Attachment D.14: Cancer Risk and Hazard Index Calculations for Intrusion into a Residential Building (Slab-on-Grade) from Soil Vapor at VP-9 (Parcel 3) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{sv} (mg/m^3)**	**$C_{building}$ (mg/m^3)**	**URF (m^3/mg)**	**f_{inh}**	**Risk**		**RfC (mg/m^3)**	**HQ**
VOC	1,1-Dichloroethane	75-34-3	SC	N	3.60E-04	1.08E-05					5.0E-01	2.1E-05
VOC	1,2-Dichloroethane	107-06-2	B2	N	2.30E-03	6.90E-05	2.6E-02		7.4E-07		7.0E-03	9.5E-03
VOC	1,1-Dichloroethene	75-35-4	C	N	1.70E-03	5.10E-05					2.0E-01	2.4E-04
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	1.40E-04	4.20E-06						
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	1.40E-04	4.20E-06						
VOC	Tetrachloroethene	127-18-4	LC	N	2.90E-04	8.70E-06	2.6E-04		9.3E-10		4.0E-02	2.1E-04
VOC	1,1,1-Trichloroethane	71-55-6	ID	N	4.50E-05	1.35E-06					5.0E+00	2.6E-07
VOC	Trichloroethene	79-01-6	HC	Y	3.10E-02	9.30E-04	4.1E-03	0.244	2.2E-06		2.0E-03	4.5E-01
VOC	Vinyl Chloride	75-01-4	A	N	4.10E-03	1.23E-04	4.4E-03		7.6E-07		1.0E-01	1.2E-03
							Cumulative Risk:		4E-06		**HI:**	5E-01

Note:

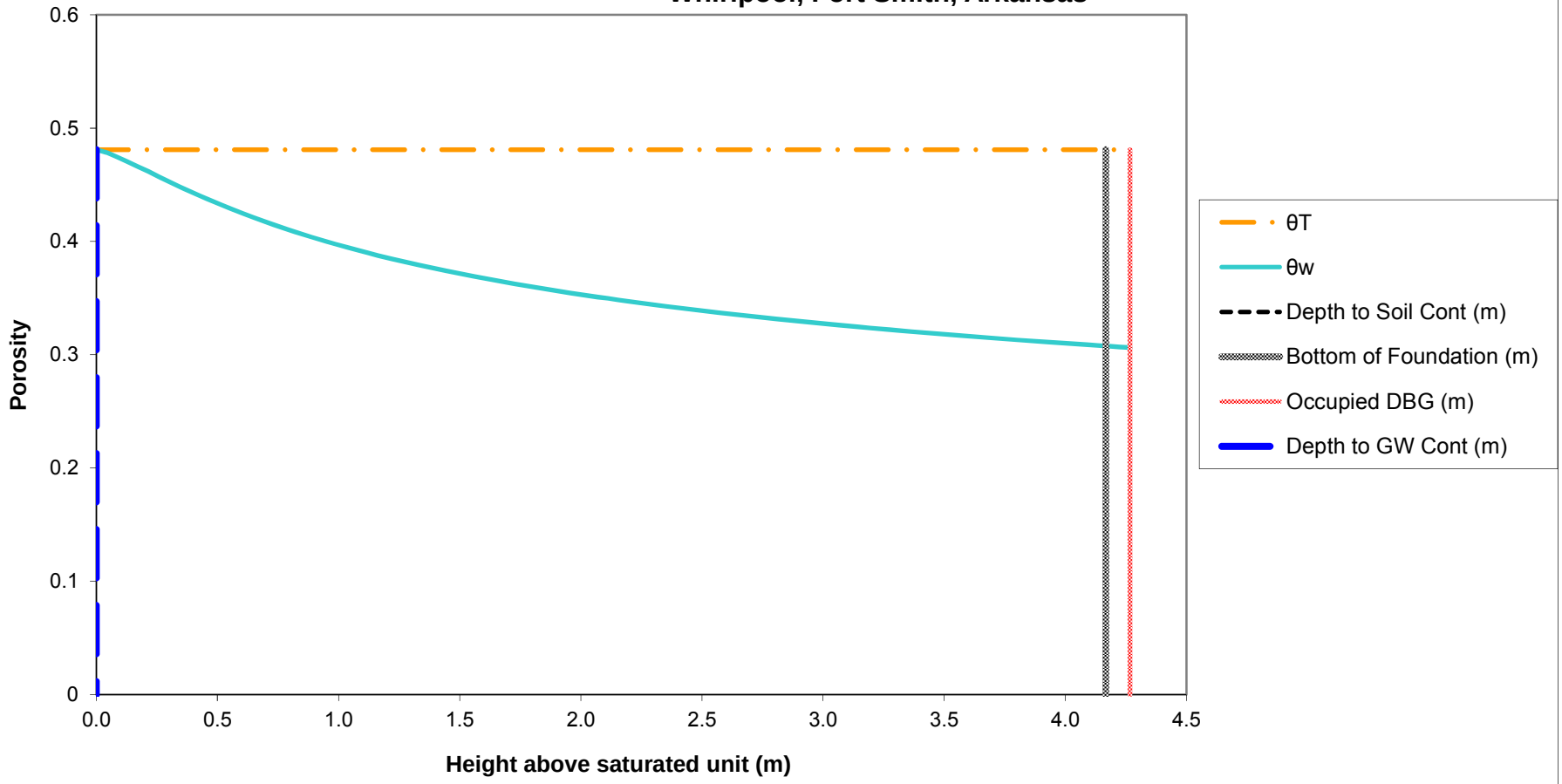
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.

Only VOCs detected in the 1st Quarter 2015 soil vapor sample at VP-9 (Parcel 3) are shown.

Residential risks were calculated assuming residents could be exposed to soil vapor intrusion into indoor air for 24 hours per day and 350 days per year for 30 years.

Indoor air concentrations due to intrusion of soil vapor were calculated using USEPA's 95th percentile subslab soil gas attenuaion factor of 0.03 (EPA's Vapor Intrusion Database: Evaluation and Characterization of Attenuation Factors for Chlorinated Volatile Organic Compounds and Residential Buildings, 2012), as discussed in Appendix A, Section 6.8.2 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

Attachment D.15: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-176 (Parcel 3) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

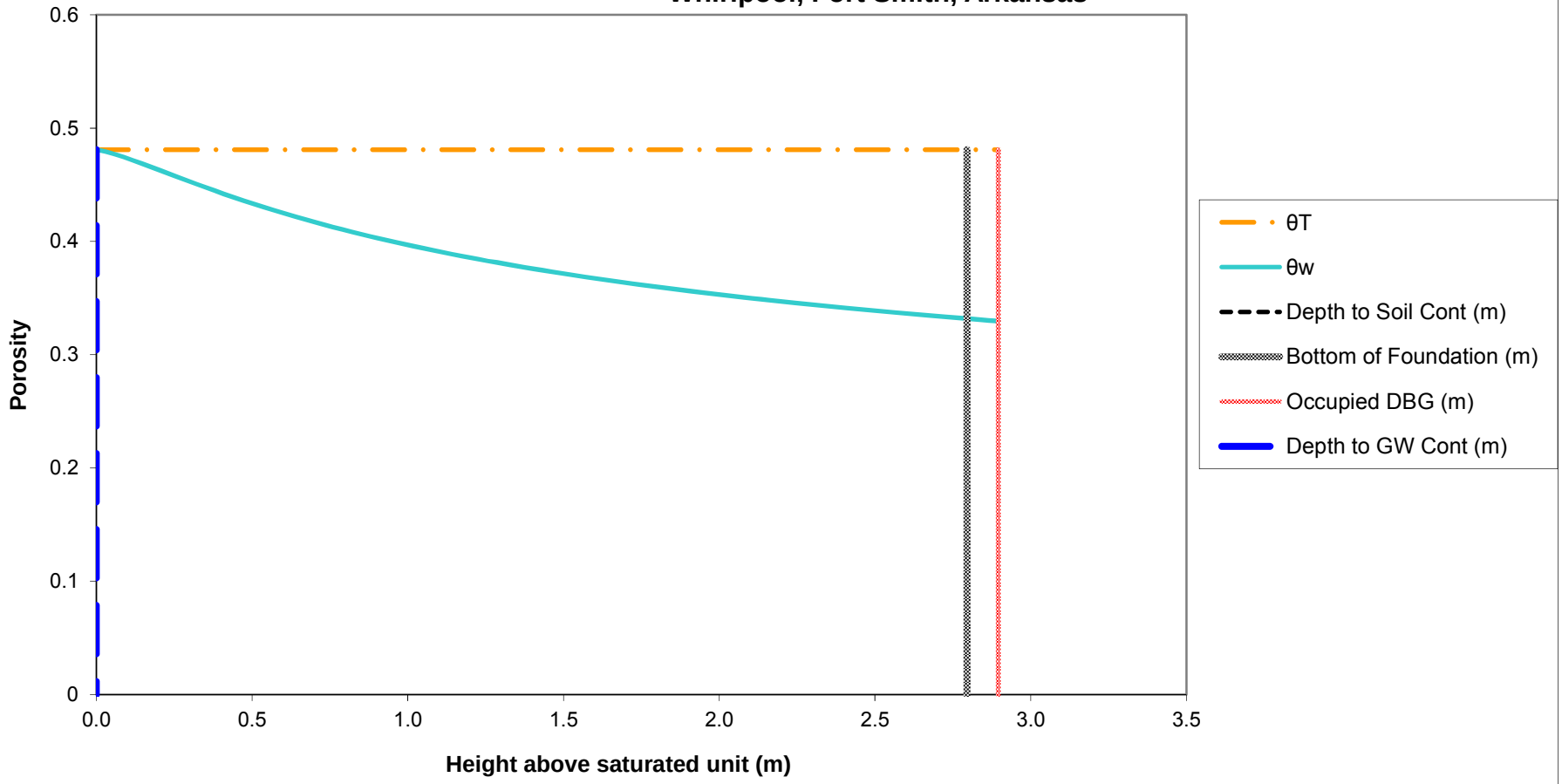
Attachment D.16: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-176 (Parcel 3)
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	1,1-Dichloroethene	75-35-4	7.78E-01	8.99E-05	8.10E-01	1.25E-01	3.62E-04	1.21E-03	2.73E-03	3.29E-06	2.67E-03
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	1.02E-01	1.11E-03	3.68E-03	2.73E-03	1.01E-05	1.19E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.10E-01	6.04E-04	2.01E-03	2.73E-03	5.49E-06	1.58E-03
VOC	Vinyl Chloride	75-01-4	9.16E-01	1.06E-04	9.00E-01	1.48E-01	4.00E-04	1.33E-03	2.73E-03	3.63E-06	3.27E-03
Notes:	**Crack Soil and Building Characteristics**			**Crack Soil**							
	SCS Soil texture class			Sand							
	Bulk density	kg/L	ρ_b	1.66							
	Total porosity	L/L-soil	θ_T	0.375							
	Water-filled porosity	L/L-soil	θ_w	0.054							
	Air-filled porosity	L/L-soil	θ_a	0.321							
	Residual saturation	L/L-soil	θ_r	0.053							
	Hydraulic conductivity	cm/s	K	7.4E-03							
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307							
	Density of water	g/cm^3	ρ_w	1.0							
	Gravitational acceleration	cm/s^2	g	980.7							
	Intrinsic permeability	cm^2	k	9.9E-08							
	Relative saturation	unitless	S_e	0.003							
	van Genuchten N	unitless	N	3.177							
	van Genuchten M	unitless	M	0.685							
	Relative air permeability	unitless	k_{rg}	0.998							
	Permeability to vapor	cm^2	k_v	9.90E-08							
	Distance from building foundation to source	m	L_{T-gw}	4.17							
	Bldg foundation thickness	m	L_{crack}	0.1							
	Bldg foundation length	m		10.00							
	Bldg foundation width	m		10.00							
	Bldg occupied height	m		2.44							
	Bldg occupied volume	m^3		244.00							
	Occupied depth below ground	m		0.0							
	Bldg area for vapor intrusion	m^2	A_B	100.0							
	Ratio of A_{crack} to A_B		η	4E-04							
	Area of cracks	m^2	A_{crack}	4E-02							
	Air exchange rate	$hour^{-1}$	ach	0.45							
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03							
	Pressure difference between outdoors-indoors	$kg/m\text{-}s^2$	ΔP	1.0							
	Viscosity of air	kg/m-s	μ_a	1.8E-05							
	Crack length (bldg perimeter)	m	X_{crack}	40							
	Crack depth below ground	m	Z_{crack}	0.10							
	Crack radius	m	r_{crack}	1E-03							
	Soil gas flow rate into bldg	m^3/day	Q_{soil}	7.20							
	Indoor air concentrations resulting from groundwater vapor intrusion into a building are estimated using the relationships described by Johnson and Ettinger (Heuristic model for predicting the intrusion rate of contaminant vapors into buildings, 1991), which USEPA recommends for screening level calculations, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.										
	The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.										

Attachment D.17: Cancer Risk and Hazard Index Calculations for Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-176 (Parcel 3) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	1,1-Dichloroethene	75-35-4	C	N	2.60E-03	6.94E-06					2.0E-01	3.3E-05
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	1.68E-02	2.01E-05						
VOC	Trichloroethene	79-01-6	HC	Y	7.20E-01	1.14E-03	4.1E-03	0.244	2.6E-06		2.0E-03	5.5E-01
VOC	Vinyl Chloride	75-01-4	A	N	5.70E-04	1.86E-06	4.4E-03		1.2E-08		1.0E-01	1.8E-05
							Cumulative Risk:		3E-06		**HI:**	5E-01
Note:												
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the 1st Quarter 2015 water sample at MW-176 (Parcel 3) are shown.												
Residential risks were calculated assuming residents could be exposed to soil vapor intrusion into indoor air for 24 hours per day and 350 days per year for 30 years.												

Attachment D.18: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-177 (Parcel 4) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

Attachment D.19: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-177 (Parcel 4)
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	Acetone	67-64-1	1.07E+00	9.85E-05	1.14E-03	1.70E-01	1.88E-02	8.54E-02	2.73E-03	2.33E-04	2.66E-04
VOC	Chloroform	67-66-3	8.99E-01	8.64E-05	1.07E-01	1.43E-01	8.97E-04	4.44E-03	2.73E-03	1.21E-05	1.30E-03
Notes:	**Crack Soil and Building Characteristics**			**Crack Soil**							
	SCS Soil texture class			Sand							
	Bulk density	kg/L	ρ_b	1.66							
	Total porosity	L/L-soil	θ_T	0.375							
	Water-filled porosity	L/L-soil	θ_w	0.055							
	Air-filled porosity	L/L-soil	θ_a	0.320							
	Residual saturation	L/L-soil	θ_r	0.053							
	Hydraulic conductivity	cm/s	K	7.4E-03							
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307							
	Density of water	g/cm^3	ρ_w	1.0							
	Gravitational acceleration	cm/s^2	g	980.7							
	Intrinsic permeability	cm^2	k	9.9E-08							
	Relative saturation	unitless	S_e	0.007							
	van Genuchten N	unitless	N	3.177							
	van Genuchten M	unitless	M	0.685							
	Relative air permeability	unitless	k_{rg}	0.996							
	Permeability to vapor	cm^2	k_v	9.87E-08							
	Distance from building foundation to source	m	L_{T-gw}	2.80							
	Bldg foundation thickness	m	L_{crack}	0.1							
	Bldg foundation length	m		10.00							
	Bldg foundation width	m		10.00							
	Bldg occupied height	m		2.44							
	Bldg occupied volume	m^3		244.00							
	Occupied depth below ground	m		0.0							
	Bldg area for vapor intrusion	m^2	A_B	100.0							
	Ratio of A_{crack} to A_B		η	4E-04							
	Area of cracks	m^2	A_{crack}	4E-02							
	Air exchange rate	$hour^{-1}$	ach	0.45							
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03							
	Pressure difference between outdoors-indoors	$kg/m\text{-}s^2$	ΔP	1.0							
	Viscosity of air	kg/m-s	μ_a	1.8E-05							
	Crack length (bldg perimeter)	m	X_{crack}	40							
	Crack depth below ground	m	Z_{crack}	0.10							
	Crack radius	m	r_{crack}	1E-03							
	Soil gas flow rate into bldg	m^3/day	Q_{soil}	7.20							
	Indoor air concentrations resulting from groundwater vapor intrusion into a building are estimated using the relationships described by Johnson and Ettinger (Heuristic model for predicting the intrusion rate of contaminant vapors into buildings, 1991), which USEPA recommends for screening level calculations, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.										
	The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.										

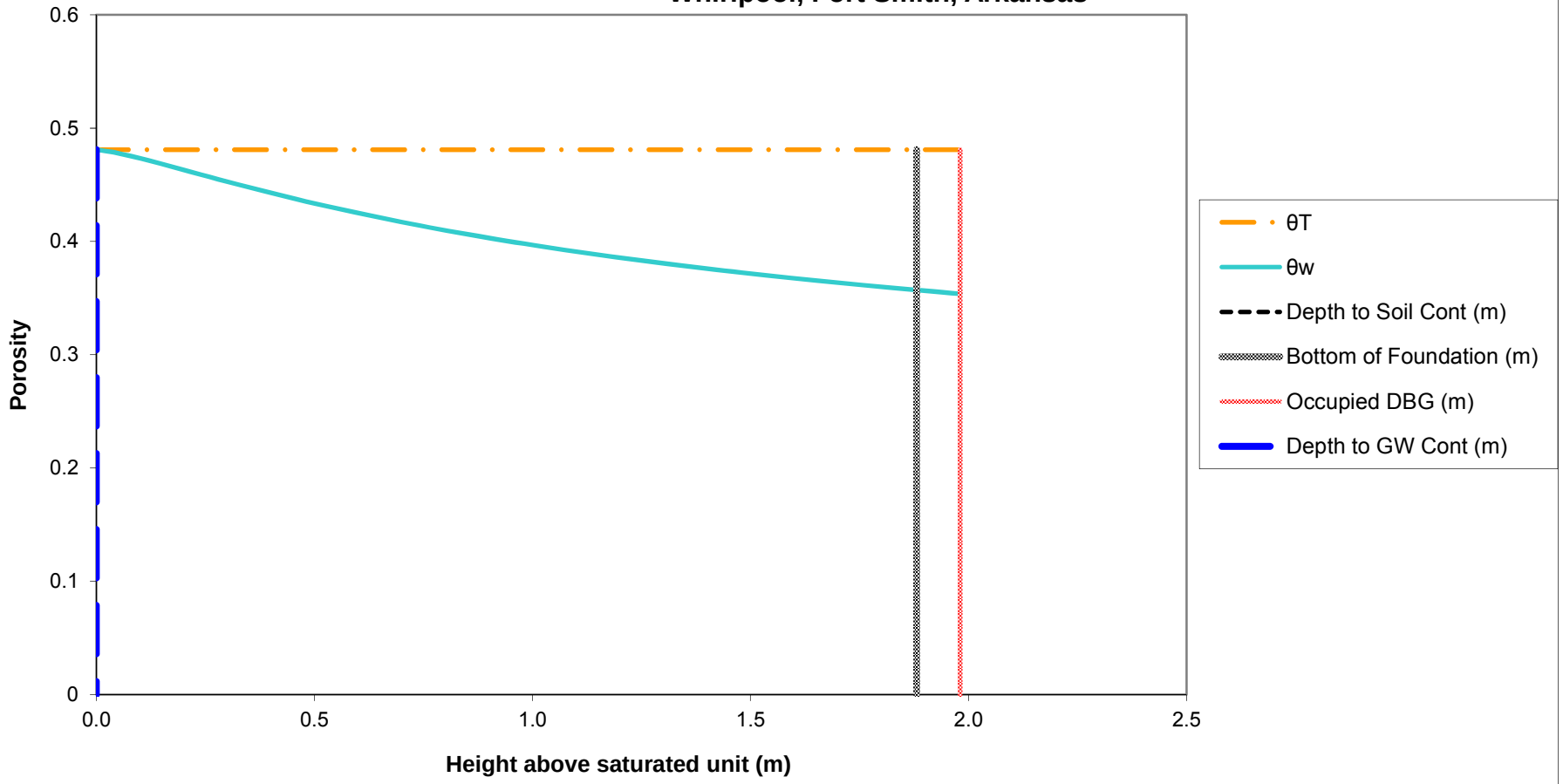
Attachment D.20: Cancer Risk and Hazard Index Calculations for Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-177 (Parcel 4) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	Acetone	67-64-1	ID	N	6.00E-03	1.60E-06					3.1E+01	5.0E-08
VOC	Chloroform	67-66-3	B2	N	6.70E-04	8.73E-07	2.3E-02		8.3E-09		5.0E-02	1.7E-05
							Cumulative Risk:		8E-09		**HI:**	2E-05
Note:												
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the 1st Quarter 2015 water sample at MW-177 (Parcel 4) are shown.												
Residential risks were calculated assuming residents could be exposed to soil vapor intrusion into indoor air for 24 hours per day and 350 days per year for 30 years.												

Attachment D.21: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-71 (Parcel 4) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	1,1-Dichloroethene	75-35-4	C	N	1.40E-03	3.77E-06					2.0E-01	1.8E-05
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	6.00E-03	7.35E-06						
VOC	Trichloroethene	79-01-6	HC	Y	1.70E-01	2.73E-04	4.1E-03	0.244	6.3E-07		2.0E-03	1.3E-01
							Cumulative Risk:		6E-07		**HI:**	1E-01
Note:												
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the 1st Quarter 2015 water sample at MW-71 (Parcel 4) are shown.												
Residential risks were calculated assuming residents could be exposed to soil vapor intrusion into indoor air for 24 hours per day and 350 days per year for 30 years.												

Attachment D.22: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-180 (Parcel 5) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

Attachment D.23: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-180 (Parcel 5)
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	9.81E-02	5.75E-04	4.22E-03	2.73E-03	1.15E-05	1.37E-03
VOC	trans-1,2-Dichloroethene	156-60-5	6.11E-01	1.03E-04	2.81E-01	9.42E-02	3.39E-04	2.49E-03	2.73E-03	6.81E-06	1.92E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.05E-01	2.92E-04	2.15E-03	2.73E-03	5.89E-06	1.70E-03

Notes:	Crack Soil and Building Characteristics			Crack Soil
	SCS Soil texture class			Sand
	Bulk density	kg/L	ρ_b	1.66
	Total porosity	L/L-soil	θ_T	0.375
	Water-filled porosity	L/L-soil	θ_w	0.058
	Air-filled porosity	L/L-soil	θ_a	0.317
	Residual saturation	L/L-soil	θ_r	0.053
	Hydraulic conductivity	cm/s	K	7.4E-03
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307
	Density of water	g/cm^3	ρ_w	1.0
	Gravitational acceleration	cm/s^2	g	980.7
	Intrinsic permeability	cm^2	k	9.9E-08
	Relative saturation	unitless	S_e	0.016
	van Genuchten N	unitless	N	3.177
	van Genuchten M	unitless	M	0.685
	Relative air permeability	unitless	k_{rg}	0.989
	Permeability to vapor	cm^2	k_v	9.80E-08
	Distance from building foundation to source	m	L_{T-gw}	1.88
	Bldg foundation thickness	m	L_{crack}	0.1
	Bldg foundation length	m		10.00
	Bldg foundation width	m		10.00
	Bldg occupied height	m		2.44
	Bldg occupied volume	m^3		244.00
	Occupied depth below ground	m		0.0
	Bldg area for vapor intrusion	m^2	A_B	100.0
	Ratio of A_{crack} to A_B		η	4E-04
	Area of cracks	m^2	A_{crack}	4E-02
	Air exchange rate	$hour^{-1}$	ach	0.45
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03
	Pressure difference between outdoors-indoors	kg/m-s^2	ΔP	1.0
	Viscosity of air	kg/m-s	μ_a	1.8E-05
	Crack length (bldg perimeter)	m	X_{crack}	40
	Crack depth below ground	m	Z_{crack}	0.10
	Crack radius	m	r_{crack}	1E-03
	Soil gas flow rate into bldg	m^3/day	Q_{soil}	7.20

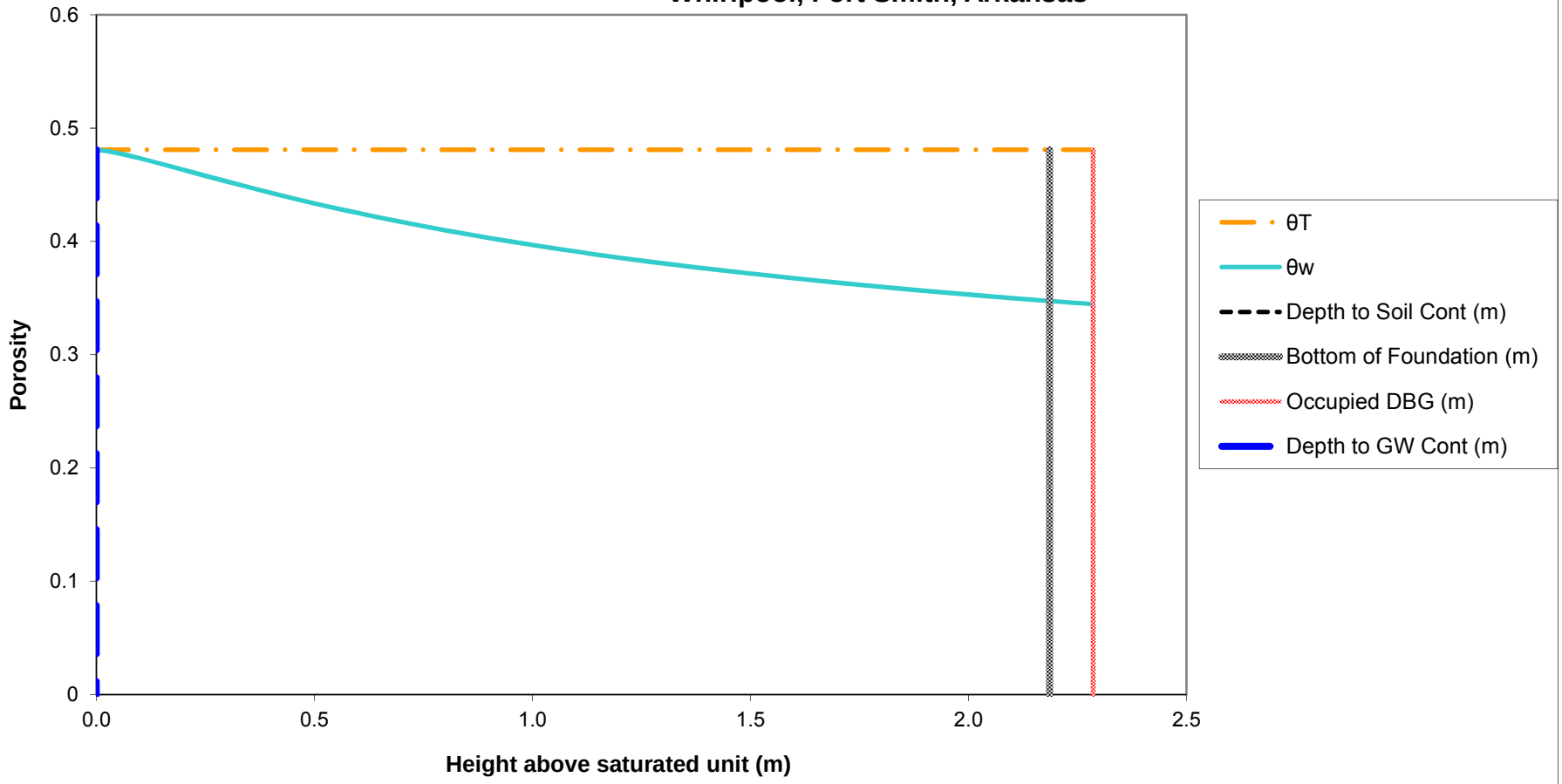
Indoor air concentrations resulting from groundwater vapor intrusion into a building are estimated using the relationships described by Johnson and Ettinger (Heuristic model for predicting the intrusion rate of contaminant vapors into buildings, 1991), which USEPA recommends for screening level calculations, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.

Attachment D.24: Cancer Risk and Hazard Index Calculations for Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-180 (Parcel 5) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	3.40E-03	4.65E-06						
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	5.70E-04	1.09E-06						
VOC	Trichloroethene	79-01-6	HC	Y	2.37E-02	4.02E-05	4.1E-03	0.244	9.3E-08		2.0E-03	1.9E-02
							Cumulative Risk:		9E-08		**HI:**	2E-02
Note:												
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the 1st Quarter 2015 water sample at MW-180 (Parcel 5) are shown.												
Residential risks were calculated assuming residents could be exposed to soil vapor intrusion into indoor air for 24 hours per day and 350 days per year for 30 years.												

Attachment D.25: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-178 (Parcel 5) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

Attachment D.26: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-178 (Parcel 5)
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	Acetone	67-64-1	1.07E+00	9.85E-05	1.14E-03	1.68E-01	1.93E-02	1.09E-01	2.73E-03	2.99E-04	3.41E-04
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	9.95E-02	6.44E-04	4.08E-03	2.73E-03	1.11E-05	1.32E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.07E-01	3.33E-04	2.11E-03	2.73E-03	5.76E-06	1.66E-03
Notes:	**Crack Soil and Building Characteristics**			**Crack Soil**							
	SCS Soil texture class			Sand							
	Bulk density	kg/L	ρ_b	1.66							
	Total porosity	L/L-soil	θ_T	0.375							
	Water-filled porosity	L/L-soil	θ_w	0.057							
	Air-filled porosity	L/L-soil	θ_a	0.318							
	Residual saturation	L/L-soil	θ_r	0.053							
	Hydraulic conductivity	cm/s	K	7.4E-03							
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307							
	Density of water	g/cm^3	ρ_w	1.0							
	Gravitational acceleration	cm/s^2	g	980.7							
	Intrinsic permeability	cm^2	k	9.9E-08							
	Relative saturation	unitless	S_e	0.012							
	van Genuchten N	unitless	N	3.177							
	van Genuchten M	unitless	M	0.685							
	Relative air permeability	unitless	k_{rg}	0.992							
	Permeability to vapor	cm^2	k_v	9.84E-08							
	Distance from building foundation to source	m	L_{T-gw}	2.19							
	Bldg foundation thickness	m	L_{crack}	0.1							
	Bldg foundation length	m		10.00							
	Bldg foundation width	m		10.00							
	Bldg occupied height	m		2.44							
	Bldg occupied volume	m^3		244.00							
	Occupied depth below ground	m		0.0							
	Bldg area for vapor intrusion	m^2	A_B	100.0							
	Ratio of A_{crack} to A_B		η	4E-04							
	Area of cracks	m^2	A_{crack}	4E-02							
	Air exchange rate	$hour^{-1}$	ach	0.45							
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03							
	Pressure difference between outdoors-indoors	$kg/m\text{-}s^2$	ΔP	1.0							
	Viscosity of air	kg/m-s	μ_a	1.8E-05							
	Crack length (bldg perimeter)	m	X_{crack}	40							
	Crack depth below ground	m	Z_{crack}	0.10							
	Crack radius	m	r_{crack}	1E-03							
	Soil gas flow rate into bldg	m^3/day	Q_{soil}	7.20							
	Indoor air concentrations resulting from groundwater vapor intrusion into a building are estimated using the relationships described by Johnson and Ettinger (Heuristic model for predicting the intrusion rate of contaminant vapors into buildings, 1991), which USEPA recommends for screening level calculations, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.										
	The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.										

Attachment D.27: Cancer Risk and Hazard Index Calculations for Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-178 (Parcel 5) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	Acetone	67-64-1	ID	N	9.50E-03	3.24E-06					3.1E+01	1.0E-07
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	9.90E-04	1.31E-06						
VOC	Trichloroethene	79-01-6	HC	Y	5.20E-03	8.64E-06	4.1E-03	0.244	2.0E-08		2.0E-03	4.1E-03
							Cumulative Risk:		2E-08		**HI:**	4E-03
Note:												
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the 1st Quarter 2015 water sample at MW-178 (Parcel 5) are shown.												
Residential risks were calculated assuming residents could be exposed to soil vapor intrusion into indoor air for 24 hours per day and 350 days per year for 30 years.												

Attachment D.28: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-33 (Parcel 5) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	1,1-Dichloroethene	75-35-4	C	N	8.20E-04	2.21E-06					2.0E-01	1.1E-05
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	1.39E-02	1.70E-05						
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	1.50E-03	2.68E-06						
VOC	Trichloroethene	79-01-6	HC	Y	1.08E+00	1.73E-03	4.1E-03	0.244	4.0E-06		2.0E-03	8.3E-01
							Cumulative Risk:		4E-06		**HI:**	8E-01
Note:												
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the 1st Quarter 2015 water sample at MW-33 (Parcel 5) are shown.												
Residential risks were calculated assuming residents could be exposed to soil vapor intrusion into indoor air for 24 hours per day and 350 days per year for 30 years.												

May 11, 2015

Mr. Mostafa Mehran
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118

Re: Shallow Offsite Groundwater Investigation Report
Whirlpool Corporation
Fort Smith, Arkansas
EPA No. ARD042755389
AFIN No. 66-00048
CAO LIS 13-202

Dear Mr. Mehran:

This Shallow Offsite Groundwater Investigation Report presents a summary of the investigation completed to characterize the shallow subsurface geology and groundwater quality near the north boundary of the Whirlpool Corporation (Whirlpool) property and immediately offsite in the residential area north of the Whirlpool property boundary. The investigation included an assessment of potential trichloroethene (TCE) impacts in soil and groundwater on the Whirlpool properties (former manufacturing building property and 1501 Jacobs Avenue property) and at three residential properties each of which provided access in late November 2014. The work was completed in accordance with the Offsite Shallow Groundwater Investigation Work Plan (Work Plan) dated October 2014. This Work Plan was submitted to the Arkansas Department of Environmental Quality (ADEQ) on October 30, 2014, and was subsequently approved in a January 26, 2015, letter from ADEQ.

