



Fourth Quarter 2014 Progress Report

Whirlpool Corporation
Fort Smith, Arkansas

Prepared for:
Whirlpool Corporation

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34-34399A

ENVIRON

Fourth Quarter 2014 Progress Report
October 1, 2014 through December 31, 2014
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 Fourth 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 Fourth Quarter of 2014, findings of the activities 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.

The 2014 Remedial Action Effectiveness Report was submitted to ADEQ on January 15, 2015 and contains a summary of the soil and groundwater data collected investigations performed during 2014.

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 55%, 55% and 50%, respectively. Reductions in TCE concentrations of up to 96 and 99% were observed at ITMW-15 and IW-152, respectively.
- The third oxidant injection event was implemented during the Fourth Quarter, involving 41 injection wells and 36 temporary direct push injection points located in Area 1 and the surrounding area. Total TCE concentrations at wells located in Area 1 decreased approximately 50% roughly thirty days following injection. The success of the third oxidant injection effort is anticipated to be further evident after receipt and assessment of the 2015 first quarter groundwater monitoring data.
- 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 Fourth Quarter of 2014. 86% of monitoring wells (57 of 66 wells) 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.
- Based on fourth 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 gallon to 2 gallons, the quantity of TCE in the south plume is estimated to range from 2 to 8 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 11 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.

3. REVIEW OF ACTIVITIES COMPLETED – FOURTH QUARTER 2014

During the Fourth Quarter of 2014, groundwater samples were collected via low flow sampling methodologies. Groundwater samples were collected from 55 RADD wells and nine wells located in the northeast corner and on the Boys and Girls Club property during the week of October 13, 2014. The samples were analyzed for the parameters as outlined in the RADD for the RADD wells and VOCs only for the remaining nine wells. The Fourth Quarter 2014 Groundwater Monitoring Report is included as Attachment A.

Groundwater samples were collected October 22, 23 and 29, 2014, from select wells to establish baseline conditions prior to performance of the third phase of in-situ chemical oxidation (ISCO) event which occurred at the end of October 2014. Groundwater samples were also collected on December 4 and 5 to assess the effectiveness of the third phase of ISCO event (i.e. 30 day monitoring event). The data from these sampling events is presented in the Fourth Quarter 2014 Groundwater Monitoring Report (Attachment A) and evaluated in the Third Oxidant Injection Summary Report included as Attachment C.

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

- The groundwater potentiometric surface observed during the fourth 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/southeastern direction.
- Fourth Quarter groundwater monitoring data shows generally stable to decreasing trends for TCE concentrations at a majority of monitoring well locations [86% of monitoring wells (57 of 66 wells) exhibit either little or no TCE or a decreasing or stable TCE concentration trend].
- Fourth 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.

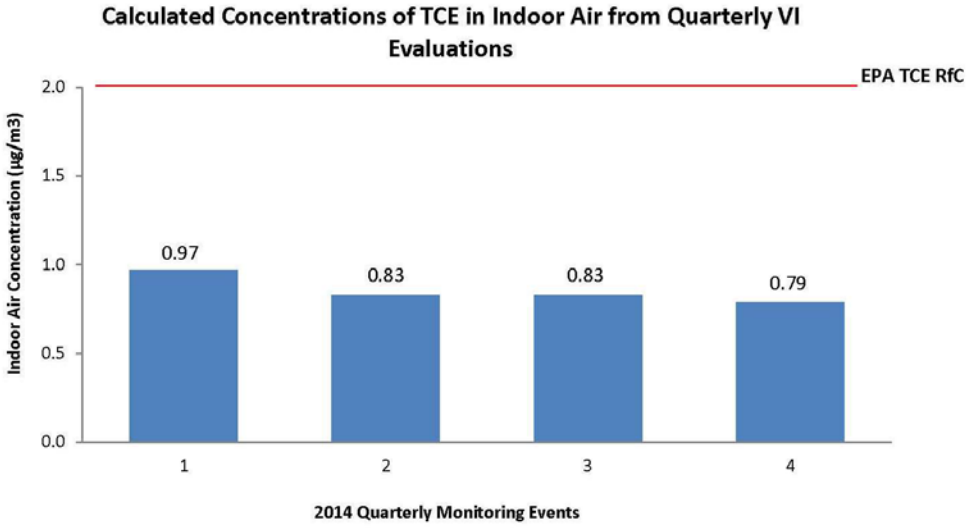
During the Fourth Quarter of 2014, soil vapor sampling events were attempted in October 2014. Soil vapor samples could not be collected during the monitoring event due to water accumulating in the soil vapor monitoring points. Water was present in the sampling train from the shallow port at VP-1and the shallow and deep ports at VP-2. No water was present in the sampling train for the deep port at location VP-1 and collection of a soil vapor sample was attempted. However, despite the use of sustained vacuum at this location, a soil vapor sample could not be obtained.

Water samples were successfully collected at the shallow port of VP-1 (VP-1S) and at the shallow and deep ports of VP-2 (VP-2S/D). Sufficient water volume could not be collected from the deep port of VP-1 (VP-1D) due to sustained vacuum on the line. The Fourth Quarter 2014 Soil Vapor Monitoring/Vapor Intrusion 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
- Using VOC concentrations in water collected from groundwater monitoring wells indicate that the groundwater vapor intrusion model over-predicts potential vapor intrusion risks by at least a factor of approximately 20 relative to vapor intrusion modeling using VOC concentrations detected in shallow water collected from soil vapor monitoring ports.

The graphic below presents the calculated indoor air values used to estimate potential risks associated with vapor intrusion into buildings over or near the TCE groundwater plume.



Note:

Calculated off-site TCE concentrations in indoor air resulted in carcinogenic risks within ADEQ's acceptable range of 1E-04 - 1E-06 and below the non-carcinogenic hazard of 1

Cair concentrations are calculated from groundwater and presented in the quarterly reports, except for the first quarter where the technical appendix tables were not included in the submittal.

EPA RfC - Inhalation reference concentration:
http://www.epa.gov/reg3hwmd/risk/human/rb-concentration_table/Generic_Tables/docs/resair_sl_table_run_NOV2014.pd

Calculated indoor air values (C_{AIR}) are estimates of indoor air concentrations resulting from vapors from groundwater potentially migrating into a building. These values, calculated using the maximum detected offsite groundwater concentrations in each quarter in 2014, were compared to the USEPA reference concentration (RfC) which is defined as an estimate (which includes a margin safety) of a continuous inhalation exposure that is unlikely to result in non-carcinogenic adverse effects during a lifetime. The RfC for TCE is 2 µg/m^3. The calculated concentrations from each quarter ranged from 0.79 – 0.97 micrograms per cubic meter (µg/m^3) with the highest estimated indoor air concentration being in the first quarter of 2014 and decreasing with each subsequent sampling quarter. The highest estimated indoor air concentration as a result of vapor intrusion is at least two times below the indoor air concentration USEPA has determined to be protective of sensitive and vulnerable populations. As demonstrated in the Vapor Intrusion Report (Attachment B), estimated indoor air concentrations using the maximum detected offsite TCE groundwater concentrations do not present unacceptable health risks.

During the Fourth Quarter of 2014, implementation of the third 2014 oxidant injection event occurred at the Whirlpool site. The event occurred during October 28 through November 3, 2014. During this event 12,200 gallons of base activated sodium persulfate (BASP) and 3,200 gallons of Modified Fenton's reagent (hydrogen peroxide and chelated iron) activated sodium persulfate (MASP) were injected into 41 injection wells and 36 temporary direct push injection points located in Area 1 and the surrounding area. Attachment C contains the Third Oxidant Injection Summary Report.

Key observations based on the ISCO performance monitoring data include the following:

- Water levels, field water quality parameters, and persulfate concentrations indicate that the influence of the oxidant was measured in wells located up to 15 feet from the injection areas (MW-38 and ITMW-17).
- Measurable levels of persulfate increased 30 days after injection by a factor of 10 at wells MW-38, MW-85, ITMW-12, and ITMW-18. The increase of persulfate in these wells indicates the persulfate is reaching a larger area with time. Conditions remain optimum for continued oxidation of TCE based upon the continued presence of persulfate, although injection of additional caustic or Fenton's reagent may be necessary to re-activate the persulfate.
- The total TCE concentrations in the majority of wells located in the supplemental neck area (Injection Array 1) have decreased approximately 55%.
- The total TCE concentrations in the majority of wells located in Area 2 and Area 3 (Injection Array 2) have decreased approximately 55% roughly five months following the second injection.
- TCE concentrations at MW-85 and MW-86 increased following oxidant injection and these increases may be the result of desorption of TCE following the modified Fenton's reaction (MASP was assessed during the bench scale testing for this project and demonstrated an increased ability to treat adsorbed phase TCE).
- Total TCE concentrations at wells located in Area 1 (Injection Array 3) decreased approximately 50% roughly thirty days following injection. Notable decreases in TCE concentrations were observed at MW-25 where the TCE concentration was reduced from 59,800 micrograms per liter (µg/L) to 2,620 µg/L (96% reduction); at ITMW-15 where the TCE concentration was reduced from 1,490 µg/L to 63 µg/L (96% reduction); ITMW-19 where the TCE concentration was reduced from 12,800 µg/L to 33.5 µg/L (99.7% reduction); and, at IW-152 where the TCE concentration was reduced from 17,600 µg/L to < 0.5 µg/L (99% reduction).

The success of the third oxidant injection effort is anticipated to be further evident after receipt and assessment of the first quarter 2015 groundwater monitoring data (i.e. groundwater monitoring event performed in January 2015).

During the Fourth Quarter of 2014 an interim corrective action measure was completed between October 1 and October 10, 2014, with the drilling of 19 large diameter borings along the Area 1 linear drainage feature to remove TCE contaminated Vadose Zone and Transmissive Zone soils. The borings were completed to the top of shale and were backfilled with crushed limestone gravel and lean cement. Crushed limestone gravel was placed in the borings to backfill to the surface of the Transmissive Zone to attempt to passively increase the naturally low groundwater pH to enhance monitored natural attenuation. Lean cement was used to backfill the remaining annual space to the surface. Excavation spoils and drill cuttings were placed into lined roll-off boxes for characterization and then disposal. Approximately 353 cubic yards (yd^3) of soil were removed during the effort. Attachment D contains the Large Diameter Borings Summary Report.

Shallow Offsite Groundwater Investigation and Vapor Point Investigation

Five initial soil borings (DP-63 through DP-67) were completed during the week of December 15, 2014. Two of the soil borings were completed on Whirlpool properties (onsite and offsite) and the remaining three soil borings were completed in the residential area north of the main site (residential properties include; 1605 Jacobs Avenue, 1705 Jacobs Avenue and 1809 Jacobs Avenue). These borings were completed in general accordance with the Shallow Offsite Groundwater Investigation Work Plan submitted to ADEQ on October 30, 2014 and the notification letter to ADEQ submitted December 8, 2014. The purpose of the soil borings was to assess the lithology in each area to determine correct placement for the shallow monitoring well and vapor point locations which were slated to be installed in January 2015. Soil borings were completed to 15 feet below ground surface and a total of seven 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 screening [e.g. visual observation and elevated photoionization detector (PID) readings].

Whirlpool completed a cross section with two of the soil borings (DP-64 and DP-65) along with two existing ¾ inch monitoring wells (MW-55 and MW-56) in order to further evaluate offsite hydrogeological conditions. The cross section presents the subsurface geology represented by these borings and based on the lithology and the construction of the monitoring wells, it is evident that water within the Basal Transmissive Zone may have a preferential pathway through the ¾ inch monitoring wells to travel into above silty sand layers that connect with the screen and sandpack of these monitoring wells.

Tabulated analytical results for the soil samples, a figure documenting soil boring locations and a geological cross section figure are presented in Attachment E.

4. QUANTITY OF TCE

Estimated average minimum and maximum quantities of TCE in groundwater were calculated for the Site using the results of the Fourth 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 2 and 3, Attachment A – Fourth Quarter 2014 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 2 and 3 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 F, Table 2.

Northern plume parameters:

- Plume area of approximately 500,000 square feet (ft^2) consisting of 299,500 ft^2 for the portion of the plume with TCE concentrations ranging from 5 µg/L to 100 µg/L; 199,900 ft^2 for the portion of the plume with TCE concentrations ranging from 100 µg/L to 1,000 µg/L; and, 400 ft^2 for the portion of the plume with TCE concentrations greater than 1,000 µg/L;
- Average saturated thickness of 3.7 feet (see Attachment F, Table 1);
- Total porosity of 0.4; and
- TCE specific gravity of 1.465.

Southern plume parameters:

- Plume area of approximately 900,000 ft^2 consisting of 519,800 ft^2 for the portion of the plume with TCE concentrations ranging from 5 µg/L to 100 µg/L; 261,500 ft^2 for the portion of the plume with TCE concentrations ranging from 100 µg/L to 1,000 µg/L; and, 119,000 ft^2 for the portion of the plume with TCE concentrations greater than 1,000 µg/L;
- Average saturated thickness of 8.3 feet (see Attachment F, Table 1);
- Total porosity of 0.4; and
- TCE specific gravity of 1.465.

Northeastern plume parameters:

- Plume area of approximately 257,000 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, 69,200 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 F, 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	8 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 11 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 55 RADD wells and nine wells at the northeast corner and Boys and Girls Club property sampled, including water levels from this sampling event, are included in the Fourth Quarter 2014 Groundwater Monitoring Report included as Attachment A.

Groundwater samples were collected October 22, 23 and 29, 2014, from select wells to establish baseline conditions prior to performance of the third phase of ISCO event which occurred at the end of October 2014. Groundwater samples were also collected on December 4 and 5 to assess the effectiveness of the third phase of ISCO event (i.e. 30 day monitoring event). The data from these sampling events is presented in the Fourth Quarter 2014 Groundwater Monitoring Report (Attachment A) and evaluated in the Third Oxidant Injection Summary Report included as Attachment C.

Analytical data for the soil vapor monitoring are included in the Third Quarter 2014 Soil Vapor Monitoring/Vapor Intrusion Report included as Attachment B.

The Third Oxidant Injection Summary Report, with associated field and performance monitoring data, is included as Attachment C. Continuing ISCO performance data will be provided to ADEQ in subsequent reports.

The Large Diameter Borings Summary Report for the Whirlpool Site with associated field and analytical data is included as Attachment D.

A figure and data associated with the shallow offsite groundwater investigation are included in Attachment E.

6. ISSUES ENCOUNTERED AND RESOLUTION

The RADD identified five locations where soil vapor monitoring should be performed to confirm the conclusions regarding the potential for significant vapor intrusion 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 have filled with water after installation. An Addendum to the Soil Vapor Monitoring Program was submitted to ADEQ on October 2, 2014, and the boring information included in Attachment E was completed in the fourth quarter in accordance with the Shallow Offsite Groundwater Investigation Work Plan submitted to ADEQ on October 30. Vapor points were installed in January 2015.

During implementation of the adaptive remedy, TCE impacts to groundwater were identified at the northeast corner of the Site during the Third Quarter 2014. Work plans were prepared, implemented and initial delineation was completed during the third quarter, although permanent

offsite groundwater monitoring wells beyond the northeast corner of the site were not installed until October 2014 to facilitate groundwater monitoring.

Sampling of surface water and sediment at the Site were investigated as a result of groundwater impacts at the northeast corner and a request from ADEQ. No TCE was detected in surface water or sediments sampled in August 2014.

7. SCHEDULE

There are no schedule deviations to report in the Fourth Quarter 2014. Pre-design data collection activities were started before the issuance of the final RADD and remedial activities continue to move forward at an aggressive pace.

LIST OF ATTACHMENTS

Attachment A: Fourth Quarter 2014 Groundwater Monitoring Report
Attachment B: Fourth Quarter 2014 Soil Vapor Monitoring/Vapor Intrusion Report
Attachment C: Third Oxidant Injection Summary Report
Attachment D: Large Diameter Borings Summary Report
Attachment E: Shallow Offsite Groundwater Investigation Soil Boring Sampling Results
Attachment F: Quantity of TCE Tables 1 and 2





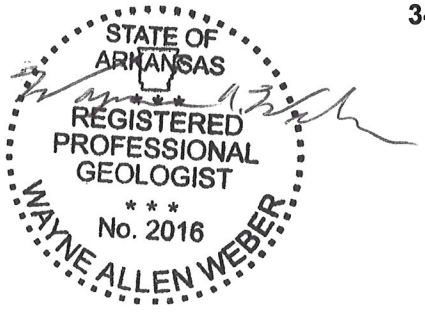
ATTACHMENT A
Fourth Quarter 2014 Groundwater Monitoring Report
Whirlpool Corporation
Fort Smith, Arkansas

Prepared for:
Whirlpool Corporation

Prepared by:
ENVIRON International Corporation

Date:
February 2015

Project Number:
34-34399A



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1 Introduction

ENVIRON International Corporation (ENVIRON) has prepared this Fourth Quarter 2014 Quarterly 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 Fourth Quarter 2014 Progress Report for the Site.

The data collected from groundwater monitoring or sampling events during the fourth quarter of 2014 was compiled and presented in the 2014 Remedial Action Effectiveness Report dated January 14, 2015.

This report describes the results of the groundwater monitoring event performed between October 13 and 17, 2014. This event included measuring water levels on October 13 and 14 from 65 wells and collection of groundwater samples from 60 wells consisting of 55 wells required for sampling by the RADD plus five wells sampled at the northeast corner of the Whirlpool property (MW-87 through MW-91).

Groundwater samples were also collected October 22, 23 and 29, 2014. This event included collection of groundwater samples from 23 wells. This event was performed to collect groundwater samples from recently installed monitoring wells on the Boys and Girls Club property (MW-96 through MW-99) and from select wells to establish baseline conditions prior to performance of the Phase 3 In-situ Chemical Oxidation (ISCO) event which occurred at the end of October 2014. The results of the groundwater sampling at the Boys and Girls Club are discussed in this report. The results of the groundwater sampling performed for the baseline monitoring event for ISCO are discussed in Table 1B in Attachment C of the Fourth Quarter Progress Report.

Groundwater samples were also collected on December 4 and 5 to assess the effectiveness of the Phase 3 ISCO event (i.e. 30 day monitoring event). This event included collection of groundwater samples 13 wells. The results of the groundwater sampling effort are discussed in Table 1C in Attachment C of the Fourth Quarter Progress Report.

[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.

2 Groundwater Sample Collection and Onsite Activities

ENVIRON performed the Fourth Quarter 2014 Groundwater Monitoring Event (Fourth Quarter event) on behalf of Whirlpool in October of 2014 during the week of October 13. 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 monitored natural attenuation (i.e. the natural degradation of the chlorinated compounds) (MNA), per the RADD. MNA parameters are specified in RADD (See RADD Table 2).

The following sections describe the Site Groundwater monitoring activities completed during the Fourth Quarter event.

2.1 Static Water Level Measurements

Prior to groundwater sample collection, static groundwater levels were measured in the plume boundary wells, onsite wells and offsite wells as required by the RADD (Table 3). On October 13, 2014, static water levels were measured in 50 of the 56 RADD monitoring wells and 10 non-RADD wells. A groundwater level measurement was not obtained from MW-55 on October 13, 2014, due to the property owner not granting access. In addition, water levels could not be measured from monitoring wells IW-73, MW-41, MW-56, MW-57 and MW-58 due to standing water pooled over the flush mount wells because of very heavy rainfall prior to gauging. IW-73, MW-41, MW-56, MW-57 and MW-58 were gauged the morning of October 14, 2014, after standing water receded. 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 Fourth Quarter event static water level measurements are presented in Table 3 along with the seven previous water level measurements recorded from project 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. Purge water was disposed of and the Waste Manifest is attached in Appendix D of this report.

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 milligrams per liter (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 2014 Fourth 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 55 groundwater samples, six field duplicate samples, three matrix spike/matrix spike duplicate (MS/MSD) samples and six equipment blanks were collected during the 2014 Fourth Quarter event (i.e. week of October 13). 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 and MW-46R.

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-39 (EB-1-201410 at 17:15), IW-73 (EB-2-201410 at 16:55), ITMW-18 (EB-3-201410 at 17:35), ITMW-17 (EB-4-201410 at 12:55), MW-25 (EB-5-201410 at 14:35) and ITMW-4 (EB-6-201410 at 16:39). 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-56, MW-57, MW-60 and MW-61. 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 labeled 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 Pittsburg, 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

As documented in the previous groundwater reports, MW-42B and MW-43 were damaged sometime between the April 2009 and October 2009 sampling events. These wells, which were previously capped and temporarily sealed to prevent further damage, were permanently abandoned on September 30 and October 30, 2014, in accordance with applicable Arkansas well standards after receiving agreement from ADEQ. Surface completion procedures for these abandoned wells followed the applicable City of Fort Smith requirements. The wells do not provide information critical to the remediation activities or associated monitoring. Therefore replacement of these wells is not anticipated.

During this quarter additional activities occurred on the Whirlpool property with the installation of temporary and permanent wells for the in-situ chemical oxidation event (further discussed in Attachment C – Third Oxidant Injection Summary Report, of this progress report). In December five soil borings were also completed on the Whirlpool property and within the residential area to the north. The objective of the soil borings was to assess the lithology in each area to determine correct placement for the shallow monitoring well and vapor point locations which are slated to be installed in January 2015.

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 66 wells at the Site were measured on October 13-14, 2014, during the Fourth Quarter event (Table 3) as discussed in Section 2.1. Ten non-RADD wells were monitored during this event to provide additional potentiometric information regarding flow direction at the site. The water level in MW-55 was not measured due to the property owner refusing access.

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 Fourth Quarter event, access has not been granted to replace this well.

The static water level measured in the wells ranged from just 0.67 feet to just over 20 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). As noted in Section 2.1, some well locations had standing water pooled over the flush mount wells due to very heavy rainfall prior to gauging. Figure 1 shows the contours of the groundwater elevations based on the monitoring well static water level measurements completed on October 13, 2014, for this Fourth 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

Fifty-five groundwater samples were collected from the plume boundary wells, onsite wells and offsite 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

In addition to the above, nine groundwater samples were collected from the northeast corner and analyzed for VOC's only. 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 Fourth Quarter event are presented in Table 5. This table includes 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 2014 Fourth Quarter event. TCE results for the Fourth Quarter (October groundwater sampling event) are presented on Figures 2A and 2B. Additional groundwater sampling occurred in December for the 30 day post ISCO monitoring event. For completeness, Figures 3A and 3B represent the 2014 Remedy Effectiveness TCE Isoconcentration Map which includes the TCE results from the December sampling event.

Plume Boundary Wells

In accordance with the RADD, 23 monitoring wells are identified as plume boundary wells (Table 2) at the Site. 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 plume boundary wells during the 2014 Fourth Quarter event are presented in Table 5.

Notable results from the Fourth Quarter sampling event include:

- ITMW-6: 1,1-Dichloroethane concentration of 4.8 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 12.1 µg/L; and
- MW-61 and MW-63: TCE concentrations of 7.9 and 9.4 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 Fourth Quarter event of 9.4 µg/L was detected in the sample from MW-63 located south of Jacobs Avenue. 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-61and 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. Soil probe 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 2014 Third Quarter event are presented in Table 5 (MW-55 was not sampled due to property access restriction by the property owner) are presented below.

During the Fourth Quarter event, the highest concentration of TCE detected in groundwater samples from the offsite wells was 554 µg/L collected from IW-77 and 1,290 µg/L collected from MW-33. The TCE concentration at IW-77 is lower than past results at this well. In both 2010 and 2011, the TCE concentration at IW-77 was identified at 1,400 µg/L and during the Third Quarter 2014 event, the TCE concentration at IW-77 was 1,540 µg/L. IW-77 is located at the northern end of the in-situ chemical oxidation (ISCO) injection array 2. While the second ISCO event

performed in late May and early June 2014 could have contributed to the rise in concentration during the Third Quarter of 2014 due to the short term desorptive effects of the oxidant, results from the Fourth Quarter may also be attributed to the ISCO event. Given the amount of oxidant injected into this area, the reduction of TCE from 1,540 to 554 µg/L is a line of evidence regarding the effectiveness of ISCO.

The TCE concentration at IW-73 during this quarter was 8.5 µg/L. This value is much lower than historical TCE results for IW-73 which were as high as 170 µg/L in October of 2012, 200 µg/L in April of 2013 and 138 µg/L during the Third Quarter 2014 event. This over 93% reduction in TCE concentration may be attributed to effects of the ISCO effort, as this well is located just north of injection array 2.

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 or the source area, which includes wells immediately adjacent to the Whirlpool manufacturing building. Tabulated VOC concentrations measured in onsite wells during the Third Quarter event are presented in Table 5.

VOCs were detected above the RADD RALs in 20 of the 21 groundwater samples collected from onsite wells. Parameters exceeding RALs include: TCE in all onsite wells (except for ITMW-14), bromomethane in one well, 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 six wells, trans-1,2-dichloroethene (trans-1,2-DCE) in one well, methylene chloride in one well, 1,1,2,2-tetrachloroethane (1,1,2,2-TCA) in two wells, tetrachloroethene (PCE) in two wells and vinyl chloride (VC) in five wells.

During the 2014 Fourth Quarter event, the maximum onsite TCE concentration in wells required for monitoring in the RADD was 42,500 µg/L at MW-25 which is in line with historic results from this location. The highest onsite TCE concentration has historically been detected in MW-25 (270,000 µg/L in September 2011). 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 also identified at MW-25. The highest TCE concentration detected during the baseline groundwater sampling event during the Fourth Quarter was 368,000 µg/L at IW-141 (the TCE concentration was reduced 87% to 46,300 µg/L at IW-141 by December 2014).

Figures 4 and 5 depict trends in TCE concentration at select onsite wells in the source area. Figure 4 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. Figure 5 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 1,290 µg/L is less than the maximum detected concentration of 1,700 µg/L, measured in September of 2007.

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. As stated in this report, quarterly monitoring at these wells will be performed for the next year.

During the Fourth Quarter event samples were collected from these wells as shown on Figure 2A and the samples were analyzed for VOCs similar to the RADD wells discussed above. Wells MW-96 through MW-99, located on the Boys and Girls club property, did not contain detected levels of any VOCs. MW-88 and MW-90, located north of the manufacturing building northeast corner, also did not contain detectable levels of VOCs. MW-87, MW-89 and MW-91 contained TCE at concentrations ranging from 11.3 to 594 µg/L which is consistent with levels identified during the initial northeast corner investigation in June 2014.

3.3.2 MNA Results

In accordance with the RADD, 55 monitoring wells are monitored for natural attenuation parameters. In addition to the parameters required by the RADD, microbial results for three wells were evaluated using groundwater samples and the Bio-Trap® (MICRO) sampler. Tabulated results are presented in Table 5.

This section presents the natural attenuation data collected from the Site during the 2014 Fourth 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

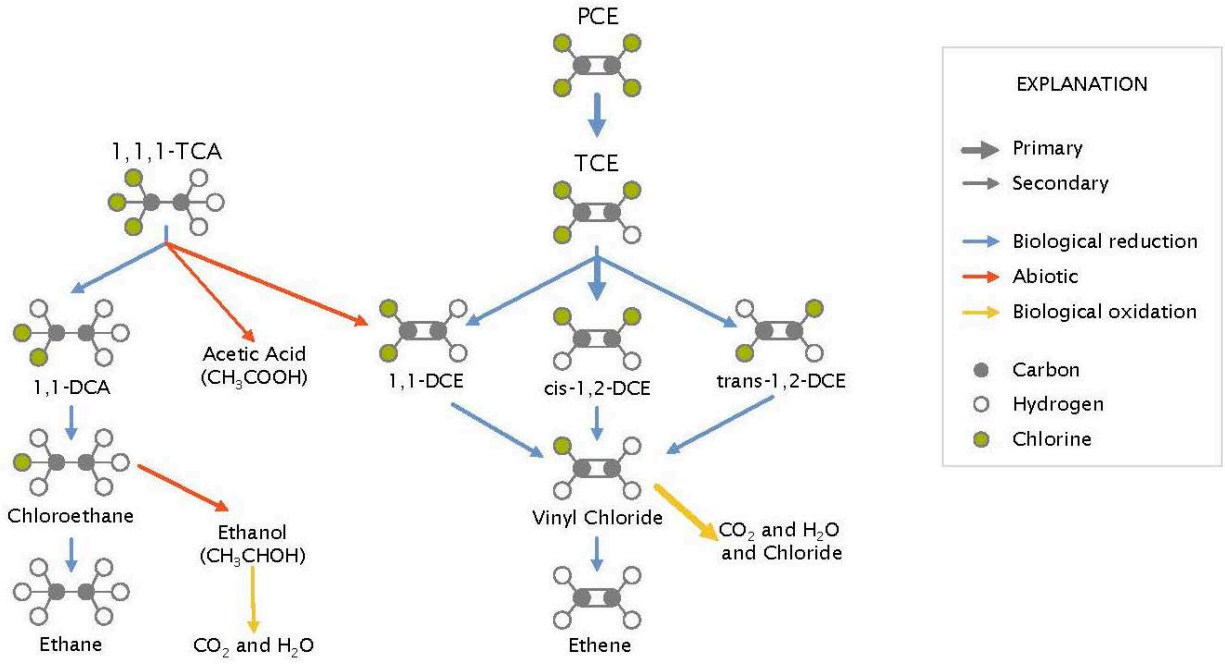


Table 5 presents a summary of analytical results for VOCs in groundwater. These data provide lines of evidence that natural attenuation of TCE is continuing to occur via biological mechanisms in both onsite and offsite groundwater. Groundwater sample results continue to show elevated levels of cis-1,2-DCE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

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 Fourth 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 conditions, with 35 out of 55 wells monitored (64%) wells showing dissolved oxygen (DO) concentrations less than approximately 1 milligram per liter (mg/L).
- The oxidation reduction potential (ORP) of the groundwater samples ranged from a low of -31.8 millivolts (mV) in ITMW-4 to a high of 704.9 mV inIW-72. 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 4.67 in MW-34 to a high of 12.0 in MW-65. MW-65 and MW-35R (pH of 11.98) are likely being impacted by the ISCO activities, which affect the pH levels of groundwater.
- The temperature of the groundwater ranged from about 17.19° to 25.59° 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 22.6 mg/L and 14.9 mg/L, respectively. Manganese concentrations ranged from 0.0064 mg/L in ITMW-20 to 5.34 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 4.09 mg/L and 3.30 mg/L, respectively, indicating that significant iron reducing conditions are occurring in the area around this well (ORP at MW-41 48.2 mV). Sulfate concentrations were generally less than 100 mg/L with the exception of IW-76 (477 mg/L), IW-77 (669 mg/L), MW-25 (373 mg/L), MW-65 (3,760 mg/L), ITMW-18 (205 mg/L), IW-80 (467 mg/L), MW-35R (5,100 mg/L) and MW-34 (273 mg/L). The wells with the elevated sulfate were likely affected by ISCO injection.
- The dissolved hydrogen concentrations ranged from 1.2 nanomolar (nM) in MW-26 to 2700 nM in MW-25. 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.
- Total organic carbon (TOC) levels ranged from less than 1 mg/L to a high of 12.9 mg/L in MW-35R. Similar to the previous quarter more than 85 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). This result is 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 alkalinity concentrations less than 100 mg/L. However, there were thirteen wells that showed alkalinity equal to or greater than 100 mg/L including ITMW-6, ITMW-15, ITMW-20, IW-72 IW-80, MW-38, MW 50, MW-60, MW-61, MW-65, MW-66, MW-67 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 (0.12 mg/L), ITMW-2 (0.11 mg/L), ITMW-7 (0.23 mg/L), ITMW-12 (0.15 mg/L), ITMW-14 (0.14 mg/L), IW-77 (0.13 mg/L), IW-80 (0.35 mg/L), MW-65 (0.83 mg/L) and MW-35R (1.0 mg/L). Phosphate was detected at concentrations ranging from non-detect (< 0.03 mg/L) to a high of 1.1 mg/L in IW-80, 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. The microbial results for the three wells which were evaluated using groundwater samples and the Bio-Trap® (MICRO) sampler are presented below.

Fourth Quarter Microbial Results for Groundwater and Bio-Trap® Samples

Well ID	Method of collection	Dehalococcoides (DHC)	BAV1 Vinyl Chloride Reductase (BVC)	tceA Reductase	Vinyl Chloride Reductase (vrcA)
MW-38 4th Q	Aqueous [cells/ml]	26,600 (0.5)	18,000 (0.5)	U (0.5)	U (0.5)
	Bio-Trap [cells/bead]	25,600 (25)	13,100 (25)	U (25)	U (25)
MW-46R 4th Q	Aqueous [cells/ml]	16.9 (0.5)	16.6 (0.5)	U (0.5)	U (0.5)
	Bio-Trap [cells/bead]	122	U (25)	U (25)	U (25)
IW-74 4th Q	Aqueous [cells/ml]	1.1 (0.5)	0.5 (0.5)	U (0.5)	U (0.5)
	Bio-Trap [cells/bead]	35,400	6,880	U (25)	U (25)

U – not detected, ml - milliliters

The Bio-Trap® (MICRO) sampler contains Bio-Sep® beads, which may be readily colonized by subsurface bacteria (Sublette et al., 2006). Results are presented for the genus *Dehalococcoides* (DHC), the functional genes, tceA reductase (tceA), BAV1 VC reductase (BVC) and VC reductase (VCR). Similar to the previous three quarters of sampling results, the DHC microbial population was detected at elevated levels in MW-38 (26,600 cells/ml); a location that is relatively close to the source area. Likewise, the BVC gene was also detected at elevated levels (18,000 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 (2380

cells/ml) and BVC gene (990 cells/ml). The following wells displayed DHC concentrations greater than 30 cells/ml: ITMW-7, MW-22, MW-41, MW-56 and MW-58.

The chemical, geochemical and microbial data from the four quarterly monitoring events in 2014 were used to assess natural attenuation conditions and geochemical and microbial trends in this plume. 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 and ITMW-7, the groundwater samples showed significant levels of DHC, which corresponded to elevated levels of cis-1,2-DCE in all three wells and elevated VC levels in MW-38 and IW-73. The cis-1,2-DCE to TCE micromolar ratio was greater than 13% in all three wells, indicating that more than 13% of the TCE was being converted to cis-1,2-DCE. The VC to cis-1,2-DCE ratio was greater than 63% in MW-38 and IW-73, indicating that a significant percentage of the cis-1,2-DCE was being converted to VC. 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. Contamination was reported by the laboratory in two equipment rinsate blanks for benzene and/or toluene (see Section 4.0 in the data validation report, Appendix C, for further discussion and resultant data qualification).

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 were of good quality. The data packages submitted contained modified level II data packages for data validation.

The data quality for VOCs was generally acceptable. Styrene results for VOC samples were qualified "UJ" as estimated non-detect values due to a matrix spike and matrix spike recoveries outside of laboratory control limits in two samples, ITMW-6-201410 and ITMW-20-201410. Styrene is considered a poorly performing VOC analytical compound as it is easily degraded by heat as found in the injection port of the gas chromatograph or it can react in certain matrices resulting in poor recovery. While these results may indicate potential poor analytical accuracy, it is the reviewer's opinion that these non-conformances do not impact the usability of the data. Several analytes were detected in associated blanks. Benzene and toluene were detected in equipment blank EB-01-201410 at 0.53 µg/L and 1.9 µg/L respectively. Toluene was detected in equipment blank EB-02-201410 at 1.6 µg/L. Methylene chloride, a common laboratory contaminant, was detected in three trip blanks and to method blanks. Sample results were "U" qualified as non-detect if the associated sample result was less than 5 times (5x) the associated blank concentration [10 times (10x) for common laboratory contaminants]. See Section 4.0 in the data validation report, Appendix C, for further discussion and resultant data 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

- **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 2014 Fourth 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 report. The macro-analysis of the entire data set minimizes an over weighting on any particular well or data set from a well. Monitoring wells installed after the RADD was issued by ADEQ in December 2013 are not included in this analysis because they have not been sampled a sufficient number of times to establish long term 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 in December 2013 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.

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 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 Fourth Quarter 2014 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). The following is the list of wells in each category (this list is only presented for evaluation of plume stability):

- **Northern Plume Wells (39 wells)**. MW-23, MW-24, MW-27, MW-28, MW-31, MW-32, MW-33, 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 and IW-80.
- **Southern Plume Wells (27 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 and MW 38.
- **Source Area Wells (9 wells)**. ITMW-11, ITMW-12, ITMW-15, ITMW-17, ITMW-18, ITMW-19, MW-25, MW-37 and MW-38.

Contaminant concentration trends as established during the Fourth Quarter event are summarized below:

- **Northern Plume Wells (39 wells):** The Mann-Kendall trend analysis utilizes data from all wells associated with the October 2014 groundwater monitoring event for the northern plume (Table 8) (temporal trend analysis relies upon previous data from 7 of the 39 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 85% (33 of 39 wells) of these wells exhibit either little or no TCE or a decreasing or stable TCE concentration trend.

  The trend analysis for the 39 wells associated with monitoring the northern plume (excluding MW-42B and MW-43) indicates the following:

  - Thirteen wells exhibit a stable trend for TCE concentrations:
  - Nine wells exhibit a decreasing trend for TCE concentrations;
  - Six wells exhibit no trend regarding TCE concentrations (TCE concentrations in five of these wells consisting of MW-31, MW-36, MW-39, MW-68 and IW-75 have been non-detect or less than 1 µg/L since October 2012);
  - Six wells exhibit TCE concentrations below detection limits or below PQLs; and

- Five wells exhibit an increasing trend for TCE concentrations.

TCE concentrations in 11 of the 39 northern plume wells (28%) have been non-detect or less than 1 µg/L since October 2012 and 22 of the 39 wells (56%) have exhibited decreasing or stable trends; therefore, 33 of the 39 northern plume wells (85%) 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 all wells in the northern plume decreased from 384 µg/L in April 2009 to 251 µg/L in October 2014.

As noted, TCE concentration trends are increasing in five of 39 (13%) of the wells (MW-55, MW-56, MW-57, MW-61 and IW-77). Further, of the five wells located in the northern plume with increasing TCE concentration trends:

- Four wells (MW-56, MW-57, MW-61 and IW-77) had concentrations during the 2014 Fourth Quarter that were within historical ranges of detected values.

- **Southern Plume Wells (27 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 24 of 27 (89%) southern wells exhibit either little or no TCE or a decreasing or stable TCE concentration trend. The trend analysis for the 27 wells associated with monitoring the southern plume indicates the following:
  - Six 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 three of these wells consisting of ITMW-16, ITMW-20 and MW-26 have been non-detect or less than 1 µg/L since October 2012);
  - Five wells exhibit TCE concentrations below PQLs; and
  - Three wells (ITMW-10 – south of the former manufacturing building, ITMW-12 - in Area 1 and MW-38 – immediately north of Area 1) exhibit an increasing trend for TCE concentrations ITMW-12 and MW-38 are source area wells and are discussed further below).
- **Source Area Wells (nine wells):** The nine source area wells showed predominantly decreasing or stable concentration trends for TCE (five wells decreasing and two wells stable) and cis-1, 2-dichloroethene (six wells decreasing and three wells stable). Only two of the source area wells (ITMW-12 and MW-38) demonstrated an increasing concentration trend for TCE. Increases in TCE concentrations at ITMW-12 and MW-38 may be attributable to performance of the large diameter borings in the immediate vicinity of these wells immediately prior to the subject groundwater sampling event (see Attachment D Large Diameter Borings Summary Report for further discussion of the large diameter borings). ITWM-12 and MW-38 exhibited TCE concentration reductions of 82% and 53% respectively by December 2014 as discussed in the Attachment C Third Oxidant Injection Summary Report of the Progress Report. Source area well 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 Fourth 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 and 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 Fourth Quarter event, with a TCE concentration of 7.9 µg/L (decreased slightly from 8.1 µg/L during Third Quarter 2014) 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 14 comprehensive groundwater monitoring events conducted at the Site beginning in 2009 and are summarized in Table 10. Figures 8-11 show the average concentrations versus time for all 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 all 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 12-14). As shown on Figure 12, although TCE concentrations have been increasing in ITMW-10 (primarily during the four 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 13 shows concentration trends for ITMW-19 and MW-25 located in the source area; concentrations are generally decreasing or stable. Although the overall trend is consistent, it is apparent that at MW-25 concentrations of TCE, cis-1,2-DCE and VC change significantly between spring and fall sampling events with higher concentrations occurring in the fall and lower concentrations occurring in the spring. This observation was corroborated by the concentrations of cis-1,2-DCE and TCE at MW-25 during the Fourth Quarter sampling event and is consistent with historical results at this well. Based on Quarterly sampling conducted in 2014 this trend appears further refined to with lower concentrations in the first half of 2014 and higher concentrations in the last half of 2014. Figure 14 shows that although concentrations of TCE and cis-1,2-DCE are increasing at IW-77, they are decreasing at the next down-gradient monitoring well IW-76. A similar trend has been historically evident at these wells during previous sampling events. Figure 15 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.

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 900,000 square feet (ft^2) (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 500,000 ft^2 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 600 µg/L;
- Limited aerial extent. The northeast corner groundwater plume extends beyond the Whirlpool property 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 Summary and Conclusion

ENVIRON performed the Fourth Quarter 2014 Groundwater Monitoring Event (Fourth Quarter event) on behalf of Whirlpool during the week of October 13, 2014. 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 Fourth Quarter event is consistent with that historically observed at the Site. Additional information gained in the northeast corner of the property shows that the hydraulic gradient in this corner trends to the northeast.
- 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/southeastern direction.
- Fourth 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 continues 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.
- Fourth 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.

6 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 (ug/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

(1) = Maximum Contamination Level (USEPA, May 2013)

(2) = USEPA Tapwater Screeging Level (MCL and Maximum Contaminant Level Goal Unavailable)

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		

Off-Site 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			

On-Site 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				

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

Location	Well Coordinates		Top of Casing Elevation (ft)	Top of Screen Elevation (ft)	Bottom of Screen Elevation (ft)	Screen Length (ft)	Screened Interval (ft)	Static Water Level Elevation (ft)							
	Easting (ft)	Northing (ft)						10/1/2012	4/22/2013	10/14/2013	3/5/2014	3/25/2014	5/12/2014	7/28/2014	10/13/2014
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

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

Location	Well Coordinates		Top of Casing Elevation (ft)	Top of Screen Elevation (ft)	Bottom of Screen Elevation (ft)	Screen Length (ft)	Screened Interval (ft)	Static Water Level Elevation (ft)							
	Easting (ft)	Northing (ft)						10/1/2012	4/22/2013	10/14/2013	3/5/2014	3/25/2014	5/12/2014	7/28/2014	10/13/2014
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
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
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
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
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
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
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
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
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
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
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
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
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	NA	NA
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

Notes:

NA -- Not available or not installed, or well to be replaced

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 - OCTOBER 2014
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (in)	Date Sampled	Water Level prior to Purging (ft btoc)	Total Depth of Well Casing (ft)	Set Tubing Depth (ft)	Time Sampled	Water Level after Purging (ft 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	10/15/2014	14.00	35.50	30.5	09:20	14.03	0.9	100	17.46	551	6.02	0.54	322.1	0.54	0.00	Clear	ITMW-1-201410
ITMW-2	4	10/15/2014	11.22	26.80	21.8	12:50	11.23	1.6	100	24.04	619	5.96	0.14	277.4	8.2	0.00	Clear	ITMW-2-201410
ITMW-3^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
ITMW-4	4	10/16/2014	15.55	33.46	28.5	08:25	13:12	1.0	100	17.83	263	6.40	1.35	-31.8	1.21	3.80	Clear	ITMW-4-201410
ITMW-5^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
ITMW-6	4	10/15/2014	20.81	40.09	35.0	14:45	20.85	2.9	100	22.50	1253	5.84	0.38	165	0.92	0.00	Clear	ITMW-6-201410
ITMW-7	4	10/15/2014	18.88	37.04	32.0	16:15	18.93	1.1	100	22.14	961	5.06	0.34	221.3	0.91	0.00	Clear	ITMW-7-201410
ITMW-9	4	10/15/2014	19.49	36.22	31.2	12:35	19.5	1.2	100	22.10	590	5.89	0.99	155.5	2.2	0.00	Clear	ITMW-9-201410
ITMW-10	4	10/15/2014	18.50	38.04	33.0	14:40	18.5	1.0	100	22.86	686	5.67	0.87	115.4	0.69	3.00	Clear	ITMW-10-201410
ITMW-11	4	10/15/2014	9.69	30.40	25.0	17:15	9.7	2.7	100	24.52	236	5.83	0.27	121	4.4	0.00	Clear	ITMW-11-201410
ITMW-12	4	10/15/2014	12.56	32.70	27.7	16:42	12.59	1.8	100	23.01	247	5.99	0.83	116.3	1.39	0.09	Clear	ITMW-12-201410
ITMW-13	4	10/15/2014	13.75	31.91	26.9	11:12	13.81	2.0	100	18.99	317	5.99	1.24	76	0.13	0.00	Clear	ITMW-13-201410
ITMW-14	4	10/15/2014	13.32	31.71	26.7	13:09	13.41	2.0	100	20.50	184	5.89	1.70	97.2	2.71	0.00	Clear	ITMW-14-201410
ITMW-15	4	10/16/2014	10.09	31.00	263.0	08:28	10.12	1.5	100	18.23	840	7.04	2.99	138.2	4.84	0.00	Clear	ITMW-15-201410
ITMW-16	4	10/15/2014	14.45	35.38	30.4	08:59	14.95	1.5	100	19.76	216	7.03	6.60	92.7	23.4	0.00	Clear	ITMW-16-201410
ITMW-17	4	10/16/2014	13.70	30.10	25.0	08:55	13.7	2.6	100	18.31	908	5.03	0.28	307.4	7.62	0.00	Clear	ITMW-17-201410
ITMW-18	4	10/15/2014	9.52	30.71	25.7	16:13	9.57	3.0	100	21.53	1984	5.71	2.15	237.6	0.17	0.00	Clear	ITMW-18-201410
ITMW-19	4	10/16/2014	12.06	34.00	29.0	08:40	12.06	1.3	100	18.64	1029	6.32	0.31	184.2	0.31	0.00	Clear	ITMW-19-201410
ITMW-20	4	10/15/2014	13.47	32.28	27.0	09:30	13.7	3.3	100	17.19	708	6.41	1.54	355.5	0.07	0.00	Clear	ITMW-20-201410
ITMW-21	4	10/15/2014	12.23	33.00	28.0	13:50	12.57	1.6	100	22.46	2579	4.91	0.34	330.1	0.9	0.00	Clear	ITMW-21-201410
MW-22	4	10/15/2014	10.50	29.19	24.2	15:00	10.55	1.5	100	22.35	176	5.55	0.23	259	0.39	0.00	Clear	MW-22-201410
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	10/16/2014	12.44	34.11	29.1	10:55	12.54	2.5	100	21.62	2571	5.26	1.42	539.8	2.81	0.02	Clear	MW-25-201410
MW-26	4	10/14/2014	13.23	37.00	32.0	16:35	13.38	2.6	100	22.13	1225	5.05	0.31	174.4	0.13	0.00	Clear	MW-26-201410
MW-27	2	10/14/2014	11.00	30.10	25.1	15:45	11.01	1.0	100	24.56	212	5.46	0.82	135.3	12.4	0.00	Clear	MW-27-201410
MW-28	2	10/14/2014	6.25	27.43	22.4	14:05	6.39	1.0	100	25.59	374	6.13	0.73	-1.6	1.11	1.00	Clear	MW-28-201410
MW-29	2	10/15/2014	10.90	30.02	25.0	11:55	10.93	3.0	100	21.16	615	5.28	0.94	268	0.33	0.00	Clear	MW-29-201410
MW-30^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-31	0.75	10/14/2014	11.65	27.00	24.5	13:10	13.34	0.9	75	21.56	346	5.28	0.42	207.1	3.48	0.02	Clear	MW-31-201410
MW-32	0.75	10/14/2014	11.30	24.30	19.3	14:30	11.36	1.1	100	22.85	1097	4.86	0.24	456.1	8.81	0.00	Clear	MW-32-201410
MW-33	0.75	10/15/2014	10.66	25.62	23.1	13:25	11.07	1.8	100	22.48	799	5.13	0.85	313.2	14.5	0.00	Light Yellow	MW-33-201410
MW-34	0.75	10/15/2014	9.95	28.58	25.0	09:15	10.12	1.1	100	18.65	2029	4.67	1.10	513.5	12.1	0.00	Light Brown	MW-34-201410
MW-35R	4	10/14/2014	9.51	32.35	29.9	16:10	9.62	1.7	100	20.95	16092	11.70	0.32	138.4	4.28	0.01	Light Yellow	MW-35R-201410
MW-36	0.75	10/14/2014	8.72	25.61	23.1	10:05	8.80	1.6	100	19.77	1461	5.08	0.52	460.8	8.4	0.00	Clear	MW-36-201410

Notes:

ft btoc	feet below top of casing	mL/min	milliliters per minute
in	inches	mg/L	milligrams per liter
ORP	oxidation reduction potential	NTUs	nephelometric turbidity units
DO	dissolved oxygen	NM	not measured
(°C)	degrees Celcius	(µS/cm)	microsiemens per centimeter
mV	millivolts	--	color not noted
^	Well not sampled		

Tubing inlet depths based on estimated distance from total depth.

All wells gauged using electronic water level meter and purged using peristaltic pumps.

ENVIRON

TABLE 4
SUMMARY OF FINAL WELL GROUND WATER FIELD PARAMETERS MEASUREMENTS - OCTOBER 2014
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (in)	Date Sampled	Water Level prior to Purging (ft btoc)	Total Depth of Well Casing (ft)	Set Tubing Depth (ft)	Time Sampled	Water Level after Purging (ft 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-37^	2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-38	0.75	10/16/2014	10.18	29.74	24.8	11:27	10.29	3	100	22.27	1069	6.79	4.21	89.2	28.5	0.08	Clear	MW-38-201410
MW-39	0.75	10/13/2014	11.15	NM	18.0	15:31	11.51	1.1	100	20.53	1189	4.86	0.91	251.4	0.25	0.00	Clear	MW-39-201410
MW-40	0.75	10/13/2014	8.50	28.12	25.7	15:55	8.63	1.5	100	21.53	850	5.19	0.32	45	0.27	0.00	Clear	MW-40-201410
MW-41	0.75	10/15/2014	7.80	28.45	23.5	09:10	7.85	1.3	100	17.59	1341	5.57	0.27	48.2	2.31	3.30	Clear	MW-41-201410
MW-46R	2	10/16/2014	1.81	21.53	19.0	08:55	2.15	1	100	19.30	795	4.98	0.32	234.8	0.96	0.00	Clear	MW-46R-201410
MW-50	0.75	10/14/2014	3.08	18.10	15.6	11:50	12.05	1	75	19.96	1260	6.44	0.88	31.3	6.86	0.00	Clear	MW-50-201410
MW-56	0.75	10/15/2014	1.32	19.28	16.9	15:00	Dry	0.75	40	17.44	342	5.61	3.65	143.4	245	0.52	Clear	MW-56-201410
MW-57	0.75	10/15/2014	2.00	18.98	16.5	16:00	Dry	0.5	100	19.84	983	5.44	2.83	186.7	41.3	0.41	Clear	MW-57-201410
MW-58	0.75	10/15/2014	1.05	18.97	15.2	12:45	4.4	1.5	100	20.18	913	5	0.25	216.2	1.96	0.67	Clear	MW-58-201410
MW-60	0.75	10/14/2014	3.11	16.47	14.0	15:35	Dry	1	50	19.80	1280	6.68	1.27	56.7	20.4	0.00	Clear	MW-60-201410
MW-61	0.75	10/14/2014	6.34	15.36	12.9	14:15	Dry	1	60	18.77	692	6.32	2.28	141.1	141.1	0.00	Clear	MW-61-201410
MW-62	0.75	10/14/2014	4.01	20.61	15.6	11:30	6.86	1.25	75	19.73	635	5.62	1.45	267	6.6	0.00	Clear	MW-62-201410
MW-63	0.75	10/14/2014	2.67	21.04	19.0	14:45	19.51	1.25	50	19.51	607	5.63	0.26	292.8	51.00	0.07	Clear	MW-63-201410
MW-65	2	10/14/2014	9.56	32.00	29.5	16:08	9.65	1.6	100	20.18	13176	11.98	6.02	121.9	3.16	0.00	Light Yellow	MW-65-201410
MW-66	2	10/13/2014	2.73	17.30	14.8	14:55	3.34	2.5	100	22.95	836	6.07	0.68	131.3	6.57	0.00	Clear	MW-66-201410
MW-67	2	10/13/2014	8.62	13.40	10.9	15:45	10.70	1.2	40	22.79	852	6.70	3.46	286.6	76.10	1.16	Clear	MW-67-201410
MW-68	2	10/14/2014	5.38	20.34	15.0	14:05	5.46	2.85	100	22.32	1202	5.15	0.24	228	0.23	0.00	Clear	MW-68-201410
MW-70^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-71	2	10/14/2014	6.88	26.99	22.6	9:50	6.92	1.1	100	19.36	1001	5.28	0.45	107.3	7.82	0.79	Clear	MW-71-201410
RW-69	4	10/14/2014	6.83	27.93	23.0	11:35	6.90	2.2	100	20.04	1062	5.20	0.27	102.5	3.16	0.95	Clear	RW-69-201410
IW-72	2	10/13/2014	6.99	26.90	24.4	15:40	7.08	1.2	100	20.19	796	6.02	2.08	704.9	4.0	0.02	Pink - light	IW-72-201410
IW-73	2	10/14/2014	7.06	29.60	27.1	15:35	7.10	1.3	100	21.26	164	6.59	1.91	47.5	23.49	0.14	Slight brown tint	IW-73-201410
IW-74	2	10/14/2014	7.72	27.52	25.0	14:05	7.80	2.2	150	21.43	969	5.91	0.77	40.5	0.81	0.00	Clear	IW-74-201410
IW-75^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
IW-76	2	10/15/2014	8.19	28.12	26.6	10:55	8.20	1.7	100	18.75	3023	5.16	0.22	694.4	2.12	0.00	Clear	IW-76-201410
IW-77	2	10/15/2014	8.81	29.85	34.4	10:55	8.80	1.1	100	18.80	3918	5.88	0.85	464.2	8.23	0.00	Clear	IW-77-201410
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	10/14/2014	9.00	29.62	26.0	11:00	9.04	2	100	20.97	6832	6.55	1.50	379.2	13.40	0.01	Cloudy Brown	IW-80-201410

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Notes:

ft btoc	feet below top of casing	mL/min	milliliters per minute
in	inches	mg/L	milligrams per liter
ORP	oxidation reduction potential	NTUs	nephelometric turbidity units
DO	dissolved oxygen	NM	not measured
(°C)	degrees Celcius	(µS/cm)	microsiemens per centimeter
mV	millivolts	--	color not noted
^	Well not sampled		