OVERVIEW

The objective of this investigation was to better define shallow subsurface conditions in soil and the extent of TCE impact in groundwater north of the Whirlpool property and into the residential area. Soil vapor conditions are addressed in a separate report (2015 First Quarter Progress Report, Attachment B - Soil Vapor Monitoring and Vapor Intrusion Assessment Report).

The investigation was completed in accordance with the approved Work Plan and included the following:

- Completion of five initial soil borings to evaluate lithology and potential impact to soil;
- Collection and analysis of six soil samples;
- Installation of nine shallow groundwater monitoring wells (MW-173 through MW-181);
- Collection of groundwater samples in seven of the nine new monitoring wells (MW-173 and MW-179 were dry);
- Installation of eight new soil vapor monitoring points (VP-5 through VP-10, VP-12 and VP-14 [VP-11 and VP-13 were installed as monitoring wells MW-181 and MW-180 due to the presence of water in the borings during installation]); and

- Collection of water samples in three of the eight new vapor points (VP-6, VP-10 and VP-12) where water was present (neither a water sample nor a soil vapor sample could be collected from VP-8 due to field conditions).

The overall field investigations facilitated collection of six soil samples and ten groundwater samples to support the characterization of the shallow subsurface geology and further delineation of the shallow groundwater TCE impact extending north and east from the Whirlpool property to the residential area.

FIELD INVESTIGATION

Initial Soil Boring Completion (December 2014)

Five initial soil borings (DP-63 through DP-67) were completed during the week of December 15, 2014 and the boring locations are depicted on Figure 1. Two of the soil borings (DP-66 and DP-67) were completed on Whirlpool properties (one on the former manufacturing facility property south of Ingersoll Avenue and one on the parcel located to the north of the facility along Jacobs Avenue) and the remaining three soil borings were completed in the residential area north of the main site. These borings were completed in general accordance with the Work Plan and the notification letter submitted to ADEQ on December 8, 2014. The purpose of the soil boring completion was to assess the lithology in each area to evaluate construction details for the shallow groundwater monitoring wells and soil vapor monitoring point locations which were subsequently installed in January 2015. Soil borings were completed to 15 feet below ground surface and a total of six soil samples were collected for analyses in order to evaluate the presence of TCE in soil. Soil sample intervals were chosen in the field based on field observations and field screening results [e.g. visual observation of shallow permeable zones and elevated photoionization detector (PID) readings]. Soil samples were collected utilizing 5035 kits for volatile organic compound (VOC) analysis using EPA Method 8260. Soil samples were submitted to Pace Analytical Laboratory for analysis. The soil boring lithologic logs are provided in Appendix A. Soil analytical results are included as Table 2, Laboratory analytical data packages are included in Appendix B. These results are further discussed below in the Section titled “Results of Soil and Groundwater Sampling.”

The proposed construction details for the soil vapor probes and permanent shallow groundwater monitoring wells were submitted to ADEQ on December 23, 2014 based upon the results of the soil borings described above. ADEQ provided comments on the proposed construction details on January 26, 2015 (correspondence received January 29, 2015). Whirlpool and ENVIRON responded to ADEQ comments on February 27, 2015 (ADEQ’s requested monitoring well construction changes were implemented during the field activities in January).

Monitoring Well and Soil Vapor Point Installation and Sampling (January 2015)

Permanent soil vapor probes and permanent shallow groundwater monitoring wells were installed during the week of January 12, 2015, at each of the five locations discussed above to evaluate and to monitor groundwater and soil vapor conditions.

The monitoring wells and soil vapor points were installed based on the lithology of the corresponding initial soil borings completed at the respective parcels as presented below (monitoring well and soil vapor monitoring point locations are depicted on Figure 2):

Parcel ID	Soil Boring (sampled interval)	Permanent Well ID (screened interval)	Soil Vapor Point ID (screened interval)
#1	DP-63 (5.5, 10.5)	MW-173 (5-6) MW-174 (10-11)	VP-5 (7.25-7.75) VP-6 (13.75-14.25)
#2	DP-64 (14.5)	MW-175 (14-15)	VP-7 (5.25-5.75) VP-8 (10.25-10.75)
#3	DP-65 (14.0)	MW-176 (13.5-14.5)	VP-9 (5.25-5.75) VP-10 (10.75-11.25)
#4	DP-66 (14.5)	MW-177 (9-10) MW-181[1] (5.5-6.5)	VP-11[1] converted to MW-181 VP-12 (12.25-12.75)
#5	DP-67 (14.5)	MW-178 (7-8) MW-179 (12-13) MW-180[1] (6-7)	VP-13[1] converted to MW-180 VP-14 (10.25-10.75)

[1] Vapor points were converted to monitoring wells due to field conditions indicating presence of water in the boring.

A total of nine monitoring wells (MW-173 through MW-181) were installed based upon the lithology identified during the initial soil boring completion.

Construction of the monitoring wells began with an 8 inch diameter protective surface casing which was initially installed in a 12 inch diameter borehole at each new monitoring well and soil vapor point location to a depth immediately above the predetermined depth for screen placement. The casing was allowed to set for approximately 48 hours prior to installation of the groundwater monitoring well or soil vapor monitoring point. A 6 inch diameter borehole was then drilled through the surface casing to depth for completion of the monitoring point.

Groundwater monitoring wells were constructed with 2 inch diameter, schedule 40 PVC, 0.010 slotted pipe, 1 foot in length and 2 inch diameter, solid schedule 40 PVC pipe to the surface. A 20/40 grade sand pack was installed in the well annulus around the PVC screen to approximately 1 foot above the top of the screen. This was followed by an annular seal consisting of bentonite chips 1 to 2 feet above the top of the sand pack. Cement/bentonite grout was placed in the annular space above the seal to the surface. The monitoring wells were completed with flush-mount well protectors set in concrete with bolted covers. A summary of the monitoring well construction details is provided in Table 1.

Soil vapor points were constructed with a .25 inch diameter tubing attached to a 6 inch long stainless steel screen produced by Geoprobe®. A 20/40 grade sand pack was installed in the well annulus, around the screen to approximately 0.25 feet above the top of the screen. This

was followed by an annular seal consisting of bentonite chips 1 to 2 feet above the top of sand pack. Bentonite grout slurry was placed in the annular space above the seal to the surface. The soil vapor points were completed with flush-mount protectors set in concrete with bolted covers. Well construction logs and vapor point construction logs are provided in Appendix A.

The monitoring wells were developed after sufficient groundwater was present in the monitoring wells, some of which required a minimum of 48 hours or greater for water to be present in the well. These monitoring wells were purged dry once during well development, but the wells did not produce sufficient water to facilitate further development. Some of the newly installed shallow monitoring wells did not recover completely from the development process prior to sampling; therefore, an accurate round of static water level measurements could not be obtained prior to sampling. Static water levels will be recorded for future rounds of sampling.

Seven of the monitoring wells produced sufficient water for sampling (MW-173 and MW-179 were dry at the time of the sampling event).Only a limited amount of purge water was removed from the monitoring wells prior to collection of groundwater samples due to the lack of water present in these wells. Groundwater samples were collected for laboratory analysis using low-flow sampling techniques. All groundwater samples were submitted to PACE Analytical Services (Lenexa, Kansas) for analysis of VOCs by SW486 Method 8260B. Analytical results are discussed below and the laboratory reports are provided in Appendix B. Groundwater field sample forms are provided in Appendix C.

Investigation Derived Waste

The soil cuttings generated from drilling activities for the initial soil borings were containerized in a 55 gallon drums and the soil from the monitoring well installation activities were containerized in a 20 yard roll-off box and staged on the former Whirlpool manufacturing facility. Water generated from groundwater sampling was containerized in labeled totes for disposal. The soil and water investigation derived waste was disposed of as non-hazardous waste by Environmental Remediation Specialists and transported to American Environmental Landfill, Inc. on January 22, 2015. Waste manifests are included as Appendix C.

RESULTS OF THE INVESTIGATION

Discussion of Hydrogeologic Conditions

Based on water levels collected during the 2015 first quarter groundwater sampling event, completed during the week of January 12, 2015, groundwater flow in the Basal Transmissive Zone is to the north-northeast direction in the offsite residential area. The newly installed shallow monitoring wells did not recover completely from the development process prior to sampling; therefore, an accurate round of static water level measurements could not be obtained prior to sampling. Static water levels will be measured in the future to facilitate assessment of the groundwater flow direction in the shallow zone.

The initial soil borings were completed to 15 feet below ground surface (bgs) and the boring logs indicate that the shallow soils consist primarily of clay. A seam of silty clayey sand is present in DP-64 and DP-65 at 13 to 14.5 feet bgs and 13 to 14 feet bgs, respectively. Based upon review of the initial soil boring logs and previous monitoring well logs cross section A-A' has been developed and presented as Figure 3. The cross section presents the subsurface geology represented by these initial borings and borings for current and former monitoring wells along Jacobs Avenue. Upon review of the cross section it is evident that a seam of silty clayey sand is present and thins out to the east. It is also evident that semi-confined groundwater within the Basal Transmissive Zone appears hydraulically connected to the overlying silty sand layer through select monitoring wells constructed with screens and sand filter packs across the Basal Transmissive Zone and the silty sand layer. Specifically, the smaller diameter wells (3/4 inch diameter temporary monitoring wells) that have longer screens and sand filter packs allowing this hydraulic connection. The majority of these monitoring wells are located north of Ingersoll Avenue and are planned to be replaced in accordance with the December 2014 Temporary Monitoring Well Replacement Work Plan approved in a January 14, 2015, letter from ADEQ.

Results of Soil and Groundwater Sampling

TCE concentrations were measured above detectable limits in three of the six soil samples and one duplicate sample (Table 2) collected in December 2014. None of these sample results were above the Remedial Action Level (RAL) of 0.129 milligrams per kilograms (mg/kg) as stated in the December 2013 Remedial Action Decision Document (RADD). TCE was detected in soil samples collected from the silty sand layer which ultimately was identified as saturated after well constructions were completed (a silty sand layer was not identified in DP-67 although the log identifies that sand was present at 14 ft bgs). TCE was detected at 0.119 mg/kg in soil at Parcel #3/DP-65 (14 feet bgs), 0.0039J mg/kg at Parcel #2/DP-64 (14.5 feet bgs) and 0.0025J mg/kg at Parcel #5/DP-67 (14.5 feet bgs). The soil samples at Parcel #1/DP-63 contained low concentrations of acetone (a typical laboratory artifact) and the soil sample from Parcel #4/DP-66 contained a low concentration of bromomethane (a common byproduct from chlorination of drinking water). The detection of bromomethane in the sample, was at or near the detection in the method blank and the source was determined to be carry over from the instrument. Therefore it has been reported as non-detect at the reporting limit.

TCE impacts to groundwater were characterized during the sampling of groundwater from monitoring wells and soil vapor points during the field investigation in January 2015. Table 3 presents a summary of the groundwater analytical results. Groundwater samples from MW-175, MW-176, MW-178, MW-180 and VP-10, had detections of TCE at concentrations above the RAL of 5 micrograms per liter (µg/L) ranging from 5.2 µg/L at Parcel #5 from MW-178 to 720 µg/L at Parcel #3 from MW-176. The highest concentrations of TCE were detected at Parcel #3 from MW-176 and VP-10 and at Parcel #5 from MW-175. MW-175 and MW-176 are screened in the silty, clayey sand layer, while VP-10 is screened just above this layer. TCE was detected at concentrations below the RAL at VP-06 (4.3 µg/L) which is screened just above the silty, clayey sand layer. TCE was not detected in groundwater samples collected at Parcel #1 from MW-174

and Parcel #4 from MW-177, MW-181 and VP-12. Each of these sample points were screened in the shallower zone in clay above the silty, clayey sand layer.

CONCLUSIONS

Conclusions regarding TCE impacts at the offsite properties north of the Whirlpool property are based upon the investigation and sampling efforts performed in the area between December 2014 and January 2015.

Based on water levels collected during the 2015 first quarter groundwater sampling event, completed during the week of January 12, 2015, groundwater flow in the Basal Transmissive Zone is to the north-northeast direction in the offsite residential area. Since static water level measurements were not possible in the shallow groundwater monitoring wells due to slow recovery, assessment of the shallow groundwater flow direction will occur during subsequent quarterly monitoring events.

The concentrations of TCE detected in the shallow monitoring wells is consistent with the levels observed in the northern plume based on 2015 first quarter groundwater monitoring results. The TCE contamination is evident in groundwater from the offsite shallow monitoring wells that are screened in the silty sand layer(approximately 13 to 14 feet bgs) which is hydraulically connected to the Basal Transmissive Zone, while TCE was not present in groundwater from the monitoring wells that are screened in the shallow zone (approximately 6 to 10 feet bgs). Based on these initial sampling efforts, TCE impacted groundwater is limited to the silty sand layer in the offsite shallow monitoring wells.

RECOMMENDATIONS

Quarterly monitoring will be performed for all monitoring wells and soil vapor points (MW-173 through MW-181 and VP-5 through VP-14) during the next year (sampling will coincide with the quarterly monitoring required by the RADD) to confirm the observed groundwater concentrations and to verify that groundwater flow direction and gradient remains consistent. Recommendations for additional monitoring wells, if necessary and modifications to the monitoring schedule will be presented after the 2015 Fourth Quarter Monitoring Event which would conclude four quarters of monitoring.

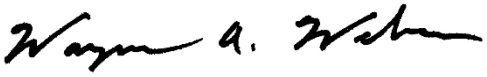
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If you have any questions or comments please contact me at your earliest convenience.

Sincerely,

ENVIRON International Corporation





Michael F. Ellis, PE
Principal

Wayne Weber, RG
Manager

LIST OF ATTACHMENTS

Table 1: Summary of Monitoring Well Construction Details
Table 2: Summary of Soil Sample Analytical Results
Table 3: Summary of Groundwater Sample Analytical Results

Figure 1: Location of Initial Soil Borings
Figure 2: Shallow Monitoring Well and Vapor Point Locations
Figure 3: Cross Section A-A'

Appendix A: Boring, Monitoring Well Construction and Vapor Point Construction Logs
Appendix B: Laboratory Analytical Reports
Appendix C: Groundwater Sampling Logs and IDW Manifest Forms

Tables

TABLE 1
SUMMARY OF MONITORING CONSTRUCTION DETAILS
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Coordinates		Ground Surface Elevation (feet)	Top of Casing Elevation (feet)	Top of Screen Elevation (feet)	Bottom of Screen Elevation (feet)	Screen Length (feet)	Screened Interval (feet)
	Easting (feet)	Northing (feet)						
MW-173	591973	369623	463.94	463.56	458.94	457.94	1.00	5.0 - 6.0
MW-174	591976	369644	463.72	463.45	452.72	451.72	1.00	11.0 - 12.0
MW-175	591603	369655	464.52	464.17	451.02	450.02	1.00	13.5 - 14.5
MW-176	591473	369675	465.46	465.24	452.46	451.46	1.00	13.0 - 14.0
MW-177	591148	369698	471.69	471.50	462.69	461.69	1.00	9.0 - 10.0
MW-178	590973	369232	475.69	475.40	468.69	467.69	1.00	7.0 - 8.0
MW-179	590984	369231	475.66	475.39	463.66	462.66	1.00	12.0 - 13.0
MW-180	590996	369231	475.63	475.32	469.63	468.63	1.00	6.0 - 7.0
MW-181	591156	369695	472.18	471.87	466.18	465.18	1.00	6.0 - 7.0

Notes:
Horizontal and vertical coordinates provided by Hoffman & Associates survey dated 1/22/2015.

ENVIRON

TABLE 2
SUMMARY OF SOIL ANALYTICAL RESULTS - OFFSITE SHALLOW GROUNDWATER INVESTIGATION
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	DP-63	DP-63	DP-64	DP-65	DP-65	DP-66	DP-67
ENVIRON Sample ID		DP-63-SL-5.5 FT-20141217	DP-63-SL-10.5 FT-20141217	DP-64-SL-14.5 FT-20141217	DP-65-SL-14.0 FT-20141217	DUP-01-SL-20141217	DP-66-SL-14.5 FT-20141218	DP-67-SL-14.5 FT-20141218
Lab Sample ID		60184825001	60184825002	60184826001	60184824001	60184824002	60184980001	60184980002
Collection Depth (feet bgs)		5.5	10.5	14.5	14	14	14.5	14.5
Sample Date		12/17/2014	12/17/2014	12/17/2014	12/17/2014	12/17/2014	12/18/2014	12/18/2014
Comments						Field Duplicate		
Volatile Organic Compounds								
Acetone	NE	0.0156 J (0.01)	0.0175 J (0.01)	U (0.01)	U (0.01)	U (0.01)	U (0.01)	U (0.01)
Benzene	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Bromodichloromethane	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Bromoform	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Bromomethane	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
2-Butanone	NE	U (0.005)	U (0.005)	U (0.005)	U (0.005)	U (0.005)	U (0.005)	U (0.005)
Carbon Disulfide	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Carbon Tetrachloride	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Chlorobenzene	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Chloroethane	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Chloroform	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Chloromethane	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Dibromochloromethane	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
1,1-Dichloroethane	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
1,2-Dichloroethane	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
1,1-Dichloroethene	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
cis-1,2-Dichloroethene	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
trans-1,2-Dichloroethene	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
1,2-Dichloropropane	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
1,3-Dichloropropene (total)	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
cis-1,3-Dichloropropene	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
trans-1,3-Dichloropropene	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Ethyl Benzene	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
2-Hexanone	NE	U (0.01)	U (0.01)	U (0.01)	U (0.01)	U (0.01)	U (0.01)	U (0.01)
4-Methyl-2-pentanone	NE	U (0.005)	U (0.005)	U (0.005)	U (0.005)	U (0.005)	U (0.005)	U (0.005)
Methylene Chloride	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Styrene	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
1,1,2,2-Tetrachloroethane	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Tetrachloroethene	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Toluene	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
1,1,1-Trichloroethane	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
1,1,2-Trichloroethane	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Trichloroethene	NE	U (0.0025)	U (0.0025)	0.0039 J (0.0025)	0.119 (0.0025)	0.112 (0.0025)	U (0.0025)	0.0025 J (0.0025)
Vinyl Chloride	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Xylenes (total)	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)

Notes:

1 All concentrations are presented in mg/kg (ppm).
2 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued 2013 are double underlined.
U = Not detected
J = Estimated concentration
( ) = Reporting limit
bgs = Below ground surface
RADD = Remedial Action Decision Document
ADEQ = Arkansas Department of Environmental Quality
mg/kg = Miligrams per kilograms
NE = Not established
NS = Not sampled

ENVIRON

TABLE 3
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS - OFFSITE SHALLOW GROUNDWATER INVESTIGATION
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-174	MW-175	MW-176	MW-177	MW-178
ENVIRON Sample ID		MW-174-GW-20150120	MW-175-GW-20150120	MW-176-GW-20150120	MW-177-GW-20150121	MW-178-GW-20150118
Lab Sample ID		60186563001	60186566001	60186564001	60186643002	60186465002
Collection Depth (feet bgs)		10 - 11	14 - 15	13.5 - 14.5	9 - 10	7 - 8
Sample Date		01/20/2015	01/20/2015	01/20/2015	01/21/2015	01/18/2015
Volatile Organic Compounds						
Acetone	12000	51.1 (5.0)	16.1 (5.0)	U (5.0)	6.0 J (5.0)	9.5 J (5.0)
2-Butanone	4900	11.3 (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	0.67 J (0.50)	U (0.50)
1,1-Dichloroethene	7.0	U (0.50)	U (0.50)	2.6 (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	70	U (0.50)	2.0 (0.50)	16.8 (0.50)	U (0.50)	0.99 J (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	5.0	U (0.50)	123 (0.50)	720 (5.0)	U (0.50)	5.2 (0.50)
Vinyl Chloride	2.0	U (0.50)	U (0.50)	0.57 J (0.50)	U (0.50)	U (0.50)

Notes:

1 All concentrations are presented in µg/L (ppb)

2 Only compounds with at least one detection are shown

3 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued Dec 2013 are double underlined

U = Not detected

J = Estimated concentration

( ) = Method detection limit

bgs = Below ground surface

RADD = Remedial Action Decision Document

ADEQ = Arkansas Department of Environmental Quality

µg/L = Micrograms per Liter

TABLE 3
SUMMARY OF GROUNDWATER SAMPLE ANALYTICAL RESULTS - OFFSITE SHALLOW GROUNDWATER INVESTIGATION
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-180	MW-181	VP-6	VP-10	VP-12
ENVIRON Sample ID		MW-180-GW-20150119	MW-181-GW-20150121	VP-06-GW-20150120	VP-10-GW-20150120	VP-12-GW-20150121
Lab Sample ID		60186465001	60186643001	60186563002	60186564002	60186643003
Collection Depth (feet bgs)		6 - 7	5.5 - 6.5	13.75 - 14.25	10.75 - 11.25	12.25 - 12.75
Sample Date		01/19/2015	01/21/2015	01/20/2015	01/20/2015	01/21/2015
Volatile Organic Compounds						
Acetone	12000	U (5.0)	U (5.0)	5.7 J (5.0)	5.8 J (5.0)	U (5.0)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	U (0.50)	U (0.50)	U (0.50)	2.8 (0.50)	U (0.50)
cis-1,2-Dichloroethene	70	3.4 (0.50)	U (0.50)	U (0.50)	18.8 (0.50)	U (0.50)
trans-1,2-Dichloroethene	100	0.57 J (0.50)	U (0.50)	U (0.50)	0.51 J (0.50)	U (0.50)
Trichloroethene	5.0	23.7 (0.50)	U (0.50)	4.3 (0.50)	636 (5.0)	U (0.50)
Vinyl Chloride	2.0	U (0.50)	U (0.50)	U (0.50)	0.61 J (0.50)	U (0.50)

Notes:

1 All concentrations are presented in µg/L (ppb)

2 Only compounds with at least one detection are shown

3 Concentrations that exceed the Remedial Action Levels per ADEQ RADD Issued Dec 2013 are double underlined

U = Not detected

J = Estimated concentration

( ) = Method detection limit

bgs = Below ground surface

RADD = Remedial Action Decision Document

ADEQ = Arkansas Department of Environmental Quality

µg/L = Micrograms per Liter

Figures



FILE: D:\GIS\PROJECT\WHIRLPOOL\DOCS\20141028_ShallowOffsiteGWworkplan\Figure 1 - Location of Initial Soil Borings - 20150306.mxd

ENVIRON

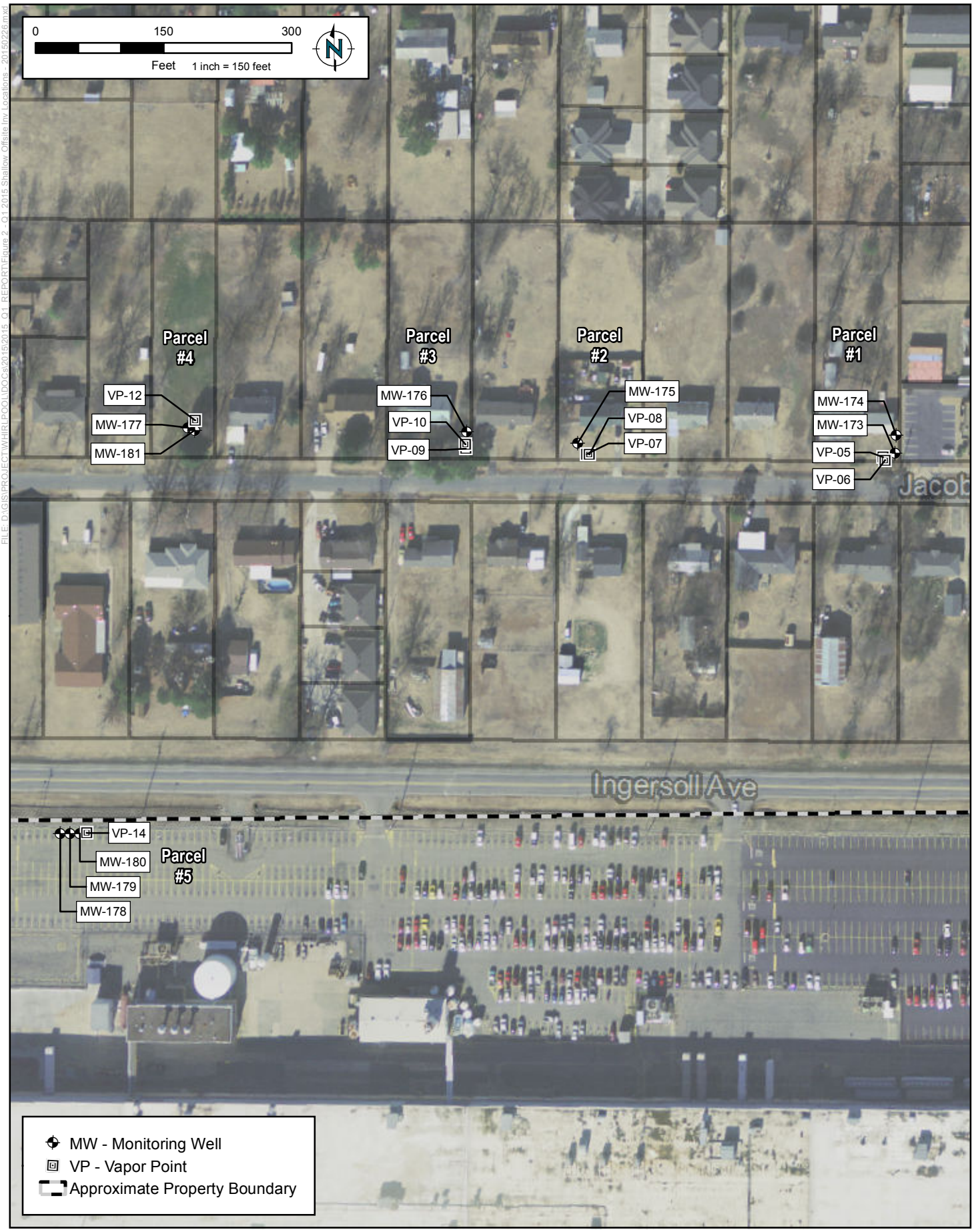
DRAFTED BY: KTS | DATE: 03/06/2015

LOCATION OF INITIAL SOIL BORINGS

Whirlpool Facility - Fort Smith, Arkansas

Figure 1

PROJECT: 3436269



FILE: D:\GIS\PROJECT\WHIRLPOOL\DOCS\2015\2015_Q1_REPORT\Figure 2 - Q1 2015 Shallow Offsite Inv Locations - 20150226.mxd

ENVIRON

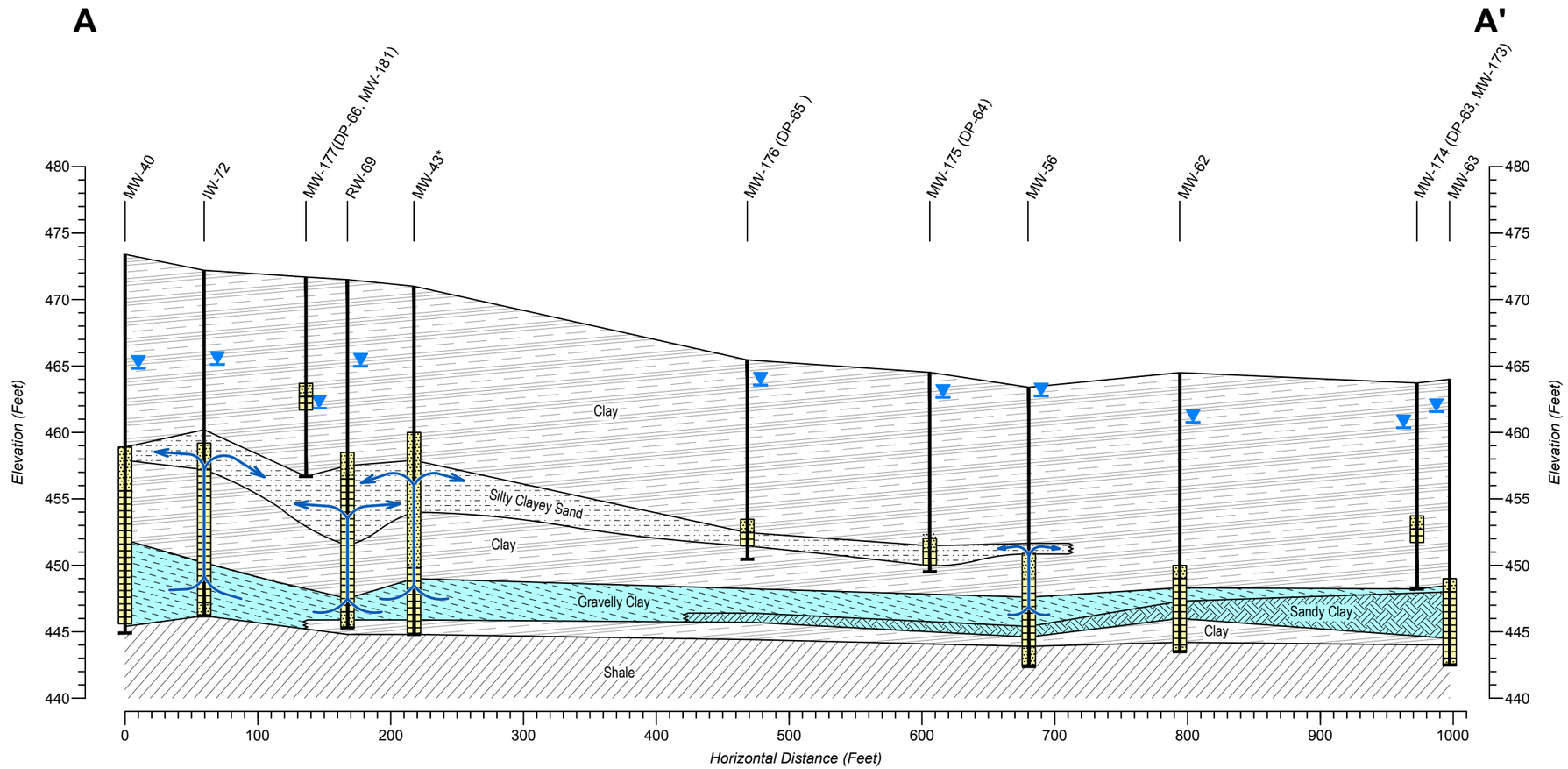
DRAFTED BY: KTS	DATE: 03/06/2015

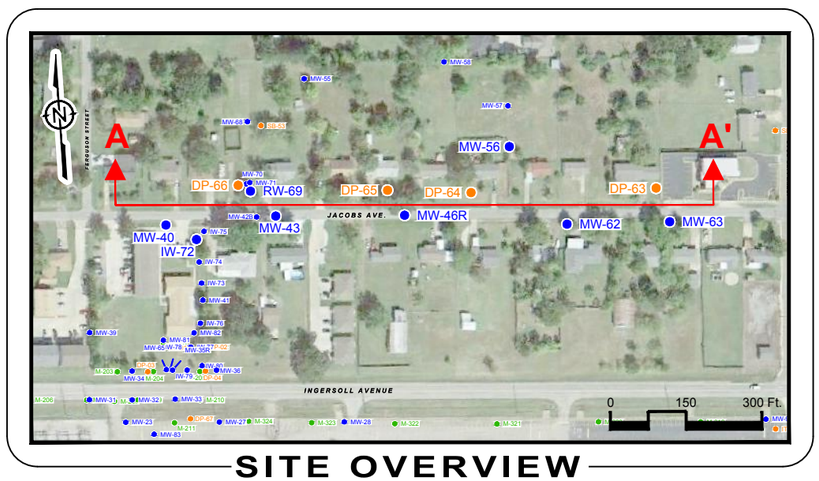
SHALLOW MONITORING WELL AND VAPOR POINT LOCATIONS

Whirlpool Facility - Fort Smith, Arkansas

Figure 2

PROJECT: 3436269





SITE OVERVIEW

LITHOLOGY

- SHALE
- CLAY
- SANDY CLAY
- GRAVELLY CLAY
- SILTY CLAYEY SAND
- BASAL TRANSMISSIVE ZONE (SATURATED SEMI CONFINED)
- BORING
- SCREEN
- WATER LEVEL, JANUARY 2015
- SAND PACK ELEVATION

* WELL HAS BEEN ABANDONED

HORIZONTAL SCALE (Ft.)
0 100

VERTICAL SCALE (Ft.)
0 10

VERTICAL EXAGGERATION = 10

CROSS-SECTION A-A'
WHIRLPOOL FACILITY
FORT SMITH, ARKANSAS

ENVIRON

FIGURE
3

DRAFTED BY: CKL | DATE: 3/9/15 | 3436269A

L:\Loop Project Files\00_CAD FILES\341Whirlpool_2015 Offsite Shallow GW 3436269A\03_Cross Section A-A' dwg

Appendix A
Boring, Monitoring Well Construction and Soil Vapor Point Construction Logs

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: MW-173		Date(s): **1/14/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **K. Stonestreet**	
Contractor: **Walker-Hill**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **463.94 ft amsl**	TOC Elevation: **463.56 ft amsl**
Sampling Method: **Sonic**		North: **369623.00**	East: **591972.98**
Borehole Dia.: **12 inches**		Total Depth: **15.5 feet**	
Project Number: **3433244A**			
Project Name: **Whirlpool Corporation**			
Remarks: **Lithology from boring DP-63.**			

Well Construction:

Surface Casing:	Sch 40 PVC 8 inch	0.5 FT to 4 FT
Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 5 FT
Screen:	Sch. 40 2 Inch 0.10 PVC	5 FT to 6 FT
Surface Casing:	Cement Grout	0 FT to 4 FT
Well:	Cement Grout	0 FT to 2 FT
	Bentonite	2 FT to 4 FT
	Sand	4 FT to 6 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
				0.0		CL	TOPSOIL, DARK BROWN, SANDY, LOOSE, MOIST, OCCASIONAL ROOT HAIRS		Flush Mount
		4		0.0			SILTY CLAY, DARK BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, STIFF, PLASTIC, MOIST		
460									
	5		DP-63 (5.5)	0.0			SILTY CLAY, DARK BROWN/RED BROWN/GRAY, MOTTLED,SOFT, PLASTIC, MOIST		
		6					SILTY CLAY, RED BROWN, FREQUENT GRAVEL, SUB ROUND, FINE GRAIN, SAND, FINE TO MEDIUM GRAIN, STIFF, SLIGHTLY PLASTIC, MOIST, WITH ORGANIC NODULES		
455				0.0					
	10		DP-63 (10.5)				SILTY CLAY, DARK BROWN/RED BROWN, TRACE GRAVEL, FINE GRAIN, SOFT, PLASTIC, MOIST		
				0.0		CH	SANDY CLAY, RED BROWN, FINE TO MEDIUM GRAIN, WITH GRAVEL, FINE GRAIN, SUB ROUND, COHESIVE, MOIST		
		5.5				CL	SILTY CLAY, RED BROWN/GRAY, MOTTLED, WITH GRAVEL, FINE TO COURSE GRAIN, SUB ROUND, SAND, FINE TO MEDIUM GRAIN, VERY STIFF, COHESIVE, MOIST		
450				0.0					
	15								
445									
	20								
440									
	25								
435									

Report: WELL_LOG_REV_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: MW-174	Date(s): **1/14/2015**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	Checked By: **K. Stonestreet**
Contractor: **Walker-Hill**	Purpose: **Monitoring Well**
Drilling Method: **Sonic**	GS Elevation: **463.72 ft amsl** / TOC Elevation: **463.45 ft amsl**
Sampling Method: **Sonic**	North: **369643.79** / East: **591975.59**
Borehole Dia.: **12 inches**	Total Depth: **15.5 feet**
Project Number: **3433244A**	
Project Name: **Whirlpool Corporation**	
Remarks: **Lithology from boring DP-63.**	

Well Construction:

Surface Casing:	Sch 40 PVC 8 inch	0.5 FT to 10 FT
Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 11 FT
Screen:	Sch. 40 2 Inch 0.10 PVC	11 FT to 12 FT
Surface Casing:	Cement Grout	0 FT to 10 FT
Well:	Cement Grout	0 FT to 8 FT
	Bentonite	8 FT to 10 FT
	Sand	10 FT to 12 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
				0.0			TOPSOIL, DARK BROWN, SANDY, LOOSE, MOIST, OCCASIONAL ROOT HAIRS		Flush Mount
		4		0.0		CL	SILTY CLAY, DARK BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, STIFF, PLASTIC, MOIST		
460									
	5		DP-63 (5.5)	0.0			SILTY CLAY, DARK BROWN/RED BROWN/GRAY, MOTTLED,SOFT, PLASTIC, MOIST		
		6					SILTY CLAY, RED BROWN, FREQUENT GRAVEL, SUB ROUND, FINE GRAIN, SAND, FINE TO MEDIUM GRAIN, STIFF, SLIGHTLY PLASTIC, MOIST, WITH ORGANIC NODULES		
455				0.0					
	10		DP-63 (10.5)				SILTY CLAY, DARK BROWN/RED BROWN, TRACE GRAVEL, FINE GRAIN, SOFT, PLASTIC, MOIST		
				0.0		CH	SANDY CLAY, RED BROWN, FINE TO MEDIUM GRAIN, WITH GRAVEL, FINE GRAIN, SUB ROUND, COHESIVE, MOIST		
		5.5				CL	SILTY CLAY, RED BROWN/GRAY, MOTTLED, WITH GRAVEL, FINE TO COURSE GRAIN, SUB ROUND, SAND, FINE TO MEDIUM GRAIN, VERY STIFF, COHESIVE, MOIST		
450				0.0					
	15								
445									
	20								
440									
	25								
435									

Report: WELL_LOG_REV_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: MW-175		Date(s): **1/15/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **K. Stonestreet**	
Contractor: **Walker-Hill**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **464.52 ft amsl**	TOC Elevation: **464.17 ft amsl**
Sampling Method: **Sonic**		North: **369654.94**	East: **591602.59**
Well Construction:		Borehole Dia.: **12 inches**	Total Depth: **15.0 feet**
Surface Casing: Sch 40 PVC 8 inch	0.5 FT to 13 FT	Project Number: **3433244A**	
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 14.5 FT	Project Name: **Whirlpool Corporation**	
Screen: Sch. 40 2 Inch 0.10 PVC	13.5 FT to 14.5 FT	Remarks: **Lithology from boring DP-64.**	
Surface Casing: Cement Grout	0 FT to 13 FT		
Well: Cement Grout	0 FT to 10.5 FT		
Bentonite	10.5 FT to 12.5 FT		
Sand	12.5 FT to 14.5 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
				0.0			TOPSOIL, DARK BROWN, ROOT HAIRS, WET(SATURATED)		Flush Mount
		4		0.0		CL	SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, SILT DECREASING WITH DEPTH, TRACE GRAVEL, FINE GRAIN, SUB ROUND, STIFF, PLASTIC, MOIST		
460	5	6		0.0			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, TRACE GRAVEL, FINE GRAIN, SUB ROUND, VERY STIFF, PLASTIC, MOIST		
455	10			0.0			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT GRAVEL, FINE GRAIN, TRACE SAND, FINE GRAIN, STIFF, SLIGHTLY PLASTIC, MOIST		
		5		0.0			SILTY CLAY, RED BROWN, WITH GRAVEL, SUB ROUND, FINE GRAIN, TRACE SAND, FINE GRAIN, STIFF, COHESIVE, MOIST		
450	15		DP-64 (14.5)	0.1		SM	SILTY SAND, RED BROWN, SLIGHTLY CLAYEY, FINE TO MEDIUM GRAIN, SLIGHTLY COHESIVE, MOIST		
						CL	SILTY CLAY, RED BROWN, WITH GRAVEL, SUB ROUND, FINE TO COURSE GRAIN, HARD, DRY		
445	20								
440	25								
435									

Report: WELL_LOG_REV_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: MW-176	Date(s): **1/16/2015**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Monitoring Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **465.46 ft amsl** / TOC Elevation: **465.24 ft amsl**
Sampling Method: **Sonic**	North: **369675.04** / East: **591473.47**
Borehole Dia.: **12 inches**	Total Depth: **15.0 feet**
Project Number: **3433244A**	
Project Name: **Whirlpool Corporation**	
Remarks: **Lithology from boring DP-65.**	

Well Construction:

Surface Casing:	Sch 40 PVC 8 inch	0.5 FT to 12.5 FT
Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 13 FT
Screen:	Sch. 40 2 Inch 0.10 PVC	13 FT to 14 FT
Surface Casing:	Cement Grout	0 FT to 12.5 FT
Well:	Cement Grout	0 FT to 10 FT
	Bentonite	10 FT to 12 FT
	Sand	12 FT to 14 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
465		4		0.1		CL	SILTY CLAY, GRAY/BROWN, MOTTLED, SOFT, PLASTIC, WET, OCCASIONAL ROOT HAIR		Flush Mount
				0.8			SILTY CLAY, RED BROWN/GRAY, MOTTLED, TRACE GRAVEL, FINE GRAIN, SUB ROUND, VERY STIFF, PLASTIC, MOIST, OCCASIONAL ORGANIC NODULES		
460	5	6		1.8					
				8.7					
455	10	5	DP-65 (14)	2.1					
				2.8		SM	SILTY SAND, RED BROWN, FINE TO MEDIUM GRAIN, SLIGHTLY CLAYEY, SLIGHTLY COHESIVE, MOIST		
450	15					CL	SILTY CLAY, RED BROWN/GRAY, MOTTLED, SLIGHTLY SANDY, FINE GRAIN, STIFF, PLASTIC, MOIST		
							SILTY CLAY, RED BROWN, WITH GRAVEL, FINE TO COARSE GRAIN, SUB ROUND, STIFF, COHESIVE, MOIST, CRUMBLES		
445	20								
440	25								

Report: WELL_LOG_REV_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: MW-177	Date(s): **1/15/2015**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Monitoring Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **471.69 ft amsl** / TOC Elevation: **471.50 ft amsl**
Sampling Method: **Sonic**	North: **369697.95** / East: **591147.73**
Borehole Dia.: **12 inches**	Total Depth: **15.0 feet**
Project Number: **3433244A**	
Project Name: **Whirlpool Corporation**	
Remarks: **Lithology from boring DP-66.**	

Well Construction:

Surface Casing:	Sch 40 PVC 8 inch	0.5 FT to 8 FT
Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 9 FT
Screen:	Sch. 40 2 Inch 0.10 PVC	9 FT to 10 FT
Surface Casing:	Cement Grout	0 FT to 8 FT
Well:	Cement Grout	0 FT to 6 FT
	Bentonite	6 FT to 8 FT
	Sand	8 FT to 10 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
470	0	4		0.3		CL	TOP SOIL SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, STIFF, PLASTIC, MOIST, OCCASIONAL ROOT HAIR TO 2 FEET		Flush Mount
				0.1					
	5			0.4			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, OCCASIONAL ORGANIC NODULE, STIFF, SLIGHTLY PLASTIC, SLIGHTLY MOIST		
465		6							
				0.2					
	10						SILTY CLAY, RED BROWN/GRAY, MOTTLED, WITH ORGANIC NODULE, VERY STIFF, PLASTIC, MOIST		
460		5		0.3					
			DP-66 (14.5)	0.4			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULE, TRACE SAND, FINE GRAIN, STIFF, PLASTIC, MOIST		
	15								
455									
	20								
450									
	25								
445									

Report: WELL_LOG_REV_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: MW-178		Date(s): **1/14/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **K. Stonestreet**	
Contractor: **Able Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **475.69 ft amsl**	TOC Elevation: **475.40 ft amsl**
Sampling Method: **Sonic**		North: **369231.68**	East: **590972.64**
Well Construction:		Borehole Dia.: **12 inches**	Total Depth: **15.0 feet**
Surface Casing: Sch 40 PVC 8 inch	0.5 FT to 5 FT	Project Number: **3433244A**	
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 7 FT	Project Name: **Whirlpool Corporation**	
Screen: Sch. 40 2 Inch 0.10 PVC	7 FT to 8 FT	Remarks: **Lithology from boring DP-67.**	
Surface Casing: Cement Grout	0 FT to 5 FT		
Well: Cement Grout	0 FT to 3 FT		
Bentonite	3 FT to 5 FT		
Sand	5 FT to 8 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
475				0.0		ML	ASPHALT		Flush Mount
							GRAVEL, FILL		
				0.0		CL	CLAYEY SILT, GRAY/BROWN, NON PLASTIC, SLIGHTLY COHESIVE, DRY		
		6					SILTY CLAY, RED BROWN/GRAY, MOTTLED, ABUNDANT ORGANIC NODULES, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, STIFF, PLASTIC, MOIST		
470	5			0.1			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, VERY STIFF, PLASTIC, MOIST		
		5		0.1					
465	10			0.0					
		4	DP-67 (14.5)	0.3					
				0.3			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, TRACE SAND, STIFF, SLIGHTLY PLASTIC, MOIST		
460	15								
455	20								
450	25								

Report: WELL_LOG_REV_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: MW-179	Date(s): **1/14/2015**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Monitoring Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **475.66 ft amsl** / TOC Elevation: **475.39 ft amsl**
Sampling Method: **Sonic**	North: **369231.30** / East: **590984.46**
Borehole Dia.: **12 inches**	Total Depth: **15.0 feet**
Project Number: **3433244A**	
Project Name: **Whirlpool Corporation**	
Remarks: **Lithology from boring DP-67.**	

Well Construction:

Surface Casing:	Sch 40 PVC 8 inch	0.5 FT to 11 FT
Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 12 FT
Screen:	Sch. 40 2 Inch 0.10 PVC	12 FT to 13 FT
Surface Casing:	Cement Grout	0 FT to 11 FT
Well:	Cement Grout	0 FT to 9 FT
	Bentonite	9 FT to 11 FT
	Sand	11 FT to 13 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
475	0			0.0		ML	ASPHALT		Flush Mount
							GRAVEL, FILL		
				0.0		CL	CLAYEY SILT, GRAY/BROWN, NON PLASTIC, SLIGHTLY COHESIVE, DRY		
		6					SILTY CLAY, RED BROWN/GRAY, MOTTLED, ABUNDANT ORGANIC NODULES, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, STIFF, PLASTIC, MOIST		
470	5			0.1			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, VERY STIFF, PLASTIC, MOIST		
		5		0.1					
465	10			0.0					
		4	DP-67 (14.5)	0.3					
				0.3			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, TRACE SAND, STIFF, SLIGHTLY PLASTIC, MOIST		
460	15								
455	20								
450	25								

Report: WELL_LOG_REV_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: MW-180	Date(s): **1/14/2015**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Monitoring Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **475.63 ft amsl** / TOC Elevation: **475.32 ft amsl**
Sampling Method: **Sonic**	North: **369230.51** / East: **590995.83**
Well Construction:	Borehole Dia.: **12 inches** / Total Depth: **15.0 feet**
Project Number: **3433244A**	
Project Name: **Whirlpool Corporation**	
Remarks: **Lithology from boring DP-67.**	

Well Construction:

Surface Casing:	Sch 40 PVC 8 inch	0.5 FT to 5 FT
Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 6 FT
Screen:	Sch. 40 2 Inch 0.10 PVC	6 FT to 7 FT
Surface Casing:	Cement Grout	0 FT to 5 FT
Well:	Cement Grout	0 FT to 3 FT
	Bentonite	3 FT to 5 FT
	Sand	5 FT to 7 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
475	0			0.0		ML	ASPHALT		Flush Mount
							GRAVEL, FILL		
				0.0		CL	CLAYEY SILT, GRAY/BROWN, NON PLASTIC, SLIGHTLY COHESIVE, DRY		
		6					SILTY CLAY, RED BROWN/GRAY, MOTTLED, ABUNDANT ORGANIC NODULES, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, STIFF, PLASTIC, MOIST		
470	5			0.1			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, VERY STIFF, PLASTIC, MOIST		
		5		0.1					
465	10			0.0					
		4	DP-67 (14.5)	0.3					
				0.3			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, TRACE SAND, STIFF, SLIGHTLY PLASTIC, MOIST		
460	15								
455	20								
450	25								

Report: WELL_LOG_REV_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: MW-181	Date(s): **1/15/2015**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Monitoring Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **472.18 ft amsl** / TOC Elevation: **471.87 ft amsl**
Sampling Method: **Sonic**	North: **369694.63** / East: **591155.92**
Borehole Dia.: **12 inches**	Total Depth: **15.0 feet**
Project Number: **3433244A**	
Project Name: **Whirlpool Corporation**	
Remarks: **Lithology from boring DP-66.**	

Well Construction:

Surface Casing:	Sch 40 PVC 8 inch	0.5 FT to 5 FT
Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 6 FT
Screen:	Sch. 40 2 Inch 0.10 PVC	6 FT to 7 FT
Surface Casing:	Cement Grout	0 FT to 5 FT
Well:	Cement Grout	0 FT to 3 FT
	Bentonite	3 FT to 5 FT
	Sand	5 FT to 7 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
470	0	4		0.3		CL	TOP SOIL SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, STIFF, PLASTIC, MOIST, OCCASIONAL ROOT HAIR TO 2 FEET		Flush Mount
				0.1					
	5			0.4			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, OCCASIONAL ORGANIC NODULE, STIFF, SLIGHTLY PLASTIC, SLIGHTLY MOIST		
465		6							
				0.2					
	10						SILTY CLAY, RED BROWN/GRAY, MOTTLED, WITH ORGANIC NODULE, VERY STIFF, PLASTIC, MOIST		
460		5		0.3					
			DP-66 (14.5)	0.4			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULE, TRACE SAND, FINE GRAIN, STIFF, PLASTIC, MOIST		
	15								
455									
	20								
450									
	25								
445									

Report: WELL_LOG_REV_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: DP-63		Date(s): **12/17/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**			
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**		
Contractor: **Walker-Hill**	Purpose: **Soil Boring**		
Drilling Method: **Sonic**	Datum: **NAVD88**	Elevation: **463.86 ft amsl**	
Sampling Method: **Sonic**	North: **369626.02**	East: **591973.26**	
Remarks:	Borehole Dia.: **3 inches**	Total Depth: **15.5 feet**	
	Project Number: **3433244A**		
	Project Name: **Whirlpool Corporation**		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
				0.0		TOPSOIL, DARK BROWN, SANDY, LOOSE, MOIST, OCCASIONAL ROOT HAIRS
		4		0.0	CL	SILTY CLAY, DARK BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, STIFF, PLASTIC, MOIST
460	5		DP-63 (5.5)	0.0		SILTY CLAY, DARK BROWN/RED BROWN/GRAY, MOTTLED,SOFT, PLASTIC, MOIST
		6				SILTY CLAY, RED BROWN, FREQUENT GRAVEL, SUB ROUND, FINE GRAIN, SAND, FINE TO MEDIUM GRAIN, STIFF, SLIGHTLY PLASTIC, MOIST, WITH ORGANIC NODULES
455				0.0		
	10		DP-63 (10.5)			SILTY CLAY, DARK BROWN/RED BROWN, TRACE GRAVEL, FINE GRAIN, SOFT, PLASTIC, MOIST
				0.0	CH	SANDY CLAY, RED BROWN, FINE TO MEDIUM GRAIN, WITH GRAVEL, FINE GRAIN, SUB ROUND, COHESIVE, MOIST
		5.5			CL	SILTY CLAY, RED BROWN/GRAY, MOTTLED, WITH GRAVEL, FINE TO COURSE GRAIN, SUB ROUND, SAND, FINE TO MEDIUM GRAIN, VERY STIFF, COHESIVE, MOIST
450				0.0		
	15					
445						
	20					
440						
	25					
435						

Report: SOIL_LOG_REV_1_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: DP-64		Date(s): **12/17/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**			
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**		
Contractor: **Walker-Hill**	Purpose: **Soil Boring**		
Drilling Method: **Sonic**	Datum: **NAVD88**	Elevation: **464.47 ft amsl**	
Sampling Method: **Sonic**	North: **369642.10**	East: **591606.66**	
Remarks:	Borehole Dia.: **3 inches**	Total Depth: **15.0 feet**	
	Project Number: **3433244A**		
	Project Name: **Whirlpool Corporation**		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
				0.0		TOPSOIL, DARK BROWN, ROOT HAIRS, WET(SATURATED)
		4		0.0	CL	SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, SILT DECREASING WITH DEPTH, TRACE GRAVEL, FINE GRAIN, SUB ROUND, STIFF, PLASTIC, MOIST
460	5	6		0.0		SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, TRACE GRAVEL, FINE GRAIN, SUB ROUND, VERY STIFF, PLASTIC, MOIST
455	10	5	DP-64 (14.5)	0.0		SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT GRAVEL, FINE GRAIN, TRACE SAND, FINE GRAIN, STIFF, SLIGHTLY PLASTIC, MOIST
				0.0		SILTY CLAY, RED BROWN, WITH GRAVEL, SUB ROUND, FINE GRAIN, TRACE SAND, FINE GRAIN, STIFF, COHESIVE, MOIST
450	15			0.1	SM	SILTY SAND, RED BROWN, SLIGHTLY CLAYEY, FINE TO MEDIUM GRAIN, SLIGHTLY COHESIVE, MOIST
					CL	SILTY CLAY, RED BROWN, WITH GRAVEL, SUB ROUND, FINE TO COURSE GRAIN, HARD, DRY
445	20					
440	25					
435						

Report: SOIL_LOG_REV_1_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: DP-65		Date(s): **12/17/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**			
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**		
Contractor: **Walker-Hill**	Purpose: **Soil Boring**		
Drilling Method: **Sonic**	Datum: **NAVD88**	Elevation: **465.53 ft amsl**	
Sampling Method: **Sonic**	North: **369663.84**	East: **591470.36**	
Remarks:	Borehole Dia.: **3 inches**	Total Depth: **15.0 feet**	
	Project Number: **3433244A**		
	Project Name: **Whirlpool Corporation**		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
465		4		0.1	CL	SILTY CLAY, GRAY/BROWN, MOTTLED, SOFT, PLASTIC, WET, OCCASIONAL ROOT HAIR
				0.8		SILTY CLAY, RED BROWN/GRAY, MOTTLED, TRACE GRAVEL, FINE GRAIN, SUB ROUND, VERY STIFF, PLASTIC, MOIST, OCCASIONAL ORGANIC NODULES
	5	6		1.8		
460				8.7		
	10					
455		5	DP-65 (14)	2.1		
				2.8	SM	SILTY SAND, RED BROWN, FINE TO MEDIUM GRAIN, SLIGHTLY CLAYEY, SLIGHTLY COHESIVE, MOIST
	15				CL	SILTY CLAY, RED BROWN/GRAY, MOTTLED, SLIGHTLY SANDY, FINE GRAIN, STIFF, PLASTIC, MOIST
450						SILTY CLAY, RED BROWN, WITH GRAVEL, FINE TO COARSE GRAIN, SUB ROUND, STIFF, COHESIVE, MOIST, CRUMBLES
	20					
445						
	25					
440						

Report: SOIL_LOG_REV_1_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID:	DP-66	Date(s):	**12/18/2014**
Location:	**Fort Smith, Arkansas**		
Logged By:	**N. Zurweller**		
Consulting Firm:	**ENVIRON**	Checked By:	**K. Stonestreet**
Contractor:	**Walker-Hill**	Purpose:	**Soil Boring**
Drilling Method:	**Sonic**	Datum: **NAVD88**	Elevation: **472.18 ft amsl**
Sampling Method:	**Sonic**	North: **369690.10**	East: **591139.10**
Remarks:		Borehole Dia.: **3 inches**	Total Depth: **15.0 feet**
		Project Number: **3433244A**	
		Project Name: **Whirlpool Corporation**	

Elevation (ft)	Water Level	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description
470		0	4		0.3		CL	TOP SOIL SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, STIFF, PLASTIC, MOIST, OCCASIONAL ROOT HAIR TO 2 FEET
					0.1			
		5			0.4			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, OCCASIONAL ORGANIC NODULE, STIFF, SLIGHTLY PLASTIC, SLIGHTLY MOIST
465			6					
					0.2			
		10						SILTY CLAY, RED BROWN/GRAY, MOTTLED, WITH ORGANIC NODULE, VERY STIFF, PLASTIC, MOIST
460			5		0.3			
				DP-66 (14.5)	0.4			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULE, TRACE SAND, FINE GRAIN, STIFF, PLASTIC, MOIST
		15						
455								
		20						
450								
		25						
445								

Report: SOIL_LOG_REV_1_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID:	DP-67	Date(s):	**12/18/2014**
Location:	**Fort Smith, Arkansas**		
Logged By:	**N. Zurweller**		
Consulting Firm:	**ENVIRON**	Checked By:	**K. Stonestreet**
Contractor:	**Walker-Hill**	Purpose:	**Soil Boring**
Drilling Method:	**Sonic**	Datum: **NAVD88**	Elevation: **475.66 ft amsl**
Sampling Method:	**Sonic**	North: **369226.87**	East: **591005.61**
Remarks:		Borehole Dia.: **3 inches**	Total Depth: **15.0 feet**
		Project Number:	**3433244A**
		Project Name:	**Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
475				0.0	ML	ASPHALT
						GRAVEL, FILL
						CLAYEY SILT, GRAY/BROWN, NON PLASTIC, SLIGHTLY COHESIVE, DRY
				0.0	CL	SILTY CLAY, RED BROWN/GRAY, MOTTLED, ABUNDANT ORGANIC NODULES, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, STIFF, PLASTIC, MOIST
		6				
	5			0.1		
470						SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, VERY STIFF, PLASTIC, MOIST
		5		0.1		
	10			0.0		
465						
		4		0.3		
			DP-67 (14.5)	0.3		
	15					SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, TRACE SAND, STIFF, SLIGHTLY PLASTIC, MOIST
460						
	20					
455						
	25					
450						

Report: SOIL_LOG_REV_1_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: VP-5		Date(s): **1/14/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **K. Stonestreet**	
Contractor: **Walker-Hill**		Purpose: **Vapor Point**	
Drilling Method: **Sonic**		GS Elevation: **464.08 ft amsl**	TOC Elevation: **Not available**
Sampling Method: **Sonic**		North: **369619.19**	East: **591959.04**
Well Construction:		Borehole Dia.: **12 inches**	Total Depth: **8.0 feet**
Surface Casing: Sch 40 PVC 8 inch	0.5 FT to 7 FT	Project Number: **3433244A**	
Blank Casing: 0.25 Inch I.D. Tubing	0 FT to 7.25 FT	Project Name: **Whirlpool Corporation**	
Screen: Stainless Steel	7.25 FT to 7.75 FT	Remarks: **Lithology from boring DP-63.**	
Surface Casing: Cement Grout	0 FT to 7 FT		
Well: Cement Grout	0 FT to 5 FT		
Bentonite Grout	5 FT to 7 FT		
Sand	7 FT to 8 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
				0.0			TOPSOIL, DARK BROWN, SANDY, LOOSE, MOIST, OCCASIONAL ROOT HAIRS		Flush Mount
		4		0.0		CL	SILTY CLAY, DARK BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, STIFF, PLASTIC, MOIST		
460									
	5		DP-63 (5.5)	0.0			SILTY CLAY, DARK BROWN/RED BROWN/GRAY, MOTTLED,SOFT, PLASTIC, MOIST		
		6					SILTY CLAY, RED BROWN, FREQUENT GRAVEL, SUB ROUND, FINE GRAIN, SAND, FINE TO MEDIUM GRAIN, STIFF, SLIGHTLY PLASTIC, MOIST, WITH ORGANIC NODULES		
455				0.0					
	10		DP-63 (10.5)				SILTY CLAY, DARK BROWN/RED BROWN, TRACE GRAVEL, FINE GRAIN, SOFT, PLASTIC, MOIST		
		5.5		0.0		CH	SANDY CLAY, RED BROWN, FINE TO MEDIUM GRAIN, WITH GRAVEL, FINE GRAIN, SUB ROUND, COHESIVE, MOIST		
450				0.0		CL	SILTY CLAY, RED BROWN/GRAY, MOTTLED, WITH GRAVEL, FINE TO COURSE GRAIN, SUB ROUND, SAND, FINE TO MEDIUM GRAIN, VERY STIFF, COHESIVE, MOIST		
	15								
445									
	20								
440									
	25								
435									

Report: WELL_LOG_REV_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: VP-6		Date(s): **1/14/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **K. Stonestreet**	
Contractor: **Walker-Hill**		Purpose: **Vapor Point**	
Drilling Method: **Sonic**		GS Elevation: **464.01 ft amsl**	TOC Elevation: **Not available**
Sampling Method: **Sonic**		North: **369615.51**	East: **591961.14**
Well Construction:		Borehole Dia.: **12 inches**	Total Depth: **14.5 feet**
Surface Casing: Sch 40 PVC 8 inch	0.5 FT to 13.5 FT	Project Number: **3433244A**	
Blank Casing: 0.25 Inch I.D. Tubing	0 FT to 13.75 FT	Project Name: **Whirlpool Corporation**	
Screen: Stainless Steel	13.75 FT to 14.25 FT	Remarks: **Lithology from boring DP-63.**	
Surface Casing: Cement Grout	0 FT to 13.5 FT		
Well: Cement Grout	0 FT to 11.5 FT		
Bentonite Grout	11.5 FT to 13.5 FT		
Sand	13.5 FT to 14.5 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
				0.0		CL	TOPSOIL, DARK BROWN, SANDY, LOOSE, MOIST, OCCASIONAL ROOT HAIRS		Flush Mount
460		4		0.0			SILTY CLAY, DARK BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, STIFF, PLASTIC, MOIST		
	5		DP-63 (5.5)	0.0			SILTY CLAY, DARK BROWN/RED BROWN/GRAY, MOTTLED,SOFT, PLASTIC, MOIST		
		6					SILTY CLAY, RED BROWN, FREQUENT GRAVEL, SUB ROUND, FINE GRAIN, SAND, FINE TO MEDIUM GRAIN, STIFF, SLIGHTLY PLASTIC, MOIST, WITH ORGANIC NODULES		
455				0.0					
	10		DP-63 (10.5)				SILTY CLAY, DARK BROWN/RED BROWN, TRACE GRAVEL, FINE GRAIN, SOFT, PLASTIC, MOIST		
				0.0		CH	SANDY CLAY, RED BROWN, FINE TO MEDIUM GRAIN, WITH GRAVEL, FINE GRAIN, SUB ROUND, COHESIVE, MOIST		
		5.5				CL	SILTY CLAY, RED BROWN/GRAY, MOTTLED, WITH GRAVEL, FINE TO COURSE GRAIN, SUB ROUND, SAND, FINE TO MEDIUM GRAIN, VERY STIFF, COHESIVE, MOIST		
450				0.0					
	15								
445									
	20								
440									
	25								
435									

Report: WELL_LOG_REV_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: VP-7		Date(s): **1/15/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **K. Stonestreet**	
Contractor: **Walker-Hill**		Purpose: **Vapor Point**	
Drilling Method: **Sonic**		GS Elevation: **464.63 ft amsl**	TOC Elevation: **Not available**
Sampling Method: **Sonic**		North: **369641.40**	East: **591612.33**
Well Construction:		Borehole Dia.: **12 inches**	Total Depth: **6.0 feet**
Surface Casing: Sch 40 PVC 8 inch	0.5 FT to 5 FT	Project Number: **3433244A**	
Blank Casing: 0.25 Inch I.D. Tubing	0 FT to 5.25 FT	Project Name: **Whirlpool Corporation**	
Screen: Stainless Steel	5.25 FT to 5.75 FT	Remarks: **Lithology from boring DP-64.**	
Surface Casing: Cement Grout	0 FT to 5 FT		
Well: Cement Grout	0 FT to 3 FT		
Bentonite Grout	3 FT to 5 FT		
Sand	5 FT to 6 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
				0.0			TOPSOIL, DARK BROWN, ROOT HAIRS, WET(SATURATED)		Flush Mount
		4		0.0		CL	SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, SILT DECREASING WITH DEPTH, TRACE GRAVEL, FINE GRAIN, SUB ROUND, STIFF, PLASTIC, MOIST		
460	5			0.0			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, TRACE GRAVEL, FINE GRAIN, SUB ROUND, VERY STIFF, PLASTIC, MOIST		
		6		0.0					
455	10			0.0			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT GRAVEL, FINE GRAIN, TRACE SAND, FINE GRAIN, STIFF, SLIGHTLY PLASTIC, MOIST		
		5		0.0			SILTY CLAY, RED BROWN, WITH GRAVEL, SUB ROUND, FINE GRAIN, TRACE SAND, FINE GRAIN, STIFF, COHESIVE, MOIST		
			DP-64 (14.5)	0.1		SM	SILTY SAND, RED BROWN, SLIGHTLY CLAYEY, FINE TO MEDIUM GRAIN, SLIGHTLY COHESIVE, MOIST		
450	15					CL	SILTY CLAY, RED BROWN, WITH GRAVEL, SUB ROUND, FINE TO COURSE GRAIN, HARD, DRY		
445	20								
440	25								
435									

Report: WELL_LOG_REV_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: VP-8		Date(s): **1/15/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **K. Stonestreet**	
Contractor: **Walker-Hill**		Purpose: **Vapor Point**	
Drilling Method: **Sonic**		GS Elevation: **464.61 ft amsl**	TOC Elevation: **Not available**
Sampling Method: **Sonic**		North: **369641.14**	East: **591615.45**
Well Construction:		Borehole Dia.: **12 inches**	Total Depth: **11.0 feet**
Surface Casing: Sch 40 PVC 8 inch	0.5 FT to 10 FT	Project Number: **3433244A**	
Blank Casing: 0.25 Inch I.D. Tubing	0 FT to 10.25 FT	Project Name: **Whirlpool Corporation**	
Screen: Stainless Steel	10.25 FT to 10.75 FT	Remarks: **Lithology from boring DP-64.**	
Surface Casing: Cement Grout	0 FT to 10 FT		
Well: Cement Grout	0 FT to 8 FT		
Bentonite Grout	8 FT to 10 FT		
Sand	10 FT to 11 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
				0.0			TOPSOIL, DARK BROWN, ROOT HAIRS, WET(SATURATED)		Flush Mount
		4		0.0		CL	SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, SILT DECREASING WITH DEPTH, TRACE GRAVEL, FINE GRAIN, SUB ROUND, STIFF, PLASTIC, MOIST		
460	5			0.0			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, TRACE GRAVEL, FINE GRAIN, SUB ROUND, VERY STIFF, PLASTIC, MOIST		
		6		0.0					
455	10			0.0			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT GRAVEL, FINE GRAIN, TRACE SAND, FINE GRAIN, STIFF, SLIGHTLY PLASTIC, MOIST		
		5		0.0			SILTY CLAY, RED BROWN, WITH GRAVEL, SUB ROUND, FINE GRAIN, TRACE SAND, FINE GRAIN, STIFF, COHESIVE, MOIST		
			DP-64 (14.5)	0.1		SM	SILTY SAND, RED BROWN, SLIGHTLY CLAYEY, FINE TO MEDIUM GRAIN, SLIGHTLY COHESIVE, MOIST		
450	15					CL	SILTY CLAY, RED BROWN, WITH GRAVEL, SUB ROUND, FINE TO COURSE GRAIN, HARD, DRY		
445	20								
440	25								
435									