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

ENVIRON

TABLE 5
SUMMARY OF RADD MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FOURTH QUARTER 2014)
Whirlpool Corporation - 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	IW-80	MW-25
ENVIRON Sample ID		ITMW-1-201410	ITMW-7-201410	ITMW-9-201410	DUP-02-201410	ITMW-10-201410	ITMW-11-201410	ITMW-12-201410	DUP-04-201410	ITMW-13-201410	ITMW-14-201410	ITMW-15-201410	DUP-05-201410	ITMW-17-201410	ITMW-18-201410	ITMW-19-201410	ITMW-21-201410	IW-80-201410	MW-25-201410
Lab Sample ID(s)		137010007, 041LJ043, 137090010, 60180441010	137010003, 041LJ045, 137090022, 60180441022	137000002, 041LJ028, 137090014, 60180441014	60180441029	137000003, 041LJ027, 137090013, 60180441013	137010022, 041LJ046, 137090023, 60180441023	137010018, 041LJ029, 137090015, 60180441015	60180441028	137010016, 041LJ047, 137090024, 60180441024	137010014, 041LJ030, 137090016, 60180441016	137010019, 041LJ048, 137090025, 60180635001	60180635008	137010021, 041LJ052, 137090029, 60180635005	137010017, 041LJ031, 137090017, 60180441017	137010020, 041LJ051, 137090028, 60180635004	137010010, 041LJ036, 137090003, 60180441003	137000013, 041LJ015, 137080009, 60180331004	137010024, 041LJ049, 137090026, 60180635002
Sample Date		10/15/2014	10/15/2014	10/13/2014	10/15/2014	10/13/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/16/2014	10/16/2014	10/16/2014	10/15/2014	10/16/2014	10/15/2014	10/14/2014	10/16/2014
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	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)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	11.8 (5.0)	U (5.0)	U (5.0)	24.2 (5.0)	41.8 (5.0)
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)	0.51 J (0.50)	U (0.50)	U (0.50)	U (0.50)	0.68 J (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)	2.0 J (0.50)	U (0.50)
Bromomethane	7.0	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)	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)	U (5.0)	5.4 J (5.0)
Chlorobenzene	100	U (0.50)	0.56 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)	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)	U (0.50)	0.89 J (0.50)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.52 J (0.50)	0.54 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.81 J (0.50)	2.2 J (0.50)	3.7 J (0.50)	U (0.50)	U (0.50)	5.6 (0.50)
Chloromethane	190	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	5.0 J (0.50)	U (0.50)	U (0.50)	0.85 J (0.50)	2.1 J (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)	1.3 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.5 J (0.50)	U (0.50)	U (0.50)	U (0.50)	18.2 (0.50)
1,1-Dichloroethane	2.4	1.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)	2.8 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.5 J (0.50)	U (0.50)	U (0.50)	U (0.50)	5.3 (0.50)
1,2-Dichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.55 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.7 J (0.50)
1,1-Dichloroethene	7.0	U (0.50)	U (0.50)	1.5 J (0.50)	1.6 J (0.50)	3.8 J (0.50)	0.71 J (0.50)	2.0 J (0.50)	1.8 J (0.50)	U (0.50)	U (0.50)	3.4 J (0.50)	3.9 J (0.50)	5.8 (0.50)	U (0.50)	19.9 (0.50)	U (0.50)	U (0.50)	3.1 J (0.50)
cis-1,2-Dichloroethene	70	4.5 J (0.50)	10.3 (0.50)	39.1 (0.50)	38.8 (0.50)	32.3 (0.50)	70.4 (0.50)	188 (12.5)	192 (0.50)	25.9 (0.50)	9.4 (0.50)	63.0 (0.50)	66.4 (0.50)	70.5 (0.50)	68.5 (0.50)	76.7 (0.50)	U (0.50)	U (0.50)	2870 J (500)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.54 J (0.50)	1.0 J (0.50)	1.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	13.9 (0.50)	1.1 J (0.50)	U (0.50)	U (0.50)	595 J (500)
Methylene Chloride	5.0	U (0.50)	U (0.50)	0.88 J (0.50)	0.84 J (0.50)	0.61 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)	0.59 J (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)	0.76 J (0.50)	U (0.50)	U (0.50)	U (0.50)	57.7 (0.50)
Tetrachloroethene	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.64 J (0.50)	0.94 J (0.50)	1.3 J (0.50)	1.2 J (0.50)	U (0.50)	22.0 (0.50)	U (0.50)	U (0.50)	0.82 J (0.50)	1.5 J (0.50)	2.7 J (0.50)	U (0.50)	U (0.50)	18.1 (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)	U (0.50)	1.7 J (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)	U (0.50)	9.7 (0.50)
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.58 J (0.50)	0.92 J (0.50)	U (0.50)	U (0.50)	U (0.50)	1.9 J (0.50)
Trichloroethene	5.0	6.1 (0.50)	33.7 (0.50)	76.9 (0.50)	75.3 (0.50)	243 (2.5)	2050 (50.0)	2570 (12.5)	2950 (50.0)	40.8 (0.50)	4.1 J (0.50)	1490 (5.0)	1660 (25.0)	3510 (25.0)	3540 (50.0)	12800 (50.0)	6.0 (0.50)	11.8 (0.50)	42500 (500)
Vinyl Chloride	2.0	U (0.50)	U (0.50)	1.8 J (0.50)	1.7 J (0.50)	1.7 J (0.50)	3.5 (0.50)	3.5 (0.50)	3.7 (0.50)	U (0.50)	U (0.50)	2.0 (0.50)	1.8 J (0.50)	3.2 (0.50)	U (0.50)	1.9 J (0.50)	U (0.50)	U (0.50)	540 J (500)
Metals																			
Iron	NE	U (50.0)	U (50.0)	U (50.0)	NM	U (50.0)	382 (50.0)	55.7 (50.0)	NM	U (50.0)	385 (50.0)	248 (50.0)	NM	150 (50.0)	45.5 J (50.0)	U (50.0)	U (50.0)	337 (50.0)	1310 (50.0)
Manganese	NE	16.4 (5.0)	80.5 (5.0)	257 (5.0)	NM	330 (5.0)	136 (5.0)	114 (5.0)	NM	16.5 (5.0)	15.1 (5.0)	24.9 (5.0)	NM	1910 (5.0)	7.7 (5.0)	78.2 (5.0)	801 (5.0)	63.8 (5.0)	248 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)																			
Total Alkalinity	NE	70900 (20000)	12100 J (20000)	91400 (20000)	NM	82800 (20000)	92900 (20000)	76800 (20000)	NM	53600 (20000)	41800 (20000)	230000 (20000)	NM	6400 J (20000)	56200 (20000)	73400 (20000)	9800 J (20000)	225000 (20000)	34800 (20000)
Ammonia	NE	U (100)	230 (100)	U (100)	NM	U (100)	U (100)	150 (100)	NM	U (100)	140 (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	350 (100)	U (100)
Bicarbonate Alkalinity	NE	70900 (20000)	12100 J (20000)	91400 (20000)	NM	82800 (20000)	92900 (20000)	76800 (20000)	NM	53600 (20000)	41800 (20000)	230000 (20000)	NM	6400 J (20000)	56200 (20000)	73400 (20000)	9800 J (20000)	225000 (20000)	34800 (20000)
Carbon Dioxide	NE	198000	0	1670000	NM	427000	356000	225000	NM	157000	145000	244000	NM	0	212000	135000	0	325000	413000
Organic Carbon (total)	NE	520 J (1000)	210 J (1000)	2600 (1000)	NM	1300 (1000)	640 J (1000)	880 J (1000)	NM	490 J (1000)	880 J (1000)	700 J (1000)	NM	290 J (1000)	630 J (1000)	260 J (1000)	U (1000)	1100 (1000)	4600 (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	96600 (10000)	278000 (50000)	61800 (10000)	NM	138000 (10000)	4600 (1000)	18500 (2000)	NM	22800 (2000)	6600 (1000)	120000 (10000)	NM	280000 (20000)	135000 (10000)	285000 (20000)	766000 (100000)	194000 (20000)	482000 (50000)
Iron, Ferric	NE	0 J (200)	80 J (200)	0 J (200)	NM	0 J (200)	380 (200)	0 J (200)	NM	14 J (200)	380 (200)	250 (200)	NM	130 J (200)	45 J (200)	6 J (200)	0 J (200)	330 (200)	1300 (200)
Nitrogen	NE	760 (100)	2700 (100)	14900 (500)	NM	5700 (200)	190 (100)	130 M1 (100)	NM	160 (100)	390 (100)	600 (100)	NM	U (100)	2900 (100)	1200 (100)	U (100)	1900 (100)	270 (100)
Nitrogen, Nitrate (As N)	NE	760 (100)	2700 (100)	14900 (500)	NM	5700 (200)	190 (100)	130 M1 (100)	NM	160 (100)	390 (100)	600 (100)	NM	U (100)	2900 (100)	1200 (100)	U (100)	1900 (100)	270 (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)	U (100)	U (100)
pH [STD UNITS]	NE	6.0 (0.10)	5.0 (0.10)	5.1 (0.10)	NM	5.7 (0.10)	5.8 (0.10)	6.0 (0.10)	NM	6.0 (0.10)	5.9 (0.10)	7.0 (0.10)	NM	5.0 (0.10)	5.8 (0.10)	6.3 (0.10)	4.9 (0.10)	6.6 (0.10)	5.3 (0.10)
Phosphates (total)	NE	66 (30)	32 (30)	32 (30)	NM	66 (30)	U (30)	66 (30)	NM	U (30)	32 (30)	32 (30)	NM	35 (30)	66 (30)	35 (30)	32 (30)	1100 (30)	32 (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)	U (50)	U (50)
Sulfate	NE	23800 (2000)	9700 (1000)	36100 (10000)	NM	39200 (10000)	14100 (1000)	13200 (2000)	NM	6200 (1000)	9400 M1 (1000)	8800 (1000)	NM	7100 (1000)	324000 (20000)	6100 (1000)	7000 (1000)	121000 (10000)	373000 (50000)
Gasses																			
Methane	NE	0.22 (0.10)	3.0 (0.10)	25 (0.10)	NM	4.7 (0.10)	18 (0.10)	64 (0.10)	NM	16 (0.10)	0.32 (0.10)	2.8 (0.10)	NM	4.8 (0.10)	2.0 (0.10)	0.78 (0.10)	24 (0.10)	1.7 (0.10)	130 (0.10)
Ethane	NE	0.027 (0.025)	U (0.025)	0.068 (0.025)	NM	0.056 (0.025)	0.20 (0.025)	2.2 (0.025)	NM	0.73 (0.025)	U (0.025)	0.46 (0.025)	NM	0.29 (0.025)	0.25 (0.025)	0.090 (0.025)	0.055 (0.025)	0.10 (0.025)	23 (0.025)
Ethene	NE	0.12 (0.025)	0.074 (0.025)	0.12 (0.025)	NM	0.14 (0.025)	0.057 (0.025)	0.041 (0.025)	NM	0.047 (0.025)	U (0.025)	0.050 (0.025)	NM	0.027 (0.025)	0.084 (0.025)	0.10 (0.025)	U (0.025)	U (0.025)	0.30 (0.025)
Hydrogen [nM] [4*]	NE	5.4 (0.60)	1.6 (0.60)	4.6 (0.60)	NM	5.0 (0.60)	4.8 (0.60)	1.5 (0.60)	NM	2.2 (0.60)	1.7 (0.60)	5.1 (0.60)	NM	3.7 (0.60)	7.3 (0.60)	4.7 (0.60)	2.4 (0.60)	21 (0.60)	2700 (60)
Molecular Analyses																			
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	4 (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.625)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Dehalocaccoides (DHC) [cells/mL]	NE	4.3 (0.5)	46.9 (0.5)	U (0.5)	NM	U (0.5)	0.3 J (0.5)	0.3 J (0.5)	NM	U (0.5)	U (0.625)	1.4 (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	0.6 (0.5)	2 (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.625)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	1 (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.625)	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

Abbreviations:
U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit for Volatile Organic Compounds; 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
ug/L -- micrograms per Liter
mL -- milliliters
NE -- Not Established
NM -- Not Measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 5
SUMMARY OF RADD MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FOURTH QUARTER 2014)
Whirlpool Corporation - Fort Smith, Arkansas

Location		MW-32	MW-33	MW-34	MW-35R	MW-38	MW-38	MW-65	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-32-201410	MW-33-201410	MW-34-201410	MW-35R-201410	MW-38-201410	DUP-06-201410	MW-65-201410	ITMW-2-201410	ITMW-4-201410	ITMW-6-201410	ITMW-16-201410	ITMW-20-201410	IW-72-201410	MW-22-201410	MW-26-201410	MW-27-201410	MW-28-201410	MW-29-201410
Lab Sample ID(s)	Remedial Action Levels per ADEQ RADD Issued Dec 2013	137000018, 041LJ017, 137080011, 60180331006	137000017, 041LJ040, 137090007, 60180441007	137000015, 041LJ042, 137090009, 60180441009	137000019, 041LJ010, 137080021, 60180331016	137010023, 041LJ053, 137090030, 60180635006	60180635010	137000020, 041LJ023, 137080023, 60180331018	137010011, 041LJ025, 137090011, 60180441011	137000001, 041LJ050, 137090027, 60180635003	137010006, 041LJ037, 137090004, 60180441004	137010012, 041LJ032, 137090018, 60180441018	137010005, 041LJ039, 137090006, 60180441006	137000006, 041LJ05, 137080005, 60180221005	137010008, 041LJ026, 137090012, 60180441012	137010009, 041LJ011, 137080022, 60180331017	137010015, 041LJ024, 137080024, 60180331019	137010013, 041LJ012, 137080006, 60180331001	137010004, 041LJ038, 137090005, 60180441005
Sample Date		10/14/2014	10/15/2014	10/14/2014	10/14/2014	10/16/2014	10/16/2014	10/14/2014	10/15/2014	10/13/2014	10/15/2014	10/15/2014	10/15/2014	10/13/2014	10/15/2014	10/14/2014	10/14/2014	10/14/2014	10/15/2014
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	Low Flow	Low Flow
Comments							Field Duplicate												
Volatile Organic Compounds																			
Acetone	12000	U (5.0)	U (5.0)	30.4 (5.0)	48.9 (5.0)	U (5.0)	U (5.0)	45.3 (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)
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)	U (0.50)	U (0.50)
Bromoform	80	0.59 J (0.50)	U (0.50)	1.9 J (0.50)	U (0.50)	U (0.50)	U (0.50)	1.9 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	4.5 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7.0	2.8 J (2.5)	U (2.5)	34.9 (2.5)	U (2.5)	U (2.5)	U (2.5)	5.2 J (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)	U (5.0)	U (5.0)
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)	1.5 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)	4.7 J (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)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.3 J (0.50)	2.4 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)
Chloromethane	190	1.6 (0.50)	U (0.50)	6.2 J (0.50)	7.2 J (0.50)	U (0.50)	U (0.50)	3.9 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)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.6 J (0.50)	2.4 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)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.98 J (0.50)	1.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)	4.8 (0.50)	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	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	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	7.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	10.2 (0.50)	10.8 (0.50)	U (0.50)	U (0.50)	U (0.50)	0.53 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	0.80 J (0.50)	15.3 (0.50)	0.96 J (0.50)	2.6 J (0.50)	781 (50.0)	869 (50.0)	0.54 J (0.50)	U (0.50)	4.9 J (0.50)	5.2 (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)
trans-1,2-Dichloroethene	100	U (0.50)	2.2 J (0.50)	U (0.50)	U (0.50)	4.1 J (0.50)	2.8 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)
Methylene Chloride	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	21.8 (0.50)	22.4 (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)
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)	U (0.50)	U (0.50)
Tetrachloroethene	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.5 J (0.50)	2.5 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)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.0 J (0.50)	2.0 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)
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)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.60 J (0.50)	0.69 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)
Trichloroethene	5.0	29.7 (0.50)	1290 (5.0)	47.7 (0.50)	79.2 (0.50)	6750 (50.0)	6970 (50.0)	30.8 (0.50)	U (0.50)	3.4 J (0.50)	3.1 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)
Vinyl Chloride	2.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	321 (50.0)	370 (50.0)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	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	229 (50.0)	342 (50.0)	238 (50.0)	69.0 (50.0)	1270 (50.0)	NM	88.2 (50.0)	519 (50.0)	2770 (50.0)	U (50.0)	712 (50.0)	U (50.0)	166 (50.0)	U (50.0)	U (50.0)	473 (50.0)	438 (50.0)	U (50.0)
Manganese	NE	388 (5.0)	126 (5.0)	158 (5.0)	38.3 (5.0)	5670 (5.0)	NM	35.0 (5.0)	46.1 (5.0)	3540 (5.0)	155 (5.0)	18.4 (5.0)	6.4 (5.0)	5340 (5.0)	94.8 (5.0)	399 (5.0)	102 (5.0)	55.7 (5.0)	126 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)																			
Total Alkalinity	NE	7400 J (20000)	10200 J (20000)	3200 J (20000)	1250000 (20000)	330000 (20000)	NM	876000 (20000)	57400 (20000)	72700 (20000)	145000 (20000)	34400 (20000)	135000 (20000)	107000 (20000)	45600 (20000)	21400 (20000)	32800 (20000)	99000 (20000)	16300 J (20000)
Ammonia	NE	U (100)	U (100)	U (100)	1000 (100)	U (100)	NM	830 (100)	110 (100)	120 (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
Bicarbonate Alkalinity	NE	7400 J (20000)	10200 J (20000)	3200 J (20000)	U (20000)	330000 (20000)	NM	U (20000)	57400 (20000)	72700 (20000)	145000 (20000)	34400 (20000)	135000 (20000)	107000 (20000)	45600 (20000)	21400 (20000)	32800 (20000)	99000 (20000)	16300 J (20000)
Carbon Dioxide	NE	0	0	0	427000	397000	NM	226000	176000	122000	546000	36700	223000	298000	297000	400000	256000	234000	0
Organic Carbon (total)	NE	U (1000)	U (1000)	530 J (1000)	12900 (1000)	2400 (1000)	NM	5900 (1000)	U (1000)	12000 (1000)	700 (1000)	2900 (1000)	600 (1000)	730 J (1000)	800 J (1000)	U (1000)	1100 (1000)	820 J (1000)	880 J (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	U (20000)	U (20000)	970000 (20000)	U (20000)	NM	514000 (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	126000 (10000)	196000 (20000)	299000 (20000)	343000 (50000)	32000 (2000)	NM	307000 (20000)	110000 (10000)	9000 (1000)	161000 (10000)	1000 (1000)	108000 (10000)	175000 (10000)	14700 (1000)	416000 (50000)	31500 (2000)	23400 (2000)	113000 (10000)
Iron, Ferric	NE	230 (200)	340 (200)	240 (200)	59 J (200)	1200 (200)	NM	88 J (200)	520 (200)	0 J (200)	7 J (200)	710 (200)	0 J (200)	150 J (200)	0 J (200)	8 J (200)	63 J (200)	440 (200)	15 J (200)
Nitrogen	NE	170 (100)	2400 (100)	450 (100)	1900 (100)	6300 (200)	NM	2700 (100)	1000 (100)	U (100)	26600 (1000)	1100 (100)	1200 M1 (100)	1100 M1 (100)	U (100)	2900 (100)	310 (100)	U (100)	1900 (100)
Nitrogen, Nitrate (As N)	NE	170 (100)	2400 (100)	450 (100)	1900 (100)	4500 (200)	NM	2700 (100)	1000 (100)	U (100)	26600 (1000)	1100 (100)	1200 M1 (100)	1100 (100)	U (100)	2900 (100)	310 (100)	U (100)	1900 (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (100)	U (100)	1800 (200)	NM	U (100)	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	4.8 (0.10)	5.1 (0.10)	4.7 (0.10)	11.7 (0.10)	6.8 (0.10)	NM	12.0 (0.10)	6.0 (0.10)	6.4 (0.10)	5.8 (0.10)	7.0 (0.10)	6.4 (0.10)	6.0 (0.10)	5.6 (0.10)	5.0 (0.10)	5.5 (0.10)	6.1 (0.10)	5.3 (0.10)
Phosphates (total)	NE	U (30)	32 (30)	32 (30)	3100 (60)	32 (30)	NM	2800 (60)	66 (30)	35 (30)	14 J (30)	66 (30)	32 (30)	49 (30)	14 J (30)	84 (30)	32 (30)	290 (30)	32 (30)
Sulfide (total)	NE	U (50)	U (50)	U (50)	U (50)	U (50)	NM	U (50)	U (50)	27 J (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	34900 (5000)	11000 (2000)	273000 (20000)	5110000 (500000)	135000 (10000)	NM	3080000 (500000)	19500 (2000)	17400 (1000)	86900 (10000)	32800 (5000)	18200 (2000)	9100 (1000)	10300 (1000)	8700 (1000)	15500 (2000)	39800 (2000)	57100 (10000)
Gasses																			
Methane	NE	9.3 (0.10)	0.44 (0.10)	2.9 (0.10)	17 (0.10)	24 (0.10)	NM	7.4 (0.10)	21 (0.10)	120 (0.10)	1.1 (0.10)	0.23 (0.10)	0.26 (0.10)	0.54 (0.10)	4.9 (0.10)	0.80 (0.10)	U (0.10)	1.2 (0.10)	0.65 (0.10)
Ethane	NE	U (0.025)	0.031 (0.025)	U (0.025)	0.72 (0.025)	1.0 (0.025)	NM	0.25 (0.025)	U (0.025)	0.16 (0.025)	U (0.025)	U (0.025)	U (0.025)	0.050 (0.025)	0.037 (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)
Ethene	NE	U (0.025)	U (0.025)	U (0.025)	0.16 (0.025)	42 (0.025)	NM	0.050 (0.025)	0.21 (0.025)	0.18 (0.025)	0.44 (0.025)	0.13 (0.025)	U (0.025)	U (0.025)	0.051 (0.025)	U (0.025)	U (0.025)	0.029 (0.025)	U (0.025)
Hydrogen [nM] [4*]	NE	1.3 (0.60)	1.3 (0.60)	9.6 (0.60)	2300 (60)	5.6 (0.60)	NM	160 (12)	4.9 (0.60)	6.7 (0.60)	1.7 (0.60)	1.7 (0.60)	2.1 (0.60)	4.8 (0.60)	7.0 (0.60)	1.2 (0.60)	4.9 (0.60)	5.3 (0.60)	1.7 (0.60)
Molecular Analyses																			
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	18000 (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.666667)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	0.5 (0.5)	U (0.5)
Dehalocaccoides (DHC) [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	26600 (0.5)	NM	U (0.5)	U (0.5)	0.6 (0.5)	U (0.5)	1.4 J (0.666667)	U (0.5)	U (0.5)	19.2 (0.5)	U (0.5)	U (0.5)	3.4 (0.5)	U (0.5)
tceA Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	0.2 J (0.5)	U (0.5)	0.4 J (0.666667)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.666667)	U (0.5)	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

Abbreviations:
U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit for Volatile Organic Compounds; 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
ug/L -- micrograms per Liter
mL -- milliliters
NE -- Not Established
NM -- Not Measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 5
SUMMARY OF RADD MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FOURTH QUARTER 2014)
Whirlpool Corporation - Fort Smith, Arkansas

Location		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-73	IW-74	IW-74	IW-76	IW-77	MW-41
ENVIRON Sample ID		MW-31-201410	MW-36-201410	MW-39-201410	MW-40-201410	MW-50-201410	MW-60-201410	MW-61-201410	MW-62-201410	MW-63-201410	MW-66-201410	MW-67-201410	MW-68-201410	IW-73-201410	IW-74-201410	DUP-01-201410	IW-76-201410	IW-77-201410	MW-41-201410
Lab Sample ID(s)	Remedial Action Levels per ADEQ RADD Issued Dec 2013	041LJ016, 137080010, 60180331005	137000014, 041LJ014, 137080008, 60180331003	137000016, 041LJ01, 137080001, 60180221001	137000007, 041LJ04, 137080004, 60180221004	041LJ013, 137080007, 60180331002	041LJ08, 137080019, 60180331014	041LJ07, 137080018, 60180331013	137000022, 041LJ022, 137080016, 60180331011	041LJ06, 137080017, 60180331012	137000004, 041LJ02, 137080002, 60180221002	137000021, 041LJ03, 137080003, 60180221003	137010001, 041LJ020, 137080014, 60180331009	137000009, 041LJ09, 137080020, 60180331015	137000008, 041LJ021, 137080015, 60180331010		137000011, 041LJ035, 137090002, 60180441002	137000012, 041LJ041, 137090008, 60180441008	137000010, 041LJ034, 137090001, 60180441001
Sample Date		10/14/2014	10/14/2014	10/13/2014	10/13/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/13/2014	10/13/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014
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	Low Flow	Low Flow
Comments																Field Duplicate			
Volatile Organic Compounds																			
Acetone	12000	U (5.0)	6.4 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)	23.1 (5.0)	15.9 (5.0)	U (5.0)
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)	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)	9.6 (0.50)	2.3 J (0.50)	U (0.50)
Bromomethane	7.0	U (2.5)	12.1 (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)	58.5 (2.5)	15.3 (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)	U (5.0)	U (5.0)
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)	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)	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)	0.51 J (0.50)	U (0.50)
Chloromethane	190	U (0.50)	2.9 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)	11.3 (0.50)	13.9 (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)	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)	U (0.50)	U (0.50)
1,2-Dichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	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	7.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.61 J (0.50)	U (0.50)	1.6 J (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)	0.98 J (0.50)	U (0.50)	U (0.50)	U (0.50)	0.84 J (0.50)	3.3 J (0.50)	3.3 J (0.50)	6.7 (0.50)	15.8 (0.50)	16.9 (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)	0.62 J (0.50)	2.9 J (0.50)	U (0.50)
Methylene Chloride	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	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)	U (0.50)	U (0.50)
Tetrachloroethene	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	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)	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)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	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	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	7.9 (0.50)	U (0.50)	9.4 (0.50)	2.3 J (0.50)	U (0.50)	U (0.50)	8.5 (0.50)	144 (0.50)	143 (0.50)	214 (2.5)	741 (10.0)	491 (5.0)
Vinyl Chloride	2.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	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 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Metals																			
Iron	NE	152 (50.0)	51.9 (50.0)	49.0 J (50.0)	29.8 J (50.0)	886 (50.0)	9510 (50.0)	2090 (50.0)	87.4 (50.0)	1290 (50.0)	74.2 (50.0)	1900 (50.0)	24.1 J (50.0)	1740 (50.0)	36.9 J (50.0)	NM	U (50.0)	64.9 (50.0)	4090 (50.0)
Manganese	NE	233 (5.0)	482 (5.0)	425 (5.0)	192 (5.0)	156 (5.0)	908 (5.0)	28.6 (5.0)	22.4 (5.0)	40.0 (5.0)	12.4 (5.0)	15.3 (5.0)	1630 (5.0)	196 (5.0)	591 (5.0)	NM	49.3 (5.0)	6.1 (5.0)	5760 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)																			
Total Alkalinity	NE	17900 J (20000)	13700 J (20000)	10600 J (20000)	14400 J (20000)	195000 (20000)	385000 (20000)	109000 (20000)	28000 (20000)	33800 (20000)	100000 (20000)	256000 (20000)	12400 J (20000)	35800 (20000)	75200 (20000)	NM	13100 J (20000)	98900 (20000)	36100 (20000)
Ammonia	NE	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	NM	U (100)	130 (100)	95 J (100)
Bicarbonate Alkalinity	NE	17900 J (20000)	13700 J (20000)	10600 J (20000)	14400 J (20000)	195000 (20000)	385000 (20000)	109000 (20000)	28000 (20000)	33800 (20000)	100000 (20000)	256000 (20000)	12400 J (20000)	35800 (20000)	75200 (20000)	NM	13100 J (20000)	98900 (20000)	36100 (20000)
Carbon Dioxide	NE	0	0	0	0	313000	500000	201000	159000	188000	259000	328000	0	50000	251000	NM	0	348000	226000
Organic Carbon (total)	NE	640 J (1000)	U (1000)	U (1000)	U (1000)	U (1000)	1900 (1000)	U (1000)	U (1000)	U (1000)	U (1000)	U (1000)	U (1000)	7800 (1000)	550 J (1000)	NM	550 J (1000)	720 J (1000)	U (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)
Chloride	NE	96400 (10000)	248000 (20000)	379000 (50000)	247000 (20000)	240000 (20000)	135000 (10000)	104000 (10000)	149000 (10000)	161000 (10000)	172000 (10000)	113000 (10000)	313000 (50000)	23600 (2000)	220000 (20000)	NM	316000 (50000)	300000 (50000)	448000 (50000)
Iron, Ferric	NE	130 J (200)	52 J (200)	49 J (200)	30 J (200)	890 (200)	9500 (200)	2100 (200)	87 J (200)	1200 (200)	74 J (200)	740 (200)	25 J (200)	1600 (200)	37 J (200)	NM	19 J (200)	65 J (200)	790 (200)
Nitrogen	NE	210 (100)	21 J (100)	25 J (100)	40 J (100)	U (100)	U (100)	1500 (100)	740 (100)	380 (100)	220 (100)	22 J (100)	U (100)	53 J (100)	530 (100)	NM	1100 (100)	2700 (100)	39 J (100)
Nitrogen, Nitrate (As N)	NE	210 (100)	21 J (100)	25 J (100)	40 J (100)	U (100)	U (100)	1500 (100)	740 (100)	380 (100)	220 (100)	22 J (100)	U (100)	53 J (100)	530 (100)	NM	1100 (100)	2700 (100)	39 J (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)
pH [STD UNITS]	NE	5.3 (0.10)	5.1 (0.10)	4.9 (0.10)	5.2 (0.10)	6.4 (0.10)	6.7 (0.10)	6.3 (0.10)	5.6 (0.10)	5.6 (0.10)	6.1 (0.10)	6.7 (0.10)	5.2 (0.10)	6.6 (0.10)	5.9 (0.10)	NM	5.2 (0.10)	5.9 (0.10)	5.6 (0.10)
Phosphates (total)	NE	U (30)	32 (30)	14 J (30)	49 (30)	170 (30)	210 (30)	500 (30)	18 J (30)	U (30)	39 (30)	32 (30)	U (30)	270 (30)	U (30)	NM	32 (30)	900 (30)	32 (30)
Sulfide (total)	NE	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)
Sulfate	NE	31500 (2000)	45500 (10000)	3800 (1000)	2500 (1000)	U (10000)	27700 (5000)	20900 (2000)	7200 (1000)	8000 (1000)	7100 (1000)	7400 (1000)	800 J (1000)	3000 (1000)	3100 (1000)	NM	477000 (50000)	669000 (50000)	2600 (1000)
Gasses																			
Methane	NE	2.8 (0.10)	5.8 (0.10)	0.20 (0.10)	0.32 (0.10)	0.53 (0.10)	1.8 (0.10)	U (0.10)	U (0.10)	0.40 (0.10)	U (0.10)	U (0.10)	21 (0.10)	5.4 (0.10)	1.7 (0.10)	NM	3.9 (0.10)	0.91 (0.10)	12 (0.10)
Ethane	NE	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)	U (0.025)	U (0.025)	U (0.025)	NM	0.047 (0.025)	0.066 (0.025)	0.031 (0.025)
Ethene	NE	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)	0.025 (0.025)	0.036 (0.025)	U (0.025)	NM	U (0.025)	U (0.025)	U (0.025)
Hydrogen [nM] [4]	NE	NM	120 (6.0)	7.3 (0.60)	8.4 (0.60)	NM	NM	NM	4.1 (0.60)	NM	5.3 (0.60)	1.4 (0.60)	1.6 (0.60)	4.5 (0.60)	6.5 (0.60)	NM	340 (12)	11 (0.60)	4.9 (0.60)
Molecular Analyses																			
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.714286)	U (0.444444)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	990 (0.5)	0.5 (0.5)	NM	U (0.5)	U (0.5)	0.2 J (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	0.6 J (0.5)	U (0.5)	2.2 (0.5)	0.6 J (0.5)	0.7 (0.5)	5.5 (0.5)	U (0.714286)	U (0.444444)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	2380 (0.5)	1.1 (0.5)	NM	U (0.5)	U (0.5)	42.3 (0.5)
tceA Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.714286)	U (0.444444)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.714286)	U (0.444444)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NM	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

Abbreviations:
U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit for Volatile Organic Compounds; 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
ug/L -- micrograms per Liter
mL -- milliliters
NE -- Not Established
NM -- Not Measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 5
SUMMARY OF RADD MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FOURTH QUARTER 2014)
Whirlpool Corporation - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-46R	MW-46R	MW-56	MW-57	MW-58	MW-71	RW-69
ENVIRON Sample ID		MW-46R-201410	DUP-03-201410	MW-56-201410	MW-57-201410	MW-58-201410	MW-71-201410	RW-69-201410
Lab Sample ID(s)		137000005, 041LJ054, 137090031, 60180635007	60180635011	041LJ044, 137090021, 60180441021	041LJ055, 137090019, 60180441019	137010002, 041LJ033, 137090020, 60180441020	137000024, 041LJ019, 137080013, 60180331008	137000023, 041LJ018, 137080012, 60180331007
Sample Date		10/14/2014	10/16/2014	10/15/2014	10/15/2014	10/15/2014	10/14/2014	10/14/2014
Sample Method		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)
Bromodichloromethane	80	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)
Bromomethane	7.0	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)
Chlorobenzene	100	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)
Chloroform	80	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)	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)
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)
1,2-Dichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	1.2 J (0.50)	1.3 J (0.50)	1.0 J (0.50)	0.59 J (0.50)	2.1 J (0.50)	1.3 J (0.50)	0.85 J (0.50)
cis-1,2-Dichloroethene	70	24.6 (0.50)	25.2 (0.50)	12.1 (0.50)	4.2 J (0.50)	10.8 (0.50)	6.0 (0.50)	6.9 (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)
Methylene Chloride	5.0	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)
Tetrachloroethene	5.0	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)
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)
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	5.0	410 (5.0)	373 (5.0)	408 (2.5)	172 (0.50)	360 (2.5)	185 (0.50)	173 (2.5)
Vinyl Chloride	2.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.68 J (0.50)	U (0.50)	U (0.50)
Metals								
Iron	NE	128 (50.0)	NM	1210 (50.0)	7490 (50.0)	827 (50.0)	1000 (50.0)	1110 (50.0)
Manganese	NE	126 (5.0)	NM	158 (5.0)	338 (5.0)	359 (5.0)	1660 (5.0)	664 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)								
Total Alkalinity	NE	6200 J (20000)	NM	26600 (20000)	30200 (20000)	9600 J (20000)	20700 (20000)	14200 J (20000)
Ammonia	NE	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)
Bicarbonate Alkalinity	NE	6200 J (20000)	NM	26600 (20000)	30200 (20000)	9600 J (20000)	20700 (20000)	14200 J (20000)
Carbon Dioxide	NE	0	NM	154000	246000	0	235000	0
Organic Carbon (total)	NE	190 J (1000)	NM	480 J (1000)	330 J (1000)	290 J (1000)	U (1000)	740 J (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	NM	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	248000 (20000)	NM	165000 (10000)	283000 (20000)	267000 (50000)	258000 (20000)	276000 (20000)
Iron, Ferric	NE	130 J (200)	NM	690 (200)	7100 (200)	160 J (200)	210 (200)	150 J (200)
Nitrogen	NE	U (100)	NM	130 (100)	U (100)	U (100)	U (100)	U (100)
Nitrogen, Nitrate (As N)	NE	U (100)	NM	130 (100)	U (100)	U (100)	U (100)	U (100)
Nitrogen, Nitrite	NE	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)
pH [STD UNITS]	NE	5.0 (0.10)	NM	5.6 (0.10)	5.4 (0.10)	5.0 (0.10)	5.3 (0.10)	5.2 (0.10)
Phosphates (total)	NE	32 (30)	NM	32 (30)	32 (30)	U (30)	U (30)	U (30)
Sulfide (total)	NE	U (50)	NM	31 J (50)	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	580 J (1000)	NM	4900 (1000)	3900 (1000)	2400 (1000)	1900 (1000)	1900 (1000)
Gasses								
Methane	NE	20 (0.10)	NM	0.49 (0.10)	2.8 (0.10)	36 (0.10)	73 (0.10)	34 (0.10)
Ethane	NE	U (0.025)	NM	U (0.025)	U (0.025)	U (0.025)	U (0.025)	0.038 (0.025)
Ethene	NE	U (0.025)	NM	0.20 (0.025)	0.091 (0.025)	0.026 (0.025)	0.050 (0.025)	0.26 (0.025)
Hydrogen [nM] [4*]	NE	7.6 (0.60)	NM	NM	NM	2.6 (0.60)	1.9 (0.60)	1.6 (0.60)
Molecular Analyses								
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	16.6 (0.5)	NM	3.1 (0.588235)	U (0.588235)	1.9 (0.5)	U (0.5)	U (0.5)
Dehalocaccoides (DHC) [cells/mL]	NE	16.9 (0.5)	NM	37.1 (0.588235)	3.6 (0.588235)	31.7 (0.5)	0.8 (0.5)	2.1 (0.5)
tceA Reductase [cells/mL]	NE	U (0.5)	NM	2.1 (0.588235)	U (0.588235)	U (0.5)	U (0.5)	U (0.5)
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	NM	0.3 J (0.588235)	U (0.588235)	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

Abbreviations:
U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit for Volatile Organic Compounds; 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
ug/L -- micrograms per Liter
mL -- milliliters
NE -- Not Established
NM -- Not Measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 6
SUMMARY OF NORTHEAST CORNER GROUND WATER SAMPLE ANALYTICAL RESULTS - 4TH QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location		MW-87	MW-88	MW-89	MW-90	MW-91	MW-96	MW-97	MW-98	MW-99
ENVIRON Sample ID	Remedial Action	MW-87-201410	MW-88-201410	MW-89-201410	MW-90-201410	MW-91-201410	MW-96-20141022	MW-97-20141022	MW-98-2014 1029	MW-99-20141022
Lab Sample ID(s)	Levels per ADEQ	60180642003	60180642002	60180642004	60180642005	60180642001	60180994003	60180994001	60181472001	60180994002
Sample Date	RADD Issued	10/16/2014	10/16/2014	10/16/2014	10/16/2014	10/16/2014	10/22/2014	10/22/2014	10/29/2014	10/22/2014
Sample Method	Dec 2013	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)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Bromodichloromethane	80	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)
Bromoform	80	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)
Bromomethane	7.0	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)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Chlorobenzene	100	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)
Chloroethane	12000	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)
Chloroform	80	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)
Chloromethane	190	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)
Dibromochloromethane	80	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)
1,1-Dichloroethane	2.4	2.2J (0.5)	U (0.5)	U (0.5)	U (0.5)	1.2J (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
1,2-Dichloroethane	5.0	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)
1,1-Dichloroethene	7.0	6.2 (0.5)	U (0.5)	U (0.5)	U (0.5)	3.5 J (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
cis-1,2-Dichloroethene	70	47.8 (0.5)	U (0.5)	U (0.5)	U (0.5)	28.8 (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
trans-1,2-Dichloroethene	100	0.56J (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)
Methylene Chloride	5.0	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)
1,1,2,2-Tetrachloroethane	0.066	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)
Tetrachloroethene	5.0	2.5J (0.5)	U (0.5)	U (0.5)	U (0.5)	1.4J (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Toluene	1000	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)
1,1,1-Trichloroethane	200	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)
1,1,2-Trichloroethane	5.0	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)
Trichloroethene	5.0	594 (0.5)	U (0.5)	11.3	U (0.5)	319 (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Vinyl Chloride	2.0	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)

Notes:

1 All concentrations are presented in ug/L except where noted.

2 For comparison purposes, only compounds shown on Table 5 are shown here.

3 Concentrations that exceed the RALs for
Fort Smith ADEQ RADD Issued Dec

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L -- micrograms per Liter

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-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
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

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	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-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
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

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	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-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
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

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	9/28/2005	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
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

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	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-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
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

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	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-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
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-10	1/1/1990	ND	NT	ND

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	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
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-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

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	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
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-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

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	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
ITMW-12	12/4/2014	468	51.1	0.88 J
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

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-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-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-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

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	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
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-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

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	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
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-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

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	4/18/2007	13000	298	< 10 U
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 J	7.7
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
ITMW-18	12/9/2008	7200	320	< 5 U
ITMW-18	4/27/2009	7100	320	< 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-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-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
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

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	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-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
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

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	10/15/2014	< 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
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

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	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-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
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

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	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-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
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

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	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-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
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

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	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-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
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-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

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	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
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-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

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-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-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
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-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

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	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
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-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

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	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
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-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

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	10/28/2009	1200	20	< 5 U
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-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
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

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	10/15/2014	47.7	0.96 J	< 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-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
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

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	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-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
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

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	10/26/2011	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-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
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

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	10/13/2014	< 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
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-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

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-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-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
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

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-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
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-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

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-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-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
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

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-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-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
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-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

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	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
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-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-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

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	10/27/2009	< 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
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-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-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

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	3/23/2011	12	< 5 U	< 5 U
MW-63	10/25/2011	9.8	< 5 U	< 5 U
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-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-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
MW-66	10/13/2014	2.3 J	< 0.50 U	< 0.50 U
MW-67	4/6/2006	< 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-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-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
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
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

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	5/13/2014	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
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
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
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-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

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-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-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-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
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-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

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-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-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
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

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-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
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-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-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-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-85	5/29/2014	1970	99.4	23.1
MW-85	7/8/2014	3780	133	3.9
MW-85	9/11/2014	5820	226 J	35.3
MW-85	12/5/2014	27700	280	7.7
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-87	6/25/2014	564	41.8	< 0.50 U
MW-87	10/16/2014	594	47.8	< 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-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-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-91	6/25/2014	234	21.7	< 0.50 U
MW-91	10/16/2014	319	28.8	< 0.50 U
MW-92	10/22/2014	2160	16.0	7.2
MW-92	12/4/2014	2200	23.4	10.3
MW-93	10/22/2014	18200	145	5.0
MW-93	12/4/2014	14600	85.7	2.5
MW-94	10/22/2014	11100	309 J	2.5
MW-94	12/4/2014	9570	250 J	3.0
MW-95	10/22/2014	22300	151	25.7
MW-95	12/4/2014	20900	159	29.9
MW-96	10/22/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-97	10/22/2014	< 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-98	10/29/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-99	10/22/2014	< 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
IW-115	4/14/2014	449	9.3	< 0.13 U
IW-115	5/28/2014	504	11.2	0.27 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)
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
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

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-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

Notes:

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 spike recovery exceeded QC limits. Batch accepted based on laboratory control sample

TABLE 8
SUMMARY OF STATISTICAL TEMPORAL TREND ANALYSIS (2009 - 2014)
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	10/16/2013	10	Stable	ND	ND
MW-24	4/27/2009	4/25/2013	8	Stable	<PQL	<PQL
MW-27	5/12/2010	10/14/2014	11	Decreasing	ND	ND
MW-28	10/29/2009	10/14/2014	13	Decreasing	ND	ND
MW-31	4/25/2009	10/14/2014	11	No Trend	ND	ND
MW-32	4/25/2009	10/14/2014	12	Decreasing	<PQL	ND
MW-33	4/25/2009	10/15/2014	14	Stable	Decreasing	<PQL
MW-34	4/24/2009	10/15/2014	13	Stable	<PQL	ND
MW-35R	4/24/2009	10/14/2014	14	No Trend	Stable	ND
MW-36	4/24/2009	10/14/2014	15	No Trend	ND	ND
MW-39	4/24/2009	10/13/2014	12	No Trend	ND	ND
MW-40	4/24/2009	10/13/2014	15	<PQL	ND	ND
MW-41	4/24/2009	10/15/2014	16	Stable	Stable	<PQL
MW-46R	4/25/2009	10/16/2014	18	Stable	Increasing	<PQL
MW-50	4/24/2009	10/14/2014	12	<PQL	ND	ND
MW-55	4/24/2009	10/16/2013	8	Increasing	ND	ND
MW-56	4/24/2009	10/15/2014	11	Increasing	Increasing	<PQL
MW-57	4/24/2009	10/15/2014	11	Increasing	Stable	<PQL
MW-58	4/25/2009	10/15/2014	13	Decreasing	Stable	<PQL
MW-60	4/24/2009	10/14/2014	12	<PQL	ND	ND
MW-61	4/24/2009	10/14/2014	12	Increasing	ND	ND
MW-62	4/24/2009	10/14/2014	11	<PQL	ND	ND
MW-63	4/24/2009	10/14/2014	12	Stable	<PQL	<PQL
MW-65	4/24/2009	10/14/2014	10	Decreasing	Decreasing	ND
MW-66	4/25/2009	10/13/2014	12	<PQL	ND	ND
MW-67	4/25/2009	10/13/2014	12	ND	ND	ND
MW-68	1/15/2009	10/14/2014	12	No Trend	ND	ND
RW-69	1/15/2009	10/14/2014	17	Stable	Stable	<PQL
MW-70	11/4/2010	10/16/2013	7	Stable	Decreasing	<PQL
MW-71	10/28/2009	10/14/2014	13	Stable	Stable	<PQL
IW-72	1/16/2009	10/13/2014	14	Decreasing	ND	ND
IW-73	4/23/2009	10/14/2014	11	Decreasing	No Trend	Increasing
IW-74	4/23/2009	10/14/2014	11	Stable	Stable	Increasing
IW-75	1/16/2009	10/15/2013	5	No Trend	<PQL	ND
IW-76	4/23/2009	10/15/2014	13	Decreasing	Decreasing	No Trend
IW-77	4/23/2009	10/15/2014	18	Increasing	Increasing	<PQL
IW-78	10/25/2011	10/17/2013	5	Stable	Stable	ND
IW-79	10/25/2011	10/17/2013	5	Stable	Stable	<PQL
IW-80	4/23/2009	10/14/2014	12	Decreasing	<PQL	ND
Southern Plume Wells (includes Source Area Wells as indicated by bold font well ID)						
ITMW-1	10/27/2011	10/15/2014	9	Decreasing	Decreasing	ND
ITMW-2	11/3/2010	10/15/2014	11	<PQL	<PQL	ND
ITMW-3	11/4/2010	10/15/2013	6	Decreasing	<PQL	ND
ITMW-4	10/25/2011	10/16/2014	7	<PQL	Stable	No Trend
ITMW-5	4/27/2009	10/16/2013	10	Stable	Decreasing	<PQL
ITMW-6	10/28/2009	10/15/2014	11	<PQL	Increasing	<PQL
ITMW-7	4/27/2009	10/15/2014	13	Decreasing	Decreasing	No Trend
ITMW-9	4/27/2009	10/15/2014	13	Stable	Decreasing	No Trend
ITMW-10	4/27/2009	10/15/2014	11	Increasing	Decreasing	Decreasing
ITMW-11	4/27/2009	10/15/2014	10	Stable	Decreasing	Decreasing
ITMW-12	10/26/2011	10/15/2014	8	Increasing	Decreasing	Stable
ITMW-13	4/27/2009	10/15/2014	13	Stable	Decreasing	<PQL
ITMW-14	11/4/2010	10/15/2014	10	Decreasing	Decreasing	ND
ITMW-15	4/27/2009	10/16/2014	9	Stable	Stable	Stable
ITMW-16	11/6/2010	10/15/2014	10	No Trend	ND	ND
ITMW-17	4/27/2009	10/16/2014	13	Decreasing	Decreasing	Increasing
ITMW-18	4/27/2009	10/15/2014	12	Decreasing	Decreasing	<PQL
ITMW-19	4/27/2009	10/16/2014	13	Decreasing	Decreasing	<PQL
ITMW-20	10/29/2009	10/15/2014	12	No Trend	ND	<PQL
ITMW-21	10/27/2009	10/15/2014	12	Decreasing	<PQL	ND
MW-22	10/27/2009	10/15/2014	11	<PQL	ND	ND
MW-25	4/27/2009	10/16/2014	14	Decreasing	Stable	No Trend
MW-26	10/29/2009	10/14/2014	12	No Trend	ND	ND
MW-29	10/29/2009	10/15/2014	10	<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	10/16/2014	7	Increasing	Stable	Stable

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 of

TABLE 9
SUMMARY OF TEMPORAL TREND ANALYSIS BY WELL CATEGORY(2009 through 4th Quarter 2014)
Whirlpool Facility
Fort Smith, Arkansas

Northern Plume Wells						
Chemical	**4th Quarter 2014 Concentration Trend**	***Increasing***	***Decreasing***	***Stable***	***No Trend***	***Not Detected***
Trichloroethene		5	9	13	6	6
cis-1,2-Dichloroethene		3	4	9	1	22
Vinyl Chloride		2	0	0	1	36
Southern Plume Wells (includes Source Area Wells)						
Chemical	**4th Quarter 2014 Concentration Trend**	***Increasing***	***Decreasing***	***Stable***	***No Trend***	***Not Detected***
Trichloroethene		3	10	6	3	5
cis-1,2-Dichloroethene		1	13	5	0	8
Vinyl Chloride		1	2	4	4	16
Source Area Wells						
Chemical	**4th Quarter 2014 Concentration Trend**	***Increasing***	***Decreasing***	***Stable***	***No Trend***	***Not Detected***
Trichloroethene		2	5	2	0	0
cis-1,2-Dichloroethene		0	6	3	0	0
Vinyl Chloride		1	1	4	1	2

TABLE 10
SUMMARY OF AVERAGE DETECTED CONCENTRATIONS (2009 - 2014)
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
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
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
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

Notes:
µg/L: Micrograms per liter

Figures

FILE: D:\GIS\PROJECTWHIRLPOOL\DOCs\2014_Q4_REPORT\Figure 1 - Q4 Potentiometric Surface 20150204.mxd

Brazil Ave

Ferguson St

Jenny Lind Rd

Boys Club Ln

Jacobs Ave

Ingersoll Ave

MW-50 459.81'
MW-60 458.07'
MW-61 452.46'
MW-67 449.31'
MW-66 452.57'
MW-57 460.35'
MW-68 464.74'
MW-56 462.55'
MW-70 464.91'
MW-71 464.82'
RW-69 464.44'
MW-40 464.76'
IW-75 464.73'
IW-72 464.56'
IW-74 464.64'
IW-79 464.77'
IW-73 464.46'
MW-35R 464.69'
MW-41 464.45'
MW-81 464.71'
IW-76 464.56'
MW-39 464.78'
IW-78 464.73'
IW-77 464.74'
IW-80 464.62'
MW-34 464.81'
MW-36 464.85'
MW-65 464.73'
MW-31 464.73'
MW-33 464.76'
MW-32 464.74'
MW-27 464.76'
MW-28 464.51'
MW-26 465.06'
MW-23 464.78'
MW-83 464.66'
MW-84 464.54'
MW-24 464.75'
ITMW-16 464.70'
ITMW-15 464.81'
ITMW-13 464.56'
ITMW-3 463.52'
ITMW-17 464.57'
ITMW-14 464.46'
ITMW-11 464.82'
ITMW-2 464.36'
ITMW-20 464.83'
MW-25 464.71'
MW-85 464.50'
ITMW-12 464.56'
ITMW-1 463.49'
MW-86 464.26'
MW-94 464.46'
ITMW-21 464.66'
ITMW-18 464.48'
MW-95 464.48'
MW-92 464.75'
MW-37 464.82'
MW-38 464.82'
MW-172 464.72'
NW-93 464.57'
ITMW-19 464.54'
MW-30 463.99'
MW-29 464.39'
ITMW-7 463.4'
ITMW-4 463.09'
ITMW-5 462.63'
ITMW-10 462.84'
ITMW-9 462.92'
ITMW-6 462.63'
MW-46R 464.28'
MW-62 460.58'
MW-63 461.43'
MW-97 445.95'
MW-96 450.09'
MW-98 443.21'
MW-90 462.39'
MW-89 459.61'
MW-88 462.76'
MW-22 463.91'
MW-87 460.97'
MW-99 459.75'
MW-91 460.39'

0 260 520
Feet
1 inch = 260 feet

Notes:
- Water levels measured 10/28/2014
- 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

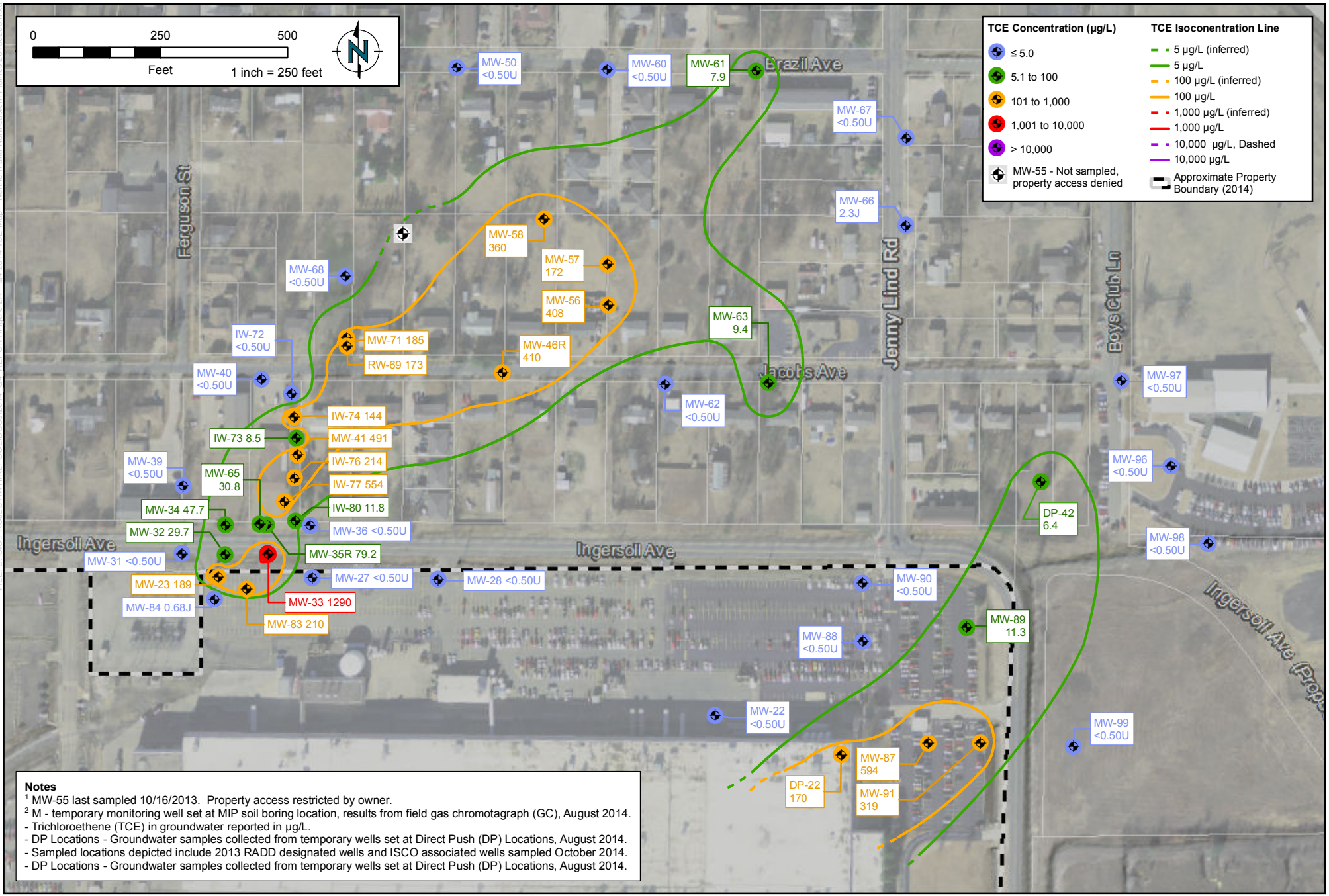
ENVIRON

FOURTH QUARTER 2014 POTENTIOMETRIC SURFACE

Whirlpool Facility - Fort Smith, Arkansas

Figure 1

DRAFTED BY: KTS | DATE: 02/04/2015 | PROJECT: 3434446A



Notes

[1] MW-55 last sampled 10/16/2013. Property access restricted by owner.
[2] M - temporary monitoring well set at MIP soil boring location, results from field gas chromotagraph (GC), August 2014.
- Trichloroethene (TCE) in groundwater reported in µg/L.
- DP Locations - Groundwater samples collected from temporary wells set at Direct Push (DP) Locations, August 2014.
- Sampled locations depicted include 2013 RADD designated wells and ISCO associated wells sampled October 2014.
- DP Locations - Groundwater samples collected from temporary wells set at Direct Push (DP) Locations, August 2014.