Report: WELL_LOG_REV_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: VP-9	Date(s): **1/16/2015**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Vapor Point**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **465.6 ft amsl** / TOC Elevation: **Not available**
Sampling Method: **Sonic**	North: **369655.87** / East: **591471.58**
Borehole Dia.: **12 inches**	Total Depth: **6.0 feet**
Project Number: **3433244A**	
Project Name: **Whirlpool Corporation**	
Remarks: **Lithology from boring DP-65.**	

Well Construction:

Surface Casing:	Sch 40 PVC 8 inch	0.5 FT to 5 FT
Blank Casing:	0.25 Inch I.D. Tubing	0 FT to 5.25 FT
Screen:	Stainless Steel	5.25 FT to 5.75 FT
Surface Casing:	Cement Grout	0 FT to 5 FT
Well:	Cement Grout	0 FT to 3 FT
	Bentonite Grout	3 FT to 5 FT
	Sand	5 FT to 6 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
465		4		0.1		CL	SILTY CLAY, GRAY/BROWN, MOTTLED, SOFT, PLASTIC, WET, OCCASIONAL ROOT HAIR		Flush Mount
				0.8			SILTY CLAY, RED BROWN/GRAY, MOTTLED, TRACE GRAVEL, FINE GRAIN, SUB ROUND, VERY STIFF, PLASTIC, MOIST, OCCASIONAL ORGANIC NODULES		
460	5	6		1.8					
				8.7					
455	10	5	DP-65 (14)	2.1					
				2.8		SM	SILTY SAND, RED BROWN, FINE TO MEDIUM GRAIN, SLIGHTLY CLAYEY, SLIGHTLY COHESIVE, MOIST		
450	15					CL	SILTY CLAY, RED BROWN/GRAY, MOTTLED, SLIGHTLY SANDY, FINE GRAIN, STIFF, PLASTIC, MOIST		
							SILTY CLAY, RED BROWN, WITH GRAVEL, FINE TO COARSE GRAIN, SUB ROUND, STIFF, COHESIVE, MOIST, CRUMBLES		
445	20								
440	25								

Report: WELL_LOG_REV_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: VP-10	Date(s): **1/16/2015**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Vapor Point**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **465.59 ft amsl** / TOC Elevation: **Not available**
Sampling Method: **Sonic**	North: **369661.02** / East: **591471.62**
Well Construction:	Borehole Dia.: **12 inches** / Total Depth: **11.5 feet**
Surface Casing: Sch 40 PVC 8 inch 0.5 FT to 10.5 FT Blank Casing: 0.25 Inch I.D. Tubing 0 FT to 10.75 FT Screen: Stainless Steel 10.75 FT to 11.25 FT Surface Casing: Cement Grout 0 FT to 10.5 FT Well: Cement Grout 0 FT to 8.5 FT Bentonite Grout 8.5 FT to 10.5 FT Sand 10.5 FT to 11.5 FT	Project Number: **3433244A** Project Name: **Whirlpool Corporation** Remarks: **Lithology from boring DP-65.**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
465		4		0.1		CL	SILTY CLAY, GRAY/BROWN, MOTTLED, SOFT, PLASTIC, WET, OCCASIONAL ROOT HAIR		Flush Mount
				0.8			SILTY CLAY, RED BROWN/GRAY, MOTTLED, TRACE GRAVEL, FINE GRAIN, SUB ROUND, VERY STIFF, PLASTIC, MOIST, OCCASIONAL ORGANIC NODULES		
	5	6		1.8					
460				8.7					
	10								
455		5	DP-65 (14)	2.1					
				2.8		SM	SILTY SAND, RED BROWN, FINE TO MEDIUM GRAIN, SLIGHTLY CLAYEY, SLIGHTLY COHESIVE, MOIST		
	15					CL	SILTY CLAY, RED BROWN/GRAY, MOTTLED, SLIGHTLY SANDY, FINE GRAIN, STIFF, PLASTIC, MOIST		
450							SILTY CLAY, RED BROWN, WITH GRAVEL, FINE TO COARSE GRAIN, SUB ROUND, STIFF, COHESIVE, MOIST, CRUMBLES		
	20								
445									
	25								
440									

Report: WELL_LOG_REV_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: VP-12	Date(s): **1/15/2015**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Vapor Point**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **471.79 ft amsl** / TOC Elevation: **Not available**
Sampling Method: **Sonic**	North: **369705.99** / East: **591156.94**
Well Construction:	Borehole Dia.: **12 inches** / Total Depth: **13.0 feet**
Surface Casing: Sch 40 PVC 8 inch, 0.5 FT to 12 FT	Project Number: **3433244A**
Blank Casing: 0.25 Inch O.D. Tubing, 0 FT to 12.25 FT	Project Name: **Whirlpool Corporation**
Screen: Stainless Steel, 12.25 FT to 12.75 FT	Remarks: **Lithology from boring DP-66.**
Surface Casing: Cement Grout, 0 FT to 12 FT	
Well: Cement Grout, 0 FT to 10 FT	
Bentonite Grout, 10 FT to 12 FT	
Sand, 12 FT to 13 FT	

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
470	0	4		0.3		CL	TOP SOIL SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, STIFF, PLASTIC, MOIST, OCCASIONAL ROOT HAIR TO 2 FEET		Flush Mount
				0.1					
	5	6		0.4			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, OCCASIONAL ORGANIC NODULE, STIFF, SLIGHTLY PLASTIC, SLIGHTLY MOIST		
465				0.2					
	10	5	DP-66 (14.5)	0.3			SILTY CLAY, RED BROWN/GRAY, MOTTLED, WITH ORGANIC NODULE, VERY STIFF, PLASTIC, MOIST		
460				0.4					
	15						SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULE, TRACE SAND, FINE GRAIN, STIFF, PLASTIC, MOIST		
455									
	20								
450									
	25								
445									

Report: WELL_LOG_REV_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: VP-14		Date(s): **1/14/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **K. Stonestreet**	
Contractor: **Able Environmental**		Purpose: **Vapor Point**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **475.64 ft amsl**	TOC Elevation: **Not available**
Sampling Method: **Sonic**		North: **369230.45**	East: **591003.78**
Well Construction:		Borehole Dia.: **12 inches**	Total Depth: **11.0 feet**
Surface Casing: Sch 40 PVC 8 inch	0.5 FT to 10 FT	Project Number: **3433244A**	
Blank Casing: 0.25 Inch O.D. Tubing	0 FT to 10.25 FT	Project Name: **Whirlpool Corporation**	
Screen: Stainless Steel	10.25 FT to 10.75 FT	Remarks: **Lithology from boring DP-67.**	
Surface Casing: Cement Grout	0 FT to 10 FT		
Well: Cement Grout	0 FT to 8 FT		
Bentonite Grout	8 FT to 10 FT		
Sand	10 FT to 11 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
475	0			0.0		ML	ASPHALT		Flush Mount
							GRAVEL, FILL		
				0.0		CL	CLAYEY SILT, GRAY/BROWN, NON PLASTIC, SLIGHTLY COHESIVE, DRY		
		6					SILTY CLAY, RED BROWN/GRAY, MOTTLED, ABUNDANT ORGANIC NODULES, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, STIFF, PLASTIC, MOIST		
470	5			0.1			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, FREQUENT GRAVEL, FINE GRAIN, SUB ROUND, VERY STIFF, PLASTIC, MOIST		
		5		0.1					
465	10			0.0					
		4	DP-67 (14.5)	0.3					
				0.3			SILTY CLAY, RED BROWN/GRAY, MOTTLED, FREQUENT ORGANIC NODULES, TRACE SAND, STIFF, SLIGHTLY PLASTIC, MOIST		
460	15								
455	20								
450	25								

Report: WELL_LOG_REV_MKE2; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 1/28/15

Appendix B
Laboratory Analytical Reports

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

January 27, 2015

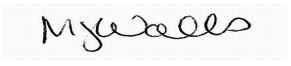
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH AR
Pace Project No.: 60186563

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on January 21, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: FORT SMITH AR
Pace Project No.: 60186563

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: FORT SMITH AR
Pace Project No.: 60186563

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186563001	**MW-174-GW-20150120**	Water	01/20/15 13:40	01/21/15 08:30
60186563002	**VP-06-GW-20150120**	Water	01/20/15 15:50	01/21/15 08:30

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR
Pace Project No.: 60186563

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60186563001	**MW-174-GW-20150120**	EPA 5030B/8260	PRG	38
60186563002	**VP-06-GW-20150120**	EPA 5030B/8260	PRG	38

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORT SMITH AR
Pace Project No.: 60186563

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: January 27, 2015

General Information:
2 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/67171

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60186563

Sample: MW-174-GW-20150120 **Lab ID: 60186563001** Collected: 01/20/15 13:40 Received: 01/21/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**51.1**	ug/L	10.0	5.0	1		01/23/15 19:41	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/23/15 19:41	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/23/15 19:41	74-83-9	
2-Butanone (MEK)	**11.3**	ug/L	10.0	5.0	1		01/23/15 19:41	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/23/15 19:41	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/23/15 19:41	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/23/15 19:41	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/23/15 19:41	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/23/15 19:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/23/15 19:41	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:41	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:41	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/23/15 19:41	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/23/15 19:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/23/15 19:41	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		01/23/15 19:41	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		01/23/15 19:41	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/23/15 19:41		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60186563

Sample: VP-06-GW-20150120 **Lab ID: 60186563002** Collected: 01/20/15 15:50 Received: 01/21/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**5.7J**	ug/L	10.0	5.0	1		01/23/15 19:56	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/23/15 19:56	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/23/15 19:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/23/15 19:56	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/23/15 19:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/23/15 19:56	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/23/15 19:56	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/23/15 19:56	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/23/15 19:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/23/15 19:56	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/23/15 19:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 19:56	79-00-5	
Trichloroethene	**4.3**	ug/L	1.0	0.50	1		01/23/15 19:56	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/23/15 19:56	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/23/15 19:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/23/15 19:56	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/23/15 19:56	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		01/23/15 19:56	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/23/15 19:56		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60186563

QC Batch: MSV/67171 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186563001, 60186563002

METHOD BLANK: 1510745 Matrix: Water
Associated Lab Samples: 60186563001, 60186563002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/23/15 15:12	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/23/15 15:12	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/23/15 15:12	
1,1-Dichloroethane	ug/L	ND	1.0	01/23/15 15:12	
1,1-Dichloroethene	ug/L	ND	1.0	01/23/15 15:12	
1,2-Dichloroethane	ug/L	ND	1.0	01/23/15 15:12	
1,2-Dichloropropane	ug/L	ND	1.0	01/23/15 15:12	
2-Butanone (MEK)	ug/L	ND	10.0	01/23/15 15:12	
2-Hexanone	ug/L	ND	10.0	01/23/15 15:12	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/23/15 15:12	
Acetone	ug/L	ND	10.0	01/23/15 15:12	
Benzene	ug/L	ND	1.0	01/23/15 15:12	
Bromodichloromethane	ug/L	ND	1.0	01/23/15 15:12	
Bromoform	ug/L	ND	1.0	01/23/15 15:12	
Bromomethane	ug/L	ND	5.0	01/23/15 15:12	
Carbon disulfide	ug/L	ND	5.0	01/23/15 15:12	
Carbon tetrachloride	ug/L	ND	1.0	01/23/15 15:12	
Chlorobenzene	ug/L	ND	1.0	01/23/15 15:12	
Chloroethane	ug/L	ND	1.0	01/23/15 15:12	
Chloroform	ug/L	ND	1.0	01/23/15 15:12	
Chloromethane	ug/L	ND	1.0	01/23/15 15:12	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 15:12	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 15:12	
Dibromochloromethane	ug/L	ND	1.0	01/23/15 15:12	
Ethylbenzene	ug/L	ND	1.0	01/23/15 15:12	
Methylene chloride	ug/L	ND	1.0	01/23/15 15:12	
Styrene	ug/L	ND	1.0	01/23/15 15:12	
Tetrachloroethene	ug/L	ND	1.0	01/23/15 15:12	
Toluene	ug/L	ND	1.0	01/23/15 15:12	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 15:12	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 15:12	
Trichloroethene	ug/L	ND	1.0	01/23/15 15:12	
Vinyl chloride	ug/L	ND	1.0	01/23/15 15:12	
Xylene (Total)	ug/L	ND	3.0	01/23/15 15:12	
1,2-Dichloroethane-d4 (S)	%	102	80-120	01/23/15 15:12	
4-Bromofluorobenzene (S)	%	100	80-120	01/23/15 15:12	
Toluene-d8 (S)	%	100	80-120	01/23/15 15:12	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60186563

LABORATORY CONTROL SAMPLE: 1510746

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.3	102	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.8	99	73-121	
1,1,2-Trichloroethane	ug/L	20	21.1	105	80-120	
1,1-Dichloroethane	ug/L	20	20.6	103	80-120	
1,1-Dichloroethene	ug/L	20	20.2	101	80-120	
1,2-Dichloroethane	ug/L	20	21.5	107	81-120	
1,2-Dichloropropane	ug/L	20	20.6	103	80-120	
2-Butanone (MEK)	ug/L	100	100	100	67-122	
2-Hexanone	ug/L	100	102	102	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	102	102	76-120	
Acetone	ug/L	100	95.9	96	72-120	
Benzene	ug/L	20	22.1	111	80-120	
Bromodichloromethane	ug/L	20	21.3	107	80-120	
Bromoform	ug/L	20	20.3	102	73-138	
Bromomethane	ug/L	20	14.1	71	38-137	
Carbon disulfide	ug/L	20	21.5	107	71-129	
Carbon tetrachloride	ug/L	20	20.6	103	67-146	
Chlorobenzene	ug/L	20	22.0	110	80-120	
Chloroethane	ug/L	20	17.9	89	76-120	
Chloroform	ug/L	20	20.1	100	80-120	
Chloromethane	ug/L	20	16.0	80	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.9	105	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.5	103	80-120	
Dibromochloromethane	ug/L	20	20.9	105	80-126	
Ethylbenzene	ug/L	20	21.0	105	80-120	
Methylene chloride	ug/L	20	18.7	94	80-120	
Styrene	ug/L	20	22.1	110	80-123	
Tetrachloroethene	ug/L	20	21.0	105	80-123	
Toluene	ug/L	20	21.5	108	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.5	102	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.1	106	80-129	
Trichloroethene	ug/L	20	20.7	103	80-120	
Vinyl chloride	ug/L	20	18.3	92	62-125	
Xylene (Total)	ug/L	60	65.7	109	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			104	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: FORT SMITH AR
Pace Project No.: 60186563

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/67171

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR
Pace Project No.: 60186563

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186563001	**MW-174-GW-20150120**	EPA 5030B/8260	MSV/67171		
60186563002	**VP-06-GW-20150120**	EPA 5030B/8260	MSV/67171		

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Sample Condition Upon Receipt

WO#: 60186563

60186563

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 5689 1283 9504 Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☑ None ☐ Other ☐

Thermometer Used: T-239 / T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 1-7

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JW 1/21/15

Chain of Custody present:	☑Yes	☐No	☐N/A	1.
Chain of Custody filled out:	☑Yes	☐No	☐N/A	2.
Chain of Custody relinquished:	☑Yes	☐No	☐N/A	3.
Sampler name & signature on COC:	☑Yes	☐No	☐N/A	4.
Samples arrived within holding time:	☑Yes	☐No	☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes	☑No	☐N/A	6.
Rush Turn Around Time requested:	☐Yes	☑No	☐N/A	7.
Sufficient volume:	☑Yes	☐No	☐N/A	8.
Correct containers used:	☑Yes	☐No	☐N/A	
Pace containers used:	☑Yes	☐No	☐N/A	9.
Containers intact:	☑Yes	☐No	☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes	☐No	☑N/A	11.
Filtered volume received for dissolved tests?	☐Yes	☑No	☐N/A	12.
Sample labels match COC:	☑Yes	☐No	☐N/A	
Includes date/time/ID/analyses Matrix: WT				13.
All containers needing preservation have been checked.	☐Yes	☐No	☑N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes	☐No	☑N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	☑Yes	☐No		Initial when completed / Lot # of added preservative
Trip Blank present:	☑Yes	☐No	☐N/A	
Pace Trip Blank lot # (if purchased): OCT 09 2014				15.
Headspace in VOA vials (>6mm):	☐Yes	☑No	☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes	☐No	☑N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MW Date: 1/21/14

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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.

Page: / of /

Section A — Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STANDARD

Section B — Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tamara Gleason
	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	34344466

Section C — Invoice Information:

Attention:	Tamara Gleason
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Section D — Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-174-GW-20150120	WT	G			1/20/15	1340		3				3						X		60186563
2	VP-06-GW-20150120	WT	G			1/20/15	1550		3				3						X		(60186563)
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / ENVIRON	1/20/15	1715	[signature] / PACE	1/21/15	830	1-7	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Michael Eddings

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 1/20/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*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.

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January 27, 2015

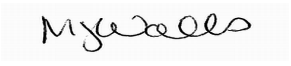
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on January 21, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

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SAMPLE SUMMARY

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186566001	**MW-175-GW-20150120**	Water	01/20/15 13:45	01/21/15 08:30
60186566002	**TB-02**	Water	01/20/15 13:45	01/21/15 08:30

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60186566001	**MW-175-GW-20150120**	EPA 5030B/8260	PRG	38
60186566002	**TB-02**	EPA 5030B/8260	PRG	38

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PROJECT NARRATIVE

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: January 27, 2015

General Information:
2 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

Sample: MW-175-GW-20150120 **Lab ID: 60186566001** Collected: 01/20/15 13:45 Received: 01/21/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**16.1**	ug/L	10.0	5.0	1		01/24/15 01:38	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/24/15 01:38	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/24/15 01:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/24/15 01:38	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/24/15 01:38	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/24/15 01:38	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/24/15 01:38	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	75-35-4	
cis-1,2-Dichloroethene	**2.0**	ug/L	1.0	0.50	1		01/24/15 01:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/24/15 01:38	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/24/15 01:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/24/15 01:38	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/24/15 01:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:38	79-00-5	
Trichloroethene	**123**	ug/L	1.0	0.50	1		01/24/15 01:38	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/24/15 01:38	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/24/15 01:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		01/24/15 01:38	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		01/24/15 01:38	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/24/15 01:38	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/24/15 01:38		

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ANALYTICAL RESULTS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

Sample: TB-02 **Lab ID: 60186566002** Collected: 01/20/15 13:45 Received: 01/21/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/23/15 21:55	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/23/15 21:55	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/23/15 21:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/23/15 21:55	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/23/15 21:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/23/15 21:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/23/15 21:55	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/23/15 21:55	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/23/15 21:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/23/15 21:55	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/23/15 21:55	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/23/15 21:55	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/23/15 21:55	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/23/15 21:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/23/15 21:55	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		01/23/15 21:55	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		01/23/15 21:55	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/23/15 21:55		

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QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

QC Batch: MSV/67172 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186566001, 60186566002

METHOD BLANK: 1510757 Matrix: Water
Associated Lab Samples: 60186566001, 60186566002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1-Dichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1-Dichloroethene	ug/L	ND	1.0	01/23/15 21:25	
1,2-Dichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,2-Dichloropropane	ug/L	ND	1.0	01/23/15 21:25	
2-Butanone (MEK)	ug/L	ND	10.0	01/23/15 21:25	
2-Hexanone	ug/L	ND	10.0	01/23/15 21:25	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/23/15 21:25	
Acetone	ug/L	ND	10.0	01/23/15 21:25	
Benzene	ug/L	ND	1.0	01/23/15 21:25	
Bromodichloromethane	ug/L	ND	1.0	01/23/15 21:25	
Bromoform	ug/L	ND	1.0	01/23/15 21:25	
Bromomethane	ug/L	ND	5.0	01/23/15 21:25	
Carbon disulfide	ug/L	ND	5.0	01/23/15 21:25	
Carbon tetrachloride	ug/L	ND	1.0	01/23/15 21:25	
Chlorobenzene	ug/L	ND	1.0	01/23/15 21:25	
Chloroethane	ug/L	ND	1.0	01/23/15 21:25	
Chloroform	ug/L	ND	1.0	01/23/15 21:25	
Chloromethane	ug/L	ND	1.0	01/23/15 21:25	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 21:25	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 21:25	
Dibromochloromethane	ug/L	ND	1.0	01/23/15 21:25	
Ethylbenzene	ug/L	ND	1.0	01/23/15 21:25	
Methylene chloride	ug/L	ND	1.0	01/23/15 21:25	
Styrene	ug/L	ND	1.0	01/23/15 21:25	
Tetrachloroethene	ug/L	ND	1.0	01/23/15 21:25	
Toluene	ug/L	ND	1.0	01/23/15 21:25	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 21:25	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 21:25	
Trichloroethene	ug/L	ND	1.0	01/23/15 21:25	
Vinyl chloride	ug/L	ND	1.0	01/23/15 21:25	
Xylene (Total)	ug/L	ND	3.0	01/23/15 21:25	
1,2-Dichloroethane-d4 (S)	%	101	80-120	01/23/15 21:25	
4-Bromofluorobenzene (S)	%	100	80-120	01/23/15 21:25	
Toluene-d8 (S)	%	99	80-120	01/23/15 21:25	

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QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

LABORATORY CONTROL SAMPLE: 1510758

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.1	105	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.9	100	73-121	
1,1,2-Trichloroethane	ug/L	20	20.4	102	80-120	
1,1-Dichloroethane	ug/L	20	20.5	103	80-120	
1,1-Dichloroethene	ug/L	20	20.6	103	80-120	
1,2-Dichloroethane	ug/L	20	21.2	106	81-120	
1,2-Dichloropropane	ug/L	20	20.3	101	80-120	
2-Butanone (MEK)	ug/L	100	101	101	67-122	
2-Hexanone	ug/L	100	99.7	100	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	109	109	76-120	
Acetone	ug/L	100	101	101	72-120	
Benzene	ug/L	20	21.9	110	80-120	
Bromodichloromethane	ug/L	20	21.7	109	80-120	
Bromoform	ug/L	20	20.0	100	73-138	
Bromomethane	ug/L	20	15.4	77	38-137	
Carbon disulfide	ug/L	20	22.3	112	71-129	
Carbon tetrachloride	ug/L	20	21.5	108	67-146	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	20.2	101	76-120	
Chloroform	ug/L	20	20.1	100	80-120	
Chloromethane	ug/L	20	19.3	97	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.5	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.4	107	80-120	
Dibromochloromethane	ug/L	20	20.4	102	80-126	
Ethylbenzene	ug/L	20	21.0	105	80-120	
Methylene chloride	ug/L	20	20.3	102	80-120	
Styrene	ug/L	20	21.8	109	80-123	
Tetrachloroethene	ug/L	20	20.6	103	80-123	
Toluene	ug/L	20	20.3	101	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.5	103	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.7	104	80-129	
Trichloroethene	ug/L	20	20.4	102	80-120	
Vinyl chloride	ug/L	20	20.7	104	62-125	
Xylene (Total)	ug/L	60	65.3	109	80-120	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1510759 1510760

Parameter	Units	60186403027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	22.1	22.4	111	112	88-124	1	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.0	19.9	95	100	78-116	5	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	18.7	20.6	93	103	84-112	10	10	

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QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1510759 1510760

Parameter	Units	60186403027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	ND	20	20	20.8	20.6	104	103	82-121	1	9	
1,1-Dichloroethene	ug/L	ND	20	20	21.8	21.7	109	109	78-124	0	12	
1,2-Dichloroethane	ug/L	ND	20	20	20.5	21.3	103	107	79-121	4	12	
1,2-Dichloropropane	ug/L	ND	20	20	19.6	20.3	98	102	82-119	4	10	
2-Butanone (MEK)	ug/L	ND	100	100	86.1	91.4	86	91	66-114	6	13	
2-Hexanone	ug/L	ND	100	100	86.7	93.5	87	94	71-116	8	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	95.6	97.7	96	98	72-122	2	12	
Acetone	ug/L	ND	100	100	111	86.8	109	85	65-113	24	27	
Benzene	ug/L	ND	20	20	22.6	21.9	113	109	46-155	3	13	
Bromodichloromethane	ug/L	ND	20	20	21.1	21.0	106	105	77-127	0	10	
Bromoform	ug/L	ND	20	20	18.5	19.2	93	96	70-125	4	11	
Bromomethane	ug/L	ND	20	20	12.2	15.8	61	79	41-140	25	30	
Carbon disulfide	ug/L	ND	20	20	24.8	23.2	124	116	68-140	7	10	
Carbon tetrachloride	ug/L	ND	20	20	22.7	22.6	114	113	68-147	1	11	
Chlorobenzene	ug/L	ND	20	20	21.0	21.4	105	107	83-121	2	9	
Chloroethane	ug/L	ND	20	20	20.9	17.3	105	86	69-126	19	19	
Chloroform	ug/L	ND	20	20	20.1	20.2	101	101	86-119	0	9	
Chloromethane	ug/L	ND	20	20	19.1	13.0	96	65	23-168	38	49	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.8	20.8	102	103	85-117	0	10	
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.5	19.9	98	99	74-115	2	12	
Dibromochloromethane	ug/L	ND	20	20	19.0	19.7	95	98	65-134	4	11	
Ethylbenzene	ug/L	ND	20	20	21.2	20.9	106	104	51-148	2	14	
Methylene chloride	ug/L	ND	20	20	19.7	18.3	99	92	75-118	7	11	
Styrene	ug/L	ND	20	20	21.3	21.2	107	106	17-174	1	10	
Tetrachloroethene	ug/L	12.2	20	20	32.1	33.3	100	105	78-127	3	9	
Toluene	ug/L	ND	20	20	20.9	21.3	105	106	47-149	2	16	
trans-1,2-Dichloroethene	ug/L	ND	20	20	21.7	21.5	108	108	84-119	1	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.7	19.7	93	98	71-120	5	10	
Trichloroethene	ug/L	0.82J	20	20	21.2	21.1	102	102	70-135	0	10	
Vinyl chloride	ug/L	ND	20	20	21.5	19.5	107	97	58-130	10	11	
Xylene (Total)	ug/L	ND	60	60	65.6	64.0	109	107	39-158	2	15	
1,2-Dichloroethane-d4 (S)	%						102	101	80-120			
4-Bromofluorobenzene (S)	%						98	102	80-120			
Toluene-d8 (S)	%						98	100	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALIFIERS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR VOCs
Pace Project No.: 60186566

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186566001	**MW-175-GW-20150120**	EPA 5030B/8260	MSV/67172		
60186566002	**TB-02**	EPA 5030B/8260	MSV/67172		

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Sample Condition Upon Receipt

WO# : 60186566

60186566

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 5689 1283 9504 Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☑ None ☐ Other ☐

Thermometer Used: T-239 / T-194 **Type of Ice:** ~~Wet~~ Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 1-7

Temperature should be above freezing to 6°C

Date and initials of person examining contents: MW 1/21/15

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	7.
Sufficient volume:	☑Yes ☐No ☐N/A	8.
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	9.
Containers intact:	☑Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☑No ☐N/A	12.
Sample labels match COC:	☑Yes ☐No ☐N/A	
Includes date/time/ID/analyses Matrix: WT		13.
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☑Yes ☐No ☐N/A	
Pace Trip Blank lot # (if purchased): OCT 09 2014		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MW Date: 1/21/15

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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.

Page: 1 of 1

Section A Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	Standard TAT

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tamara Gleason
	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	3434446A

Section C Invoice Information:

Attention:	Tamara Gleason
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-175-GW-20150120	WT	G			1/20/15	1345		3				X					X			60186566 (3VOA HL) a1
2	Trip Blank-02	WT							2				X					X			60186566 (2VOA HL) a2
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	ENVIRON	1/20/15	1715		1/21/15	830	1-7	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Nick Zurweller

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 1/20/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

F-ALL-Q-020rev.07, 15-Feb-2007

Pace Analytical Services, Inc.
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Lenexa, KS 66219
(913)599-5665

January 27, 2015

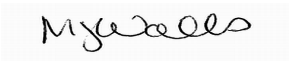
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on January 21, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

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SAMPLE SUMMARY

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186564001	**MW-176-GW-20150120**	Water	01/20/15 16:15	01/21/15 08:30
60186564002	**VP-10-GW-20150120**	Water	01/20/15 15:55	01/21/15 08:30

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60186564001	**MW-176-GW-20150120**	EPA 5030B/8260	PRG	38
60186564002	**VP-10-GW-20150120**	EPA 5030B/8260	PRG	38

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PROJECT NARRATIVE

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: January 27, 2015

General Information:
2 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/67208

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

Sample: MW-176-GW-20150120 **Lab ID: 60186564001** Collected: 01/20/15 16:15 Received: 01/21/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/24/15 01:08	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/24/15 01:08	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/24/15 01:08	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/24/15 01:08	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/24/15 01:08	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/24/15 01:08	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/24/15 01:08	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/24/15 01:08	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/24/15 01:08	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	107-06-2	
1,1-Dichloroethene	**2.6**	ug/L	1.0	0.50	1		01/24/15 01:08	75-35-4	
cis-1,2-Dichloroethene	**16.8**	ug/L	1.0	0.50	1		01/24/15 01:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/24/15 01:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/24/15 01:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/24/15 01:08	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/24/15 01:08	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/24/15 01:08	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/24/15 01:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/24/15 01:08	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/24/15 01:08	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/24/15 01:08	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/24/15 01:08	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:08	79-00-5	
Trichloroethene	**720**	ug/L	10.0	5.0	10		01/27/15 01:46	79-01-6	
Vinyl chloride	**0.57J**	ug/L	1.0	0.50	1		01/24/15 01:08	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/24/15 01:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		01/24/15 01:08	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/24/15 01:08	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		01/24/15 01:08	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/24/15 01:08		

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ANALYTICAL RESULTS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

Sample: VP-10-GW-20150120 **Lab ID: 60186564002** Collected: 01/20/15 15:55 Received: 01/21/15 08:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**5.8J**	ug/L	10.0	5.0	1		01/24/15 01:23	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/24/15 01:23	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/24/15 01:23	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/24/15 01:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/24/15 01:23	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/24/15 01:23	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/24/15 01:23	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/24/15 01:23	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/24/15 01:23	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	107-06-2	
1,1-Dichloroethene	**2.8**	ug/L	1.0	0.50	1		01/24/15 01:23	75-35-4	
cis-1,2-Dichloroethene	**18.8**	ug/L	1.0	0.50	1		01/24/15 01:23	156-59-2	
trans-1,2-Dichloroethene	**0.51J**	ug/L	1.0	0.50	1		01/24/15 01:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/24/15 01:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/24/15 01:23	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/24/15 01:23	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/24/15 01:23	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/24/15 01:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/24/15 01:23	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/24/15 01:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/24/15 01:23	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/24/15 01:23	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/24/15 01:23	79-00-5	
Trichloroethene	**636**	ug/L	10.0	5.0	10		01/27/15 02:01	79-01-6	
Vinyl chloride	**0.61J**	ug/L	1.0	0.50	1		01/24/15 01:23	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/24/15 01:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/24/15 01:23	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		01/24/15 01:23	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		01/24/15 01:23	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/24/15 01:23		

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QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

QC Batch: MSV/67172
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186564001, 60186564002

METHOD BLANK: 1510757
Matrix: Water
Associated Lab Samples: 60186564001, 60186564002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1-Dichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,1-Dichloroethene	ug/L	ND	1.0	01/23/15 21:25	
1,2-Dichloroethane	ug/L	ND	1.0	01/23/15 21:25	
1,2-Dichloropropane	ug/L	ND	1.0	01/23/15 21:25	
2-Butanone (MEK)	ug/L	ND	10.0	01/23/15 21:25	
2-Hexanone	ug/L	ND	10.0	01/23/15 21:25	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/23/15 21:25	
Acetone	ug/L	ND	10.0	01/23/15 21:25	
Benzene	ug/L	ND	1.0	01/23/15 21:25	
Bromodichloromethane	ug/L	ND	1.0	01/23/15 21:25	
Bromoform	ug/L	ND	1.0	01/23/15 21:25	
Bromomethane	ug/L	ND	5.0	01/23/15 21:25	
Carbon disulfide	ug/L	ND	5.0	01/23/15 21:25	
Carbon tetrachloride	ug/L	ND	1.0	01/23/15 21:25	
Chlorobenzene	ug/L	ND	1.0	01/23/15 21:25	
Chloroethane	ug/L	ND	1.0	01/23/15 21:25	
Chloroform	ug/L	ND	1.0	01/23/15 21:25	
Chloromethane	ug/L	ND	1.0	01/23/15 21:25	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 21:25	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 21:25	
Dibromochloromethane	ug/L	ND	1.0	01/23/15 21:25	
Ethylbenzene	ug/L	ND	1.0	01/23/15 21:25	
Methylene chloride	ug/L	ND	1.0	01/23/15 21:25	
Styrene	ug/L	ND	1.0	01/23/15 21:25	
Tetrachloroethene	ug/L	ND	1.0	01/23/15 21:25	
Toluene	ug/L	ND	1.0	01/23/15 21:25	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/23/15 21:25	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/23/15 21:25	
Vinyl chloride	ug/L	ND	1.0	01/23/15 21:25	
Xylene (Total)	ug/L	ND	3.0	01/23/15 21:25	
1,2-Dichloroethane-d4 (S)	%	101	80-120	01/23/15 21:25	
4-Bromofluorobenzene (S)	%	100	80-120	01/23/15 21:25	
Toluene-d8 (S)	%	99	80-120	01/23/15 21:25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

LABORATORY CONTROL SAMPLE: 1510758

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.1	105	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.9	100	73-121	
1,1,2-Trichloroethane	ug/L	20	20.4	102	80-120	
1,1-Dichloroethane	ug/L	20	20.5	103	80-120	
1,1-Dichloroethene	ug/L	20	20.6	103	80-120	
1,2-Dichloroethane	ug/L	20	21.2	106	81-120	
1,2-Dichloropropane	ug/L	20	20.3	101	80-120	
2-Butanone (MEK)	ug/L	100	101	101	67-122	
2-Hexanone	ug/L	100	99.7	100	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	109	109	76-120	
Acetone	ug/L	100	101	101	72-120	
Benzene	ug/L	20	21.9	110	80-120	
Bromodichloromethane	ug/L	20	21.7	109	80-120	
Bromoform	ug/L	20	20.0	100	73-138	
Bromomethane	ug/L	20	15.4	77	38-137	
Carbon disulfide	ug/L	20	22.3	112	71-129	
Carbon tetrachloride	ug/L	20	21.5	108	67-146	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	20.2	101	76-120	
Chloroform	ug/L	20	20.1	100	80-120	
Chloromethane	ug/L	20	19.3	97	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.5	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.4	107	80-120	
Dibromochloromethane	ug/L	20	20.4	102	80-126	
Ethylbenzene	ug/L	20	21.0	105	80-120	
Methylene chloride	ug/L	20	20.3	102	80-120	
Styrene	ug/L	20	21.8	109	80-123	
Tetrachloroethene	ug/L	20	20.6	103	80-123	
Toluene	ug/L	20	20.3	101	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.5	103	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.7	104	80-129	
Vinyl chloride	ug/L	20	20.7	104	62-125	
Xylene (Total)	ug/L	60	65.3	109	80-120	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1510759 1510760

Parameter	Units	60186403027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	22.1	22.4	111	112	88-124	1	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.0	19.9	95	100	78-116	5	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	18.7	20.6	93	103	84-112	10	10	
1,1-Dichloroethane	ug/L	ND	20	20	20.8	20.6	104	103	82-121	1	9	

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QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1510759 1510760

Parameter	Units	60186403027 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	20	20	21.8	21.7	109	109	78-124	0	12	
1,2-Dichloroethane	ug/L	ND	20	20	20.5	21.3	103	107	79-121	4	12	
1,2-Dichloropropane	ug/L	ND	20	20	19.6	20.3	98	102	82-119	4	10	
2-Butanone (MEK)	ug/L	ND	100	100	86.1	91.4	86	91	66-114	6	13	
2-Hexanone	ug/L	ND	100	100	86.7	93.5	87	94	71-116	8	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	95.6	97.7	96	98	72-122	2	12	
Acetone	ug/L	ND	100	100	111	86.8	109	85	65-113	24	27	
Benzene	ug/L	ND	20	20	22.6	21.9	113	109	46-155	3	13	
Bromodichloromethane	ug/L	ND	20	20	21.1	21.0	106	105	77-127	0	10	
Bromoform	ug/L	ND	20	20	18.5	19.2	93	96	70-125	4	11	
Bromomethane	ug/L	ND	20	20	12.2	15.8	61	79	41-140	25	30	
Carbon disulfide	ug/L	ND	20	20	24.8	23.2	124	116	68-140	7	10	
Carbon tetrachloride	ug/L	ND	20	20	22.7	22.6	114	113	68-147	1	11	
Chlorobenzene	ug/L	ND	20	20	21.0	21.4	105	107	83-121	2	9	
Chloroethane	ug/L	ND	20	20	20.9	17.3	105	86	69-126	19	19	
Chloroform	ug/L	ND	20	20	20.1	20.2	101	101	86-119	0	9	
Chloromethane	ug/L	ND	20	20	19.1	13.0	96	65	23-168	38	49	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.8	20.8	102	103	85-117	0	10	
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.5	19.9	98	99	74-115	2	12	
Dibromochloromethane	ug/L	ND	20	20	19.0	19.7	95	98	65-134	4	11	
Ethylbenzene	ug/L	ND	20	20	21.2	20.9	106	104	51-148	2	14	
Methylene chloride	ug/L	ND	20	20	19.7	18.3	99	92	75-118	7	11	
Styrene	ug/L	ND	20	20	21.3	21.2	107	106	17-174	1	10	
Tetrachloroethene	ug/L	12.2	20	20	32.1	33.3	100	105	78-127	3	9	
Toluene	ug/L	ND	20	20	20.9	21.3	105	106	47-149	2	16	
trans-1,2-Dichloroethene	ug/L	ND	20	20	21.7	21.5	108	108	84-119	1	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.7	19.7	93	98	71-120	5	10	
Vinyl chloride	ug/L	ND	20	20	21.5	19.5	107	97	58-130	10	11	
Xylene (Total)	ug/L	ND	60	60	65.6	64.0	109	107	39-158	2	15	
1,2-Dichloroethane-d4 (S)	%						102	101	80-120			
4-Bromofluorobenzene (S)	%						98	102	80-120			
Toluene-d8 (S)	%						98	100	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALITY CONTROL DATA

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

QC Batch: MSV/67208
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186564001, 60186564002

METHOD BLANK: 1511906
Matrix: Water
Associated Lab Samples: 60186564001, 60186564002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	ug/L	ND	1.0	01/26/15 21:49	
1,2-Dichloroethane-d4 (S)	%	101	80-120	01/26/15 21:49	
4-Bromofluorobenzene (S)	%	98	80-120	01/26/15 21:49	
Toluene-d8 (S)	%	97	80-120	01/26/15 21:49	

LABORATORY CONTROL SAMPLE: 1511907

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	20	20.3	101	80-120	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			104	80-120	
Toluene-d8 (S)	%			98	80-120	

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QUALIFIERS

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

A separate vial preserved to a pH of 4-5 is recommended in SW846 Chapter 4 for the analysis of Acrolein and Acrylonitrile by EPA Method 8260.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/67208

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR VOCs
Pace Project No.: 60186564

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186564001	**MW-176-GW-20150120**	EPA 5030B/8260	MSV/67172		
60186564001	**MW-176-GW-20150120**	EPA 5030B/8260	MSV/67208		
60186564002	**VP-10-GW-20150120**	EPA 5030B/8260	MSV/67172		
60186564002	**VP-10-GW-20150120**	EPA 5030B/8260	MSV/67208		

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Sample Condition Upon Receipt

WO# : 60186564

60186564

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 5689 1283 9504 Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☑ None ☐ Other ☐

Thermometer Used: T-239 / T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 1-7

Temperature should be above freezing to 6°C

Date and initials of person examining contents: MW 1/21/15

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	7.
Sufficient volume:	☑Yes ☐No ☐N/A	8.
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	9.
Containers intact:	☑Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☑No ☐N/A	12.
Sample labels match COC:	☑Yes ☐No ☐N/A	
Includes date/time/ID/analyses Matrix: WT		13.
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☑Yes ☐No ☐N/A	
Pace Trip Blank lot # (if purchased): OCT 09 2014		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MW Date: 1/21/15

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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.

Page: 1 of 1

Section A — **Required** Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	Standard TAT

Section B — **Required** Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tamara Gleason
	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	343444 61

Section C — Invoice Information:

Attention:	Tamara Gleason
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Section D — **Required** Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-176-GW-20150120	WT	G			1/20/15	1615		3				X					X	X		60186564
2	VP-10-GW-20150120	WT	G			1/20/15	1555		3				X					X	X		3106411
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / ENVIRON	1/20/15	1715	[signature] / PACE	1/21/15	830	1-7	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Nick Zurweller

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 1/20/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

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December 19, 2014

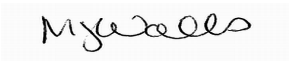
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH, AR
Pace Project No.: 60184824

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on December 18, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60184824

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

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SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60184824

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60184824001	**DP-65-SL-14.0 FT-20141217**	Solid	12/17/14 15:10	12/18/14 06:45
60184824002	**DUP-01-SL-20141217**	Solid	12/17/14 15:10	12/18/14 06:45

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60184824

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60184824001	**DP-65-SL-14.0 FT-20141217**	EPA 8260	TJT	37
		ASTM D2974	DWC	1
60184824002	**DUP-01-SL-20141217**	EPA 8260	TJT	37
		ASTM D2974	DWC	1

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60184824

Method: **EPA 8260**
Description: 8260 MSV 5035A VOA
Client: Environ_AR
Date: December 19, 2014

General Information:
2 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60184824

Sample: DP-65-SL-14.0 FT-20141217 **Lab ID: 60184824001** Collected: 12/17/14 15:10 Received: 12/18/14 06:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260								
Acetone	ND	ug/kg	19.5	9.8	1		12/18/14 10:56	67-64-1	
Benzene	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	71-43-2	
Bromodichloromethane	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	75-27-4	
Bromoform	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	75-25-2	
Bromomethane	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	74-83-9	
2-Butanone (MEK)	ND	ug/kg	9.8	4.9	1		12/18/14 10:56	78-93-3	
Carbon disulfide	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	75-15-0	
Carbon tetrachloride	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	56-23-5	
Chlorobenzene	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	108-90-7	
Chloroethane	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	75-00-3	
Chloroform	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	67-66-3	
Chloromethane	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	74-87-3	
Dibromochloromethane	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	124-48-1	
1,1-Dichloroethane	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	10061-02-6	
Ethylbenzene	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	100-41-4	
2-Hexanone	ND	ug/kg	19.5	9.8	1		12/18/14 10:56	591-78-6	
Methylene chloride	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	9.8	4.9	1		12/18/14 10:56	108-10-1	
Styrene	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	79-34-5	
Tetrachloroethene	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	127-18-4	
Toluene	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	79-00-5	
Trichloroethene	**119**	ug/kg	4.9	2.4	1		12/18/14 10:56	79-01-6	
Vinyl chloride	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	75-01-4	
Xylene (Total)	ND	ug/kg	4.9	2.4	1		12/18/14 10:56	1330-20-7	
Surrogates									
Toluene-d8 (S)	106	%	82-137		1		12/18/14 10:56	2037-26-5	
4-Bromofluorobenzene (S)	95	%	82-119		1		12/18/14 10:56	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	81-142		1		12/18/14 10:56	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974								
Percent Moisture	**13.6**	%	0.50	0.50	1		12/18/14 00:00		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60184824

Sample: DUP-01-SL-20141217 **Lab ID: 60184824002** Collected: 12/17/14 15:10 Received: 12/18/14 06:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260								
Acetone	ND	ug/kg	19.2	9.6	1		12/18/14 11:11	67-64-1	
Benzene	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	71-43-2	
Bromodichloromethane	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	75-27-4	
Bromoform	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	75-25-2	
Bromomethane	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	74-83-9	
2-Butanone (MEK)	ND	ug/kg	9.6	4.8	1		12/18/14 11:11	78-93-3	
Carbon disulfide	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	75-15-0	
Carbon tetrachloride	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	56-23-5	
Chlorobenzene	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	108-90-7	
Chloroethane	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	75-00-3	
Chloroform	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	67-66-3	
Chloromethane	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	74-87-3	
Dibromochloromethane	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	124-48-1	
1,1-Dichloroethane	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	78-87-5	
cis-1,3-Dichloropropene	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	10061-02-6	
Ethylbenzene	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	100-41-4	
2-Hexanone	ND	ug/kg	19.2	9.6	1		12/18/14 11:11	591-78-6	
Methylene chloride	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	9.6	4.8	1		12/18/14 11:11	108-10-1	
Styrene	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	79-34-5	
Tetrachloroethene	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	127-18-4	
Toluene	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	108-88-3	
1,1,1-Trichloroethane	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	79-00-5	
Trichloroethene	**112**	ug/kg	4.8	2.4	1		12/18/14 11:11	79-01-6	
Vinyl chloride	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	75-01-4	
Xylene (Total)	ND	ug/kg	4.8	2.4	1		12/18/14 11:11	1330-20-7	
Surrogates									
Toluene-d8 (S)	100	%	82-137		1		12/18/14 11:11	2037-26-5	
4-Bromofluorobenzene (S)	97	%	82-119		1		12/18/14 11:11	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	81-142		1		12/18/14 11:11	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974								
Percent Moisture	**14.2**	%	0.50	0.50	1		12/18/14 00:00		

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60184824

QC Batch: MSV/66563
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 60184824001, 60184824002

METHOD BLANK: 1496437
Matrix: Solid
Associated Lab Samples: 60184824001, 60184824002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	ND	5.0	12/18/14 10:10	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	12/18/14 10:10	
1,1,2-Trichloroethane	ug/kg	ND	5.0	12/18/14 10:10	
1,1-Dichloroethane	ug/kg	ND	5.0	12/18/14 10:10	
1,1-Dichloroethene	ug/kg	ND	5.0	12/18/14 10:10	
1,2-Dichloroethane	ug/kg	ND	5.0	12/18/14 10:10	
1,2-Dichloropropane	ug/kg	ND	5.0	12/18/14 10:10	
2-Butanone (MEK)	ug/kg	ND	10.0	12/18/14 10:10	
2-Hexanone	ug/kg	ND	20.0	12/18/14 10:10	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	10.0	12/18/14 10:10	
Acetone	ug/kg	ND	20.0	12/18/14 10:10	
Benzene	ug/kg	ND	5.0	12/18/14 10:10	
Bromodichloromethane	ug/kg	ND	5.0	12/18/14 10:10	
Bromoform	ug/kg	ND	5.0	12/18/14 10:10	
Bromomethane	ug/kg	ND	5.0	12/18/14 10:10	
Carbon disulfide	ug/kg	ND	5.0	12/18/14 10:10	
Carbon tetrachloride	ug/kg	ND	5.0	12/18/14 10:10	
Chlorobenzene	ug/kg	ND	5.0	12/18/14 10:10	
Chloroethane	ug/kg	ND	5.0	12/18/14 10:10	
Chloroform	ug/kg	ND	5.0	12/18/14 10:10	
Chloromethane	ug/kg	ND	5.0	12/18/14 10:10	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	12/18/14 10:10	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	12/18/14 10:10	
Dibromochloromethane	ug/kg	ND	5.0	12/18/14 10:10	
Ethylbenzene	ug/kg	ND	5.0	12/18/14 10:10	
Methylene chloride	ug/kg	ND	5.0	12/18/14 10:10	
Styrene	ug/kg	ND	5.0	12/18/14 10:10	
Tetrachloroethene	ug/kg	ND	5.0	12/18/14 10:10	
Toluene	ug/kg	ND	5.0	12/18/14 10:10	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	12/18/14 10:10	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	12/18/14 10:10	
Trichloroethene	ug/kg	ND	5.0	12/18/14 10:10	
Vinyl chloride	ug/kg	ND	5.0	12/18/14 10:10	
Xylene (Total)	ug/kg	ND	5.0	12/18/14 10:10	
1,2-Dichloroethane-d4 (S)	%	100	81-142	12/18/14 10:10	
4-Bromofluorobenzene (S)	%	95	82-119	12/18/14 10:10	
Toluene-d8 (S)	%	103	82-137	12/18/14 10:10	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60184824

LABORATORY CONTROL SAMPLE: 1496438

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	100	109	109	70-133	
1,1,2,2-Tetrachloroethane	ug/kg	100	86.7	87	70-117	
1,1,2-Trichloroethane	ug/kg	100	89.0	89	75-115	
1,1-Dichloroethane	ug/kg	100	101	101	73-120	
1,1-Dichloroethene	ug/kg	100	108	108	61-136	
1,2-Dichloroethane	ug/kg	100	92.5	93	75-119	
1,2-Dichloropropane	ug/kg	100	95.3	95	77-122	
2-Butanone (MEK)	ug/kg	500	429	86	67-116	
2-Hexanone	ug/kg	500	452	90	73-116	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	456	91	77-120	
Acetone	ug/kg	500	409	82	62-126	
Benzene	ug/kg	100	100	100	76-120	
Bromodichloromethane	ug/kg	100	98.7	99	76-127	
Bromoform	ug/kg	100	107	107	76-127	
Bromomethane	ug/kg	100	108	108	44-152	
Carbon disulfide	ug/kg	100	110	110	70-140	
Carbon tetrachloride	ug/kg	100	113	113	69-137	
Chlorobenzene	ug/kg	100	101	101	76-118	
Chloroethane	ug/kg	100	103	103	63-133	
Chloroform	ug/kg	100	92.5	92	72-122	
Chloromethane	ug/kg	100	67.5	67	14-197	
cis-1,2-Dichloroethene	ug/kg	100	98.9	99	75-123	
cis-1,3-Dichloropropene	ug/kg	100	101	101	78-122	
Dibromochloromethane	ug/kg	100	92.8	93	81-120	
Ethylbenzene	ug/kg	100	105	105	70-129	
Methylene chloride	ug/kg	100	87.8	88	63-132	
Styrene	ug/kg	100	82.2	82	80-122	
Tetrachloroethene	ug/kg	100	108	108	73-126	
Toluene	ug/kg	100	99.0	99	73-125	
trans-1,2-Dichloroethene	ug/kg	100	97.2	97	69-126	
trans-1,3-Dichloropropene	ug/kg	100	96.0	96	72-128	
Trichloroethene	ug/kg	100	104	104	74-123	
Vinyl chloride	ug/kg	100	100	100	51-146	
Xylene (Total)	ug/kg	300	304	101	71-128	
1,2-Dichloroethane-d4 (S)	%			98	81-142	
4-Bromofluorobenzene (S)	%			103	82-119	
Toluene-d8 (S)	%			107	82-137	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1496439 1496440

Parameter	Units	60184709006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	ND	118	100	102	90.7	86	91	37-136	12	32	
1,1,2,2-Tetrachloroethane	ug/kg	ND	118	100	78.7	94.4	66	94	10-148	18	40	
1,1,2-Trichloroethane	ug/kg	ND	118	100	79.3	83.4	67	83	5-137	5	33	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60184824

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1496439 1496440

Parameter	Units	60184709006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/kg	ND	118	100	96.0	86.1	81	86	31-127	11	32	
1,1-Dichloroethene	ug/kg	ND	118	100	113	93.1	95	93	46-119	19	28	
1,2-Dichloroethane	ug/kg	ND	118	100	85.5	80.8	72	81	8-146	6	32	
1,2-Dichloropropane	ug/kg	ND	118	100	85.6	79.8	72	80	19-135	7	32	
2-Butanone (MEK)	ug/kg	ND	592	500	460	459	78	92	10-141	0	47	
2-Hexanone	ug/kg	ND	592	500	437	481	74	96	10-153	9	48	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	592	500	480	514	81	103	10-150	7	41	
Acetone	ug/kg	20.8	592	500	441	447	71	85	10-156	1	48	
Benzene	ug/kg	ND	118	100	90.3	84.7	75	84	23-143	6	30	
Bromodichloromethane	ug/kg	ND	118	100	85.1	80.3	72	80	15-140	6	33	
Bromoform	ug/kg	ND	118	100	87.5	98.8	74	99	10-151	12	38	
Bromomethane	ug/kg	ND	118	100	67.0	45.5	57	45	10-143	38	51	
Carbon disulfide	ug/kg	ND	118	100	107	95.0	90	95	45-124	12	34	
Carbon tetrachloride	ug/kg	ND	118	100	105	93.7	88	94	36-139	11	29	
Chlorobenzene	ug/kg	ND	118	100	78.4	84.2	66	84	7-136	7	33	
Chloroethane	ug/kg	ND	118	100	99.1	87.9	84	88	10-142	12	33	
Chloroform	ug/kg	ND	118	100	84.7	76.4	71	76	26-135	10	33	
Chloromethane	ug/kg	ND	118	100	87.9	75.6	74	76	10-157	15	74	
cis-1,2-Dichloroethene	ug/kg	ND	118	100	90.9	81.1	77	81	27-132	11	37	
cis-1,3-Dichloropropene	ug/kg	ND	118	100	83.8	81.6	71	82	10-138	3	33	
Dibromochloromethane	ug/kg	ND	118	100	79.1	82.9	67	83	5-142	5	35	
Ethylbenzene	ug/kg	ND	118	100	83.0	87.0	70	87	3-161	5	30	
Methylene chloride	ug/kg	ND	118	100	86.9	79.4	73	79	16-137	9	36	
Styrene	ug/kg	ND	118	100	46.0	64.1	39	64	10-146	33	39	
Tetrachloroethene	ug/kg	ND	118	100	96.7	98.9	82	99	23-131	2	35	
Toluene	ug/kg	ND	118	100	86.9	85.8	73	86	14-153	1	33	
trans-1,2-Dichloroethene	ug/kg	ND	118	100	92.9	83.0	78	83	38-121	11	30	
trans-1,3-Dichloropropene	ug/kg	ND	118	100	79.9	81.5	67	82	5-137	2	35	
Trichloroethene	ug/kg	ND	118	100	92.1	88.2	78	88	26-134	4	36	
Vinyl chloride	ug/kg	ND	118	100	103	84.5	87	85	27-137	20	31	
Xylene (Total)	ug/kg	ND	355	300	231	241	65	80	10-168	4	45	
1,2-Dichloroethane-d4 (S)	%						106	103	81-142			
4-Bromofluorobenzene (S)	%						101	94	82-119			
Toluene-d8 (S)	%						109	107	82-137			

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60184824

QC Batch: PMST/10318
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 60184824001, 60184824002

METHOD BLANK: 1496509
Matrix: Solid
Associated Lab Samples: 60184824001, 60184824002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	12/18/14 00:00	

SAMPLE DUPLICATE: 1496508

Parameter	Units	60184828001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	10.9	10.7	2	20	

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QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60184824

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60184824

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60184824001	**DP-65-SL-14.0 FT-20141217**	EPA 8260	MSV/66563		
60184824002	**DUP-01-SL-20141217**	EPA 8260	MSV/66563		
60184824001	**DP-65-SL-14.0 FT-20141217**	ASTM D2974	PMST/10318		
60184824002	**DUP-01-SL-20141217**	ASTM D2974	PMST/10318		

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Sample Condition Upon Receipt

WO# : 60184824

60184824

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☒ VIA

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☑ None ☐ Other ☑ ZPIC

Thermometer Used: T-239 / T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 1-5

Temperature should be above freezing to 6°C

Date and initials of person examining contents: AV 12/18/14

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☑Yes ☐No ☐N/A	6. KI'S
Rush Turn Around Time requested:	☑Yes ☐No ☐N/A	7. 24 Hr
Sufficient volume:	☑Yes ☐No ☐N/A	8.
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	9.
Containers intact:	☑Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☒Yes ☐No ☐N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	12.
Sample labels match COC:	☑Yes ☐No ☐N/A	
Includes date/time/ID/analyses Matrix: SL		13.
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	☐Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes (☒No) ☐N/A	
Pace Trip Blank lot # (if purchased):	AV 12/18	15.
Headspace in VOA vials (>6mm):	☐Yes ☐No ☑N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☑No ☐N/A	17. List State: AR

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: [signature] Date: 12/18/14

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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.

Page: 1 of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Environ	Report To:	Wendy Stonestreet	Attention:	Tamara Gleason
Address:	7500 College Blvd., Ste. 925	Copy To:	Tamara Gleason	Company Name:	
	Overland Park, KS 66210		tgleason@environcorp.com	Address:	
Email To:	wstonestreet@environcorp.com	Purchase Order No.:		Pace Quote Reference:	
Phone:	913-553-5926 Fax:	Project Name:	Fort Smith, AR	Pace Project Manager:	MJ Walls
Requested Due Date/TAT:	24 Hr TAT	Project Number:	3433233.4	Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Requested Analysis Filtered (Y/N)

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Y/N	Analysis Test: 8260 client specific list	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	DP-GS-SL-14.0 FT-20141217	SL	G			12/17/14	1510		4	X						X	X	X	10649M, 10649B, 20749M		18PBU
2	DUP-01-SL-20141217	SL	G			12/17/14	1510		4	X						X	X	X	↓		↓
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Lab 1848249

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
24 Hr TAT	Nick Zurweller / ENVIRON	12/17/14	1745	[signature]	12/18/14	0645	1-5	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Nick Zurweller

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 12/17/14

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

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December 19, 2014

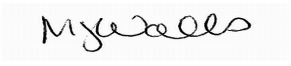
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH, AR
Pace Project No.: 60184826

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on December 18, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60184826

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

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SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60184826

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60184826001	**DP-64-SL-14.5 FT-20141217**	Solid	12/17/14 11:35	12/18/14 06:45

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60184826

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60184826001	**DP-64-SL-14.5 FT-20141217**	EPA 8260	TJT	37
		ASTM D2974	DWC	1

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60184826

Method: **EPA 8260**
Description: 8260 MSV 5035A VOA
Client: Environ_AR
Date: December 19, 2014

General Information:
1 sample was analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60184826

Sample: DP-64-SL-14.5 FT-20141217 **Lab ID: 60184826001** Collected: 12/17/14 11:35 Received: 12/18/14 06:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260								
Acetone	ND	ug/kg	17.8	8.9	1		12/18/14 11:57	67-64-1	
Benzene	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	71-43-2	
Bromodichloromethane	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	75-27-4	
Bromoform	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	75-25-2	
Bromomethane	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	74-83-9	
2-Butanone (MEK)	ND	ug/kg	8.9	4.4	1		12/18/14 11:57	78-93-3	
Carbon disulfide	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	75-15-0	
Carbon tetrachloride	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	56-23-5	
Chlorobenzene	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	108-90-7	
Chloroethane	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	75-00-3	
Chloroform	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	67-66-3	
Chloromethane	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	74-87-3	
Dibromochloromethane	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	124-48-1	
1,1-Dichloroethane	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	10061-02-6	
Ethylbenzene	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	100-41-4	
2-Hexanone	ND	ug/kg	17.8	8.9	1		12/18/14 11:57	591-78-6	
Methylene chloride	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	8.9	4.4	1		12/18/14 11:57	108-10-1	
Styrene	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	79-34-5	
Tetrachloroethene	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	127-18-4	
Toluene	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	108-88-3	
1,1,1-Trichloroethane	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	79-00-5	
Trichloroethene	**3.9J**	ug/kg	4.4	2.2	1		12/18/14 11:57	79-01-6	
Vinyl chloride	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	75-01-4	
Xylene (Total)	ND	ug/kg	4.4	2.2	1		12/18/14 11:57	1330-20-7	
Surrogates									
Toluene-d8 (S)	107	%	82-137		1		12/18/14 11:57	2037-26-5	
4-Bromofluorobenzene (S)	97	%	82-119		1		12/18/14 11:57	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	81-142		1		12/18/14 11:57	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974								
Percent Moisture	**12.4**	%	0.50	0.50	1		12/18/14 00:00		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60184826

QC Batch: MSV/66563
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 60184826001

METHOD BLANK: 1496437
Matrix: Solid
Associated Lab Samples: 60184826001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	ND	5.0	12/18/14 10:10	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	12/18/14 10:10	
1,1,2-Trichloroethane	ug/kg	ND	5.0	12/18/14 10:10	
1,1-Dichloroethane	ug/kg	ND	5.0	12/18/14 10:10	
1,1-Dichloroethene	ug/kg	ND	5.0	12/18/14 10:10	
1,2-Dichloroethane	ug/kg	ND	5.0	12/18/14 10:10	
1,2-Dichloropropane	ug/kg	ND	5.0	12/18/14 10:10	
2-Butanone (MEK)	ug/kg	ND	10.0	12/18/14 10:10	
2-Hexanone	ug/kg	ND	20.0	12/18/14 10:10	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	10.0	12/18/14 10:10	
Acetone	ug/kg	ND	20.0	12/18/14 10:10	
Benzene	ug/kg	ND	5.0	12/18/14 10:10	
Bromodichloromethane	ug/kg	ND	5.0	12/18/14 10:10	
Bromoform	ug/kg	ND	5.0	12/18/14 10:10	
Bromomethane	ug/kg	ND	5.0	12/18/14 10:10	
Carbon disulfide	ug/kg	ND	5.0	12/18/14 10:10	
Carbon tetrachloride	ug/kg	ND	5.0	12/18/14 10:10	
Chlorobenzene	ug/kg	ND	5.0	12/18/14 10:10	
Chloroethane	ug/kg	ND	5.0	12/18/14 10:10	
Chloroform	ug/kg	ND	5.0	12/18/14 10:10	
Chloromethane	ug/kg	ND	5.0	12/18/14 10:10	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	12/18/14 10:10	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	12/18/14 10:10	
Dibromochloromethane	ug/kg	ND	5.0	12/18/14 10:10	
Ethylbenzene	ug/kg	ND	5.0	12/18/14 10:10	
Methylene chloride	ug/kg	ND	5.0	12/18/14 10:10	
Styrene	ug/kg	ND	5.0	12/18/14 10:10	
Tetrachloroethene	ug/kg	ND	5.0	12/18/14 10:10	
Toluene	ug/kg	ND	5.0	12/18/14 10:10	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	12/18/14 10:10	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	12/18/14 10:10	
Trichloroethene	ug/kg	ND	5.0	12/18/14 10:10	
Vinyl chloride	ug/kg	ND	5.0	12/18/14 10:10	
Xylene (Total)	ug/kg	ND	5.0	12/18/14 10:10	
1,2-Dichloroethane-d4 (S)	%	100	81-142	12/18/14 10:10	
4-Bromofluorobenzene (S)	%	95	82-119	12/18/14 10:10	
Toluene-d8 (S)	%	103	82-137	12/18/14 10:10	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60184826

LABORATORY CONTROL SAMPLE: 1496438

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	100	109	109	70-133	
1,1,2,2-Tetrachloroethane	ug/kg	100	86.7	87	70-117	
1,1,2-Trichloroethane	ug/kg	100	89.0	89	75-115	
1,1-Dichloroethane	ug/kg	100	101	101	73-120	
1,1-Dichloroethene	ug/kg	100	108	108	61-136	
1,2-Dichloroethane	ug/kg	100	92.5	93	75-119	
1,2-Dichloropropane	ug/kg	100	95.3	95	77-122	
2-Butanone (MEK)	ug/kg	500	429	86	67-116	
2-Hexanone	ug/kg	500	452	90	73-116	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	456	91	77-120	
Acetone	ug/kg	500	409	82	62-126	
Benzene	ug/kg	100	100	100	76-120	
Bromodichloromethane	ug/kg	100	98.7	99	76-127	
Bromoform	ug/kg	100	107	107	76-127	
Bromomethane	ug/kg	100	108	108	44-152	
Carbon disulfide	ug/kg	100	110	110	70-140	
Carbon tetrachloride	ug/kg	100	113	113	69-137	
Chlorobenzene	ug/kg	100	101	101	76-118	
Chloroethane	ug/kg	100	103	103	63-133	
Chloroform	ug/kg	100	92.5	92	72-122	
Chloromethane	ug/kg	100	67.5	67	14-197	
cis-1,2-Dichloroethene	ug/kg	100	98.9	99	75-123	
cis-1,3-Dichloropropene	ug/kg	100	101	101	78-122	
Dibromochloromethane	ug/kg	100	92.8	93	81-120	
Ethylbenzene	ug/kg	100	105	105	70-129	
Methylene chloride	ug/kg	100	87.8	88	63-132	
Styrene	ug/kg	100	82.2	82	80-122	
Tetrachloroethene	ug/kg	100	108	108	73-126	
Toluene	ug/kg	100	99.0	99	73-125	
trans-1,2-Dichloroethene	ug/kg	100	97.2	97	69-126	
trans-1,3-Dichloropropene	ug/kg	100	96.0	96	72-128	
Trichloroethene	ug/kg	100	104	104	74-123	
Vinyl chloride	ug/kg	100	100	100	51-146	
Xylene (Total)	ug/kg	300	304	101	71-128	
1,2-Dichloroethane-d4 (S)	%			98	81-142	
4-Bromofluorobenzene (S)	%			103	82-119	
Toluene-d8 (S)	%			107	82-137	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1496439 1496440

Parameter	Units	60184709006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	ND	118	100	102	90.7	86	91	37-136	12	32	
1,1,2,2-Tetrachloroethane	ug/kg	ND	118	100	78.7	94.4	66	94	10-148	18	40	
1,1,2-Trichloroethane	ug/kg	ND	118	100	79.3	83.4	67	83	5-137	5	33	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60184826

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1496439 1496440

Parameter	Units	60184709006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/kg	ND	118	100	96.0	86.1	81	86	31-127	11	32	
1,1-Dichloroethene	ug/kg	ND	118	100	113	93.1	95	93	46-119	19	28	
1,2-Dichloroethane	ug/kg	ND	118	100	85.5	80.8	72	81	8-146	6	32	
1,2-Dichloropropane	ug/kg	ND	118	100	85.6	79.8	72	80	19-135	7	32	
2-Butanone (MEK)	ug/kg	ND	592	500	460	459	78	92	10-141	0	47	
2-Hexanone	ug/kg	ND	592	500	437	481	74	96	10-153	9	48	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	592	500	480	514	81	103	10-150	7	41	
Acetone	ug/kg	20.8	592	500	441	447	71	85	10-156	1	48	
Benzene	ug/kg	ND	118	100	90.3	84.7	75	84	23-143	6	30	
Bromodichloromethane	ug/kg	ND	118	100	85.1	80.3	72	80	15-140	6	33	
Bromoform	ug/kg	ND	118	100	87.5	98.8	74	99	10-151	12	38	
Bromomethane	ug/kg	ND	118	100	67.0	45.5	57	45	10-143	38	51	
Carbon disulfide	ug/kg	ND	118	100	107	95.0	90	95	45-124	12	34	
Carbon tetrachloride	ug/kg	ND	118	100	105	93.7	88	94	36-139	11	29	
Chlorobenzene	ug/kg	ND	118	100	78.4	84.2	66	84	7-136	7	33	
Chloroethane	ug/kg	ND	118	100	99.1	87.9	84	88	10-142	12	33	
Chloroform	ug/kg	ND	118	100	84.7	76.4	71	76	26-135	10	33	
Chloromethane	ug/kg	ND	118	100	87.9	75.6	74	76	10-157	15	74	
cis-1,2-Dichloroethene	ug/kg	ND	118	100	90.9	81.1	77	81	27-132	11	37	
cis-1,3-Dichloropropene	ug/kg	ND	118	100	83.8	81.6	71	82	10-138	3	33	
Dibromochloromethane	ug/kg	ND	118	100	79.1	82.9	67	83	5-142	5	35	
Ethylbenzene	ug/kg	ND	118	100	83.0	87.0	70	87	3-161	5	30	
Methylene chloride	ug/kg	ND	118	100	86.9	79.4	73	79	16-137	9	36	
Styrene	ug/kg	ND	118	100	46.0	64.1	39	64	10-146	33	39	
Tetrachloroethene	ug/kg	ND	118	100	96.7	98.9	82	99	23-131	2	35	
Toluene	ug/kg	ND	118	100	86.9	85.8	73	86	14-153	1	33	
trans-1,2-Dichloroethene	ug/kg	ND	118	100	92.9	83.0	78	83	38-121	11	30	
trans-1,3-Dichloropropene	ug/kg	ND	118	100	79.9	81.5	67	82	5-137	2	35	
Trichloroethene	ug/kg	ND	118	100	92.1	88.2	78	88	26-134	4	36	
Vinyl chloride	ug/kg	ND	118	100	103	84.5	87	85	27-137	20	31	
Xylene (Total)	ug/kg	ND	355	300	231	241	65	80	10-168	4	45	
1,2-Dichloroethane-d4 (S)	%						106	103	81-142			
4-Bromofluorobenzene (S)	%						101	94	82-119			
Toluene-d8 (S)	%						109	107	82-137			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60184826

QC Batch: PMST/10318
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 60184826001

METHOD BLANK: 1496509
Matrix: Solid
Associated Lab Samples: 60184826001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	12/18/14 00:00	

SAMPLE DUPLICATE: 1496508

Parameter	Units	60184828001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	10.9	10.7	2	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60184826

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60184826

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60184826001	**DP-64-SL-14.5 FT-20141217**	EPA 8260	MSV/66563		
60184826001	**DP-64-SL-14.5 FT-20141217**	ASTM D2974	PMST/10318		

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Sample Condition Upon Receipt

WO# : 60184826

60184826

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☒ VIA

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☒

Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☑ None ☐ Other ☑ 2 P/C

Thermometer Used: T-239 / T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 1.5

Date and initials of person examining contents: pv 12/18/14

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☑Yes ☐No ☐N/A	6. Kits
Rush Turn Around Time requested:	☑Yes ☐No ☐N/A	7. 24 Hr
Sufficient volume:	☑Yes ☐No ☐N/A	8.
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	9.
Containers intact:	☑Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☑Yes ☐No ☐N/A	11. pv 12/18/14
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	12.
Sample labels match COC:	☑Yes ☐No ☐N/A	
Includes date/time/ID/analyses Matrix: S2		13.
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics pv 12/18/14	☐Yes ☑No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes ☐No ☐N/A	
Pace Trip Blank lot # (if purchased): _____		15.
Headspace in VOA vials (>6mm):	☐Yes ☐No ☑N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☑No ☐N/A	17. List State: AR

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MW Date: 12/18/14

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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.