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DRAFTED BY: KTS | DATE: 02/09/2015

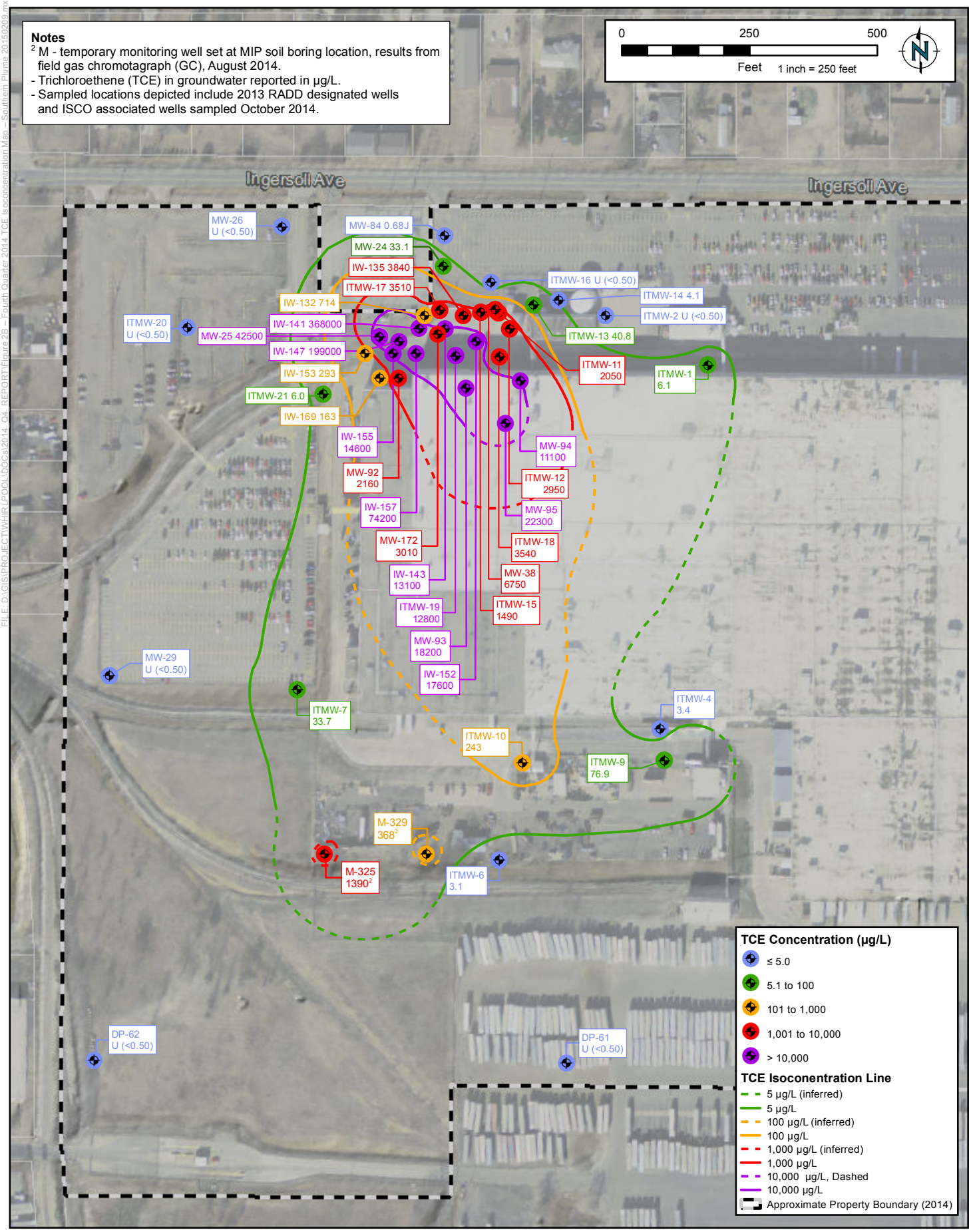
FOURTH QUARTER 2014 TCE ISOCONCENTRATION MAP NORTHERN AND NORTHEASTERN PLUMES

Whirlpool Facility - Fort Smith, Arkansas

Figure 2A

PROJECT: 2131344A

FILE: D:\GIS\PROJECT\WHIRLPOOL\DOCs\2014_Q4_REPORT\Figure 2A – Q4 2014 TCE Map – Northern and Northeastern Plumes 20150209.mxd



ENVIRON

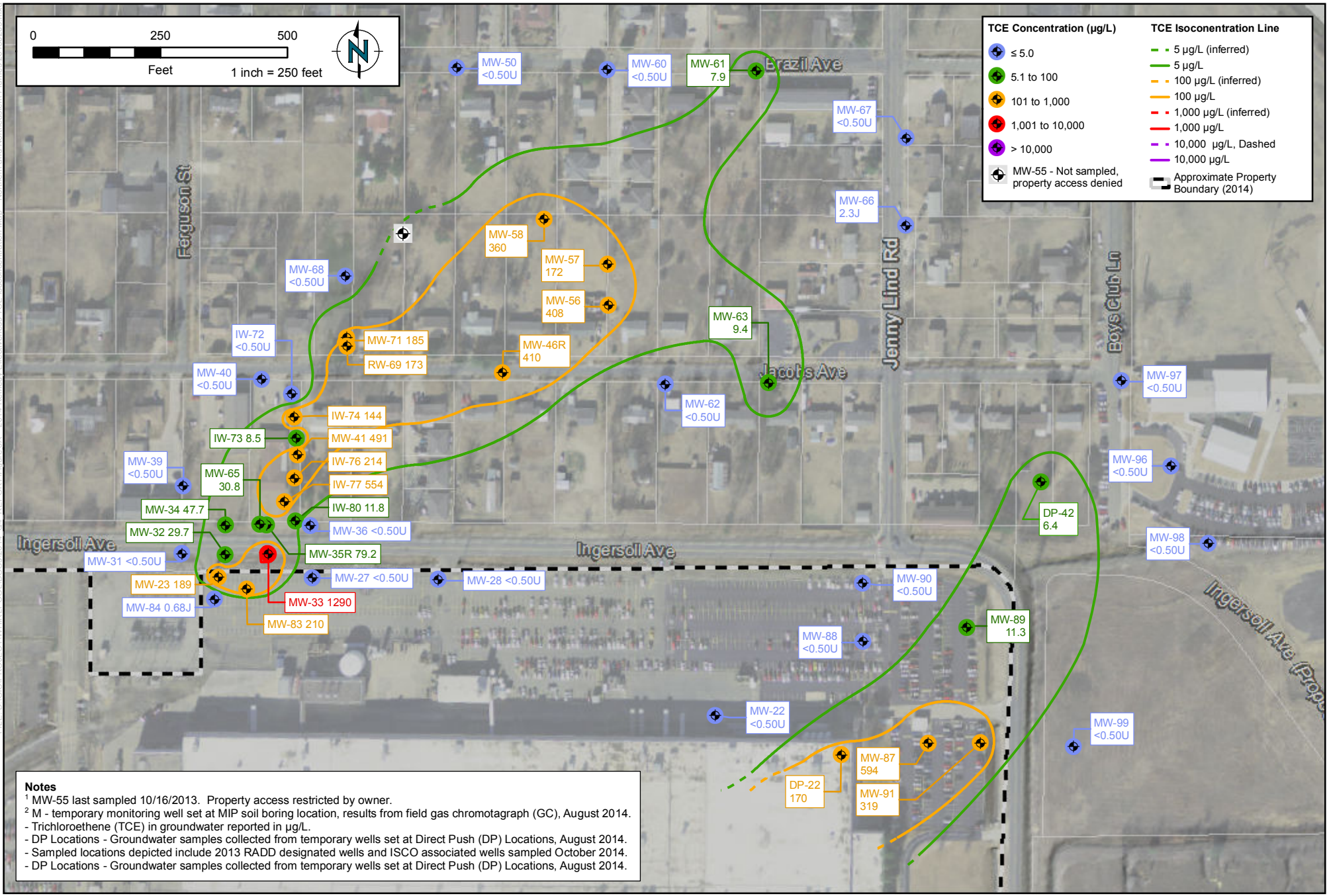
FOURTH QUARTER 2014 TCE ISOCONCENTRATION MAP
SOUTHERN PLUME

Whirlpool Facility - Fort Smith, Arkansas

Figure 2B

DRAFTED BY: KTS | DATE: 02/09/2015 | PROJECT: 2131344B

FILE: D:\GIS\PROJECTS\WHIRLPOOL\DOCS\2014_Q4_REPORT\Figure 2B - Fourth Quarter 2014 TCE Isoconcentration Map - Southern Plume 20150209.mxd



Notes

[1] MW-55 last sampled 10/16/2013. Property access restricted by owner.
[2] M - temporary monitoring well set at MIP soil boring location, results from field gas chromotagraph (GC), August 2014.
- Trichloroethene (TCE) in groundwater reported in µg/L.
- DP Locations - Groundwater samples collected from temporary wells set at Direct Push (DP) Locations, August 2014.
- Sampled locations depicted include 2013 RADD designated wells and ISCO associated wells sampled October 2014.
- DP Locations - Groundwater samples collected from temporary wells set at Direct Push (DP) Locations, August 2014.

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DRAFTED BY: KTS | DATE: 02/09/2015

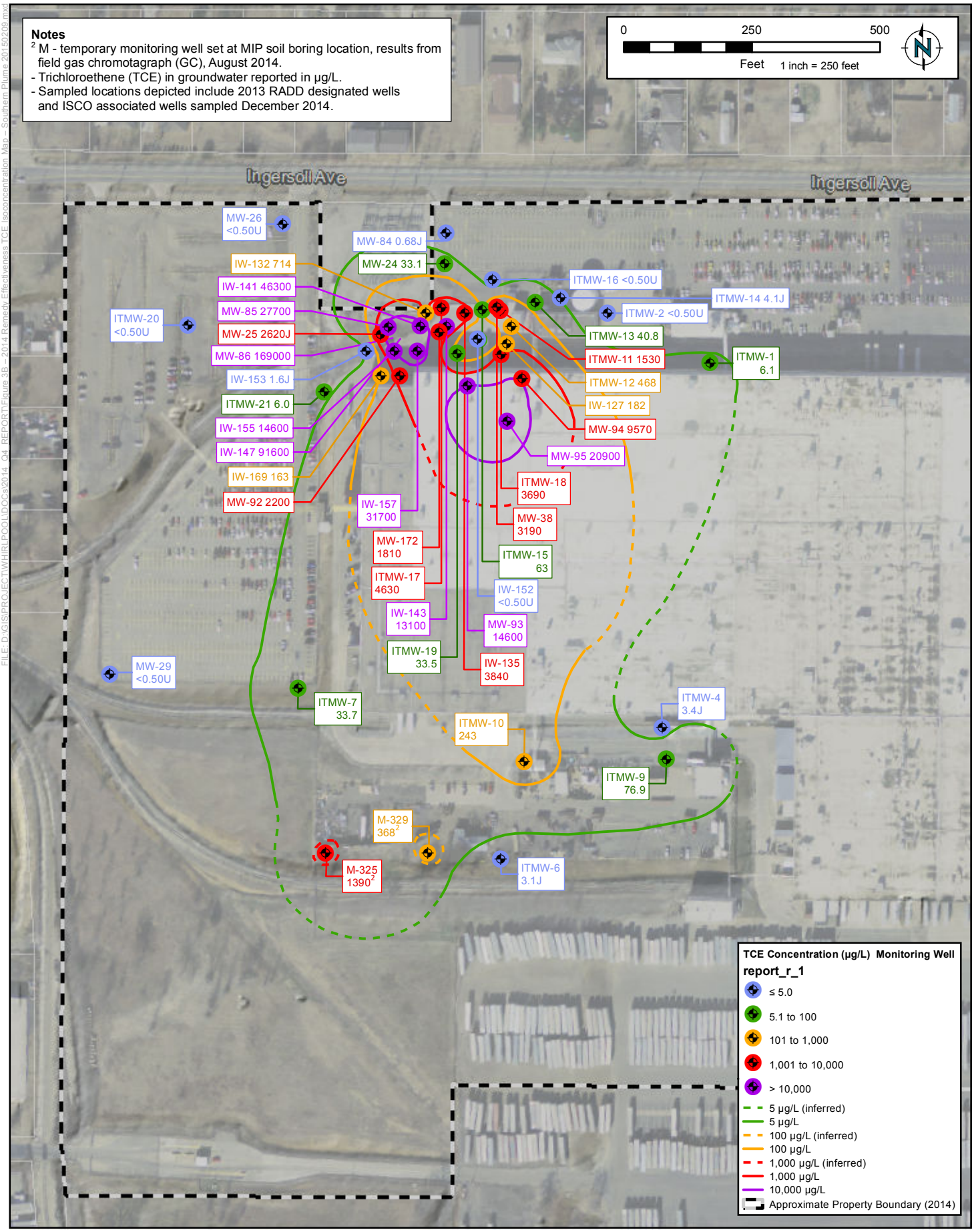
2014 REMEDY EFFECTIVENESS TCE ISOCONCENTRATION MAP NORTHERN AND NORTHEASTERN PLUMES

Whirlpool Facility - Fort Smith, Arkansas

Figure 3A

PROJECT: 2131344A

FILE: D:\GIS\PROJECT\WHIRLPOOL\DOCs\2014_Q4_REPORT\Figure 3A – 2014 Remedy Effectiveness TCE Isoconcentration Map – Northern and Northeastern Plumes 20150209.mxd



FILE: D:\GIS\PROJECT\WHIRLPOOL\DOCS\2014_Q4_REPORT\Figure 3B - 2014 Remedy Effectiveness TCE Isoconcentration Map - Southern Plume 20150209.mxd

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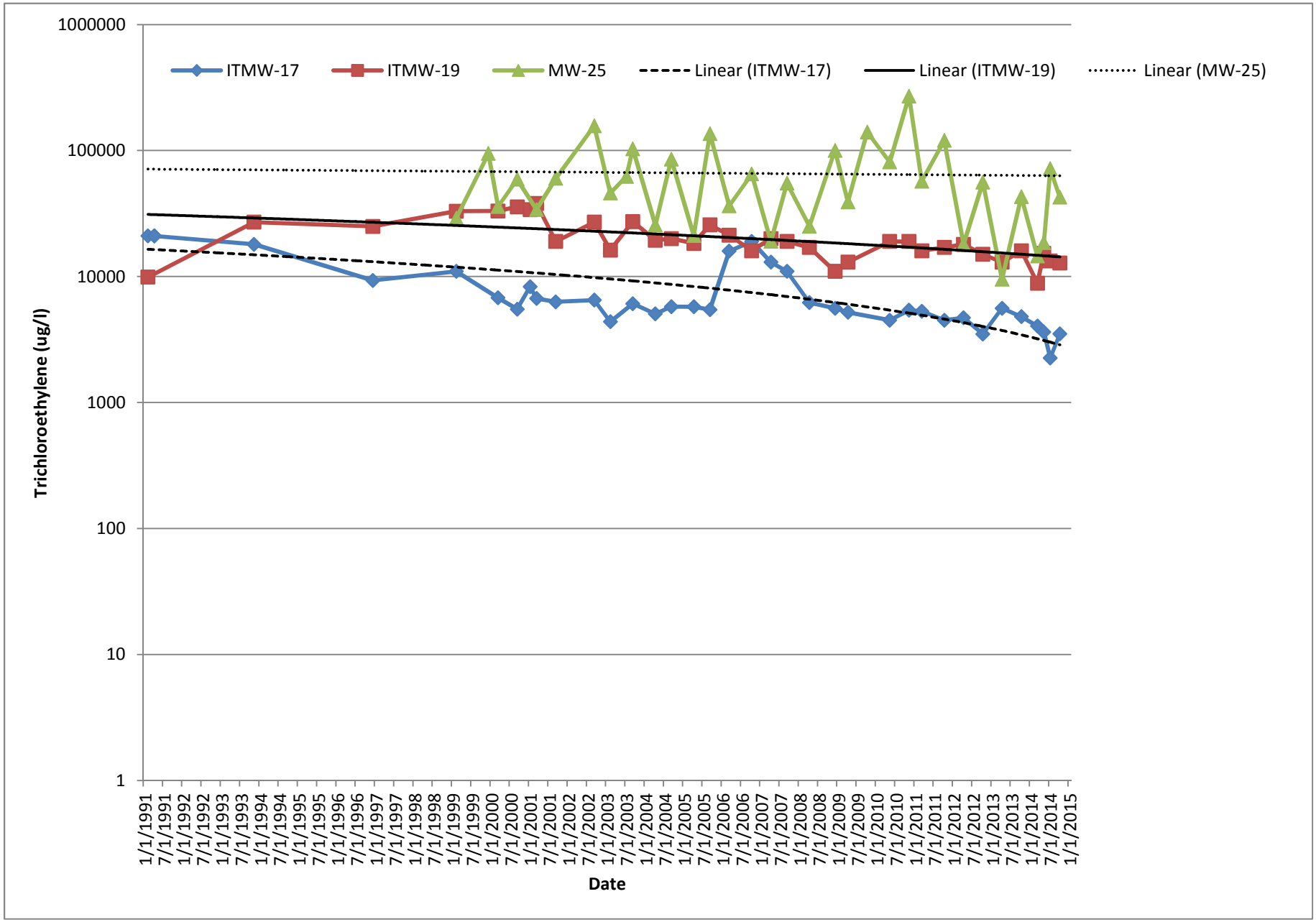
2014 REMEDY EFFECTIVENESS TCE ISOCONCENTRATION MAP - SOUTHERN PLUME

Whirlpool Facility - Fort Smith, Arkansas

Figure 3B

DRAFTED BY: KTS | DATE: 02/10/2015 | PROJECT: 2131344B

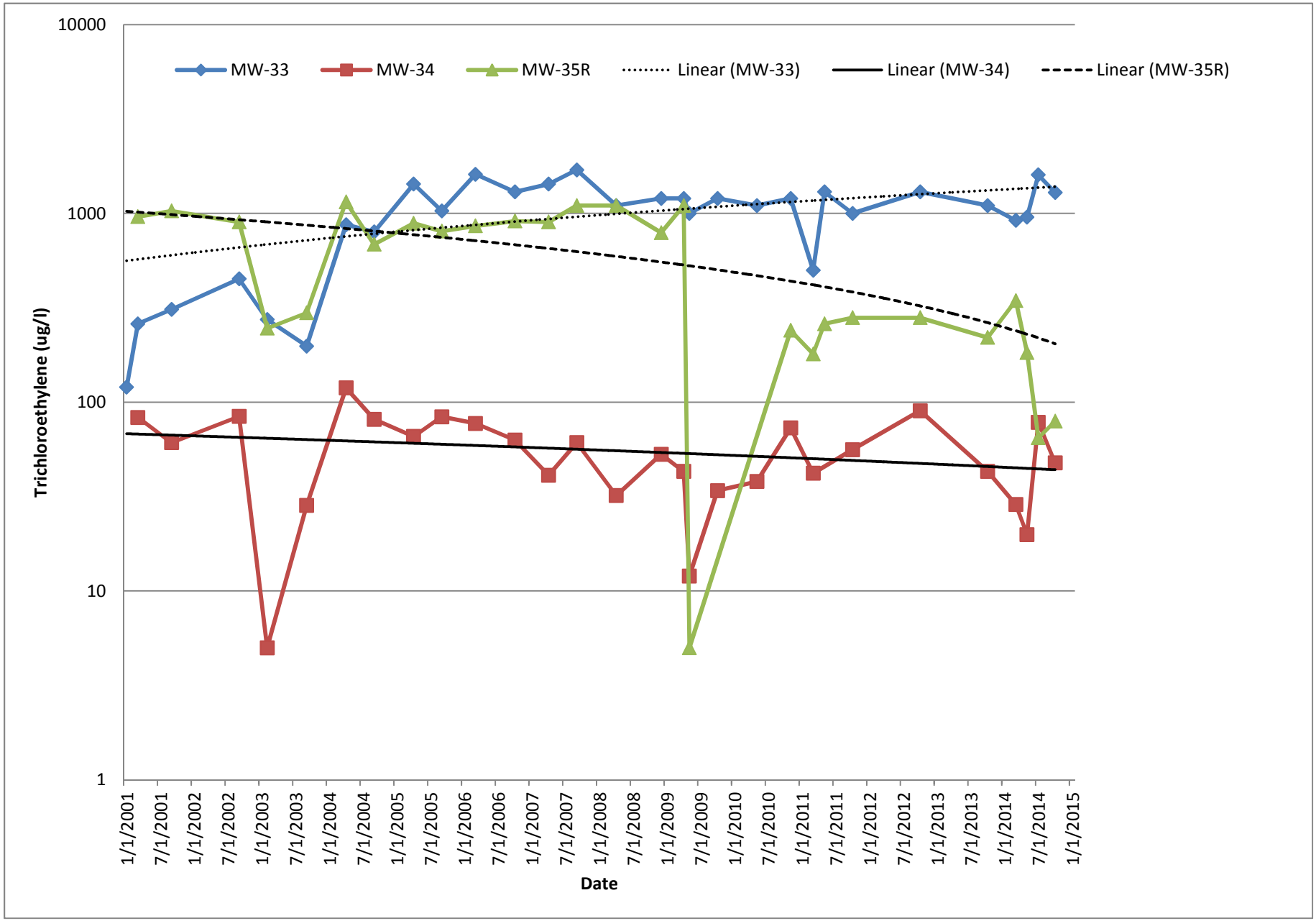
TCE Concentration with Time at Source Area Onsite Wells



ENVIRON

Figure 4
Whirlpool Facility
Fort Smith, Arkansas

TCE Concentration with Time at Northern Onsite Wells



ENVIRON

Figure 5
Whirlpool Facility
Fort Smith, Arkansas

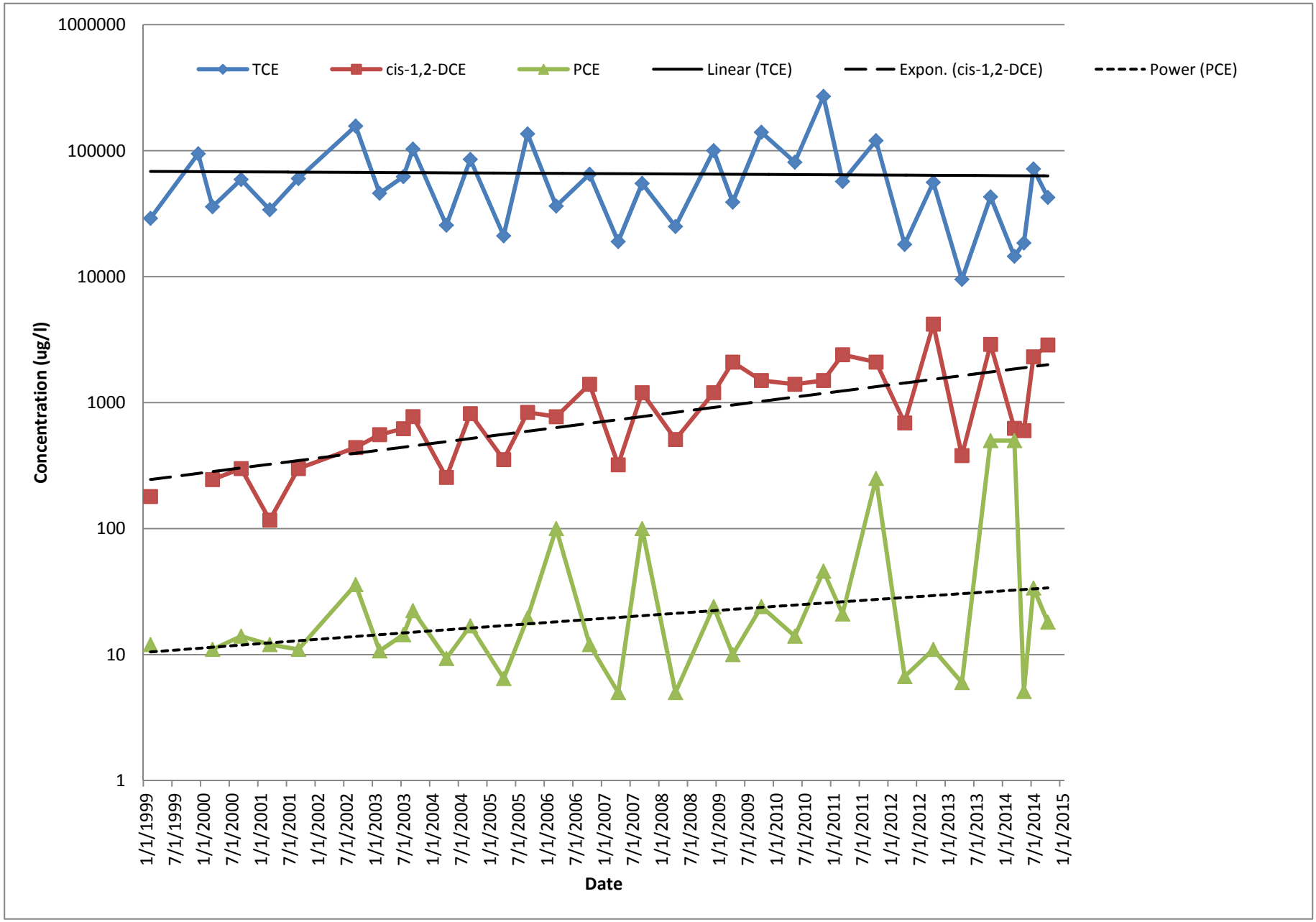


Figure 6
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON

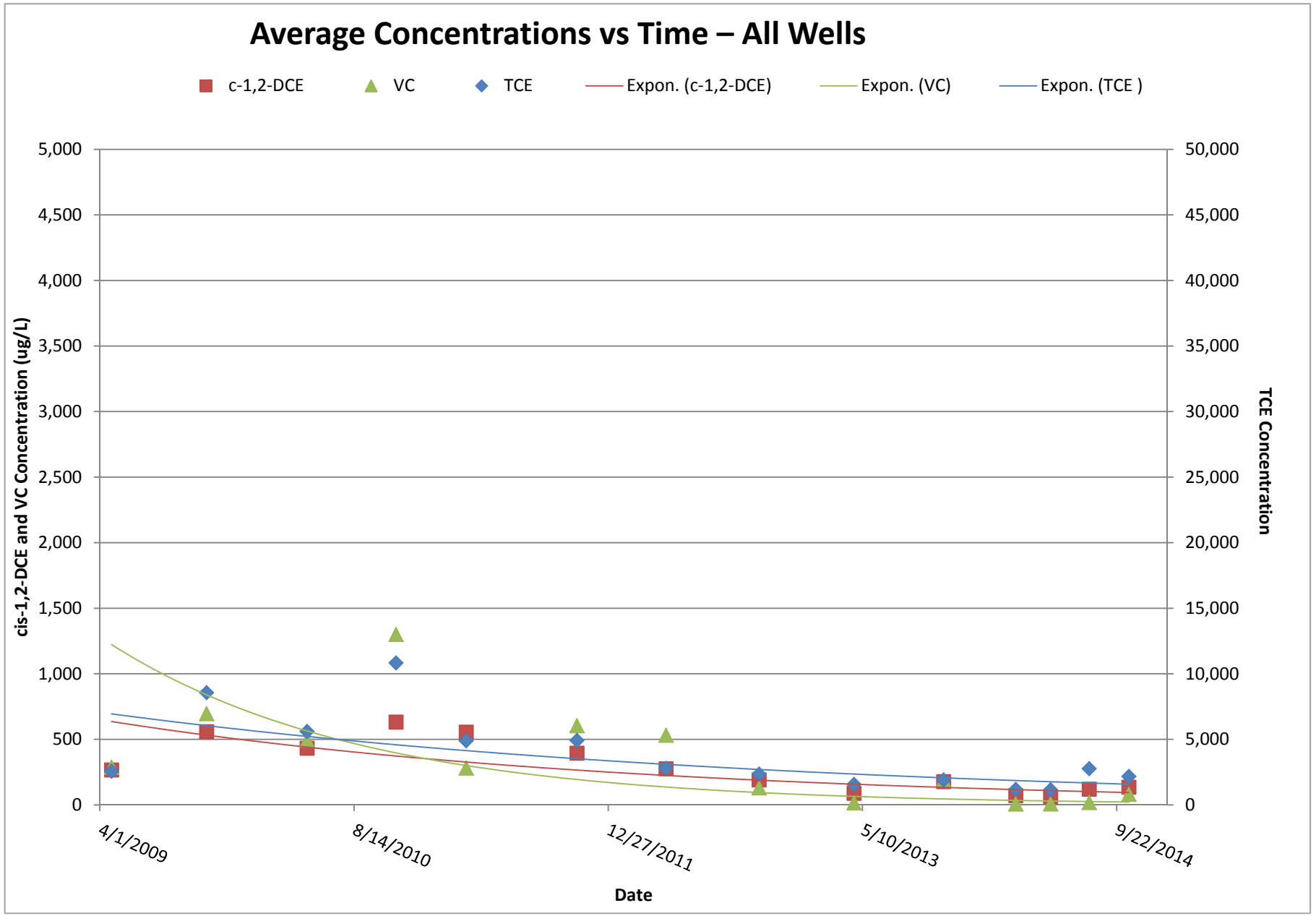


Figure 7
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON

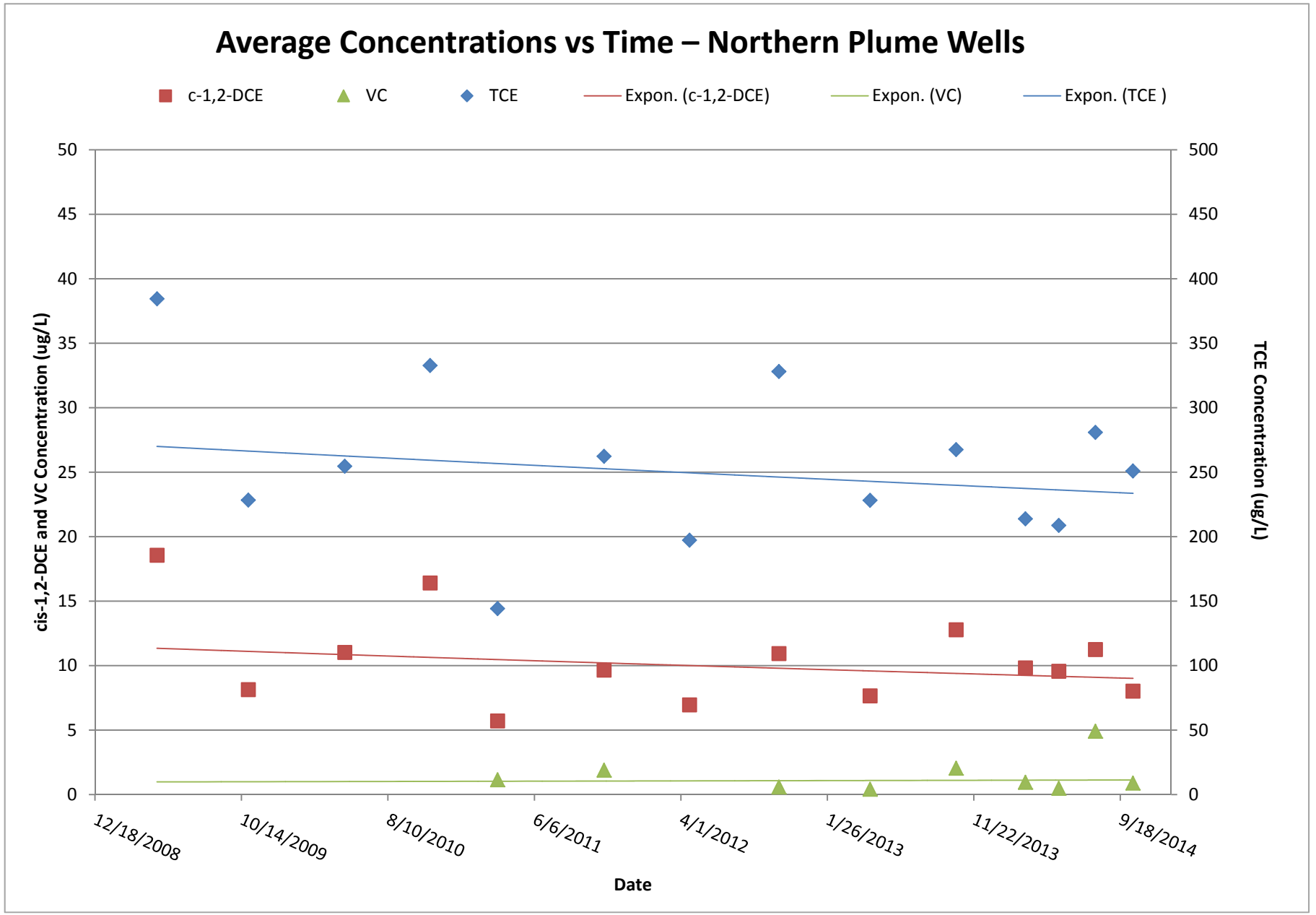


Figure 8
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON

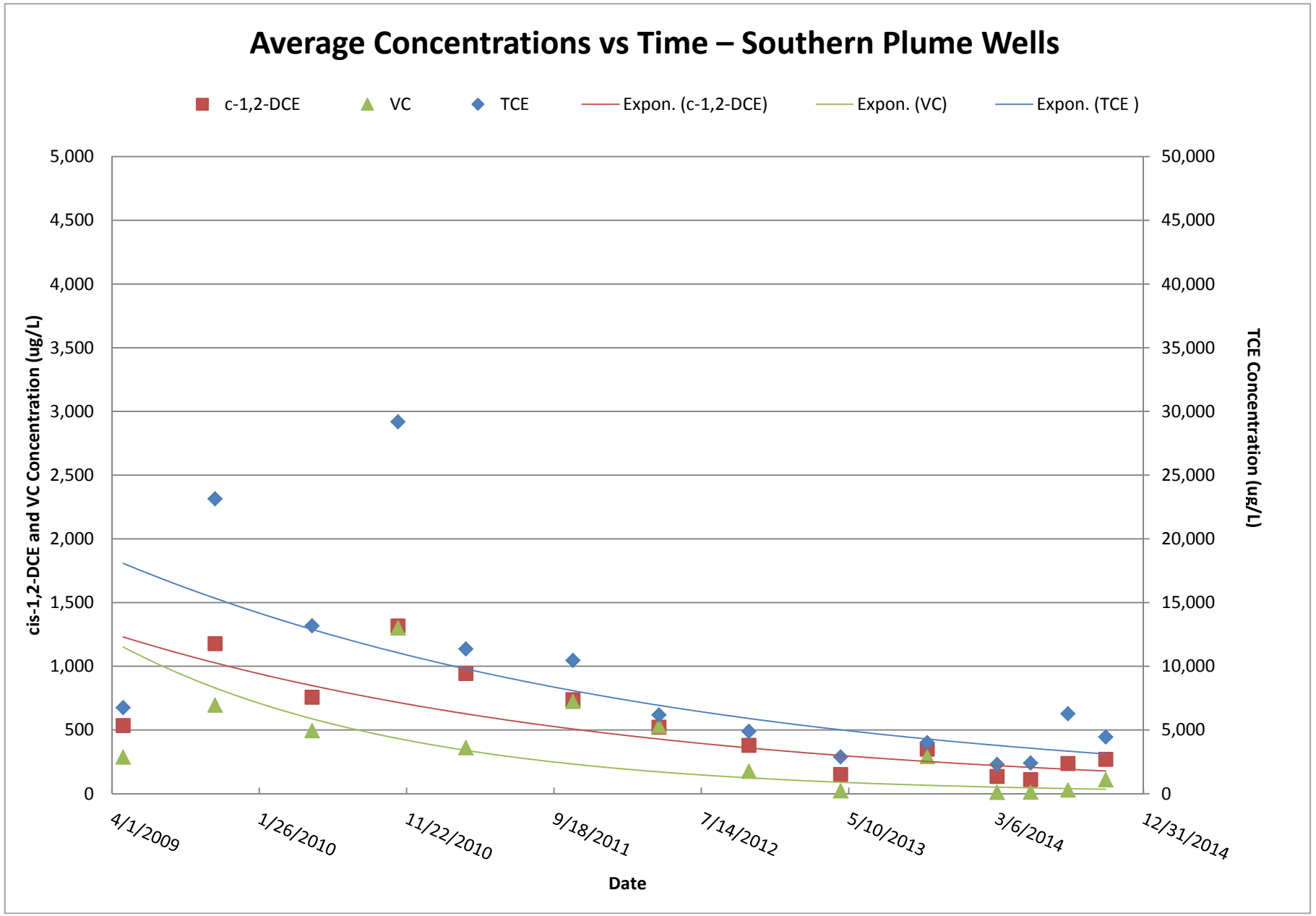


Figure 9
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON

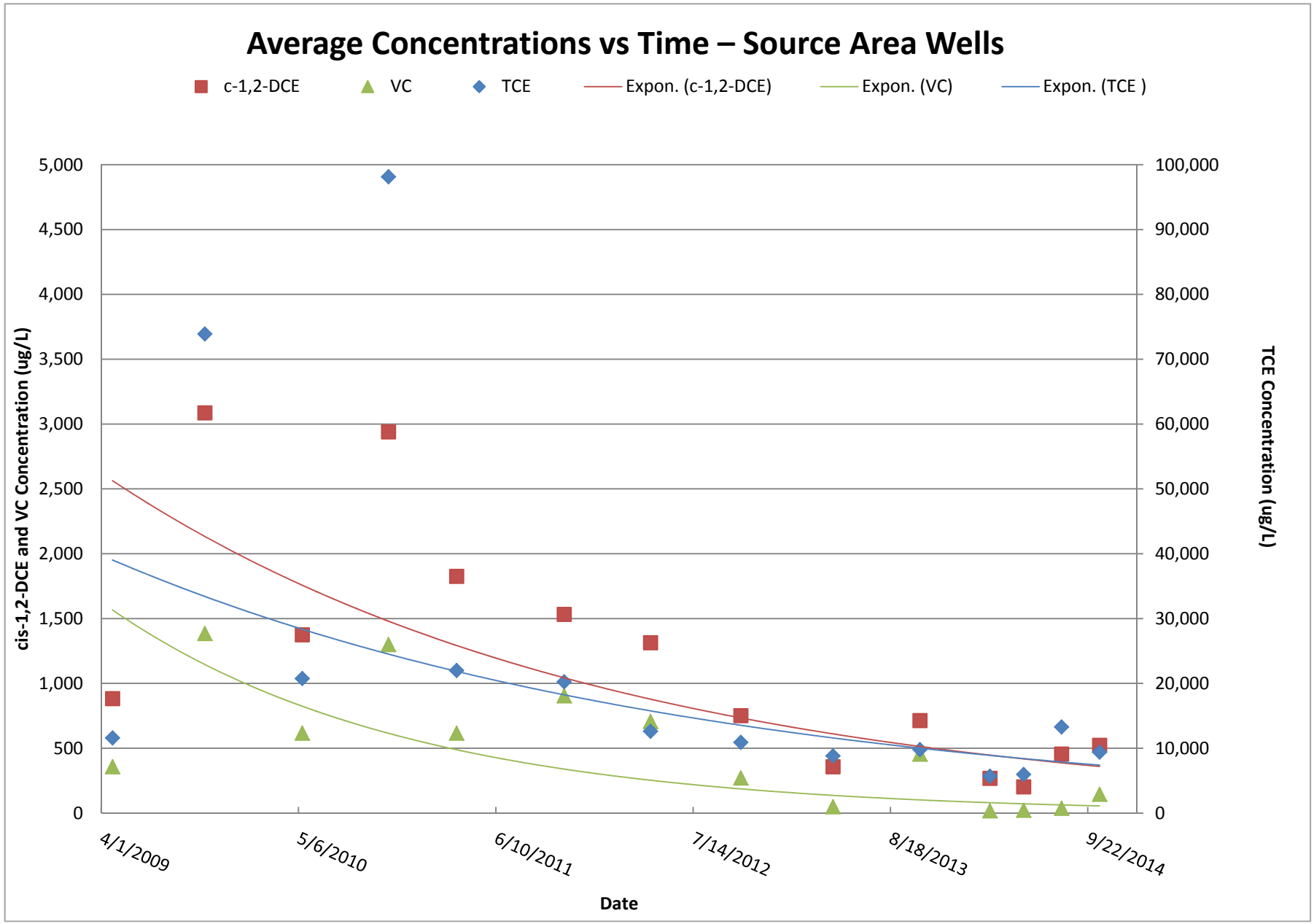
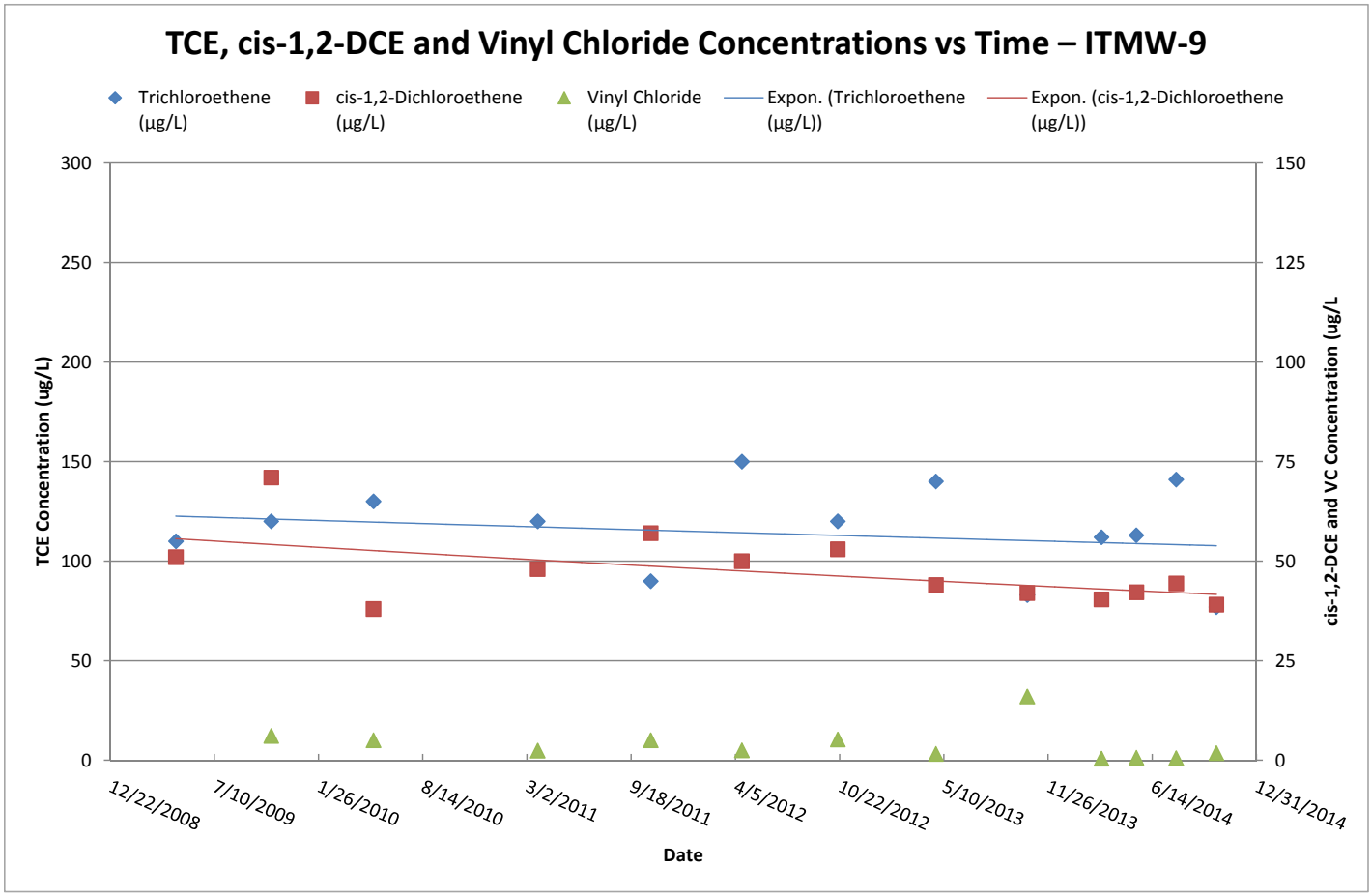


Figure 10
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON



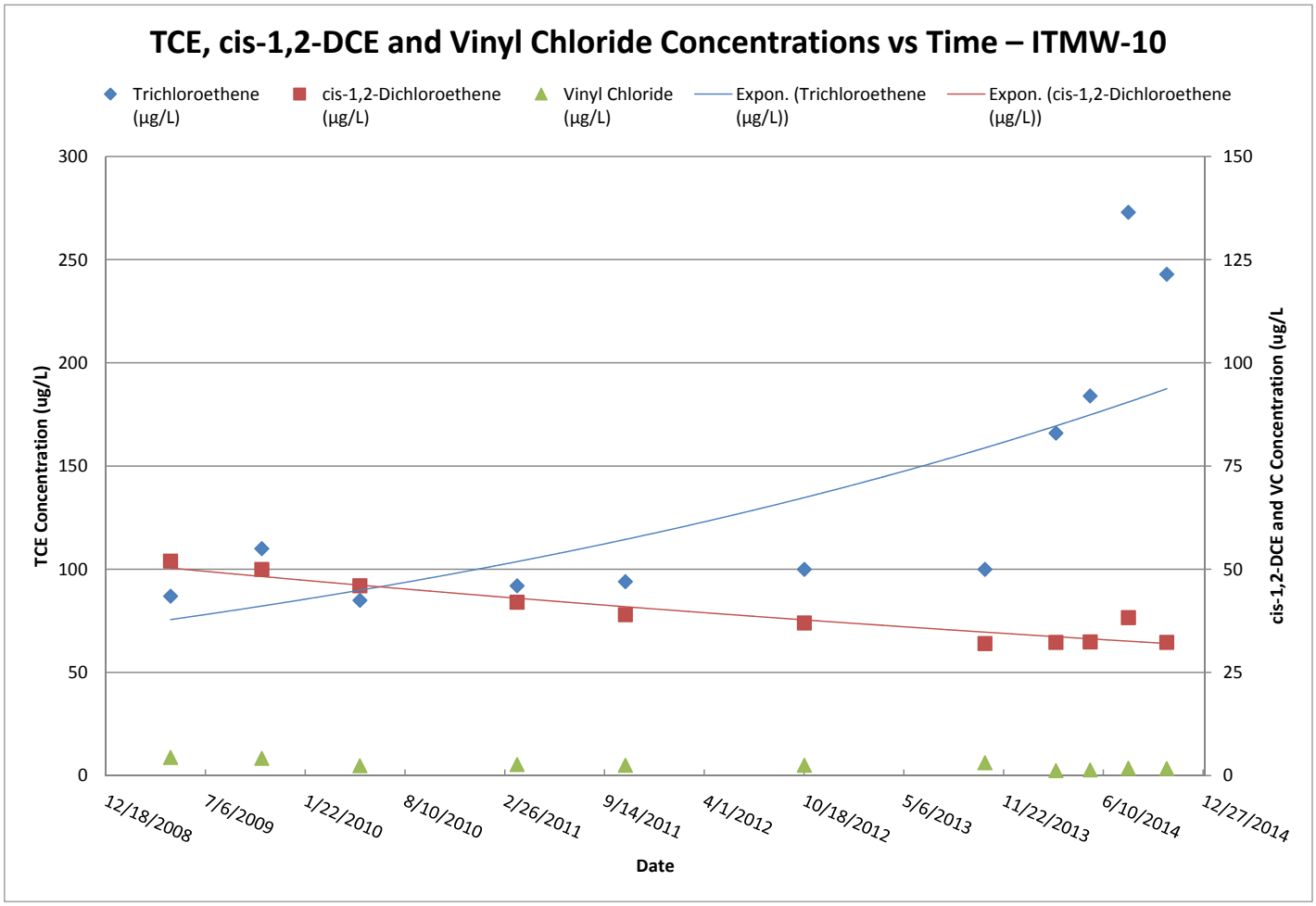
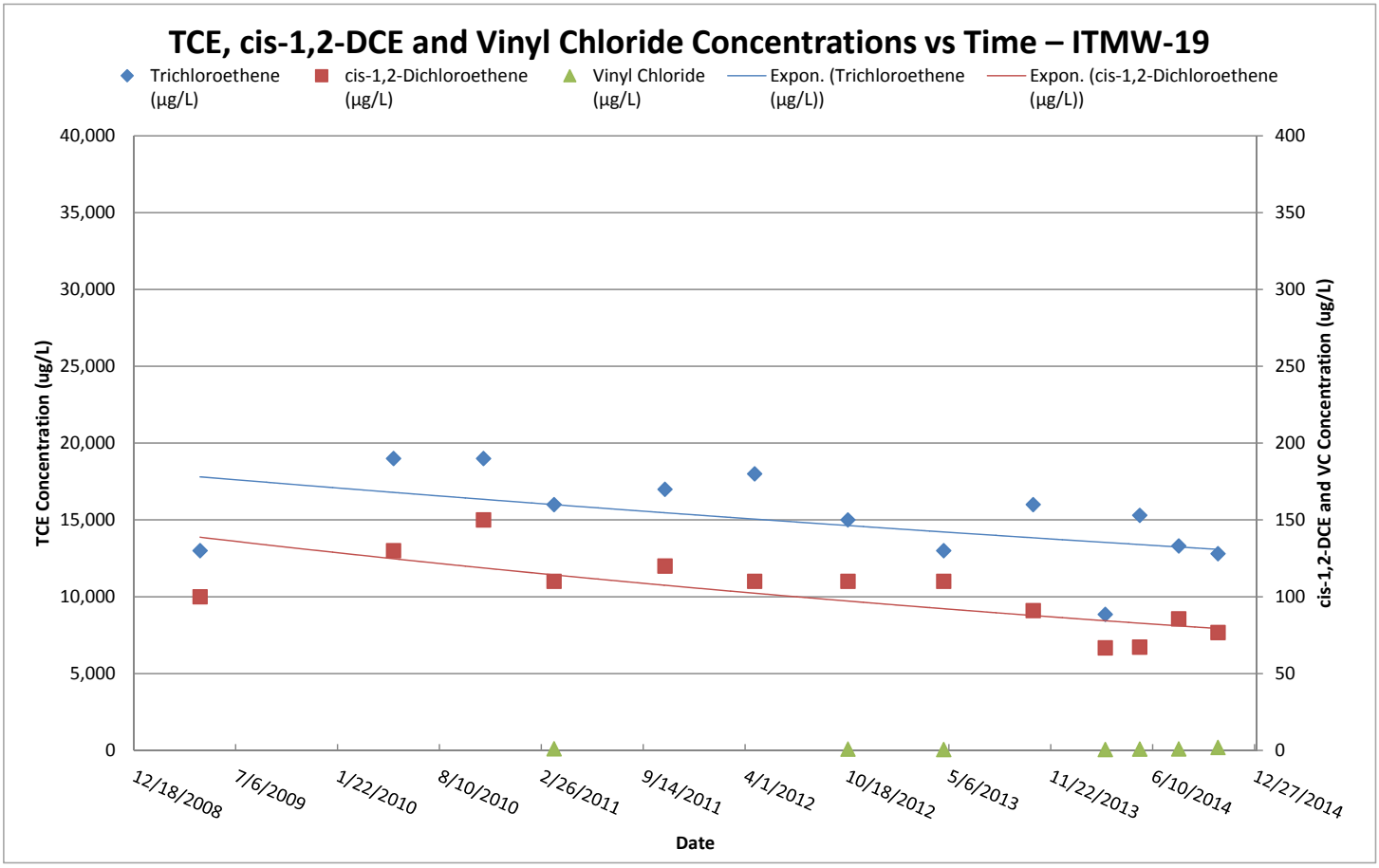


Figure 11
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON



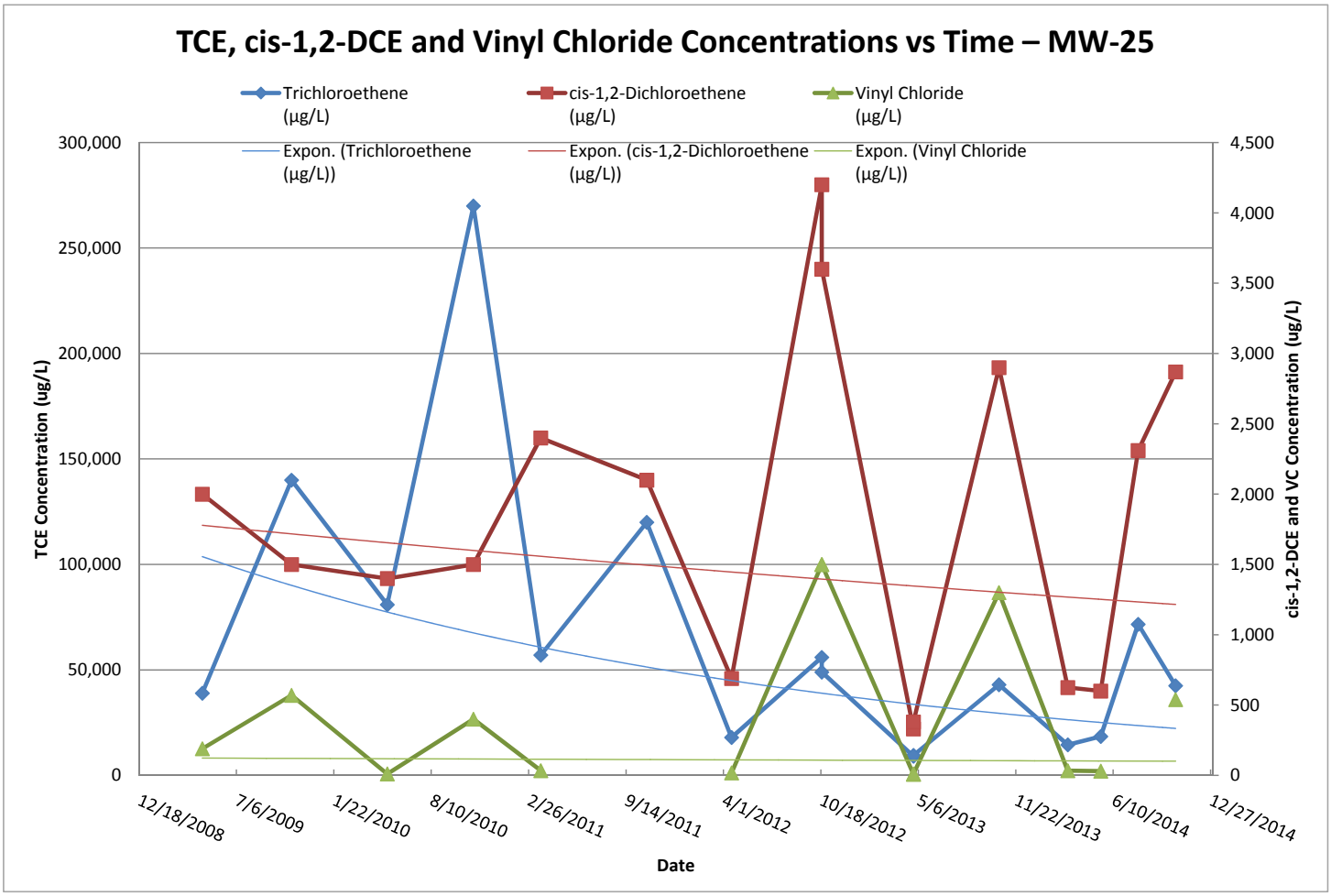
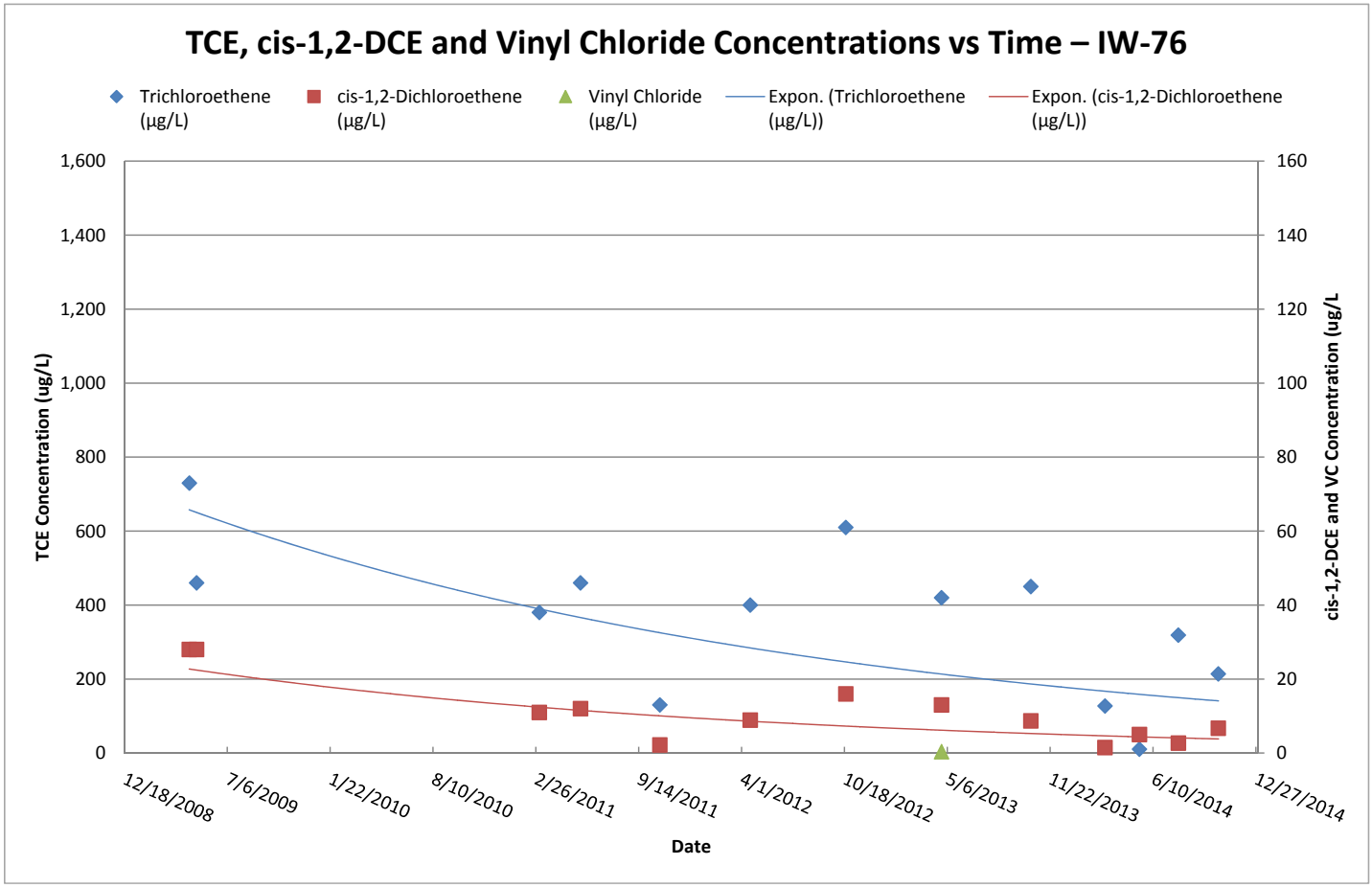