Page: | of |

Section A — **Required** Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	24 Hr TAT

Section B — **Required** Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tamara Gleason
	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	34333233A

Section C — Invoice Information:

Attention:	Tamara Gleason
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: AR

Section D — **Required** Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	Sample ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	DP-64-SL-14.5 FT-20141217	SL	G			12/17/14	1135		4	X						X			X		184826
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
24 Hr TAT	[signature] / ENVIRON	12/17/14	1745	[signature]	12/18/14	0645	1.5	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Nick Zurmeller

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 12/17/14

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

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December 19, 2014

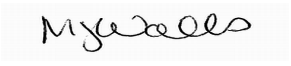
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH, AR
Pace Project No.: 60184825

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on December 18, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60184825

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

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SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60184825

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60184825001	**DP-63-SL-5.5 FT-20141217**	Solid	12/17/14 09:50	12/18/14 06:45
60184825002	**DP-63-SL-10.5 FT-20141217**	Solid	12/17/14 10:15	12/18/14 06:45
60184825003	**TB01-20141217**	Solid	12/17/14 09:50	12/18/14 06:45

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60184825

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60184825001	**DP-63-SL-5.5 FT-20141217**	EPA 8260	TJT	37
		ASTM D2974	DWC	1
60184825002	**DP-63-SL-10.5 FT-20141217**	EPA 8260	TJT	37
		ASTM D2974	DWC	1
60184825003	**TB01-20141217**	EPA 8260	TJT	37

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60184825

Method: **EPA 8260**
Description: 8260 MSV 5035A VOA
Client: Environ_AR
Date: December 19, 2014

General Information:
3 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60184825

Sample: DP-63-SL-5.5 FT-20141217 **Lab ID: 60184825001** Collected: 12/17/14 09:50 Received: 12/18/14 06:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260								
Acetone	**15.6J**	ug/kg	22.8	11.4	1		12/18/14 11:27	67-64-1	
Benzene	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	71-43-2	
Bromodichloromethane	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	75-27-4	
Bromoform	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	75-25-2	
Bromomethane	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	74-83-9	
2-Butanone (MEK)	ND	ug/kg	11.4	5.7	1		12/18/14 11:27	78-93-3	
Carbon disulfide	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	75-15-0	
Carbon tetrachloride	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	56-23-5	
Chlorobenzene	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	108-90-7	
Chloroethane	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	75-00-3	
Chloroform	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	67-66-3	
Chloromethane	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	74-87-3	
Dibromochloromethane	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	124-48-1	
1,1-Dichloroethane	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	10061-02-6	
Ethylbenzene	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	100-41-4	
2-Hexanone	ND	ug/kg	22.8	11.4	1		12/18/14 11:27	591-78-6	
Methylene chloride	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	11.4	5.7	1		12/18/14 11:27	108-10-1	
Styrene	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	79-34-5	
Tetrachloroethene	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	127-18-4	
Toluene	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	79-00-5	
Trichloroethene	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	79-01-6	
Vinyl chloride	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	75-01-4	
Xylene (Total)	ND	ug/kg	5.7	2.8	1		12/18/14 11:27	1330-20-7	
Surrogates									
Toluene-d8 (S)	99	%	82-137		1		12/18/14 11:27	2037-26-5	
4-Bromofluorobenzene (S)	98	%	82-119		1		12/18/14 11:27	460-00-4	
1,2-Dichloroethane-d4 (S)	118	%	81-142		1		12/18/14 11:27	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974								
Percent Moisture	**21.6**	%	0.50	0.50	1		12/18/14 00:00		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60184825

Sample: DP-63-SL-10.5 FT-20141217 **Lab ID: 60184825002** Collected: 12/17/14 10:15 Received: 12/18/14 06:45 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260								
Acetone	**17.5J**	ug/kg	21.0	10.5	1		12/18/14 11:42	67-64-1	
Benzene	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	71-43-2	
Bromodichloromethane	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	75-27-4	
Bromoform	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	75-25-2	
Bromomethane	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	74-83-9	
2-Butanone (MEK)	ND	ug/kg	10.5	5.3	1		12/18/14 11:42	78-93-3	
Carbon disulfide	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	75-15-0	
Carbon tetrachloride	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	56-23-5	
Chlorobenzene	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	108-90-7	
Chloroethane	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	75-00-3	
Chloroform	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	67-66-3	
Chloromethane	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	74-87-3	
Dibromochloromethane	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	124-48-1	
1,1-Dichloroethane	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	10061-02-6	
Ethylbenzene	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	100-41-4	
2-Hexanone	ND	ug/kg	21.0	10.5	1		12/18/14 11:42	591-78-6	
Methylene chloride	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	10.5	5.3	1		12/18/14 11:42	108-10-1	
Styrene	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	79-34-5	
Tetrachloroethene	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	127-18-4	
Toluene	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	108-88-3	
1,1,1-Trichloroethane	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	79-00-5	
Trichloroethene	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	79-01-6	
Vinyl chloride	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	75-01-4	
Xylene (Total)	ND	ug/kg	5.3	2.6	1		12/18/14 11:42	1330-20-7	
Surrogates									
Toluene-d8 (S)	105	%	82-137		1		12/18/14 11:42	2037-26-5	
4-Bromofluorobenzene (S)	93	%	82-119		1		12/18/14 11:42	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	81-142		1		12/18/14 11:42	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974								
Percent Moisture	**21.1**	%	0.50	0.50	1		12/18/14 00:00		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60184825

Sample: TB01-20141217 **Lab ID: 60184825003** Collected: 12/17/14 09:50 Received: 12/18/14 06:45 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260								
Acetone	ND	ug/kg	20.0	10.0	1		12/18/14 10:25	67-64-1	
Benzene	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	71-43-2	
Bromodichloromethane	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	75-27-4	
Bromoform	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	75-25-2	
Bromomethane	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	74-83-9	
2-Butanone (MEK)	ND	ug/kg	10.0	5.0	1		12/18/14 10:25	78-93-3	
Carbon disulfide	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	75-15-0	
Carbon tetrachloride	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	56-23-5	
Chlorobenzene	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	108-90-7	
Chloroethane	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	75-00-3	
Chloroform	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	67-66-3	
Chloromethane	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	74-87-3	
Dibromochloromethane	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	124-48-1	
1,1-Dichloroethane	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	10061-02-6	
Ethylbenzene	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	100-41-4	
2-Hexanone	ND	ug/kg	20.0	10.0	1		12/18/14 10:25	591-78-6	
Methylene chloride	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	10.0	5.0	1		12/18/14 10:25	108-10-1	
Styrene	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	79-34-5	
Tetrachloroethene	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	127-18-4	
Toluene	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	79-00-5	
Trichloroethene	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	79-01-6	
Vinyl chloride	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	75-01-4	
Xylene (Total)	ND	ug/kg	5.0	2.5	1		12/18/14 10:25	1330-20-7	
Surrogates									
Toluene-d8 (S)	105	%	82-137		1		12/18/14 10:25	2037-26-5	
4-Bromofluorobenzene (S)	93	%	82-119		1		12/18/14 10:25	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	81-142		1		12/18/14 10:25	17060-07-0	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60184825

QC Batch: MSV/66563 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 60184825001, 60184825002, 60184825003

METHOD BLANK: 1496437 Matrix: Solid
Associated Lab Samples: 60184825001, 60184825002, 60184825003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	ND	5.0	12/18/14 10:10	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	12/18/14 10:10	
1,1,2-Trichloroethane	ug/kg	ND	5.0	12/18/14 10:10	
1,1-Dichloroethane	ug/kg	ND	5.0	12/18/14 10:10	
1,1-Dichloroethene	ug/kg	ND	5.0	12/18/14 10:10	
1,2-Dichloroethane	ug/kg	ND	5.0	12/18/14 10:10	
1,2-Dichloropropane	ug/kg	ND	5.0	12/18/14 10:10	
2-Butanone (MEK)	ug/kg	ND	10.0	12/18/14 10:10	
2-Hexanone	ug/kg	ND	20.0	12/18/14 10:10	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	10.0	12/18/14 10:10	
Acetone	ug/kg	ND	20.0	12/18/14 10:10	
Benzene	ug/kg	ND	5.0	12/18/14 10:10	
Bromodichloromethane	ug/kg	ND	5.0	12/18/14 10:10	
Bromoform	ug/kg	ND	5.0	12/18/14 10:10	
Bromomethane	ug/kg	ND	5.0	12/18/14 10:10	
Carbon disulfide	ug/kg	ND	5.0	12/18/14 10:10	
Carbon tetrachloride	ug/kg	ND	5.0	12/18/14 10:10	
Chlorobenzene	ug/kg	ND	5.0	12/18/14 10:10	
Chloroethane	ug/kg	ND	5.0	12/18/14 10:10	
Chloroform	ug/kg	ND	5.0	12/18/14 10:10	
Chloromethane	ug/kg	ND	5.0	12/18/14 10:10	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	12/18/14 10:10	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	12/18/14 10:10	
Dibromochloromethane	ug/kg	ND	5.0	12/18/14 10:10	
Ethylbenzene	ug/kg	ND	5.0	12/18/14 10:10	
Methylene chloride	ug/kg	ND	5.0	12/18/14 10:10	
Styrene	ug/kg	ND	5.0	12/18/14 10:10	
Tetrachloroethene	ug/kg	ND	5.0	12/18/14 10:10	
Toluene	ug/kg	ND	5.0	12/18/14 10:10	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	12/18/14 10:10	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	12/18/14 10:10	
Trichloroethene	ug/kg	ND	5.0	12/18/14 10:10	
Vinyl chloride	ug/kg	ND	5.0	12/18/14 10:10	
Xylene (Total)	ug/kg	ND	5.0	12/18/14 10:10	
1,2-Dichloroethane-d4 (S)	%	100	81-142	12/18/14 10:10	
4-Bromofluorobenzene (S)	%	95	82-119	12/18/14 10:10	
Toluene-d8 (S)	%	103	82-137	12/18/14 10:10	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60184825

LABORATORY CONTROL SAMPLE: 1496438

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	100	109	109	70-133	
1,1,2,2-Tetrachloroethane	ug/kg	100	86.7	87	70-117	
1,1,2-Trichloroethane	ug/kg	100	89.0	89	75-115	
1,1-Dichloroethane	ug/kg	100	101	101	73-120	
1,1-Dichloroethene	ug/kg	100	108	108	61-136	
1,2-Dichloroethane	ug/kg	100	92.5	93	75-119	
1,2-Dichloropropane	ug/kg	100	95.3	95	77-122	
2-Butanone (MEK)	ug/kg	500	429	86	67-116	
2-Hexanone	ug/kg	500	452	90	73-116	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	456	91	77-120	
Acetone	ug/kg	500	409	82	62-126	
Benzene	ug/kg	100	100	100	76-120	
Bromodichloromethane	ug/kg	100	98.7	99	76-127	
Bromoform	ug/kg	100	107	107	76-127	
Bromomethane	ug/kg	100	108	108	44-152	
Carbon disulfide	ug/kg	100	110	110	70-140	
Carbon tetrachloride	ug/kg	100	113	113	69-137	
Chlorobenzene	ug/kg	100	101	101	76-118	
Chloroethane	ug/kg	100	103	103	63-133	
Chloroform	ug/kg	100	92.5	92	72-122	
Chloromethane	ug/kg	100	67.5	67	14-197	
cis-1,2-Dichloroethene	ug/kg	100	98.9	99	75-123	
cis-1,3-Dichloropropene	ug/kg	100	101	101	78-122	
Dibromochloromethane	ug/kg	100	92.8	93	81-120	
Ethylbenzene	ug/kg	100	105	105	70-129	
Methylene chloride	ug/kg	100	87.8	88	63-132	
Styrene	ug/kg	100	82.2	82	80-122	
Tetrachloroethene	ug/kg	100	108	108	73-126	
Toluene	ug/kg	100	99.0	99	73-125	
trans-1,2-Dichloroethene	ug/kg	100	97.2	97	69-126	
trans-1,3-Dichloropropene	ug/kg	100	96.0	96	72-128	
Trichloroethene	ug/kg	100	104	104	74-123	
Vinyl chloride	ug/kg	100	100	100	51-146	
Xylene (Total)	ug/kg	300	304	101	71-128	
1,2-Dichloroethane-d4 (S)	%			98	81-142	
4-Bromofluorobenzene (S)	%			103	82-119	
Toluene-d8 (S)	%			107	82-137	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1496439 1496440

Parameter	Units	60184709006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	ND	118	100	102	90.7	86	91	37-136	12	32	
1,1,2,2-Tetrachloroethane	ug/kg	ND	118	100	78.7	94.4	66	94	10-148	18	40	
1,1,2-Trichloroethane	ug/kg	ND	118	100	79.3	83.4	67	83	5-137	5	33	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60184825

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1496439 1496440

Parameter	Units	60184709006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/kg	ND	118	100	96.0	86.1	81	86	31-127	11	32	
1,1-Dichloroethene	ug/kg	ND	118	100	113	93.1	95	93	46-119	19	28	
1,2-Dichloroethane	ug/kg	ND	118	100	85.5	80.8	72	81	8-146	6	32	
1,2-Dichloropropane	ug/kg	ND	118	100	85.6	79.8	72	80	19-135	7	32	
2-Butanone (MEK)	ug/kg	ND	592	500	460	459	78	92	10-141	0	47	
2-Hexanone	ug/kg	ND	592	500	437	481	74	96	10-153	9	48	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	592	500	480	514	81	103	10-150	7	41	
Acetone	ug/kg	20.8	592	500	441	447	71	85	10-156	1	48	
Benzene	ug/kg	ND	118	100	90.3	84.7	75	84	23-143	6	30	
Bromodichloromethane	ug/kg	ND	118	100	85.1	80.3	72	80	15-140	6	33	
Bromoform	ug/kg	ND	118	100	87.5	98.8	74	99	10-151	12	38	
Bromomethane	ug/kg	ND	118	100	67.0	45.5	57	45	10-143	38	51	
Carbon disulfide	ug/kg	ND	118	100	107	95.0	90	95	45-124	12	34	
Carbon tetrachloride	ug/kg	ND	118	100	105	93.7	88	94	36-139	11	29	
Chlorobenzene	ug/kg	ND	118	100	78.4	84.2	66	84	7-136	7	33	
Chloroethane	ug/kg	ND	118	100	99.1	87.9	84	88	10-142	12	33	
Chloroform	ug/kg	ND	118	100	84.7	76.4	71	76	26-135	10	33	
Chloromethane	ug/kg	ND	118	100	87.9	75.6	74	76	10-157	15	74	
cis-1,2-Dichloroethene	ug/kg	ND	118	100	90.9	81.1	77	81	27-132	11	37	
cis-1,3-Dichloropropene	ug/kg	ND	118	100	83.8	81.6	71	82	10-138	3	33	
Dibromochloromethane	ug/kg	ND	118	100	79.1	82.9	67	83	5-142	5	35	
Ethylbenzene	ug/kg	ND	118	100	83.0	87.0	70	87	3-161	5	30	
Methylene chloride	ug/kg	ND	118	100	86.9	79.4	73	79	16-137	9	36	
Styrene	ug/kg	ND	118	100	46.0	64.1	39	64	10-146	33	39	
Tetrachloroethene	ug/kg	ND	118	100	96.7	98.9	82	99	23-131	2	35	
Toluene	ug/kg	ND	118	100	86.9	85.8	73	86	14-153	1	33	
trans-1,2-Dichloroethene	ug/kg	ND	118	100	92.9	83.0	78	83	38-121	11	30	
trans-1,3-Dichloropropene	ug/kg	ND	118	100	79.9	81.5	67	82	5-137	2	35	
Trichloroethene	ug/kg	ND	118	100	92.1	88.2	78	88	26-134	4	36	
Vinyl chloride	ug/kg	ND	118	100	103	84.5	87	85	27-137	20	31	
Xylene (Total)	ug/kg	ND	355	300	231	241	65	80	10-168	4	45	
1,2-Dichloroethane-d4 (S)	%						106	103	81-142			
4-Bromofluorobenzene (S)	%						101	94	82-119			
Toluene-d8 (S)	%						109	107	82-137			

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60184825

QC Batch: PMST/10318 Analysis Method: ASTM D2974
QC Batch Method: ASTM D2974 Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 60184825001, 60184825002

METHOD BLANK: 1496509 Matrix: Solid
Associated Lab Samples: 60184825001, 60184825002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	12/18/14 00:00	

SAMPLE DUPLICATE: 1496508

Parameter	Units	60184828001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	10.9	10.7	2	20	

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QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60184825

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60184825

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60184825001	**DP-63-SL-5.5 FT-20141217**	EPA 8260	MSV/66563		
60184825002	**DP-63-SL-10.5 FT-20141217**	EPA 8260	MSV/66563		
60184825003	**TB01-20141217**	EPA 8260	MSV/66563		
60184825001	**DP-63-SL-5.5 FT-20141217**	ASTM D2974	PMST/10318		
60184825002	**DP-63-SL-10.5 FT-20141217**	ASTM D2974	PMST/10318		

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Sample Condition Upon Receipt

WO# : 60184825

60184825

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☑ VIA

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☐ None ☐ Other ☑ ZPIC

Thermometer Used: T-239 / T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 1.5

Temperature should be above freezing to 6°C

Date and initials of person examining contents: pw 12/18/14

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr): pw 12/18/14	☑Yes ☐No ☐N/A	6. Kits
Rush Turn Around Time requested:	☑Yes ☐No ☐N/A	7. 24 hr
Sufficient volume:	☑Yes ☐No ☐N/A	8.
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	9.
Containers intact:	☑Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☑Yes ☐No ☐N/A	11. pw 12/18/14
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	12.
Sample labels match COC:	☑Yes ☐No ☐N/A	
Includes date/time/ID/analyses Matrix: WT		13.
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics pw 12/18	☐Yes ☑No	Initial when completed / Lot # of added preservative
Trip Blank present:	☑Yes ☐No ☐N/A	
Pace Trip Blank lot # (if purchased): 0901141-3		15.
Headspace in VOA vials (>6mm):	☐Yes ☐No ☑N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☑No ☐N/A	17. List State: AR

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: mw Date: 12/18/14

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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.

Page: 1 of 1

Section A Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	24 Hr TAT

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tamara Gleason
	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	34337233A

Section C Invoice Information:

Attention:	Tamara Gleason
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	DP-G3-SL-5.5FT-20141217	SL	G			12/17/14	0950		4	X						X	X	X	10 6am 10 6pm 2 6pm		1B PBU
2	DP-G3-SL-10.5FT-20141217	SL	G			12/17/14	1015		4	X						X	X	X			
3	Trip Blank 01-20141217	WT							2	X								X			
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Requested Analysis Filtered (Y/N)

Pace Project No./ Lab I.D.: 60184825

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
24 Hr TAT	[signature] / ENVIRON	12/17/14	1745	[signature]	12/18/14	0645	1.5	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Nick Zurweller

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 12/17/14

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

Pace Analytical Services, Inc.
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Lenexa, KS 66219
(913)599-5665

December 22, 2014

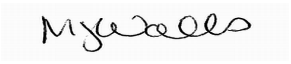
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH AR
Pace Project No.: 60184980

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on December 19, 2014. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: FORT SMITH AR
Pace Project No.: 60184980

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: FORT SMITH AR
Pace Project No.: 60184980

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60184980001	**DP-66-SL-14.5 FT-20141218**	Solid	12/18/14 09:15	12/19/14 10:00
60184980002	**DP-67-SL-14.5 FT-20141218**	Solid	12/18/14 13:10	12/19/14 10:00
60184980003	**TB02-20141218**	Solid	12/18/14 13:10	12/19/14 10:00

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR
Pace Project No.: 60184980

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60184980001	**DP-66-SL-14.5 FT-20141218**	EPA 8260	JKL	37
		ASTM D2974	DWC	1
60184980002	**DP-67-SL-14.5 FT-20141218**	EPA 8260	JKL	37
		ASTM D2974	DWC	1
60184980003	**TB02-20141218**	EPA 8260	JKL	37

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PROJECT NARRATIVE

Project: FORT SMITH AR
Pace Project No.: 60184980

Method: **EPA 8260**
Description: 8260 MSV 5035A VOA
Client: Environ_AR
Date: December 22, 2014

General Information:
3 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: MSV/66596

B: Analyte was detected in the associated method blank.
- BLANK for HBN 368084 [MSV/6659 (Lab ID: 1497387)
  - Bromomethane

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60184980

Sample: DP-66-SL-14.5 FT-20141218 **Lab ID: 60184980001** Collected: 12/18/14 09:15 Received: 12/19/14 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260								
Acetone	ND	ug/kg	17.9	9.0	1		12/19/14 13:28	67-64-1	
Benzene	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	71-43-2	
Bromodichloromethane	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	75-27-4	
Bromoform	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	75-25-2	
Bromomethane	**3.0J**	ug/kg	4.5	2.2	1		12/19/14 13:28	74-83-9	B
2-Butanone (MEK)	ND	ug/kg	9.0	4.5	1		12/19/14 13:28	78-93-3	
Carbon disulfide	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	75-15-0	
Carbon tetrachloride	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	56-23-5	
Chlorobenzene	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	108-90-7	
Chloroethane	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	75-00-3	
Chloroform	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	67-66-3	
Chloromethane	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	74-87-3	
Dibromochloromethane	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	124-48-1	
1,1-Dichloroethane	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	78-87-5	
cis-1,3-Dichloropropene	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	10061-02-6	
Ethylbenzene	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	100-41-4	
2-Hexanone	ND	ug/kg	17.9	9.0	1		12/19/14 13:28	591-78-6	
Methylene chloride	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	9.0	4.5	1		12/19/14 13:28	108-10-1	
Styrene	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	79-34-5	
Tetrachloroethene	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	127-18-4	
Toluene	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	108-88-3	
1,1,1-Trichloroethane	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	79-00-5	
Trichloroethene	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	79-01-6	
Vinyl chloride	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	75-01-4	
Xylene (Total)	ND	ug/kg	4.5	2.2	1		12/19/14 13:28	1330-20-7	
Surrogates									
Toluene-d8 (S)	105	%	82-137		1		12/19/14 13:28	2037-26-5	
4-Bromofluorobenzene (S)	101	%	82-119		1		12/19/14 13:28	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	81-142		1		12/19/14 13:28	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974								
Percent Moisture	**13.6**	%	0.50	0.50	1		12/19/14 00:00		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60184980

Sample: DP-67-SL-14.5 FT-20141218 **Lab ID: 60184980002** Collected: 12/18/14 13:10 Received: 12/19/14 10:00 Matrix: Solid

Results reported on a "dry-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260								
Acetone	ND	ug/kg	18.9	9.5	1		12/19/14 13:43	67-64-1	
Benzene	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	71-43-2	
Bromodichloromethane	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	75-27-4	
Bromoform	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	75-25-2	
Bromomethane	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	74-83-9	
2-Butanone (MEK)	ND	ug/kg	9.5	4.7	1		12/19/14 13:43	78-93-3	
Carbon disulfide	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	75-15-0	
Carbon tetrachloride	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	56-23-5	
Chlorobenzene	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	108-90-7	
Chloroethane	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	75-00-3	
Chloroform	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	67-66-3	
Chloromethane	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	74-87-3	
Dibromochloromethane	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	124-48-1	
1,1-Dichloroethane	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	10061-02-6	
Ethylbenzene	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	100-41-4	
2-Hexanone	ND	ug/kg	18.9	9.5	1		12/19/14 13:43	591-78-6	
Methylene chloride	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	9.5	4.7	1		12/19/14 13:43	108-10-1	
Styrene	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	79-34-5	
Tetrachloroethene	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	127-18-4	
Toluene	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	108-88-3	
1,1,1-Trichloroethane	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	79-00-5	
Trichloroethene	**2.5J**	ug/kg	4.7	2.4	1		12/19/14 13:43	79-01-6	
Vinyl chloride	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	75-01-4	
Xylene (Total)	ND	ug/kg	4.7	2.4	1		12/19/14 13:43	1330-20-7	
Surrogates									
Toluene-d8 (S)	104	%	82-137		1		12/19/14 13:43	2037-26-5	
4-Bromofluorobenzene (S)	101	%	82-119		1		12/19/14 13:43	460-00-4	
1,2-Dichloroethane-d4 (S)	142	%	81-142		1		12/19/14 13:43	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974								
Percent Moisture	**15.2**	%	0.50	0.50	1		12/19/14 00:00		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60184980

Sample: TB02-20141218 **Lab ID: 60184980003** Collected: 12/18/14 13:10 Received: 12/19/14 10:00 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260								
Acetone	ND	ug/kg	20.0	10.0	1		12/19/14 13:58	67-64-1	
Benzene	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	71-43-2	
Bromodichloromethane	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	75-27-4	
Bromoform	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	75-25-2	
Bromomethane	**2.8J**	ug/kg	5.0	2.5	1		12/19/14 13:58	74-83-9	B
2-Butanone (MEK)	ND	ug/kg	10.0	5.0	1		12/19/14 13:58	78-93-3	
Carbon disulfide	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	75-15-0	
Carbon tetrachloride	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	56-23-5	
Chlorobenzene	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	108-90-7	
Chloroethane	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	75-00-3	
Chloroform	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	67-66-3	
Chloromethane	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	74-87-3	
Dibromochloromethane	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	124-48-1	
1,1-Dichloroethane	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	10061-02-6	
Ethylbenzene	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	100-41-4	
2-Hexanone	ND	ug/kg	20.0	10.0	1		12/19/14 13:58	591-78-6	
Methylene chloride	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	10.0	5.0	1		12/19/14 13:58	108-10-1	
Styrene	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	79-34-5	
Tetrachloroethene	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	127-18-4	
Toluene	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	108-88-3	
1,1,1-Trichloroethane	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	79-00-5	
Trichloroethene	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	79-01-6	
Vinyl chloride	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	75-01-4	
Xylene (Total)	ND	ug/kg	5.0	2.5	1		12/19/14 13:58	1330-20-7	
Surrogates									
Toluene-d8 (S)	105	%	82-137		1		12/19/14 13:58	2037-26-5	
4-Bromofluorobenzene (S)	100	%	82-119		1		12/19/14 13:58	460-00-4	
1,2-Dichloroethane-d4 (S)	89	%	81-142		1		12/19/14 13:58	17060-07-0	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60184980

QC Batch: MSV/66596 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 60184980001, 60184980002, 60184980003

METHOD BLANK: 1497387 Matrix: Solid
Associated Lab Samples: 60184980001, 60184980002, 60184980003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	ND	5.0	12/19/14 13:12	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	12/19/14 13:12	
1,1,2-Trichloroethane	ug/kg	ND	5.0	12/19/14 13:12	
1,1-Dichloroethane	ug/kg	ND	5.0	12/19/14 13:12	
1,1-Dichloroethene	ug/kg	ND	5.0	12/19/14 13:12	
1,2-Dichloroethane	ug/kg	ND	5.0	12/19/14 13:12	
1,2-Dichloropropane	ug/kg	ND	5.0	12/19/14 13:12	
2-Butanone (MEK)	ug/kg	ND	10.0	12/19/14 13:12	
2-Hexanone	ug/kg	ND	20.0	12/19/14 13:12	
4-Methyl-2-pentanone (MIBK)	ug/kg	6.1J	10.0	12/19/14 13:12	
Acetone	ug/kg	ND	20.0	12/19/14 13:12	
Benzene	ug/kg	ND	5.0	12/19/14 13:12	
Bromodichloromethane	ug/kg	ND	5.0	12/19/14 13:12	
Bromoform	ug/kg	ND	5.0	12/19/14 13:12	
Bromomethane	ug/kg	5.2	5.0	12/19/14 13:12	
Carbon disulfide	ug/kg	ND	5.0	12/19/14 13:12	
Carbon tetrachloride	ug/kg	ND	5.0	12/19/14 13:12	
Chlorobenzene	ug/kg	ND	5.0	12/19/14 13:12	
Chloroethane	ug/kg	ND	5.0	12/19/14 13:12	
Chloroform	ug/kg	ND	5.0	12/19/14 13:12	
Chloromethane	ug/kg	ND	5.0	12/19/14 13:12	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	12/19/14 13:12	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	12/19/14 13:12	
Dibromochloromethane	ug/kg	ND	5.0	12/19/14 13:12	
Ethylbenzene	ug/kg	ND	5.0	12/19/14 13:12	
Methylene chloride	ug/kg	ND	5.0	12/19/14 13:12	
Styrene	ug/kg	ND	5.0	12/19/14 13:12	
Tetrachloroethene	ug/kg	ND	5.0	12/19/14 13:12	
Toluene	ug/kg	ND	5.0	12/19/14 13:12	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	12/19/14 13:12	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	12/19/14 13:12	
Trichloroethene	ug/kg	ND	5.0	12/19/14 13:12	
Vinyl chloride	ug/kg	ND	5.0	12/19/14 13:12	
Xylene (Total)	ug/kg	ND	5.0	12/19/14 13:12	
1,2-Dichloroethane-d4 (S)	%	91	81-142	12/19/14 13:12	
4-Bromofluorobenzene (S)	%	97	82-119	12/19/14 13:12	
Toluene-d8 (S)	%	102	82-137	12/19/14 13:12	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60184980

LABORATORY CONTROL SAMPLE: 1497388

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	100	103	103	70-133	
1,1,2,2-Tetrachloroethane	ug/kg	100	89.5	89	70-117	
1,1,2-Trichloroethane	ug/kg	100	89.7	90	75-115	
1,1-Dichloroethane	ug/kg	100	95.7	96	73-120	
1,1-Dichloroethene	ug/kg	100	99.3	99	61-136	
1,2-Dichloroethane	ug/kg	100	95.3	95	75-119	
1,2-Dichloropropane	ug/kg	100	94.9	95	77-122	
2-Butanone (MEK)	ug/kg	500	471	94	67-116	
2-Hexanone	ug/kg	500	453	91	73-116	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	477	95	77-120	
Acetone	ug/kg	500	457	91	62-126	
Benzene	ug/kg	100	92.3	92	76-120	
Bromodichloromethane	ug/kg	100	98.5	99	76-127	
Bromoform	ug/kg	100	104	104	76-127	
Bromomethane	ug/kg	100	115	115	44-152	
Carbon disulfide	ug/kg	100	107	107	70-140	
Carbon tetrachloride	ug/kg	100	99.1	99	69-137	
Chlorobenzene	ug/kg	100	95.5	95	76-118	
Chloroethane	ug/kg	100	90.9	91	63-133	
Chloroform	ug/kg	100	94.1	94	72-122	
Chloromethane	ug/kg	100	99.6	100	14-197	
cis-1,2-Dichloroethene	ug/kg	100	97.5	98	75-123	
cis-1,3-Dichloropropene	ug/kg	100	96.2	96	78-122	
Dibromochloromethane	ug/kg	100	98.3	98	81-120	
Ethylbenzene	ug/kg	100	98.2	98	70-129	
Methylene chloride	ug/kg	100	99.9	100	63-132	
Styrene	ug/kg	100	98.9	99	80-122	
Tetrachloroethene	ug/kg	100	94.4	94	73-126	
Toluene	ug/kg	100	100	100	73-125	
trans-1,2-Dichloroethene	ug/kg	100	99.4	99	69-126	
trans-1,3-Dichloropropene	ug/kg	100	96.6	97	72-128	
Trichloroethene	ug/kg	100	95.3	95	74-123	
Vinyl chloride	ug/kg	100	94.3	94	51-146	
Xylene (Total)	ug/kg	300	292	97	71-128	
1,2-Dichloroethane-d4 (S)	%			89	81-142	
4-Bromofluorobenzene (S)	%			103	82-119	
Toluene-d8 (S)	%			104	82-137	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60184980

QC Batch: PMST/10325
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 60184980001, 60184980002

METHOD BLANK: 1497633
Matrix: Solid
Associated Lab Samples: 60184980001, 60184980002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	12/19/14 00:00	

SAMPLE DUPLICATE: 1497634

Parameter	Units	60184980001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	13.6	13.1	4	20	

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QUALIFIERS

Project: FORT SMITH AR
Pace Project No.: 60184980

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR
Pace Project No.: 60184980

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60184980001	**DP-66-SL-14.5 FT-20141218**	EPA 8260	MSV/66596		
60184980002	**DP-67-SL-14.5 FT-20141218**	EPA 8260	MSV/66596		
60184980003	**TB02-20141218**	EPA 8260	MSV/66596		
60184980001	**DP-66-SL-14.5 FT-20141218**	ASTM D2974	PMST/10325		
60184980002	**DP-67-SL-14.5 FT-20141218**	ASTM D2974	PMST/10325		

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Sample Condition Upon Receipt

WO# : 60184980

60184980

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 6113 5281 8161 Pace Shipping Label Used? Yes ☐ No ☐

Custody Seal on Cooler/Box Present: Yes ☒ No ☐ Seals intact: Yes ☒ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☒ None ☐ Other ☐

Thermometer Used: T-239 / T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 1.1

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JB 12/19

Chain of Custody present:	☒Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☒Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☒Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☒Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☒Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☒Yes ☐No ☐N/A	6. Kits
Rush Turn Around Time requested:	☒Yes ☐No ☐N/A	7. 24 hr.
Sufficient volume:	☒Yes ☐No ☐N/A	8.
Correct containers used:	☒Yes ☐No ☐N/A	
Pace containers used:	☒Yes ☐No ☐N/A	9.
Containers intact:	☒Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☒Yes ☐No ☐N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☐No ☒N/A	12.
Sample labels match COC:	☒Yes ☐No ☐N/A	
Includes date/time/ID/analyses Matrix: SL		13.
All containers needing preservation have been checked.	☐Yes ☐No ☒N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☒N/A	14.
Exceptions: (VOA) coliform, TOC, O&G, WI-DRO (water), Phenolics	☒Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☒Yes ☐No ☐N/A	
Pace Trip Blank lot # (if purchased): 111813-3		15.
Headspace in VOA vials (>6mm):	☐Yes ☐No ☒N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☒No ☐N/A	17. List State: AR

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MW Date: 12/19/14

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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.