Figure 12
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON



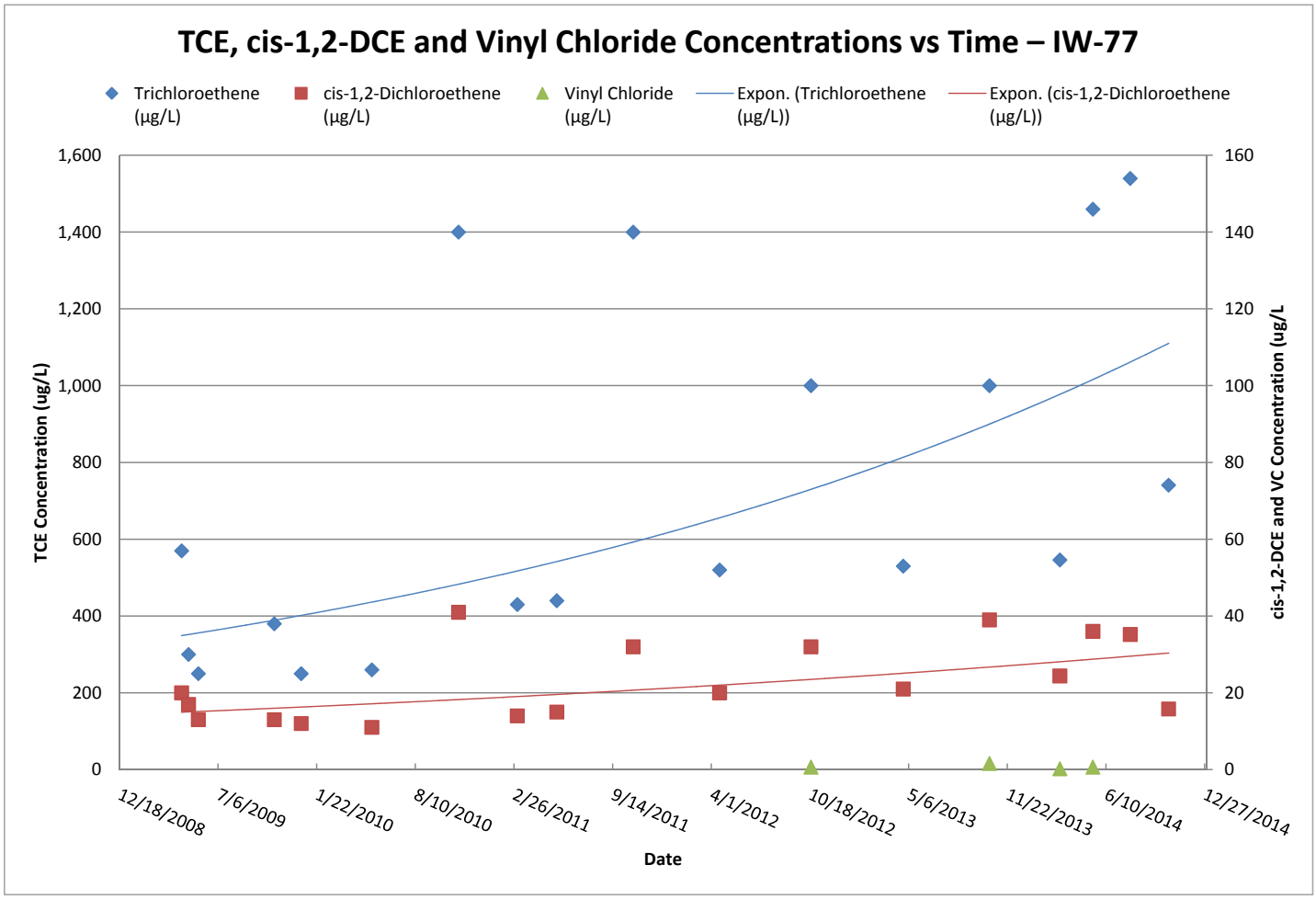


Figure 13
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON

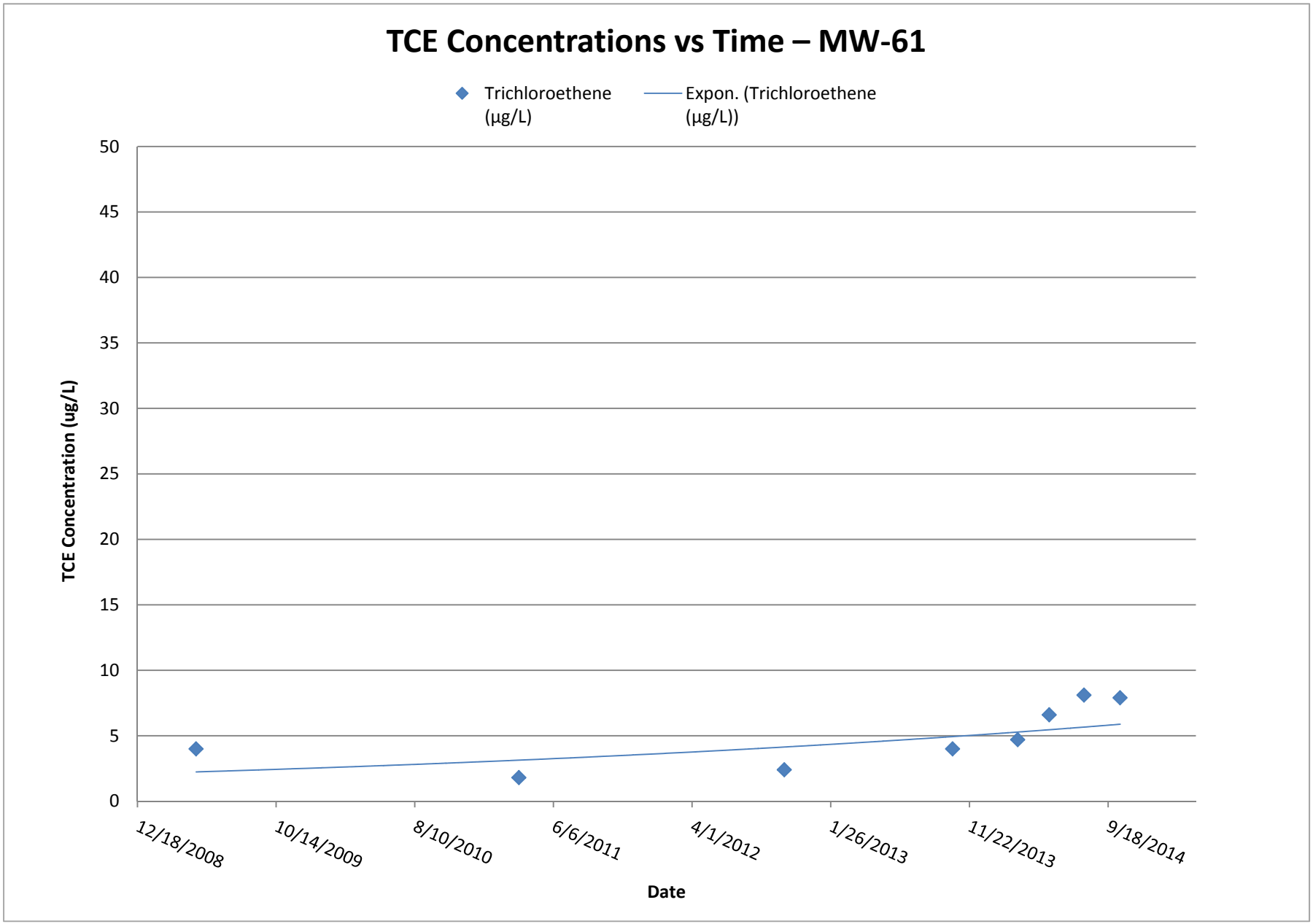


Figure 14
Whirlpool Facility
Fort Smith, Arkansas

ENVIRON

Appendix A

Fourth Quarter 2014 Calibration Logs

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/13/2014

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: 945 + 10min = 955
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 = 737.9 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: 10F102343

1. Specific Conductance: 1.412 ms/cm
2. ORP: 239 mV
3. pH:
   - Point 1: 7.01
   - Point 2: 10.00
   - Point 3: 4.00
4. DO: 98.2%

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whi[illegible]th Field Equipment Calibration Checklist

Dat[illegible] _____

Cal[illegible] Sick Zurweller

Tur[illegible]te time on line 38!

Spe[illegible]ctance calibration (should take *at least* 1.5 minutes):
- [illegible]nductivity standard into calibration cup and immerse sensor.
- [illegible] *minute* for temperature stabilization.
- [illegible]"calibrate" after *30 seconds* of no significant change in specific conductance. Note below.
- [illegible]rd used calibration standard, and rinse calibration cup and probes with DI water.

ORP[illegible]ion (should take *at least* 1.5 minutes):
- [illegible] ORP (Zobell) standard into calibration cup and immerse sensor.
- [illegible]w *1 minute* for temperature stabilization.
- [illegible]ss "calibrate" after *30 seconds* of no significant change in ORP. Note below.
- [illegible]card used calibration standard, and rinse calibration cup and probes with DI water.

3-Point calibration (should take *at least* 4.5 minutes):
- [illegible]our pH 7.0 standard into the calibration cup and immerse pH sensor.
- Allow *1 minute* for temperature stabilization.
- Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
- 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: 1240 + 10min = ~~1250~~ 1250
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 = 737.9 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 mV
3. pH:
   - Point 1: 7.00
   - Point 2: 10.00
   - Point 3: 4.01
4. DO: 97.1%

Colorimeter Model/Serial Number: 121900C 93111
Turbidity Meter Model/Serial Number: 1130 -2811

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/13/2014

Calibrated by: C. SMALLEY

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: 1216 + 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 = 737.9 mmHg — read from YSI barometer
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: 04J15531AF

1. Specific Conductance: 1.373 mS/cm^c cal to 1.413
2. ORP: 246.7 cal to 240.0
3. pH:
   - Point 1: 6.80 cal to 7.00
   - Point 2: 10.08 cal to 10.01
   - Point 3: 4.07 cal to 4.00
4. DO: 5.71 cal to 8.61

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/13/14

Calibrated by: LUCY MARTIN

Turn on YSI. Note time on line 38! 10F102343

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: 1315 + 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 = 737.9 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: 7.00
   - Point 2: 10.00
   - Point 3: 4.01
4. DO: 108.3

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/13/14

Calibrated by: Lucy MARTIN 0502720

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: 1243 + 10min = 1253
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 = 737.9 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 ORP
3. pH:
   - Point 1: 7.00
   - Point 2: 10.00
   - Point 3: 4.00
4. DO: 97

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/14/2014

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: 7:49 + 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 = 744.8 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: 10F102343

1. Specific Conductance: 1.402 ms/cm
2. ORP: 240.2 mV
3. pH:
   - Point 1: 7.00
   - Point 2: 3.97
   - Point 3: 10.04
4. DO: 9.75

Colorimeter Model/Serial Number: OR1890109059QC73072

Turbidity Meter Model/Serial Number: 2020we/246-3012

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/14/14

Calibrated by: LUCY MARTON 0502720

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: 659 + 10min = 709 709 (um)
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 = 744.7 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: 1.413
2. ORP: 240
3. pH:
   - Point 1: 7.01
   - Point 2: 10.00
   - Point 3: 3.99
4. DO: 98%

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/14/14

Calibrated by: J. Shumpf

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: 0702 + 10min = 0712
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.)
   144.9
   _____ in. x 25.4 = _____ mmHg - 15.169 = ~~746.75~~ 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: 04L2460 AG

1. Specific Conductance: 1.413
2. ORP: ~~254.4~~ JS 240.2
3. pH:
   - Point 1: 7.00
   - Point 2: 10.04
   - Point 3: 3.97
4. DO: 98.0

Colorimeter Model/Serial Number: 05050

Turbidity Meter Model/Serial Number: 1857-0412

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/14/2014

Calibrated by: C SMALLEY

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: 0656 + 10min = 0706 start 0727
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 = 744.8 mmHg read From YSI barometer
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: 04J15531 AF

1. Specific Conductance: 1.413
2. ORP: 240.0
3. pH:
   - Point 1: 6.99
   - Point 2: 10.00
   - Point 3: 3.98
4. DO: 9.70

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/14/14

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: 0650 + 10min = 0700
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 = 744.9 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: 12A101625

1. Specific Conductance: 1.413
2. ORP: 240.1
3. pH:
   - Point 1: 10.00
   - Point 2: 7.00
   - Point 3: 4.01
4. DO: 98.1

Colorimeter Model/Serial Number: 12119C13111

Turbidity Meter Model/Serial Number: 1130 - 2811

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/15/14

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: 0650 + 10min = 0700
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 = 749.8 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: 12A101625

1. Specific Conductance: 1.413 ms/cm
2. ORP: 240
3. pH:
   - Point 1: 7.00
   - Point 2: 4.00
   - Point 3: 10.00
4. DO: 98.7%

Colorimeter Model/Serial Number: 121190C73111

Turbidity Meter Model/Serial Number: 1130-2811

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/15/14

Calibrated by: J. Stumpf

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: 0658 + 10min = 0708
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 = 749.7 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: 04L2400 AG

1. Specific Conductance: 1.413
2. ORP: 240.0
3. pH:
   - Point 1: 10.00
   - Point 2: 4.00
   - Point 3: 6.97
4. DO: 98.7%

Colorimeter Model/Serial Number: 05650

Turbidity Meter Model/Serial Number: 1857-0412

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/15/2014

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: 6:22 + 10min = 6:32
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.)
   30.01 in. x 25.4 = _____ mmHg - 15.169 = 747.085 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: 10F102343

1. Specific Conductance: 1413 µs/cm
2. ORP: 240.0 mV
3. pH:
   - Point 1: 7.00
   - Point 2: 3.97
   - Point 3: 10.04
4. DO: 9.95

Colorimeter Model/Serial Number: OR1890 / 090590C73072

Turbidity Meter Model/Serial Number: 2020we / 2416-3012

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/15/14

Calibrated by: LUCY MARTON

05D2720

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: 0650 + 10min = 700
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 = 749.7 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: 1413
2. ORP: 240
3. pH:
   - Point 1: 7.00
   - Point 2: 4.00
   - Point 3: 9.94
4. DO: 98.0

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/15/2014

Calibrated by: C SMALLEY

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 = 749.7 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: 04J1SS31AF

1. Specific Conductance: 1413 ~~mS~~ µS/cm
2. ORP: 240.0
3. pH:
   - Point 1: 7.00
   - Point 2: 9.99
   - Point 3: 3.99
4. DO: 9.92 mg/L

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10-15

Calibrated by: Jeff Nelson

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: 0655 + 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 = 749.7 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: 1,413
2. ORP: 240.0
3. pH:
   - Point 1: 7.00
   - Point 2: 10.00
   - Point 3: 4.00
4. DO: 10.0

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/14

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: 0650 + 10min = 0700
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 = 747.7 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: 12A101625

1. Specific Conductance: 1413
2. ORP: 240
3. pH:
   - Point 1: 7.00
   - Point 2: 4.00
   - Point 3: 10.02
4. DO: 98.4 %

Colorimeter Model/Serial Number: 1211900C73111

Turbidity Meter Model/Serial Number: 1130-2811

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/14

Calibrated by: LUCY MARTON 04J155531 AF

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: 700 + 10min = 710
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: 7.0
   - Point 2: 4.0
   - Point 3: 9.99
4. DO: 98.4

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10-16

Calibrated by: Jeff Melson

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: 0655 + 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 = 748.0 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: 9.97
   - Point 3: 4.00
4. DO: 10.02

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/14/14

Calibrated by: J. Stumpf

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: 0659 + 10min = 0709
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 = 748.1 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: 04L2460AG

1. Specific Conductance: 1.413
2. ORP: 240.0
3. pH:
   - Point 1: 7.00
   - Point 2: 4.00
   - Point 3: 4.99
4. DO: 98.4%

Colorimeter Model/Serial Number: 05050

Turbidity Meter Model/Serial Number: 1857-0412

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/2014

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: 7:38 + 10min = 7"
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 = 748.1 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: 4.00
   - Point 2: 7.00
   - Point 3: 9.99
4. DO: 98.0

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/2014

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: 1625 + 10min = 1635
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 = 747.8 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: 10F102343

1. Specific Conductance: 1413 µs/cm
2. ORP: 240.0 mV
3. pH:
   - Point 1: 7.00
   - Point 2: 3.99
   - Point 3: 10.04
4. DO: 9.93

Colorimeter Model/Serial Number: DR1890 / 1090590C73072

Turbidity Meter Model/Serial Number: 2020we / 2416-3012

Appendix B
Laboratory Analytical Data

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

October 28, 2014

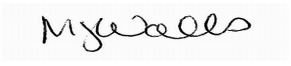
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: Fort Smith, AR
Pace Project No.: 60180221

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on October 13, 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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Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: Fort Smith, AR
Pace Project No.: 60180221

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.: 60180221

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60180221001	**MW-39-201410**	Water	10/13/14 15:28	10/13/14 23:46
60180221002	**MW-66-201410**	Water	10/13/14 14:55	10/13/14 23:46
60180221003	**MW-67-201410**	Water	10/13/14 15:45	10/13/14 23:46
60180221004	**MW-40-201410**	Water	10/13/14 15:55	10/13/14 23:46
60180221005	**IW-72-201410**	Water	10/13/14 15:40	10/13/14 23:46
60180221006	**TB-13-201410**	Water	10/13/14 14:55	10/13/14 23:46
60180221007	**EB-01-201410**	Water	10/13/14 17:15	10/13/14 23:46

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SAMPLE ANALYTE COUNT

Project: Fort Smith, AR
Pace Project No.: 60180221

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60180221001	**MW-39-201410**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	JGP	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	OL	2	PASI-K
		EPA 350.1	AJM	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
60180221002	**MW-66-201410**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	JGP	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	OL	2	PASI-K
		EPA 350.1	AJM	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
60180221003	**MW-67-201410**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	JGP	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	OL	2	PASI-K
		EPA 350.1	AJM	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: Fort Smith, AR
Pace Project No.: 60180221

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60180221004	**MW-40-201410**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	JGP	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	OL, TDB	2	PASI-K
		EPA 350.1	AJM	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
60180221005	**IW-72-201410**	EPA 8015 - Alcohol	TA	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	OL	2	PASI-K
		EPA 350.1	AJM	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
60180221006	**TB-13-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180221007	**EB-01-201410**	EPA 5030B/8260	PRG	38	PASI-K

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PROJECT NARRATIVE

Project: Fort Smith, AR
Pace Project No.: 60180221

Method: **EPA 8015 - Alcohol**
Description: Alcohol by Direct Inject GCFID
Client: Environ_AR
Date: October 28, 2014

General Information:
5 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.: 60180221

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Environ_AR
Date: October 28, 2014

General Information:
5 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.: 60180221

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: October 28, 2014

General Information:
7 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/65158

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: Fort Smith, AR
Pace Project No.: 60180221

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: Environ_AR
Date: October 28, 2014

General Information:
5 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.: 60180221

Method: **SM 3500-Fe B#4**
Description: Iron, Ferric (Calculation)
Client: Environ_AR
Date: October 28, 2014

General Information:
5 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.: 60180221

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: October 28, 2014

General Information:
5 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.
- IW-72-201410 (Lab ID: 60180221005)
- MW-39-201410 (Lab ID: 60180221001)
- MW-40-201410 (Lab ID: 60180221004)
- MW-66-201410 (Lab ID: 60180221002)
- MW-67-201410 (Lab ID: 60180221003)

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/51124

1e: Field pH
- IW-72-201410 (Lab ID: 60180221005)
  - pH at 25 Degrees C
- MW-39-201410 (Lab ID: 60180221001)
  - pH at 25 Degrees C
- MW-40-201410 (Lab ID: 60180221004)
  - pH at 25 Degrees C
- MW-66-201410 (Lab ID: 60180221002)
  - pH at 25 Degrees C
- MW-67-201410 (Lab ID: 60180221003)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: Fort Smith, AR
Pace Project No.: 60180221

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Environ_AR
Date: October 28, 2014

General Information:
5 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: Fort Smith, AR
Pace Project No.: 60180221

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Environ_AR
Date: October 28, 2014

General Information:
5 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/31426

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180174001,60180188001

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

- MS (Lab ID: 1463428)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: Fort Smith, AR
Pace Project No.: 60180221

Method: **EPA 350.1**
Description: 350.1 Ammonia
Client: Environ_AR
Date: October 28, 2014

General Information:
5 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.

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.: 60180221

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Environ_AR
Date: October 28, 2014

General Information:
5 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/31368

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s):
60180221002,60180221005,60180227005

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

- MS (Lab ID: 1461097)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrite

Additional Comments:

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PROJECT NARRATIVE

Project: Fort Smith, AR
Pace Project No.: 60180221

Method: **SM 4500-CO2 D**
Description: Total Carbon Dioxide Calc
Client: Environ_AR
Date: October 28, 2014

General Information:
5 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.: 60180221

Method: **SM 5310C**
Description: 5310C TOC
Client: Environ_AR
Date: October 28, 2014

General Information:
5 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.: 60180221

Method: **SM 4500-P E**
Description: SM4500P-E, Total Phosphorus
Client: Environ_AR
Date: October 28, 2014

General Information:
5 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: Fort Smith, AR
Pace Project No.: 60180221

Sample: MW-39-201410 **Lab ID: 60180221001** Collected: 10/13/14 15:28 Received: 10/13/14 23:46 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		10/17/14 14:36	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**49.0J**	ug/L	50.0	24.0	1	10/15/14 16:00	10/21/14 10:54	7439-89-6	
Manganese	**425**	ug/L	5.0	2.5	1	10/15/14 16:00	10/21/14 10:54	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/19/14 15:44	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/19/14 15:44	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/19/14 15:44	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/19/14 15:44	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/19/14 15:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/19/14 15:44	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/19/14 15:44	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/19/14 15:44	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/19/14 15:44	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/19/14 15:44	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/19/14 15:44	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/19/14 15:44	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/19/14 15:44	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/19/14 15:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 15:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:44	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/19/14 15:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 15:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 15:44	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/19/14 15:44	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/19/14 15:44	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/19/14 15:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/19/14 15:44	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/19/14 15:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/19/14 15:44	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:44	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/19/14 15:44	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 15:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 15:44	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:44	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/19/14 15:44	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/19/14 15:44	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		10/19/14 15:44	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		10/19/14 15:44	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		10/19/14 15:44	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/19/14 15:44		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60180221

Sample: MW-39-201410 **Lab ID: 60180221001** Collected: 10/13/14 15:28 Received: 10/13/14 23:46 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		10/22/14 09:32		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/22/14 09:32		
Alkalinity, Total as CaCO3	**10.6J**	mg/L	20.0	2.0	1		10/22/14 09:32		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.049J**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 10:59	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**379**	mg/L	50.0	25.0	50		10/21/14 19:24	16887-00-6	
Sulfate	**3.8**	mg/L	1.0	0.054	1		10/21/14 19:39	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/18/14 16:47	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.025J**	mg/L	0.10	0.012	1		10/15/14 14:32		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/15/14 14:32		
Nitrogen, NO2 plus NO3	**0.025J**	mg/L	0.10	0.012	1		10/15/14 14:32		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		10/20/14 17:28	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.014J**	mg/L	0.030	0.010	1	10/20/14 09:09	10/20/14 14:18		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60180221

Sample: MW-66-201410 **Lab ID: 60180221002** Collected: 10/13/14 14:55 Received: 10/13/14 23:46 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		10/17/14 14:48	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**74.2**	ug/L	50.0	24.0	1	10/15/14 16:00	10/21/14 10:58	7439-89-6	
Manganese	**12.4**	ug/L	5.0	2.5	1	10/15/14 16:00	10/21/14 10:58	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/19/14 15:59	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/19/14 15:59	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/19/14 15:59	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/19/14 15:59	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/19/14 15:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/19/14 15:59	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/19/14 15:59	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/19/14 15:59	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/19/14 15:59	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/19/14 15:59	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/19/14 15:59	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/19/14 15:59	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/19/14 15:59	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/19/14 15:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 15:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/19/14 15:59	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 15:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 15:59	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/19/14 15:59	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/19/14 15:59	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/19/14 15:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/19/14 15:59	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/19/14 15:59	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/19/14 15:59	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:59	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/19/14 15:59	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 15:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 15:59	79-00-5	
Trichloroethene	**2.3J**	ug/L	5.0	0.50	1		10/19/14 15:59	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/19/14 15:59	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/19/14 15:59	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	92	%	80-120		1		10/19/14 15:59	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		10/19/14 15:59	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		10/19/14 15:59	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/19/14 15:59		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60180221

Sample: MW-66-201410 **Lab ID: 60180221002** Collected: 10/13/14 14:55 Received: 10/13/14 23:46 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		10/22/14 09:35		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/22/14 09:35		
Alkalinity, Total as CaCO3	**100**	mg/L	20.0	2.0	1		10/22/14 09:35		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.074J**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 10:59	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**172**	mg/L	10.0	5.0	10		10/20/14 05:23	16887-00-6	
Sulfate	**7.1**	mg/L	1.0	0.054	1		10/21/14 20:21	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/18/14 16:48	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.22**	mg/L	0.10	0.012	1		10/15/14 14:21		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/15/14 14:21		
Nitrogen, NO2 plus NO3	**0.22**	mg/L	0.10	0.012	1		10/15/14 14:21		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**259**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		10/20/14 17:41	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.039**	mg/L	0.030	0.010	1	10/20/14 09:09	10/20/14 14:18		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60180221

Sample: MW-67-201410 **Lab ID: 60180221003** Collected: 10/13/14 15:45 Received: 10/13/14 23:46 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		10/17/14 14:59	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**1900**	ug/L	50.0	24.0	1	10/15/14 16:00	10/21/14 11:01	7439-89-6	
Manganese	**15.3**	ug/L	5.0	2.5	1	10/15/14 16:00	10/21/14 11:01	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/19/14 16:14	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/19/14 16:14	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/19/14 16:14	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/19/14 16:14	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/19/14 16:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/19/14 16:14	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/19/14 16:14	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/19/14 16:14	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/19/14 16:14	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/19/14 16:14	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/19/14 16:14	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/19/14 16:14	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/19/14 16:14	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/19/14 16:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 16:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/19/14 16:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 16:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 16:14	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/19/14 16:14	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/19/14 16:14	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/19/14 16:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/19/14 16:14	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/19/14 16:14	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/19/14 16:14	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:14	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/19/14 16:14	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 16:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 16:14	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:14	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/19/14 16:14	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/19/14 16:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	92	%	80-120		1		10/19/14 16:14	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		10/19/14 16:14	17060-07-0	
Toluene-d8 (S)	103	%	80-120		1		10/19/14 16:14	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/19/14 16:14		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60180221

Sample: MW-67-201410 **Lab ID: 60180221003** Collected: 10/13/14 15:45 Received: 10/13/14 23:46 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**256**	mg/L	20.0	2.0	1		10/22/14 09:39		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/22/14 09:39		
Alkalinity, Total as CaCO3	**256**	mg/L	20.0	2.0	1		10/22/14 09:39		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.74**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:00	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**113**	mg/L	10.0	5.0	10		10/20/14 05:38	16887-00-6	
Sulfate	**7.4**	mg/L	1.0	0.054	1		10/21/14 20:35	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/18/14 16:49	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		10/15/14 14:37		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/15/14 14:37		
Nitrogen, NO2 plus NO3	**0.022J**	mg/L	0.10	0.012	1		10/15/14 14:37		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**328**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		10/20/14 17:54	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	10/20/14 09:09	10/20/14 14:19		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60180221

Sample: MW-40-201410 **Lab ID: 60180221004** Collected: 10/13/14 15:55 Received: 10/13/14 23:46 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		10/17/14 15:11	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**29.8J**	ug/L	50.0	24.0	1	10/15/14 16:00	10/21/14 11:05	7439-89-6	
Manganese	**192**	ug/L	5.0	2.5	1	10/15/14 16:00	10/21/14 11:05	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/19/14 16:29	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/19/14 16:29	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/19/14 16:29	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/19/14 16:29	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/19/14 16:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/19/14 16:29	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/19/14 16:29	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/19/14 16:29	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/19/14 16:29	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/19/14 16:29	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/19/14 16:29	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/19/14 16:29	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/19/14 16:29	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/19/14 16:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 16:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/19/14 16:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 16:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 16:29	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/19/14 16:29	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/19/14 16:29	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/19/14 16:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/19/14 16:29	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/19/14 16:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/19/14 16:29	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:29	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/19/14 16:29	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 16:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 16:29	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:29	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/19/14 16:29	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/19/14 16:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		10/19/14 16:29	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		10/19/14 16:29	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		10/19/14 16:29	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/19/14 16:29		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60180221

Sample: MW-40-201410 **Lab ID: 60180221004** Collected: 10/13/14 15:55 Received: 10/13/14 23:46 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**14.4J**	mg/L	20.0	2.0	1		10/22/14 09:42		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/22/14 09:42		
Alkalinity, Total as CaCO3	**14.4J**	mg/L	20.0	2.0	1		10/22/14 09:42		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.030J**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:00	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**247**	mg/L	20.0	10.0	20		10/22/14 07:34	16887-00-6	
Sulfate	**2.5**	mg/L	1.0	0.054	1		10/28/14 00:21	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/18/14 16:53	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.040J**	mg/L	0.10	0.012	1		10/15/14 14:29		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/15/14 14:29		
Nitrogen, NO2 plus NO3	**0.040J**	mg/L	0.10	0.012	1		10/15/14 14:29		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		10/20/14 18:07	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.049**	mg/L	0.030	0.010	1	10/20/14 09:09	10/20/14 14:19		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60180221