Page: 1 of 1

Section A — **Required** Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	24 Hr TAT

Section B — **Required** Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tamara Gleason
	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	34333233A

Section C — Invoice Information:

Attention:	Tamara Gleason
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Section D — **Required** Client Information

SAMPLE ID
(A-Z, 0-9 / , -)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	Section D Required Client Information (SAMPLE ID)	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	DP-66-SL-14.5 FT-20141218	SL	G			12/18/14	0915		4	U						X	X	DG4A DG9B (2) VG4A BP4U		60184980 01
2	DP-67-SL-14.5 FT-20141218	SL	G			12/18/14	1310		4	X						X	X	" " " " "		02
3	Trip Blank 02-20141218	WT							2	X						X	X	(2) VG4A		CS3
4	Temp Blank																				
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
24 Hr TAT	[signature] / ENVIRON	12/18/14	1700	[signature]	12/19	1000	1.1	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Nick Zurweller

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 12/18/14

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

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January 20, 2015

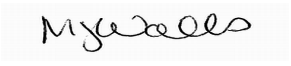
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on January 20, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

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SAMPLE SUMMARY

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60186465001	**MW-180-GW-20150119**	Water	01/19/15 11:30	01/20/15 06:15
60186465002	**MW-178-GW-20150118**	Water	01/18/15 13:45	01/20/15 06:15
60186465003	**TB-01**	Water	01/18/15 13:45	01/20/15 06:15

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60186465001	**MW-180-GW-20150119**	EPA 5030B/8260	PRG	38
60186465002	**MW-178-GW-20150118**	EPA 5030B/8260	PRG	38
60186465003	**TB-01**	EPA 5030B/8260	PRG	38

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PROJECT NARRATIVE

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: January 20, 2015

General Information:
3 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/67076

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

Sample: MW-180-GW-20150119 **Lab ID: 60186465001** Collected: 01/19/15 11:30 Received: 01/20/15 06:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/20/15 12:13	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 12:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 12:13	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/20/15 12:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 12:13	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 12:13	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 12:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 12:13	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 12:13	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 12:13	75-35-4	
cis-1,2-Dichloroethene	**3.4**	ug/L	1.0	0.50	1		01/20/15 12:13	156-59-2	
trans-1,2-Dichloroethene	**0.57J**	ug/L	1.0	0.50	1		01/20/15 12:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 12:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 12:13	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 12:13	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 12:13	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/20/15 12:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 12:13	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 12:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 12:13	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 12:13	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:13	79-00-5	
Trichloroethene	**23.7**	ug/L	1.0	0.50	1		01/20/15 12:13	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 12:13	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 12:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		01/20/15 12:13	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		01/20/15 12:13	17060-07-0	
Toluene-d8 (S)	103	%	80-120		1		01/20/15 12:13	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 12:13		

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ANALYTICAL RESULTS

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

Sample: MW-178-GW-20150118 **Lab ID: 60186465002** Collected: 01/18/15 13:45 Received: 01/20/15 06:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**9.5J**	ug/L	10.0	5.0	1		01/20/15 12:29	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 12:29	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/20/15 12:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 12:29	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 12:29	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 12:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 12:29	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	75-35-4	
cis-1,2-Dichloroethene	**0.99J**	ug/L	1.0	0.50	1		01/20/15 12:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 12:29	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/20/15 12:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 12:29	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 12:29	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 12:29	79-00-5	
Trichloroethene	**5.2**	ug/L	1.0	0.50	1		01/20/15 12:29	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 12:29	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 12:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		01/20/15 12:29	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		01/20/15 12:29	17060-07-0	
Toluene-d8 (S)	103	%	80-120		1		01/20/15 12:29	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 12:29		

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ANALYTICAL RESULTS

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

Sample: TB-01 **Lab ID: 60186465003** Collected: 01/18/15 13:45 Received: 01/20/15 06:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		01/20/15 11:56	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		01/20/15 11:56	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		01/20/15 11:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		01/20/15 11:56	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		01/20/15 11:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		01/20/15 11:56	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		01/20/15 11:56	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		01/20/15 11:56	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		01/20/15 11:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		01/20/15 11:56	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		01/20/15 11:56	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		01/20/15 11:56	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		01/20/15 11:56	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		01/20/15 11:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		01/20/15 11:56	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		01/20/15 11:56	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		01/20/15 11:56	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		01/20/15 11:56		

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QUALITY CONTROL DATA

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

QC Batch: MSV/67076 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60186465001, 60186465002, 60186465003

METHOD BLANK: 1508718 Matrix: Water
Associated Lab Samples: 60186465001, 60186465002, 60186465003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1,2-Trichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1-Dichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,1-Dichloroethene	ug/L	ND	1.0	01/20/15 11:37	
1,2-Dichloroethane	ug/L	ND	1.0	01/20/15 11:37	
1,2-Dichloropropane	ug/L	ND	1.0	01/20/15 11:37	
2-Butanone (MEK)	ug/L	ND	10.0	01/20/15 11:37	
2-Hexanone	ug/L	ND	10.0	01/20/15 11:37	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	01/20/15 11:37	
Acetone	ug/L	ND	10.0	01/20/15 11:37	
Benzene	ug/L	ND	1.0	01/20/15 11:37	
Bromodichloromethane	ug/L	ND	1.0	01/20/15 11:37	
Bromoform	ug/L	ND	1.0	01/20/15 11:37	
Bromomethane	ug/L	ND	5.0	01/20/15 11:37	
Carbon disulfide	ug/L	ND	5.0	01/20/15 11:37	
Carbon tetrachloride	ug/L	ND	1.0	01/20/15 11:37	
Chlorobenzene	ug/L	ND	1.0	01/20/15 11:37	
Chloroethane	ug/L	ND	1.0	01/20/15 11:37	
Chloroform	ug/L	ND	1.0	01/20/15 11:37	
Chloromethane	ug/L	ND	1.0	01/20/15 11:37	
cis-1,2-Dichloroethene	ug/L	ND	1.0	01/20/15 11:37	
cis-1,3-Dichloropropene	ug/L	ND	1.0	01/20/15 11:37	
Dibromochloromethane	ug/L	ND	1.0	01/20/15 11:37	
Ethylbenzene	ug/L	ND	1.0	01/20/15 11:37	
Methylene chloride	ug/L	ND	1.0	01/20/15 11:37	
Styrene	ug/L	ND	1.0	01/20/15 11:37	
Tetrachloroethene	ug/L	ND	1.0	01/20/15 11:37	
Toluene	ug/L	ND	1.0	01/20/15 11:37	
trans-1,2-Dichloroethene	ug/L	ND	1.0	01/20/15 11:37	
trans-1,3-Dichloropropene	ug/L	ND	1.0	01/20/15 11:37	
Trichloroethene	ug/L	ND	1.0	01/20/15 11:37	
Vinyl chloride	ug/L	ND	1.0	01/20/15 11:37	
Xylene (Total)	ug/L	ND	3.0	01/20/15 11:37	
1,2-Dichloroethane-d4 (S)	%	101	80-120	01/20/15 11:37	
4-Bromofluorobenzene (S)	%	98	80-120	01/20/15 11:37	
Toluene-d8 (S)	%	102	80-120	01/20/15 11:37	

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QUALITY CONTROL DATA

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

LABORATORY CONTROL SAMPLE: 1508719

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.5	107	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.5	102	73-121	
1,1,2-Trichloroethane	ug/L	20	20.0	100	80-120	
1,1-Dichloroethane	ug/L	20	17.8	89	80-120	
1,1-Dichloroethene	ug/L	20	19.2	96	80-120	
1,2-Dichloroethane	ug/L	20	21.1	105	81-120	
1,2-Dichloropropane	ug/L	20	20.7	104	80-120	
2-Butanone (MEK)	ug/L	100	86.2	86	67-122	
2-Hexanone	ug/L	100	92.1	92	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	96.4	96	76-120	
Acetone	ug/L	100	83.1	83	72-120	
Benzene	ug/L	20	20.2	101	80-120	
Bromodichloromethane	ug/L	20	21.7	108	80-120	
Bromoform	ug/L	20	20.2	101	73-138	
Bromomethane	ug/L	20	16.0	80	38-137	
Carbon disulfide	ug/L	20	18.5	92	71-129	
Carbon tetrachloride	ug/L	20	19.6	98	67-146	
Chlorobenzene	ug/L	20	20.7	104	80-120	
Chloroethane	ug/L	20	16.2	81	76-120	
Chloroform	ug/L	20	20.3	102	80-120	
Chloromethane	ug/L	20	11.9	59	34-165	
cis-1,2-Dichloroethene	ug/L	20	18.7	93	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.3	106	80-120	
Dibromochloromethane	ug/L	20	20.5	102	80-126	
Ethylbenzene	ug/L	20	20.5	102	80-120	
Methylene chloride	ug/L	20	18.7	94	80-120	
Styrene	ug/L	20	20.2	101	80-123	
Tetrachloroethene	ug/L	20	22.0	110	80-123	
Toluene	ug/L	20	20.0	100	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.6	93	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.0	105	80-129	
Trichloroethene	ug/L	20	20.3	101	80-120	
Vinyl chloride	ug/L	20	17.8	89	62-125	
Xylene (Total)	ug/L	60	59.2	99	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			102	80-120	

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QUALIFIERS

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/67076

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR 3434446A
Pace Project No.: 60186465

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60186465001	**MW-180-GW-20150119**	EPA 5030B/8260	MSV/67076		
60186465002	**MW-178-GW-20150118**	EPA 5030B/8260	MSV/67076		
60186465003	**TB-01**	EPA 5030B/8260	MSV/67076		

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Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60186465

60186465

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☑ ✓

Tracking #: _____ Pace Shipping Label Used? Yes ☑ No ☐

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☑ None ☐ Other ☐

Thermometer Used: T-239 / T-194 **Type of Ice:** Wet Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 1.7

Temperature should be above freezing to 6°C

Date and initials of person examining contents: BB 1/20/15

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time requested:	☑Yes ☐No ☐N/A	7. Rush
Sufficient volume:	☑Yes ☐No ☐N/A	8.
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	9.
Containers intact:	☑Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	12.
Sample labels match COC: Includes date/time/ID/analyses Y Matrix: water	☑Yes ☐No ☐N/A	13.
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	14.
Exceptions: VOA, coliform, TOC, O&G, WI-DRO (water), Phenolics	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present: Pace Trip Blank lot # (if purchased): 120814 3,3 ZM	☑Yes ☐No ☐N/A	15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MW Date: 1/20/15

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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.

Page: | of |

Section A — **Required** Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	24HR

Section B — **Required** Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tamara Gleason
	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	3434446A

Section C — Invoice Information:

Attention:	Tamara Gleason
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: AR

Section D — **Required** Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-180-GW-20150119	WT	G			1/19/15	1130		3				3					X	X		60186465
2	MW-17B-GW-20150118	WT	G			1/18/15	1345		3				3					X	X		3DG9H
3	TRIP-BLANK-01	WT							2				2					X	X		1DG9H
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Michael Edmonds / ENVIRON	1/19/15	1745	Ben Ruyle / Pace	1/20/15	0615	1.7	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: ~~Michael Edmonds~~ NICK ZURKWELLER

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 1/19/15

*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.

Appendix C
Groundwater Sample Logs and Investigation Derived Waste Manifest Forms

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-32R

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	1/19/15	Well Construction	2" PVC
Time	1424	Total Volume Purged (gal)	1.7
Sampler	NR	Pump is set at (ft)	25' btoc
Water Level (ft)	11.58	Well Measurement Technique	Electronic Water Level Meter
Total Depth (ft)	30.04' btoc	Well Purge Equipment	Peristaltic Pump
Screen Length (ft)	10'		

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond uS/cm (± 3%)	DO mg/L (± 10% or under 0.2)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10% or under 10)	Flow (mL/min, ≤100)
1434	11.58	20.04	2012	3.12	5.09	4.3	82.8	100
1439	11.58	19.91	2059	1.41	4.96	24.0	80.9	100
1444	11.58	19.99	2047	1.24	4.97	32.6	80.4	100
1449	11.58	20.13	2038	0.82	4.96	49.6	60.2	100
1454	11.58	20.01	2025	0.73	4.97	66.2	45.1	100
1459	11.58	19.99	2019	0.56	4.97	85.2	30.6	100
1504	11.58	20.00	2015	0.48	4.95	98.0	28.9	100
1509	11.58	20.04	2005	0.41	4.97	109.5	17.6	100
1514	11.58	20.09	1999	0.38	4.96	117.2	16.3	100
1519	11.58	20.00	1988	0.36	4.94	123.5	14.3	100
1524	11.58	19.94	1975	0.34	4.93	128.2	11.5	100
1529	11.58	20.02	1964	0.32	4.94	132.2	8.49	100

SAMPLE COLLECTION DATA

Date: 1/15/14	Odor: None
Time: 1530	Color: Clear

ANALYSES

# of Containers	Size/Type	Preservative	Analysis	Result
3	40 mL VOA	~~Hydrochloric (HCL)~~ Ascorbic Acid	VOCs	--
3	40 mL VOA	None	Chloroethanol	--
2	40 mL VOA	Trisodium Phosphate	Volatile Fatty Acids	--
2	40 mL VOA	None	Ethene, Ethane, Methane Acetylene	--
1	250 mL Plastic	None	Sulfate, Alkalinity, Chloride	--
1	250 mL Plastic	NaOH and zinc acetate	Sulfide	--
1	250 mL Plastic	Nitric (HNO3)	Metals (Mn, Fe)	--
1	250 mL Plastic	Sulfuric (H2SO4)	Phosphate, Ammonia, Nitrate and Nitrite	--
1	250 mL Glass (amber)	Sulfuric (H2SO4)	TOC	--
1	Field Filtered 1L Plastic	None	DHC, Vinyl Chloride Reductase	--
1	Glass Septa	None	Hydrogen	--
1	Hach Ampule	None	Ferrous Iron	NM

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: West

Wind Speed (mph) 0-10 10-25 >25

Temperature: 60°F

COMMENTS

Slightly turbid initially (light brown) Persulfate ~420 ~~ppm~~ mg/L + Ascorbic Acid vials for VOC, unable to stabilize parameters after 1hr of purging.

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-175

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	1/20/15	Well Construction	2" PVC
Time	~~1237~~ 1239	Total Volume Purged (gal)	0.8
Sampler	NZ	Pump is set at (ft)	14.1' btoc
Water Level (ft)	~~4.35 btos~~ 4.33' btoc	Well Measurement Technique	Electronic Water Level Meter
Total Depth (ft)	14.6 btoc	Well Purge Equipment	Peristaltic Pump
Screen Length (ft)	1'		

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond uS/cm (± 3%)	DO mg/L (± 10% or under 0.2)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10% or under 10)	Flow (mL/min, ≤100)
1253	5.45	13.80	9185	1.57	12.05	127.3	9.77	50
1258	5.78	14.87	8944	1.22	12.11	105.9	8.29	50
1303	6.26	15.69	8599	1.28	12.11	84.8	7.46	50
1308	6.46	15.84	8589	1.24	12.09	70.3	7.08	50
1313	6.82	16.18	8465	1.21	12.13	50.2	6.24	50
1318	7.18	17.14	8141	1.13	12.14	28.8	5.01	50
1323	7.50	17.06	8145	1.12	12.14	12.9	3.96	50
1328	7.81	16.69	7997	1.17	12.13	-7.5	3.61	50
1333	8.15	16.56	7975	1.16	12.13	-22.5	3.50	50
1338	8.53	16.48	7951	1.18	12.14	-34.2	3.56	50
1343	8.78	16.49	7960	1.27	12.14	-41.6	3.23	50

SAMPLE COLLECTION DATA

Date: 1/20/15	Odor: None
Time: 1345	Color: Clear

ANALYSES

# of Containers	Size/Type	Preservative	Analysis	Result
3	40 mL VOA	Hydrochloric (HCL)	VOCs	--
3	40 mL VOA	None	Chloroethanol	--
2	40 mL VOA	Trisodium Phosphate	Volatile Fatty Acids	--
2	40 mL VOA	None	Ethene, Ethane, Methane Acetylene	--
1	250 mL Plastic	None	Sulfate, Alkalinity, Chloride	--
1	250 mL Plastic	NaOH and zinc acetate	Sulfide	--
1	250 mL Plastic	Nitric (HNO3)	Metals (Mn, Fe)	--
1	250 mL Plastic	Sulfuric (H2SO4)	Phosphate, Ammonia, Nitrate and Nitrite	--
1	250 mL Glass (amber)	Sulfuric (H2SO4)	TOC	--
1	Field Filtered 1L Plastic	None	DHC, Vinyl Chloride Reductase	--
1	Glass Septa	None	Hydrogen	--
1	Hach Ampule	None	Ferrous Iron	NM

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: East

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 45°F

COMMENTS

Unable to stabilize after 1 hr. of purging

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-176

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	1/20/15	Well Construction	2" PVC
Time	1510	Total Volume Purged (gal)	0.8
Sampler	NR	Pump is set at (ft)	13.5' btoc
Water Level (ft)	1.54' btoc	Well Measurement Technique	Electronic Water Level Meter
Total Depth (ft)	14.02' btoc	Well Purge Equipment	Peristaltic Pump
Screen Length (ft)	1'		

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond uS/cm (± 3%)	DO mg/L (± 10% or under 0.2)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10% or under 10)	Flow (mL/min, ≤100)
1522	2.31	15.51	879	0.79	7.29	1.6	181	50
1527	2.46	15.55	869	0.65	7.06	-4.4	156	50
1532	2.60	15.58	865	0.87	6.93	-8.4	149	50
1537	2.68	15.59	861	0.90	6.89	-11.7	141	50
1542	2.75	15.60	841	0.68	6.93	-13.6	137	50
1547	2.81	15.60	838	0.57	6.91	-15.2	140	50
1552	2.85	15.55	829	0.54	6.85	-17.3	146	50
1557	2.90	15.45	827	0.53	6.79	-18.6	158	50
1602	2.96	15.35	822	0.48	6.76	-20.8	151	50
1607	2.99	15.26	819	0.44	6.67	-22.5	154	50
1612	3.04	15.16	814	0.41	6.67	-24.3	138	50

SAMPLE COLLECTION DATA

Date: 1/20/15

Time: ~~1622~~ NR 1615

Odor: None

Color: slightly turbid light brown

ANALYSES

# of Containers	Size/Type	Preservative	Analysis	Result
3	40 mL VOA	Hydrochloric (HCL)	VOCs	--
3	40 mL VOA	None	Chloroethanol	--
2	40 mL VOA	Trisodium Phosphate	Volatile Fatty Acids	--
2	40 mL VOA	None	Ethene, Ethane, Methane Acetylene	--
1	250 mL Plastic	None	Sulfate, Alkalinity, Chloride	--
1	250 mL Plastic	NaOH and zinc acetate	Sulfide	--
1	250 mL Plastic	Nitric (HNO3)	Metals (Mn, Fe)	--
1	250 mL Plastic	Sulfuric (H2SO4)	Phosphate, Ammonia, Nitrate and Nitrite	--
1	250 mL Glass (amber)	Sulfuric (H2SO4)	TOC	--
1	Field Filtered 1L Plastic	None	DHC, Vinyl Chloride Reductase	--
1	Glass Septa	None	Hydrogen	--
1	Hach Ampule	None	Ferrous Iron	NM

WEATHER

Sunny Cloudy (Partly Cloudy)

Wind Direction: North

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 59°F

COMMENTS

Initially slightly turbid (light brown) unable to stabilize after 1 hr. of purging

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-177

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	1/21/15	Well Construction	2"
Time	0932	Total Volume Purged (gal)	0.1
Sampler	~~0932 NZ~~ NZ	Pump is set at (ft)	9.68'
Water Level (ft)	9.68	Well Measurement Technique	Electronic Water Level Meter
Total Depth (ft)	10.09	Well Purge Equipment	Peristaltic Pump
Screen Length (ft)	1'		

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond uS/cm (± 3%)	DO mg/L (± 10% or under 0.2)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10% or under 10)	Flow (mL/min, ≤100)
0937	9.98	NM						50
0939	Dry	NM						50

SAMPLE COLLECTION DATA

Date: 1/21/15	Odor: None
Time: 0935	Color: Clear

ANALYSES

# of Containers	Size/Type	Preservative	Analysis	Result
3	40 mL VOA	Hydrochloric (HCL)	VOCs	--
3	40 mL VOA	None	Chloroethanol	--
2	40 mL VOA	Trisodium Phosphate	Volatile Fatty Acids	--
2	40 mL VOA	None	Ethene, Ethane, Methane Acetylene	--
1	250 mL Plastic	None	Sulfate, Alkalinity, Chloride	--
1	250 mL Plastic	NaOH and zinc acetate	Sulfide	--
1	250 mL Plastic	Nitric (HNO3)	Metals (Mn, Fe)	--
1	250 mL Plastic	Sulfuric (H2SO4)	Phosphate, Ammonia, Nitrate and Nitrite	--
1	250 mL Glass (amber)	Sulfuric (H2SO4)	TOC	--
1	Field Filtered 1L Plastic	None	DHC, Vinyl Chloride Reductase	--
1	Glass Septa	None	Hydrogen	--
1	Hach Ampule	None	Ferrous Iron	NM

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: West

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 40° F

COMMENTS

No parameters collected due to insufficient volume to fill flow cell

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-178

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	1/18/15	Well Construction	2" PVC
Time	1238	Total Volume Purged (gal)	0.8
Sampler	NZ	Pump is set at (ft)	7.4'
Water Level (ft)	3.44'	Well Measurement Technique	Electronic Water Level Meter
Total Depth (ft)	7.90'	Well Purge Equipment	Peristaltic Pump
Screen Length (ft)	1'		

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond uS/cm (± 3%)	DO mg/L (± 10% or under 0.2)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10% or under 10)	Flow (mL/min, ≤100)	
~~1250~~	~~2.29~~	~~2.16~~	~~12.19~~	~~-28.1~~					NZ
1250	4.51	16.12	2734	1.98	12.19	-31.2	54.6	50	
1255	4.64	16.23	2748	1.45	12.19	-47.1	47.6	50	
1300	4.91	16.31	2755	1.32	12.20	-67.3	34.9	50	
1305	5.18	16.35	2757	1.29	12.19	-80.7	36.9	50	
1310	5.42	16.49	2767	1.24	12.18	-88.3	39.3	50	
1315	5.64	16.53	2776	1.22	12.19	-94.5	42.2	50	
1320	5.85	16.65	2776	1.17	12.18	-96.5	36.1	50	
1325	6.05	16.71	2764	1.13	12.18	-100.3	28.0	50	
1330	6.22	16.81	2746	1.06	12.17	-102.6	26.9	50	
1335	6.38	16.94	2722	1.03	12.17	-105.1	28.6	50	
1340	6.52	17.03	2680	1.02	12.16	-109.0	23.1	50	

SAMPLE COLLECTION DATA

Date: 1/18/15	Odor: None
Time: 1345	Color: Clear

ANALYSES

# of Containers	Size/Type	Preservative	Analysis	Result
3	40 mL VOA	Hydrochloric (HCL)	VOCs	--
3	40 mL VOA	None	Chloroethanol	--
2	40 mL VOA	Trisodium Phosphate	Volatile Fatty Acids	--
2	40 mL VOA	None	Ethene, Ethane, Methane Acetylene	--
1	250 mL Plastic	None	Sulfate, Alkalinity, Chloride	--
1	250 mL Plastic	NaOH and zinc acetate	Sulfide	--
1	250 mL Plastic	Nitric (HNO3)	Metals (Mn, Fe)	--
1	250 mL Plastic	Sulfuric (H2SO4)	Phosphate, Ammonia, Nitrate and Nitrite	--
1	250 mL Glass (amber)	Sulfuric (H2SO4)	TOC	--
1	Field Filtered 1L Plastic	None	DHC, Vinyl Chloride Reductase	--
1	Glass Septa	None	Hydrogen	--
1	Hach Ampule	None	Ferrous Iron	NM

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: South west

Wind Speed (mph) 0-10 10-25 >25

Temperature: 45° F

COMMENTS

Initially turbid (brown), unable to stabilize after 1 hr. of purging.

Persulfate = 0 ppm

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-180

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	1/18/14	Well Construction	2" PVC (1' screen)
Time	1024	Total Volume Purged (gal)	0.6
Sampler	NZ	Pump is set at (ft)	6.4'
Water Level (ft)	4.42'	Well Measurement Technique	Electronic Water Level Meter
Total Depth (ft)	6.85	Well Purge Equipment	Peristaltic Pump
Screen Length (ft)	1'		

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond uS/cm (± 3%)	DO mg/L (± 10% or under 0.2)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10% or under 10)	Flow (mL/min, ≤100)
1137	5.42	13.68	157	7.04	6.00	218.5	25.2	50
1142	Tubing	set @	incorrect	depth,	adjust	to	6.4'	BTOC
~~1150~~	~~14.12~~	~~13.8~~	~~6.~~	~~N2~~				
1150	6.20	14.14	139	6.23	5.87	185.5	23.8	50
1155	6.40	14.29	133	5.89	5.83	176.1	55.8	50
1200	6.67	14.75	136	5.71	5.76	180.7	68	50
1205	6.72	14.89	126	5.82	5.68	165.2	781 AV	50
1210	Dry	15.14	117	4.84	5.60	152.7	790 AV	50

SAMPLE COLLECTION DATA

Date: 1/19/15 | Odor: None

Time: 1130 | Color: Clear

ANALYSES

# of Containers	Size/Type	Preservative	Analysis	Result
3	40 mL VOA	Hydrochloric (HCL)	VOCs	--
3	40 mL VOA	None	Chloroethanol	--
2	40 mL VOA	Trisodium Phosphate	Volatile Fatty Acids	--
2	40 mL VOA	None	Ethene, Ethane, Methane Acetylene	--
1	250 mL Plastic	None	Sulfate, Alkalinity, Chloride	--
1	250 mL Plastic	NaOH and zinc acetate	Sulfide	--
1	250 mL Plastic	Nitric (HNO3)	Metals (Mn, Fe)	--
1	250 mL Plastic	Sulfuric (H2SO4)	Phosphate, Ammonia, Nitrate and Nitrite	--
1	250 mL Glass (amber)	Sulfuric (H2SO4)	TOC	--
1	Field Filtered 1L Plastic	None	DHC, Vinyl Chloride Reductase	--
1	Glass Septa	None	Hydrogen	--
1	Hach Ampule	None	Ferrous Iron	NM

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: West Southwest

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 40°F

COMMENTS

Lowered tubing to TD @ 1155, turbid brown. Avoided air in-line, well dry @ 0.6 gal purged. Will allow to re-charge, set tubing to 6.4' BTOC & sample.

Sample on 1/19, persulfate 0 ppm

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-181

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	1/21/15	Well Construction	2" PVC
Time	~~+5~~ N2 0907	Total Volume Purged (gal)	0.2
Sampler	N2	Pump is set at (ft)	6.2
Water Level (ft)	5.82	Well Measurement Technique	Electronic Water Level Meter
Total Depth (ft)	6.42	Well Purge Equipment	Peristaltic Pump
Screen Length (ft)	1'		

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond uS/cm (± 3%)	DO mg/L (± 10% or under 0.2)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10% or under 10)	Flow (mL/min, ≤100)
0912	6.20	NM	NM	NM	NM	NM	NM	50
0917	6.34	9.87	210	NM	6.12	133.6	NM	50
0919	Dry	NM	NM	NM	NM	NM	NM	50

SAMPLE COLLECTION DATA

Date: 1/21/15	Odor: None
Time: 0910	Color: brown

ANALYSES

# of Containers	Size/Type	Preservative	Analysis	Result
3	40 mL VOA	Hydrochloric (HCL)	VOCs	--
3	40 mL VOA	None	Chloroethanol	--
2	40 mL VOA	Trisodium Phosphate	Volatile Fatty Acids	--
2	40 mL VOA	None	Ethene, Ethane, Methane Acetylene	--
1	250 mL Plastic	None	Sulfate, Alkalinity, Chloride	--
1	250 mL Plastic	NaOH and zinc acetate	Sulfide	--
1	250 mL Plastic	Nitric (HNO3)	Metals (Mn, Fe)	--
1	250 mL Plastic	Sulfuric (H2SO4)	Phosphate, Ammonia, Nitrate and Nitrite	--
1	250 mL Glass (amber)	Sulfuric (H2SO4)	TOC	--
1	Field Filtered 1L Plastic	None	DHC, Vinyl Chloride Reductase	--
1	Glass Septa	None	Hydrogen	--
1	Hach Ampule	None	Ferrous Iron	NM

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: West

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 35° F

COMMENTS

collect sample prior to filling flow cell due to insufficient volume & recharge, very turbid @ end of purging

ENVIRON – VAPOR MONITORING PORT SAMPLING

PROJECT NUMBER: 3434399A | **Sampler** | NZ

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

FIELD PARAMETERS

Well Location	Depth	Date	Canister ID	Regulator ID	Helium in Shroud during leak test	Start Time	Initial Vacuum Reading	Finish Time	Final Vacuum Reading	Notes
VP-14	10.75'	1/17/15	10805	AVG03580	10.1%	0930	-30 "Hg	1412	1/18/15 -13 "Hg	
VP-7	5.0'	1/19/15	01901	AVG03498	15%	0940	-27.5 "Hg	1820	-8 "Hg	
VP-9	5.0'	1/19/15	004288	AVG04173	30%	1025	-27 "Hg	1605	-5 "Hg	

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: East

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 35°F

COMMENTS

American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

Non-Hazardous Waste Manifest

4/29/16 2/

Generator

Generator's Name: Whirlpool Corp

Mailing Address: 6400 Jenny Lou Ed

Ft. Smith Ark

City State Zip

Point of Generation Address: Same

City State Zip

Contact: Kim Duckworth

Name Phone

Manifest Job No. NIN233WPC01

Bill to Name: ERS

Address: 1105 N. Peoria

Tulsa OK 74106

City State Zip

Contact: Kim Duckworth 918-832-8858

Name Phone

Common Name of Waste Material	Container No.	Container Type	Total Quantity	Unit
Soil Borings	6	DM	330	G

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Sammy Grace — Generator Authorized Agent Name

Signature

1-21-15 — Shipment Date

Transporter

Transporter Name: ERS

Address: 1105 N. Peoria

City, State Zip: Tulsa, OK, 74106

Driver Name (Print): Rick Albertson

Tag No. 667-908 State: OK

USDOT No. 875510

I hereby certify that the above material was picked up at the generator site listed above.

Driver Signature — Ship Date 1-21-15

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature — Delivery Date

Destination

American Environmental Landfill, Inc.
212 N. 177th W Ave.
Sand Springs, OK 74063

Phone: (918) 245-7786
Fax: (918) 245-7774
Permit No: 3557021

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is accurate.

Name of Authorized Agent

Signature

1-22-15 — Receipt Date

White – Destination Retention • Yellow – Return to Bill to • Pink – Transporter Retain • Goldenrod – Generator Retain

American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

Non-Hazardous Waste Manifest

4/9/16

21

Generator

Generator's Name: Whirlpool Corp

Mailing Address: 6400 Tenny Lane Rd

El Dorado AR

City State Zip

Point of Generation Address: Same

City State Zip

Contact: Ken Duckworth

Name Phone

Manifest Job No. AUN 233 JFC02

Bill to Name: FES

Address: 1165 N. Peoria

Tulsa OK 74106

City State Zip

Contact: Ken Duckworth 918-832-8888

Name Phone

Common Name of Waste Material	Container No.	Container Type	Total Quantity	Unit
Purge Water	2	PT	500	G
Purge Water	5	DM	275	G

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Tammy Grace — Generator Authorized Agent Name

Signature

1-21-15 — Shipment Date

Transporter

Transporter Name: FES

Address: 1165 N. Peoria

City, State Zip: Tulsa, OK, 74106

Driver Name (Print): Rick Albertson

Tag No. 667907 State: OK

USDOT No. 875510

I hereby certify that the above material was picked up at the generator site listed above.

Driver Signature

1-21-15 — Ship Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature

Delivery Date

Destination

American Environmental Landfill, Inc.
212 N. 177th W Ave.
Sand Springs, OK 74063

Phone: (918) 245-7786
Fax: (918) 245-7774
Permit No: 3557021

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is accurate.

Mickiking — Name of Authorized Agent

Signature

1-22-15 — Receipt Date

White – Destination Retention • Yellow – Return to Bill to • Pink – Transporter Retain • Goldenrod – Generator Retain

American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

Non-Hazardous Waste Manifest

47951 7

1021

Generator

Generator's Name: Whirlpool Corp

Mailing Address: 6400 Sunny Slope Rd

Ft. Smith AR

City State Zip

Point of Generation Address: Same

City State Zip

Contact: Jon Duckworth

Name Phone

Manifest Job No. MW233WDC01

Bill to Name: FES

Address: 1105 N. Peoria

Tulsa OK 74106

City State Zip

Contact: Jon Duckworth 918-832-8808

Name Phone

Common Name of Waste Material	Container No.	Container Type	Total Quantity	Unit
Soil Borings	01	Roll off	7	Y

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Sammy Grace — Generator Authorized Agent Name

Signature

1-21-15 — Shipment Date

Transporter

Transporter Name: FES

Address: 1105 N. Peoria

City, State Zip: Tulsa, OK, 74106

Driver Name (Print): Sam Grace

Tag No. 156-580 State: OK

USDOT No. 875510

I hereby certify that the above material was picked up at the generator site listed above.

Driver Signature

1-21-15 — Ship Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature

01/22/15 — Delivery Date

Destination

American Environmental Landfill, Inc.
212 N. 177th W Ave.
Sand Springs, OK 74063

Phone: (918) 245-7786
Fax: (918) 245-7774
Permit No: 3557021

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is accurate.

Name of Authorized Agent

Signature

1-22-15 — Receipt Date

White – Destination Retention • Yellow – Return to Bill to • Pink – Transporter Retain • Goldenrod – Generator Retain

TABLE 1
THICKNESS OF SATURATED SOILS IN PLUMES
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Ground Elevation	Top of Saturated Soils	Bottom of Saturated Soils	Saturated Soil Interval
North Plume				
IW-72	472.2	450.2	446.4	3.8
IW-73	472.1	NA[2]	NA[2]	NA[2]
IW-74	472.3	454.3	446.3	8.0
IW-75	472.8	NA[2]	NA[2]	NA[2]
IW-76	473.2	NA[2]	NA[2]	NA[2]
IW-77	473.8	454.8	445.8	9.0
IW-78	474.2	NA[2]	NA[2]	NA[2]
IW-79	474.1	NA[2]	NA[2]	NA[2]
IW-80	473.7	454.7	446.7	8.0
MW-23	475.8	453.8	447.8	6.0
MW-24	476.6	453.6	447.1	6.5
MW-27	475.7	451.7	447.4	4.3
MW-28	470.6	447.1	445.9	1.2
MW-31	476.1	448.1	447.1	1.0
MW-32	475.7	NA[2]	NA[2]	NA[2]
MW-33	474.9	NA[2]	NA[2]	NA[2]
MW-35R	474.0	NA[2]	NA[2]	NA[2]
MW-36	473.4	NA[2]	NA[2]	NA[2]
MW-39	475.6	450.1	447.6	2.5
MW-40	473.4	450.1	447.1	3.0
MW-41	472.3	453.3	445.8	7.5
MW-42B	471.8	449.8	446.3	3.5
MW-43	471.0	451.0	446.3	4.7
MW-46R	466.5	450.5	445.8	4.7
MW-50	463.2	451.2	445.6	5.6
MW-55	465.5	447.5	446.8	0.7
MW-56	463.4	445.4	444.9	0.5
MW-57	463.1	447.1	446.5	0.6
MW-58	462.9	446.3	445.9	0.4
MW-60	461.0	447.2	445.6	1.6 [3]

ENVIRON

TABLE 1
THICKNESS OF SATURATED SOILS IN PLUMES
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Ground Elevation	Top of Saturated Soils	Bottom of Saturated Soils	Saturated Soil Interval
MW-61	459.8	445.5	444.7	0.8 [3]
MW-62	464.5	446.0	444.2	1.8
MW-63	464.0	444.7	444.5	0.2 [3]
MW-65	474.1	453.6	445.7	7.9
MW-66	462.7	450.7	446.5	4.2 [3]
MW-67	459.4	448.4	445.2	3.2 [3]
MW-68	470.0	448.0	446.5	1.5
MW-70	471.7	NA[2]	NA[2]	NA[2]
MW-71	471.5	NA[2]	NA[2]	NA[2]
RW-69	471.5	449.5	445.5	4.0
			Average Thickness (feet)	**3.7**
South Plume				
ITMW-1	474.6	450.6	444.1	6.5
ITMW-10	478.6	451.6	446.1	5.5
ITMW-11	474.0	457.5	444.5	13.0
ITMW-12	474.7	456.7	444.7	12.0
ITMW-13	475.4	450.4	446.4	4.0
ITMW-14	475.7	455.7	445.7	10.0
ITMW-15	474.8	454.0	444.8	9.2
ITMW-16	476.5	458.5	445.3	13.2
ITMW-17	476.1	454.1	447.1	7.0
ITMW-18	473.9	457.9	444.9	13.0
ITMW-19	474.3	457.8	445.3	12.5
ITMW-2	475.1	457.1	445.6	11.5
ITMW-20	475.7	453.2	447.4	5.8
ITMW-21	474.4	449.4	446.4	3.0
ITMW-3	472.8	451.6	444.6	7.0
ITMW-4	477.6	458.1	447.1	11.0
ITMW-5	476.6	452.1	446.1	6.0
ITMW-6	481.1	455.4	445.6	9.8
ITMW-7	479.7	NA[2]	NA[2]	NA[2]

ENVIRON

TABLE 1
THICKNESS OF SATURATED SOILS IN PLUMES
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Ground Elevation	Top of Saturated Soils	Bottom of Saturated Soils	Saturated Soil Interval
ITMW-9	479.5	460.2	446.3	13.9
MW-22	473.9	450.9	449.9	1.0
MW-25	474.7	446.7	445.0	1.8
MW-26	476.1	451.1	446.9	4.2
MW-29	475.1	452.1	447.1	5.0
MW-30	479.2	446.7	443.7	3.0
MW-37	474.0	457.0	445.5	11.5
MW-38	474.9	NA[2]	NA[2]	NA[2]
MW-92	473.9	451.9	444.9	7.0
MW-93	478.0	456.0	443.5	12.5
MW-94	478.0	455.0	445.0	10.0
MW-95	478.0	452.0	445.0	7.0
MW-172	473.4	459.4	445.8	13.6
			Average Thickness (feet)	**8.3**
Northeast Corner Plume				
MW-87	471.0	451.0	447.8	3.2
MW-88	469.1	453.6	449.1	4.5
MW-89	467.1	451.6	449.5	2.1
MW-90	467.0	452.0	447.0	5.0
MW-91	469.2	451.7	449.2	2.5
MW-96	458.3	449.8	444.0	5.8
MW-97	459.9	451.9	445.9	6.0
MW-98	462.0	451.0	444.4	6.6
MW-99	467.1	449.3	445.1	4.2
			Average Thickness (feet)	**4.4**

Notes: 1 = Saturated thickness calculated from soil description in bor
2 = NA - Boring log not available
3 = No saturated soil observation recorded in boring log during drilling. Interval inferred based on soil description.

ENVIRON

TABLE 2
ESTIMATED QUANTITY OF TCE IN GROUNDWATER
Whirlpool Facility - Fort Smith, Arkansas

GROUNDWATER	Volume of Water						TCE Concentration		Mass of TCE		Volume of TCE	
Date	Plume Area (square feet)	Saturated Thickness (feet)	Total Porosity[2]	Plume Volume (cubic feet)	Gallons	Liters	Estimated Avg. Min. Concentration Assumed to be Present Throughout the Respective Section of Plume (µg/L)	Estimated Avg. Max. Concentration Assumed to be Present Throughout the Respective Section of Plume (µg/L)	Min. Kg.	Max. Kg.	Min. Vol. (Gallons)	Max. Vol. (Gallons)
North Plume												
March 2014 - 5 to 100 µg/L	*246,800*	3.7[1]	0.4	366,251	2,739,559	10,369,231	5	100	0.1	1.0	0.0	0.2
March 2014 - 100 to 1,000 µg/L	*184,500*	3.7[1]	0.4	273,798	2,048,009	7,751,714	100	1,000	0.8	7.8	0.1	1.4
March 2014 - > 1,000 µg/L	*100*	3.7[1]	0.4	148	1,110	4,201	1,000	1,500	0.0	0.0	0.0	0.0
March 2014 Subtotal	**431,400**								**0.8**	**8.8**	**0.2**	**1.6**
May 2014 - 5 to 100 µg/L	*279,000*	3.7[1]	0.4	414,036	3,096,989	11,722,104	5	100	0.1	1.2	0.0	0.2
May 2014 - 100 to 1,000 µg/L	*185,110*	3.7[1]	0.4	274,703	2,054,780	7,777,343	100	1,000	0.8	7.8	0.1	1.4
May 2014 - > 1,000 µg/L	*100*	3.7[1]	0.4	148	1,110	4,201	1,000	1,500	0.0	0.0	0.0	0.0
May 2014 Subtotal	**464,210**								**0.8**	**9.0**	**0.2**	**1.6**
July 2014 - 5 to 100 µg/L	*294,300*	3.7[1]	0.4	436,741	3,266,824	12,364,930	5	100	0.1	1.2	0.0	0.2
July 2014 - 100 to 1,000 µg/L	*192,500*	3.7[1]	0.4	285,670	2,136,812	8,087,832	100	1,000	0.8	8.1	0.1	1.5
July 2014 - > 1,000 µg/L	*200*	3.7[1]	0.4	297	2,220	8,403	1,000	1,500	0.0	0.0	0.0	0.0
July 2014 Subtotal	**487,000**								**0.9**	**9.3**	**0.2**	**1.7**
October 2014 - 5 to 100 µg/L	*299,500*	3.7[1]	0.4	444,458	3,324,546	12,583,406	5	100	0.1	1.3	0.0	0.2
October 2014 - 100 to 1,000 µg/L	*199,900*	3.7[1]	0.4	296,652	2,218,954	8,398,741	100	1,000	0.8	8.4	0.2	1.5
October 2014 - > 1,000 µg/L	*400*	3.7[1]	0.4	594	4,440	16,806	1,000	1,500	0.0	0.0	0.0	0.0
October 2014 Subtotal	**499,800**								**0.9**	**9.7**	**0.2**	**1.8**
January 2015 - 5 to 100 µg/L	*296,000*	3.7[1]	0.4	439,264	3,285,695	12,436,355	5	100	0.1	1.2	0.0	0.2
January 2015 - 100 to 1,000 µg/L	*180,500*	3.7[1]	0.4	267,862	2,003,608	7,583,655	100	1,000	0.8	7.6	0.1	1.4
January 2015 - > 1,000 µg/L	*0*	3.7[1]	0.4	0	0	0	1,000	1,500	0.0	0.0	0.0	0.0
January 2015 Subtotal	**476,500**								**0.8**	**8.8**	**0.1**	**1.6**
South Plume												
October 2014 - 5 to 100 µg/L	*519,800*	8.3[1]	0.4	1,727,815	12,924,058	48,917,558	5	100	0.2	4.9	0.0	0.9
October 2014 - 100 to 1,000 µg/L	*261,500*	8.3[1]	0.4	869,226	6,501,810	24,609,353	100	1,000	2.5	24.6	0.4	4.5
October 2014 - 1,000 to 10,000 µg/L	*119,000*	8.3[1]	0.4	395,556	2,958,759	11,198,902	1,000	1,500	11.2	16.8	2.0	3.0
October 2014 Subtotal	**900,300**								**13.9**	**46.3**	**2.5**	**8.4**
January 2015 - 5 to 100 µg/L	*442,300*	8.3[1]	0.4	1,470,205	10,997,135	41,624,156	5	100	0.2	4.2	0.0	0.8
January 2015 - 100 to 1,000 µg/L	*324,500*	8.3[1]	0.4	1,078,638	8,068,212	30,538,183	100	1,000	3.1	30.5	0.6	5.5
January 2015 - 1,000 to 10,000 µg/L	*102,900*	8.3[1]	0.4	342,040	2,558,456	9,683,757	1,000	1,500	9.7	14.5	1.8	2.6
January 2015 Subtotal	**869,700**								**12.9**	**49.2**	**2.3**	**8.9**
Northeast Plume												
October 2014 - 5 to 100 µg/L	*187,600*	4.4[1]	0.4	330,926	2,475,329	9,369,122	5	100	0.0	0.9	0.0	0.2
October 2014 - 100 to 1,000 µg/L	*69,200*	4.4[1]	0.4	122,069	913,075	3,455,987	100	1,000	0.3	3.5	0.1	0.6
October 2014 - > 1,000 µg/L	*0*	4.4[1]	0.4	0	0	0	1,000	1,500	0.0	0.0	0.0	0.0
October 2014 Subtotal	**256,800**								**0.4**	**4.4**	**0.1**	**0.8**
January 2015 - 5 to 100 µg/L	187,600	4.4[1]	0.4	330,926	2,475,329	9,369,122	5	100	0.0	0.9	0.0	0.2
January 2015 - 100 to 1,000 µg/L	*70,200*	4.4[1]	0.4	123,833	926,269	3,505,929	100	1,000	0.4	3.5	0.1	0.6
January 2015 - > 1,000 µg/L	*0*	4.4[1]	0.4	0	0	0	1,000	1,500	0.0	0.0	0.0	0.0
January 2015 Subtotal	**257,800**								**0.4**	**4.4**	**0.1**	**0.8**

Notes:
1 = Saturated thickness estimated from Fourth Quarter 2014 RADD sampled wells and new Fourth Quarter well completions (see Table 1)
2 = Total porosity estimated from Freeze and Cherry (1979)
RADD = Remedial action decision document
TCE = Trichloroethylene
µg/L = Micrograms per liter

ENVIRON

GUIDEWIRE CONSULTING

Environmental Guidance
and Support for Business

April 16, 2013

Mr. Jim Zoesch
BOST, Inc.
P.O. Box 11495
Fort Smith, AR 72917

RE: **FS Waiver Facility-Vapor Sampling**
1410 Jacobs Street
Fort Smith, Arkansas 72903

GW Project Number 04.1.130081

Dear Jim:

GuideWire Consulting, LLC (GuideWire) was contracted by the BOST, Inc., to perform vapor sampling at the FS Waiver Facility property located at 1410 Jacobs Street Fort Smith, Arkansas (Property). The investigation was performed to address potential environmental concerns related to the regulatory issues associated with the Whirlpool Corporation Facility site located to the north of the Property.

According to information obtained from Whirlpool and the Arkansas Department of Environmental Quality (ADEQ), the Whirlpool facility is known to have released Trichloroethylene (TCE) into the groundwater in the vicinity of the Property. Whirlpool and ADEQ have installed numerous groundwater monitoring wells in the area, including several on the Property.

Based on the information above, and the potential for the TCE to create detectable vapors in buildings near areas where groundwater contamination exists, GuideWire was asked to perform vapor sampling in and around the building on the Property to determine if vapor intrusion has occurred on the Property from the impacted groundwater.

On April 4th, 2013 GuideWire mobilized to the site in an effort to collect air samples in the building located on the Property, and outside the building. GuideWire utilized Summa canisters calibrated to sample the air over an eight hour period. The samples were collected from approximately 8:30 am until 4:40 pm on April 4th, 2013. Five samples were collected at the Property including four inside the building (Room 5, Room 1, Living Room and Office) and one sample was collected outside the kitchen door of the building, under a canopy. The weather during the sampling event was rainy, with temperatures in the 60's and calm to light winds. A sixth canister was originally intended to be used as a control sample; however the canister appeared to have lost pressure during shipment, so the contents of the canister were not analyzed.

The samples were shipped to Pace Analytical, in Minneapolis, MN for analysis using Environmental Protection Agency (EPA) Method Number TO-15. Pace Analytical is certified by the ADEQ to perform samples collected in the State of Arkansas. The analytes selected for analysis included: cis-1, 2-Dichloroethene, trans-1, 2-Dichloroethene, Tetrachloroethene, Trichloroethene (Trichloroethylene) and Vinyl chloride. The analytes were selected based on the known release of TCE in the groundwater and the likelihood that the TCE would degrade over time producing some of the other chemicals listed.

The analysis of the Summa canisters indicated that no detectable levels of the analytes were found in the samples collected. It should be noted that the samples collected represent a one-time assessment of the levels of the listed analytes. Based on subsurface and atmospheric conditions, variations in the levels of many compounds in the air can occur. Additional testing would be required to definitively rule out any impact from the subsurface conditions on the Property.

We appreciate the opportunity to have been of service to you on this project. Please contact GuideWire if you have any questions, or if we can be of any further service to you.

Respectfully Submitted,



Michael Dever
GuideWire Consulting, LLC

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

April 10, 2013

Mike Dever
GuideWire Consulting
211 East 8th St.
Lawrence, KS 66044

RE: Project: 60141930 Guidewire Consulting
Pace Project No.: 10224596

Dear Mike Dever:
Enclosed are the analytical results for sample(s) received by the laboratory on April 05, 2013. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



Alice Flanagan
alice.flanagan@pacelabs.com
Project Manager

Enclosures

Pace Analytical Services, Inc.
1700 Elm Street - Suite 200
Minneapolis, MN 55414
(612)607-1700

CERTIFICATIONS

Project: 60141930 Guidewire Consulting
Pace Project No.: 10224596

Minnesota Certification IDs
1700 Elm Street SE Suite 200, Minneapolis, MN 55414
A2LA Certification #: 2926.01
Alaska Certification #: UST-078
Alaska Certification #MN00064
Arizona Certification #: AZ-0014
Arkansas Certification #: 88-0680
California Certification #: 01155CA
Colorado Certification #Pace
Connecticut Certification #: PH-0256
EPA Region 8 Certification #: Pace
Florida/NELAP Certification #: E87605
Georgia Certification #: 959
Hawaii Certification #Pace
Idaho Certification #: MN00064
Illinois Certification #: 200011
Kansas Certification #: E-10167
Louisiana Certification #: 03086
Louisiana Certification #: LA080009
Maine Certification #: 2007029
Maryland Certification #: 322
Michigan DEQ Certification #: 9909
Minnesota Certification #: 027-053-137
Mississippi Certification #: Pace
Montana Certification #: MT CERT0092
Nevada Certification #: MN_00064
Nebraska Certification #: Pace
New Jersey Certification #: MN-002
New York Certification #: 11647
North Carolina Certification #: 530
North Dakota Certification #: R-036
North Dakota Certification #: R-036A
Ohio VAP Certification #: CL101
Oklahoma Certification #: 9507
Oregon Certification #: MN200001
Oregon Certification #: MN300001
Pennsylvania Certification #: 68-00563
Puerto Rico Certification
Tennessee Certification #: 02818
Texas Certification #: T104704192
Utah Certification #: MN00064
Virginia/DCLS Certification #: 002521
Virginia/VELAP Certification #: 460163
Washington Certification #: C754
West Virginia Certification #: 382
Wisconsin Certification #: 999407970

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SAMPLE SUMMARY

Project: 60141930 Guidewire Consulting
Pace Project No.: 10224596

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60141930001	**01**	Air	04/04/13 16:19	04/05/13 09:10
60141930002	**02**	Air	04/04/13 16:21	04/05/13 09:10
60141930003	**03**	Air	04/04/13 16:22	04/05/13 09:10
60141930004	**04**	Air	04/04/13 16:31	04/05/13 09:10
60141930005	**05**	Air	04/04/13 16:32	04/05/13 09:10
60141930006	**06**	Air	04/04/13 00:00	04/05/13 09:10

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SAMPLE ANALYTE COUNT

Project: 60141930 Guidewire Consulting
Pace Project No.: 10224596

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60141930001	**01**	TO-15	CJR	5
60141930002	**02**	TO-15	CJR	5
60141930003	**03**	TO-15	CJR	5
60141930004	**04**	TO-15	CJR	5
60141930005	**05**	TO-15	CJR	5

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ANALYTICAL RESULTS

Project: 60141930 Guidewire Consulting
Pace Project No.: 10224596

Sample: 01 **Lab ID: 60141930001** Collected: 04/04/13 16:19 Received: 04/05/13 09:10 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		04/09/13 04:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		04/09/13 04:31	156-60-5	
Tetrachloroethene	ND	ug/m3	0.92	1.34		04/09/13 04:31	127-18-4	
Trichloroethene	ND	ug/m3	0.74	1.34		04/09/13 04:31	79-01-6	
Vinyl chloride	ND	ug/m3	0.35	1.34		04/09/13 04:31	75-01-4	

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ANALYTICAL RESULTS

Project: 60141930 Guidewire Consulting
Pace Project No.: 10224596

Sample: 02 **Lab ID: 60141930002** Collected: 04/04/13 16:21 Received: 04/05/13 09:10 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.39		04/09/13 03:01	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.39		04/09/13 03:01	156-60-5	
Tetrachloroethene	ND	ug/m3	0.96	1.39		04/09/13 03:01	127-18-4	
Trichloroethene	ND	ug/m3	0.76	1.39		04/09/13 03:01	79-01-6	
Vinyl chloride	ND	ug/m3	0.36	1.39		04/09/13 03:01	75-01-4	

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ANALYTICAL RESULTS

Project: 60141930 Guidewire Consulting
Pace Project No.: 10224596

Sample: 03 **Lab ID: 60141930003** Collected: 04/04/13 16:22 Received: 04/05/13 09:10 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
cis-1,2-Dichloroethene	ND	ug/m3	1.2	1.44		04/09/13 04:02	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.2	1.44		04/09/13 04:02	156-60-5	
Tetrachloroethene	ND	ug/m3	0.99	1.44		04/09/13 04:02	127-18-4	
Trichloroethene	ND	ug/m3	0.79	1.44		04/09/13 04:02	79-01-6	
Vinyl chloride	ND	ug/m3	0.37	1.44		04/09/13 04:02	75-01-4	

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ANALYTICAL RESULTS

Project: 60141930 Guidewire Consulting
Pace Project No.: 10224596

Sample: 04 **Lab ID: 60141930004** Collected: 04/04/13 16:31 Received: 04/05/13 09:10 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.39		04/09/13 02:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.39		04/09/13 02:30	156-60-5	
Tetrachloroethene	ND	ug/m3	0.96	1.39		04/09/13 02:30	127-18-4	
Trichloroethene	ND	ug/m3	0.76	1.39		04/09/13 02:30	79-01-6	
Vinyl chloride	ND	ug/m3	0.36	1.39		04/09/13 02:30	75-01-4	

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ANALYTICAL RESULTS

Project: 60141930 Guidewire Consulting
Pace Project No.: 10224596

Sample: 05 **Lab ID: 60141930005** Collected: 04/04/13 16:32 Received: 04/05/13 09:10 Matrix: Air

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
TO15 MSV AIR	Analytical Method: TO-15							
cis-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		04/09/13 16:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/m3	1.1	1.34		04/09/13 16:44	156-60-5	
Tetrachloroethene	ND	ug/m3	0.92	1.34		04/09/13 16:44	127-18-4	
Trichloroethene	ND	ug/m3	0.74	1.34		04/09/13 16:44	79-01-6	
Vinyl chloride	ND	ug/m3	0.35	1.34		04/09/13 16:44	75-01-4	

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QUALITY CONTROL DATA

Project: 60141930 Guidewire Consulting
Pace Project No.: 10224596

QC Batch: AIR/17091 Analysis Method: TO-15
QC Batch Method: TO-15 Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 60141930001, 60141930002, 60141930003, 60141930004

METHOD BLANK: 1405667 Matrix: Air
Associated Lab Samples: 60141930001, 60141930002, 60141930003, 60141930004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/m3	ND	0.81	04/08/13 11:29	
Tetrachloroethene	ug/m3	ND	0.69	04/08/13 11:29	
trans-1,2-Dichloroethene	ug/m3	ND	0.81	04/08/13 11:29	
Trichloroethene	ug/m3	ND	0.55	04/08/13 11:29	
Vinyl chloride	ug/m3	ND	0.26	04/08/13 11:29	

LABORATORY CONTROL SAMPLE: 1405668

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/m3	40.3	35.6	88	73-135	
Tetrachloroethene	ug/m3	69	64.7	94	66-135	
trans-1,2-Dichloroethene	ug/m3	40.3	34.7	86	68-129	
Trichloroethene	ug/m3	54.6	50.9	93	68-134	
Vinyl chloride	ug/m3	26	22.4	86	64-134	

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QUALITY CONTROL DATA

Project: 60141930 Guidewire Consulting
Pace Project No.: 10224596

QC Batch: AIR/17099
QC Batch Method: TO-15
Analysis Method: TO-15
Analysis Description: TO15 MSV AIR Low Level
Associated Lab Samples: 60141930005

METHOD BLANK: 1406231 Matrix: Air
Associated Lab Samples: 60141930005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/m3	ND	0.81	04/09/13 10:57	
Tetrachloroethene	ug/m3	ND	0.69	04/09/13 10:57	
trans-1,2-Dichloroethene	ug/m3	ND	0.81	04/09/13 10:57	
Trichloroethene	ug/m3	ND	0.55	04/09/13 10:57	
Vinyl chloride	ug/m3	ND	0.26	04/09/13 10:57	

LABORATORY CONTROL SAMPLE: 1406232

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/m3	40.3	37.0	92	73-135	
Tetrachloroethene	ug/m3	69	67.0	97	66-135	
trans-1,2-Dichloroethene	ug/m3	40.3	42.7	106	68-129	
Trichloroethene	ug/m3	54.6	52.1	95	68-134	
Vinyl chloride	ug/m3	26	22.5	87	64-134	

SAMPLE DUPLICATE: 1406658

Parameter	Units	10223738001 Result	Dup Result	RPD	Max RPD	Qualifiers
cis-1,2-Dichloroethene	ug/m3	1230	1090	12	25	
Tetrachloroethene	ug/m3	1800	1470	20	25	
trans-1,2-Dichloroethene	ug/m3	ND	ND		25	
Trichloroethene	ug/m3	ND	ND		25	
Vinyl chloride	ug/m3	1960	1830	7	25	

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QUALIFIERS

Project: 60141930 Guidewire Consulting
Pace Project No.: 10224596

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: 60141930 Guidewire Consulting
Pace Project No.: 10224596

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60141930001	**01**	TO-15	AIR/17091		
60141930002	**02**	TO-15	AIR/17091		
60141930003	**03**	TO-15	AIR/17091		
60141930004	**04**	TO-15	AIR/17091		
60141930005	**05**	TO-15	AIR/17099		

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AIR: CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

09501

Page: of

Section A Required Client Information:

Company: Guidewire
Address: 211 E. 8th St Suite F. Law, KS 66044
Email To: mdever@sunflower.com
Phone: 785 550 7909 Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: M. Dever
Copy To:
Purchase Order No.:
Project Name: Bost FS
Project Number:

Section C Invoice Information:

Attention: Michael Dever
Company Name: Guidewire Consulting LLC
Address: 211 E 8th ST Ste F Law. KS 66044
Pace Quote Reference: 00007199
Pace Project Manager/Sales Rep.
Pace Profile #:

Program: ☐ UST ☐ Superfund ☐ Emissions ☐ Clean Air Act ☐ Voluntary Clean Up ☐ Dry Clean ☐ RCRA ☐ Other

Location of Sampling by State: AR

Reporting Units: µg/m³ mg/m³ PPBV ✓ PPMV Other

Report Level II. III. IV. Other

Valid Media Codes

MEDIA	CODE
Tedlar Bag	TB
1 Liter Summa Can	1LC
6 Liter Summa Can	6LC
Low Volume Puff	LVP
High Volume Puff	HVP
Other	PM10

ITEM #	*Section D Required Client Information AIR SAMPLE ID (Sample IDs MUST BE UNIQUE)	MEDIA CODE	PID Reading (Client only)	COLLECTED COMPOSITE START END/GRAB DATE	COLLECTED COMPOSITE START END/GRAB TIME	COLLECTED COMPOSITE - DATE	COLLECTED COMPOSITE - TIME	Canister Pressure (Initial Field - psig)	Canister Pressure (Final Field - psig)	Summa Can Number	Flow Control Number	Method: PM10	3C- Fixed Gas (%)	TO-3	TO-3M (Methane)	TO-4 (PCBs)	TO-13 (PAH)	TO-14	TO-15	TO15 Short List*	Pace Lab ID
1	01	6LC	NA	4/4/13	8:19	4/4	4:19	30	0	0691	03144							X			
2	02				8:21		4:21	30	1	0399	03356							X			
3	03				8:22		4:22	30	2	0052	00566							X			
4	04				8:31		4:31	30	1	2041	02211							X			
5	05				8:32		4:32	30	02	0411	03377							X			
6	06	↓	↓	↓	″	↓	″	30	30	1239	01258							X			
7																					
8																					
9																					
10																					
11																					
12																					

Comments :

179793709
3 day
60% upcharge

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Michael Dever	4/4	4:45		4/5/13	09:10

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: Michael Dever DATE Signed (MM / DD / YY): 4/4/13

SAMPLE CONDITIONS

	Y/N	Y/N	Y/N	
	Y/N	Y/N	Y/N	
	Y/N	Y/N	Y/N	
Temp in °C	Received on Ice	Custody Sealed Cooler	Samples Intact	

ORIGINAL

Pace Package 14 of 15

Pace Analytical®	Document Name: Air Sample Condition Upon Receipt	Document Revised: 28Jan2013 Page 1 of 1
	Document No.: F-MN-A-106-rev.07	Issuing Authority: Pace Minnesota Quality Office

Air Sample Condition Upon Receipt

Client Name: GUIDEWIRE **Project #:**

Courier: ☒ Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other:

Tracking Number: 8025 2243 0588 7957 7896 1427

Custody Seal on Cooler/Box Present? ☐ Yes ☒ No **Seals Intact?** ☐ Yes ☐ No

Optional: Proj. Due Date: Proj. Name:

Packing Material: ☐ Bubble Wrap ☐ Bubble Bags ☒ Foam ☐ None ☐ Other:

Temp. (TO17 and TO13 samples only) (°C): AMB **Corrected Temp (°C):** _____ **Thermom. Used:** ☐ B88A912167504 ☐ 80512447 ☐ 72337080

Temp should be above freezing to 6°C **Correction Factor:** _____ **Date & Initials of Person Examining Contents:** 4-5-13 JL

				Comments:
Chain of Custody Present?	☒ Yes	☐ No	☐ N/A	1.
Chain of Custody Filled Out?	☒ Yes	☐ No	☐ N/A	2.
Chain of Custody Relinquished?	☒ Yes	☐ No	☐ N/A	3.
Sampler Name and/or Signature on COC?	☒ Yes	☐ No	☐ N/A	4.
Samples Arrived within Hold Time?	☒ Yes	☐ No	☐ N/A	5.
Short Hold Time Analysis (<72 hr)?	☐ Yes	☒ No	☐ N/A	6.
Rush Turn Around Time Requested?	☒ Yes	☐ No	☐ N/A	7. 3DAY
Sufficient Volume?	☒ Yes	☐ No	☐ N/A	8.
Correct Containers Used?	☒ Yes	☐ No	☐ N/A	9.
-Pace Containers Used?	☒ Yes	☐ No	☐ N/A	
Containers Intact?	☒ Yes	☐ No	☐ N/A	10.
Media: AIR (CAN)				11.
Sample Labels Match COC?	☒ Yes	☐ No	☐ N/A	12.

Samples Received: 6 CANS, 6 FC'S

Canisters		Flow Controllers		Stand Alone G	
Sample Number	Can ID	Sample Number	Can ID	Sample Number	Can ID
01	0691	FC0214			
02	0399	FC0336			
03	0052	FC0056			
04	2041	FC0221			
05	0411	FC0337			
06	1239	FC0128			

CLIENT NOTIFICATION/RESOLUTION **Field Data Required?** ☐ Yes ☐ No

Person Contacted: _____ Date/Time: _____

Comments/Resolution: _____

Project Manager Review: _____ **Date:** _____

Note: Whenever there is a discrepancy affecting North Carolina compliance samples, a copy of this form will be sent to the North Carolina DEHNR Certification Office (i.e out of hold, incorrect preservative, out of temp, incorrect containers)