Sample: IW-72-201410 **Lab ID: 60180221005** Collected: 10/13/14 15:40 Received: 10/13/14 23:46 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		10/17/14 15:22	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**166**	ug/L	50.0	24.0	1	10/15/14 16:00	10/21/14 12:44	7439-89-6	
Manganese	**5340**	ug/L	5.0	2.5	1	10/15/14 16:00	10/21/14 12:44	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/19/14 16:44	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/19/14 16:44	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/19/14 16:44	75-27-4	
Bromoform	**4.5J**	ug/L	5.0	0.50	1		10/19/14 16:44	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/19/14 16:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/19/14 16:44	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/19/14 16:44	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/19/14 16:44	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/19/14 16:44	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/19/14 16:44	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/19/14 16:44	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/19/14 16:44	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/19/14 16:44	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/19/14 16:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 16:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:44	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/19/14 16:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 16:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 16:44	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/19/14 16:44	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/19/14 16:44	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/19/14 16:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/19/14 16:44	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/19/14 16:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/19/14 16:44	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:44	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/19/14 16:44	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 16:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 16:44	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:44	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/19/14 16:44	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/19/14 16:44	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		10/19/14 16:44	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		10/19/14 16:44	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		10/19/14 16:44	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/19/14 16:44		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60180221

Sample: IW-72-201410 **Lab ID: 60180221005** Collected: 10/13/14 15:40 Received: 10/13/14 23:46 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**107**	mg/L	20.0	2.0	1		10/22/14 09:46		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/22/14 09:46		
Alkalinity, Total as CaCO3	**107**	mg/L	20.0	2.0	1		10/22/14 09:46		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.15J**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:01	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**175**	mg/L	10.0	5.0	10		10/20/14 06:06	16887-00-6	
Sulfate	**9.1**	mg/L	1.0	0.054	1		10/22/14 07:48	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/18/14 16:54	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		10/15/14 14:36		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/15/14 14:36		M1
Nitrogen, NO2 plus NO3	**1.1**	mg/L	0.10	0.012	1		10/15/14 14:36		M1
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**298**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.73J**	mg/L	1.0	0.50	1		10/20/14 18:20	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.049**	mg/L	0.030	0.010	1	10/20/14 09:09	10/20/14 14:19		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60180221

Sample: TB-13-201410 **Lab ID: 60180221006** Collected: 10/13/14 14:55 Received: 10/13/14 23:46 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		10/19/14 15:15	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/19/14 15:15	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/19/14 15:15	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/19/14 15:15	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/19/14 15:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/19/14 15:15	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/19/14 15:15	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/19/14 15:15	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/19/14 15:15	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/19/14 15:15	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/19/14 15:15	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/19/14 15:15	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/19/14 15:15	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/19/14 15:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 15:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/19/14 15:15	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 15:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 15:15	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/19/14 15:15	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/19/14 15:15	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/19/14 15:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/19/14 15:15	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/19/14 15:15	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/19/14 15:15	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:15	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/19/14 15:15	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 15:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 15:15	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:15	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/19/14 15:15	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/19/14 15:15	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	91	%	80-120		1		10/19/14 15:15	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		10/19/14 15:15	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		10/19/14 15:15	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/19/14 15:15		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60180221

Sample: EB-01-201410 **Lab ID: 60180221007** Collected: 10/13/14 17:15 Received: 10/13/14 23:46 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		10/19/14 15:29	67-64-1	
Benzene	**0.53J**	ug/L	5.0	0.50	1		10/19/14 15:29	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/19/14 15:29	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/19/14 15:29	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/19/14 15:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/19/14 15:29	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/19/14 15:29	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/19/14 15:29	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/19/14 15:29	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/19/14 15:29	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/19/14 15:29	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/19/14 15:29	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/19/14 15:29	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/19/14 15:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 15:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/19/14 15:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 15:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 15:29	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/19/14 15:29	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/19/14 15:29	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/19/14 15:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/19/14 15:29	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/19/14 15:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/19/14 15:29	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:29	127-18-4	
Toluene	**1.9J**	ug/L	5.0	0.50	1		10/19/14 15:29	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 15:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 15:29	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 15:29	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/19/14 15:29	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/19/14 15:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	92	%	80-120		1		10/19/14 15:29	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		10/19/14 15:29	17060-07-0	
Toluene-d8 (S)	103	%	80-120		1		10/19/14 15:29	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/19/14 15:29		

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60180221

QC Batch: GCSV/3071 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

METHOD BLANK: 101936 Matrix: Water
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	10/17/14 13:50	

LABORATORY CONTROL SAMPLE: 101937

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	99300	99	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 101938 101939

Parameter	Units	60180221001 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	98400	109000	98	109	40-140	10	40	

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.: 60180221

QC Batch: MPRP/29343 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

METHOD BLANK: 1460805 Matrix: Water
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	10/21/14 09:47	
Manganese	ug/L	ND	5.0	10/21/14 09:47	

LABORATORY CONTROL SAMPLE: 1460806

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	8620	86	80-120	
Manganese	ug/L	1000	894	89	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1460807 1460808

Parameter	Units	60180141001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	386	10000	10000	8390	9440	80	91	75-125	12	20	
Manganese	ug/L	34.9	1000	1000	863	970	83	94	75-125	12	20	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60180221

QC Batch: MSV/65158 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005, 60180221006, 60180221007

METHOD BLANK: 1462544 Matrix: Water
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005, 60180221006, 60180221007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	10/19/14 15:00	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/19/14 15:00	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/19/14 15:00	
1,1-Dichloroethane	ug/L	ND	2.4	10/19/14 15:00	
1,1-Dichloroethene	ug/L	ND	5.0	10/19/14 15:00	
1,2-Dichloroethane	ug/L	ND	5.0	10/19/14 15:00	
1,2-Dichloropropane	ug/L	ND	5.0	10/19/14 15:00	
2-Butanone (MEK)	ug/L	ND	10.0	10/19/14 15:00	
2-Hexanone	ug/L	ND	10.0	10/19/14 15:00	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/19/14 15:00	
Acetone	ug/L	ND	10.0	10/19/14 15:00	
Benzene	ug/L	ND	5.0	10/19/14 15:00	
Bromodichloromethane	ug/L	ND	5.0	10/19/14 15:00	
Bromoform	ug/L	ND	5.0	10/19/14 15:00	
Bromomethane	ug/L	ND	7.0	10/19/14 15:00	
Carbon disulfide	ug/L	ND	10.0	10/19/14 15:00	
Carbon tetrachloride	ug/L	ND	5.0	10/19/14 15:00	
Chlorobenzene	ug/L	ND	5.0	10/19/14 15:00	
Chloroethane	ug/L	ND	10.0	10/19/14 15:00	
Chloroform	ug/L	ND	5.0	10/19/14 15:00	
Chloromethane	ug/L	ND	10.0	10/19/14 15:00	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/19/14 15:00	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/19/14 15:00	
Dibromochloromethane	ug/L	ND	5.0	10/19/14 15:00	
Ethylbenzene	ug/L	ND	5.0	10/19/14 15:00	
Methylene chloride	ug/L	ND	5.0	10/19/14 15:00	
Styrene	ug/L	ND	5.0	10/19/14 15:00	
Tetrachloroethene	ug/L	ND	5.0	10/19/14 15:00	
Toluene	ug/L	ND	5.0	10/19/14 15:00	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/19/14 15:00	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/19/14 15:00	
Trichloroethene	ug/L	ND	5.0	10/19/14 15:00	
Vinyl chloride	ug/L	ND	2.0	10/19/14 15:00	
Xylene (Total)	ug/L	ND	5.0	10/19/14 15:00	
1,2-Dichloroethane-d4 (S)	%	97	80-120	10/19/14 15:00	
4-Bromofluorobenzene (S)	%	96	80-120	10/19/14 15:00	
Toluene-d8 (S)	%	102	80-120	10/19/14 15:00	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60180221

LABORATORY CONTROL SAMPLE: 1462545

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.2	106	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	18.6	93	73-124	
1,1,2-Trichloroethane	ug/L	20	21.1	106	80-120	
1,1-Dichloroethane	ug/L	20	21.1	105	77-120	
1,1-Dichloroethene	ug/L	20	20.6	103	78-126	
1,2-Dichloroethane	ug/L	20	20.6	103	77-123	
1,2-Dichloropropane	ug/L	20	19.9	100	80-121	
2-Butanone (MEK)	ug/L	100	100	100	52-145	
2-Hexanone	ug/L	100	103	103	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	101	101	71-131	
Acetone	ug/L	100	94.6	95	32-155	
Benzene	ug/L	20	20.6	103	80-120	
Bromodichloromethane	ug/L	20	21.3	106	80-120	
Bromoform	ug/L	20	24.1	121	73-124	
Bromomethane	ug/L	20	15.1	76	31-144	
Carbon disulfide	ug/L	20	18.7	93	65-125	
Carbon tetrachloride	ug/L	20	22.1	111	78-128	
Chlorobenzene	ug/L	20	22.4	112	80-120	
Chloroethane	ug/L	20	18.9	94	55-137	
Chloroform	ug/L	20	21.2	106	79-120	
Chloromethane	ug/L	20	21.8	109	22-138	
cis-1,2-Dichloroethene	ug/L	20	20.0	100	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.8	99	80-120	
Dibromochloromethane	ug/L	20	22.6	113	80-120	
Ethylbenzene	ug/L	20	22.0	110	80-121	
Methylene chloride	ug/L	20	19.9	99	73-126	
Styrene	ug/L	20	22.9	114	80-120	
Tetrachloroethene	ug/L	20	23.5	117	80-121	
Toluene	ug/L	20	21.7	108	80-122	
trans-1,2-Dichloroethene	ug/L	20	20.7	104	79-121	
trans-1,3-Dichloropropene	ug/L	20	21.8	109	80-127	
Trichloroethene	ug/L	20	20.3	102	80-120	
Vinyl chloride	ug/L	20	19.5	97	59-120	
Xylene (Total)	ug/L	60	68.2	114	80-121	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			91	80-120	
Toluene-d8 (S)	%			105	80-120	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60180221

QC Batch: WET/51036 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

METHOD BLANK: 1464633 Matrix: Water
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	10/22/14 09:29	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	10/22/14 09:29	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	10/22/14 09:29	

LABORATORY CONTROL SAMPLE: 1464634

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	520	104	90-110	

SAMPLE DUPLICATE: 1464635

Parameter	Units	60180640002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	129	129	0	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	129	129	0	10	

SAMPLE DUPLICATE: 1464636

Parameter	Units	60180331001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	99.0	99.0	0	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	99.0	99.0	0	10	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60180221

QC Batch: WET/50985 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

METHOD BLANK: 1463490 Matrix: Water
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	10/20/14 10:58	

LABORATORY CONTROL SAMPLE: 1463491

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.52	104	80-120	

MATRIX SPIKE SAMPLE: 1463493

Parameter	Units	60180331001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.52	104	75-125	

SAMPLE DUPLICATE: 1463492

Parameter	Units	60180221002 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.: 60180221

QC Batch: WETA/31426 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

METHOD BLANK: 1465144 Matrix: Water
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	10/21/14 12:47	
Sulfate	mg/L	ND	1.0	10/21/14 12:47	

METHOD BLANK: 1466312 Matrix: Water
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	10/19/14 15:56	
Sulfate	mg/L	ND	1.0	10/19/14 15:56	

METHOD BLANK: 1468605 Matrix: Water
Associated Lab Samples: 60180221004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	10/27/14 21:45	

LABORATORY CONTROL SAMPLE: 1465145

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.2	103	90-110	
Sulfate	mg/L	5	5.3	105	90-110	

LABORATORY CONTROL SAMPLE: 1466313

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.1	101	90-110	
Sulfate	mg/L	5	4.8	95	90-110	

LABORATORY CONTROL SAMPLE: 1468606

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	5.1	103	90-110	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60180221

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1463426 1463427

Parameter	Units	60180174001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	28.3	10	10	39.5	39.3	112	111	80-120	0	15	
Sulfate	mg/L	30.4	10	10	41.7	41.6	113	112	80-120	0	15	

MATRIX SPIKE SAMPLE: 1463428

Parameter	Units	60180188001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	9.7	25	37.1	110	80-120	
Sulfate	mg/L	50.2	25	86.0	143	80-120	M1

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60180221

QC Batch: WETA/31415 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

METHOD BLANK: 1463333 Matrix: Water
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	10/18/14 16:20	

LABORATORY CONTROL SAMPLE: 1463334

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	1.9	97	90-110	

MATRIX SPIKE SAMPLE: 1463335

Parameter	Units	60179987002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.8	91	90-110	

MATRIX SPIKE SAMPLE: 1463336

Parameter	Units	60179992004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.54	2	2.5	100	90-110	

SAMPLE DUPLICATE: 1463337

Parameter	Units	60180003001 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.: 60180221

QC Batch: WETA/31368 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

METHOD BLANK: 1460690 Matrix: Water
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	10/15/14 14:19	
Nitrogen, Nitrite	mg/L	ND	0.10	10/15/14 14:19	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	10/15/14 14:19	

LABORATORY CONTROL SAMPLE: 1460691

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.7	106	85-115	
Nitrogen, Nitrite	mg/L	.4	0.37	93	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	103	90-110	

MATRIX SPIKE SAMPLE: 1460692

Parameter	Units	60180221002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	0.22	1.6	1.9	104	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.42	106	90-110	
Nitrogen, NO2 plus NO3	mg/L	0.22	2	2.3	105	90-110	

MATRIX SPIKE SAMPLE: 1460694

Parameter	Units	60180227005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.9	1.6	3.6	106	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.43	108	90-110	
Nitrogen, NO2 plus NO3	mg/L	1.9	2	4.0	106	90-110	

MATRIX SPIKE SAMPLE: 1461097

Parameter	Units	60180221005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.1	1.6	2.9	113	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.50	125	90-110	M1
Nitrogen, NO2 plus NO3	mg/L	1.1	2	3.4	115	90-110	M1

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60180221

QC Batch: WETA/31384 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

METHOD BLANK: 1461344 Matrix: Water
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	10/20/14 14:23	

LABORATORY CONTROL SAMPLE: 1461345

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.4	108	80-120	

MATRIX SPIKE SAMPLE: 1461346

Parameter	Units	60180164003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	10.6	5	15.3	95	80-120	

SAMPLE DUPLICATE: 1461347

Parameter	Units	60179856001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	3.9	3.7	4	25	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60180221

QC Batch: WETA/6303 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

METHOD BLANK: 102164 Matrix: Water
Associated Lab Samples: 60180221001, 60180221002, 60180221003, 60180221004, 60180221005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	10/20/14 14:11	

LABORATORY CONTROL SAMPLE: 102165

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: 102166 102167

Parameter	Units	7519710003 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	8.7	15.3	15.3	23.7	23.4	98	96	80-120	1	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 102170 102171

Parameter	Units	7519750001 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	0.82	1.5	1.5	2.2	2.4	92	101	80-120	6	20	

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QUALIFIERS

Project: Fort Smith, AR
Pace Project No.: 60180221

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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LABORATORIES

PASI-D	Pace Analytical Services - Dallas
PASI-K	Pace Analytical Services - Kansas City

BATCH QUALIFIERS

Batch: MSV/65158

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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.

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(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Fort Smith, AR
Pace Project No.: 60180221

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180221001	**MW-39-201410**	EPA 8015 - Alcohol	GCSV/3071		
60180221002	**MW-66-201410**	EPA 8015 - Alcohol	GCSV/3071		
60180221003	**MW-67-201410**	EPA 8015 - Alcohol	GCSV/3071		
60180221004	**MW-40-201410**	EPA 8015 - Alcohol	GCSV/3071		
60180221005	**IW-72-201410**	EPA 8015 - Alcohol	GCSV/3071		
60180221001	**MW-39-201410**	EPA 3010	MPRP/29343	EPA 6010	ICP/22048
60180221002	**MW-66-201410**	EPA 3010	MPRP/29343	EPA 6010	ICP/22048
60180221003	**MW-67-201410**	EPA 3010	MPRP/29343	EPA 6010	ICP/22048
60180221004	**MW-40-201410**	EPA 3010	MPRP/29343	EPA 6010	ICP/22048
60180221005	**IW-72-201410**	EPA 3010	MPRP/29343	EPA 6010	ICP/22048
60180221001	**MW-39-201410**	EPA 5030B/8260	MSV/65158		
60180221002	**MW-66-201410**	EPA 5030B/8260	MSV/65158		
60180221003	**MW-67-201410**	EPA 5030B/8260	MSV/65158		
60180221004	**MW-40-201410**	EPA 5030B/8260	MSV/65158		
60180221005	**IW-72-201410**	EPA 5030B/8260	MSV/65158		
60180221006	**TB-13-201410**	EPA 5030B/8260	MSV/65158		
60180221007	**EB-01-201410**	EPA 5030B/8260	MSV/65158		
60180221001	**MW-39-201410**	SM 2320B	WET/51036		
60180221002	**MW-66-201410**	SM 2320B	WET/51036		
60180221003	**MW-67-201410**	SM 2320B	WET/51036		
60180221004	**MW-40-201410**	SM 2320B	WET/51036		
60180221005	**IW-72-201410**	SM 2320B	WET/51036		
60180221001	**MW-39-201410**	SM 3500-Fe B#4	WET/51126		
60180221002	**MW-66-201410**	SM 3500-Fe B#4	WET/51126		
60180221003	**MW-67-201410**	SM 3500-Fe B#4	WET/51126		
60180221004	**MW-40-201410**	SM 3500-Fe B#4	WET/51126		
60180221005	**IW-72-201410**	SM 3500-Fe B#4	WET/51126		
60180221001	**MW-39-201410**	SM 4500-H+B	WET/51124		
60180221002	**MW-66-201410**	SM 4500-H+B	WET/51124		
60180221003	**MW-67-201410**	SM 4500-H+B	WET/51124		
60180221004	**MW-40-201410**	SM 4500-H+B	WET/51124		
60180221005	**IW-72-201410**	SM 4500-H+B	WET/51124		
60180221001	**MW-39-201410**	SM 4500-S-2 D	WET/50985		
60180221002	**MW-66-201410**	SM 4500-S-2 D	WET/50985		
60180221003	**MW-67-201410**	SM 4500-S-2 D	WET/50985		
60180221004	**MW-40-201410**	SM 4500-S-2 D	WET/50985		
60180221005	**IW-72-201410**	SM 4500-S-2 D	WET/50985		
60180221001	**MW-39-201410**	EPA 300.0	WETA/31426		
60180221002	**MW-66-201410**	EPA 300.0	WETA/31426		
60180221003	**MW-67-201410**	EPA 300.0	WETA/31426		
60180221004	**MW-40-201410**	EPA 300.0	WETA/31426		
60180221005	**IW-72-201410**	EPA 300.0	WETA/31426		
60180221001	**MW-39-201410**	EPA 350.1	WETA/31415		
60180221002	**MW-66-201410**	EPA 350.1	WETA/31415		
60180221003	**MW-67-201410**	EPA 350.1	WETA/31415		

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Fort Smith, AR
Pace Project No.: 60180221

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180221004	**MW-40-201410**	EPA 350.1	WETA/31415		
60180221005	**IW-72-201410**	EPA 350.1	WETA/31415		
60180221001	**MW-39-201410**	EPA 353.2	WETA/31368		
60180221002	**MW-66-201410**	EPA 353.2	WETA/31368		
60180221003	**MW-67-201410**	EPA 353.2	WETA/31368		
60180221004	**MW-40-201410**	EPA 353.2	WETA/31368		
60180221005	**IW-72-201410**	EPA 353.2	WETA/31368		
60180221001	**MW-39-201410**	SM 4500-CO2 D	WETA/31504		
60180221002	**MW-66-201410**	SM 4500-CO2 D	WETA/31504		
60180221003	**MW-67-201410**	SM 4500-CO2 D	WETA/31504		
60180221004	**MW-40-201410**	SM 4500-CO2 D	WETA/31504		
60180221005	**IW-72-201410**	SM 4500-CO2 D	WETA/31504		
60180221001	**MW-39-201410**	SM 5310C	WETA/31384		
60180221002	**MW-66-201410**	SM 5310C	WETA/31384		
60180221003	**MW-67-201410**	SM 5310C	WETA/31384		
60180221004	**MW-40-201410**	SM 5310C	WETA/31384		
60180221005	**IW-72-201410**	SM 5310C	WETA/31384		
60180221001	**MW-39-201410**	SM4500-P B	WETA/6303	SM 4500-P E	WETA/6304
60180221002	**MW-66-201410**	SM4500-P B	WETA/6303	SM 4500-P E	WETA/6304
60180221003	**MW-67-201410**	SM4500-P B	WETA/6303	SM 4500-P E	WETA/6304
60180221004	**MW-40-201410**	SM4500-P B	WETA/6303	SM 4500-P E	WETA/6304
60180221005	**IW-72-201410**	SM4500-P B	WETA/6303	SM 4500-P E	WETA/6304

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Sample Condition Upon Receipt

WO# : 60180221

60180221

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 ☑ ZPLC

Thermometer Used: T-239 T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 3.8

Date and initials of person examining contents: JV 10/14/14

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. 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	
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): 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: 001-005: Sub – DALLAS –7 8015 Chloroethanol } JVL 10.14.14
–7 Total Phosphate 3

Project Manager Review: JVL for (MJW) Date: 10.14.14

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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:	Normal

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. 60180221
1	MW-39-201410 3DGAH 3DGAH	WT	G	10/13/14	1528				11	X	X	X	X	X	1B	P3	U		X	X	X	X	X	X	X	X	X	N	14635 1B P3S 2-0 1B P3N 2-0 1B P3Z 11-0
2	MW-66-201410	WT	G	10/13/14	1455				11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	N	
3	MW-67-201410	WT	G	10/13/14	1545				11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	N	
4	MW-40-201410	WT	G	10/13/14	1555				11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	N	
5	MW-72-201410	WT	G	10/13/14	1540				11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	N	
6	TB-13-201410	WT	-	10/13/14					2				X						X										2DGAH
7	EB-01-201410	WT	-	10/13/14	1715				2				X						X										
8																													
9																													
10																													
11																													
12																													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Level IV data package required	Wendy Stonestreet	10/13/14	1800		10/13/14	2346	3-8 Y Y Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Wendy Stonestreet
SIGNATURE of SAMPLER: Wendy Stonestreet
DATE Signed (MM/DD/YY): 10/13/2014

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: 60180221 **Workorder Name:** Fort Smith, AR **Owner Received Date:** 10/13/2014 **Results Requested By:** 10/24/2014

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	MW-39-201410	PS	10/13/2014 15:28	60180221001	Water	1	3					X	X										001
2	MW-66-201410	PS	10/13/2014 14:55	60180221002	Water	1	3					X	X										002
3	MW-67-201410	PS	10/13/2014 15:45	60180221003	Water	1	3					X	X										003
4	MW-40-201410	PS	10/13/2014 15:55	60180221004	Water	1	3					X	X										004
5	IW-72-201410	PS	10/13/2014 15:40	60180221005	Water	1	3					X	X										005

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	10/13/14 1700	[signature]	10-13-14 0850
2				
3				

Comments

TRIP

Cooler Temperature on Receipt 1.0 °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# : 7519787

7519787

Pace Analytical

Sample Condition Upon Receipt
Dallas

Client Name: Pace Kansas Project Work order: 7519787

Courier: FedEX ☑ UPS ☐ USPS ☐ Client ☐ Courier ☐ LSO ☐ PACE ☐ Other:_____

Tracking#: 6113 5282 0507

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: 1.0 °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: 6403001 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: Klw Date: 10/15/14

Pace Analytical Services - Dallas

Sample Container Count-

COC PAGE 1 of 1

COC ID# _____

Pace Project # 7519787

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																					
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						

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

November 13, 2014

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

RE: Project: FORT SMITH AR
Pace Project No.: 60180331

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on October 15, 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.

Amended report, REV-1 on 11/13/14 to add TCE and change sample ID on DUP-01.

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: FORT SMITH AR
Pace Project No.: 60180331

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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(913)599-5665

SAMPLE SUMMARY

Project: FORT SMITH AR
Pace Project No.: 60180331

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60180331001	MW-28-201410	Water	10/14/14 14:05	10/15/14 08:45
60180331002	MW-50-201410	Water	10/14/14 11:50	10/15/14 08:45
60180331003	MW-36-201410	Water	10/14/14 10:05	10/15/14 08:45
60180331004	IW-80-201410	Water	10/14/14 11:00	10/15/14 08:45
60180331005	MW-31-201410	Water	10/14/14 13:10	10/15/14 08:45
60180331006	MW-32-201410	Water	10/14/14 14:30	10/15/14 08:45
60180331007	RW-69-201410	Water	10/14/14 11:35	10/15/14 08:45
60180331008	MW-71-201410	Water	10/14/14 09:50	10/15/14 08:45
60180331009	MW-68-201410	Water	10/14/14 14:05	10/15/14 08:45
60180331010	IW-74-201410	Water	10/14/14 14:05	10/15/14 08:45
60180331011	MW-62-201410	Water	10/14/14 11:30	10/15/14 08:45
60180331012	MW-63-201410	Water	10/14/14 14:45	10/15/14 08:45
60180331013	MW-61-201410	Water	10/14/14 14:15	10/15/14 08:45
60180331014	MW-60-201410	Water	10/14/14 15:35	10/15/14 08:45
60180331015	IW-73-201410	Water	10/14/14 15:35	10/15/14 08:45
60180331016	MW-35R-201410	Water	10/14/14 16:10	10/15/14 08:45
60180331017	MW-26-201410	Water	10/14/14 16:10	10/15/14 08:45
60180331018	MW-65-201410	Water	10/14/14 16:08	10/15/14 08:45
60180331019	MW-27-201410	Water	10/14/14 15:45	10/15/14 08:45
60180331020	DUP-01-201410	Water	10/14/14 14:05	10/15/14 08:45
60180331021	TB-10-201410	Water	10/14/14 00:00	10/15/14 08:45
60180331022	EB-02-201410	Water	10/14/14 16:55	10/15/14 08:45
60180331023	TB-09-201410	Water	10/14/14 09:50	10/15/14 08:45
60180331024	TB-11-201410	Water	10/14/14 09:50	10/15/14 08:45
60180331025	TB-14-201410	Water	10/14/14 09:50	10/15/14 08:45
60180331026	TB-05-201410	Water	10/14/14 09:50	10/15/14 08:45

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR
Pace Project No.: 60180331

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60180331001	**MW-28-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180331002	**MW-50-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180331003	**MW-36-201410**	EPA 8015 - Alcohol	TA	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	AJM	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: FORT SMITH AR
Pace Project No.: 60180331

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60180331004	**IW-80-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180331005	**MW-31-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180331006	**MW-32-201410**	EPA 8015 - Alcohol	TA	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	AJM	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR
Pace Project No.: 60180331

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		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
60180331007	**RW-69-201410**	EPA 8015 - Alcohol	TA	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	OL	2	PASI-K
		EPA 350.1	AJM	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
60180331008	**MW-71-201410**	EPA 8015 - Alcohol	TA	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	OL	2	PASI-K
		EPA 350.1	AJM	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
60180331009	**MW-68-201410**	EPA 8015 - Alcohol	TA	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

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR
Pace Project No.: 60180331

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	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
60180331010	**IW-74-201410**	EPA 8015 - Alcohol	TA	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	OL	2	PASI-K
		EPA 350.1	AJM	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
60180331011	**MW-62-201410**	EPA 8015 - Alcohol	TA	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	OL	2	PASI-K
		EPA 350.1	AJM	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
60180331012	**MW-63-201410**	EPA 8015 - Alcohol	TA	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: FORT SMITH AR
Pace Project No.: 60180331

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	AJM	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
60180331013	**MW-61-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180331014	**MW-60-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180331015	**IW-73-201410**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR
Pace Project No.: 60180331

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		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	AJM	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
60180331016	**MW-35R-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180331017	**MW-26-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180331018	**MW-65-201410**	EPA 8015 - Alcohol	TA	1	PASI-D

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR
Pace Project No.: 60180331

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		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	AJM	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
60180331019	**MW-27-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180331020	**DUP-01-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180331021	**TB-10-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180331022	**EB-02-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180331023	**TB-09-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180331024	**TB-11-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180331025	**TB-14-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180331026	**TB-05-201410**	EPA 5030B/8260	PRG	38	PASI-K

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PROJECT NARRATIVE

Project: FORT SMITH AR
Pace Project No.: 60180331

Method: **EPA 8015 - Alcohol**
Description: Alcohol by Direct Inject GCFID
Client: Environ_AR
Date: November 13, 2014

General Information:
19 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.: 60180331

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Environ_AR
Date: November 13, 2014

General Information:
19 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.: 60180331

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: November 13, 2014

General Information:
26 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/65160

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- LCS (Lab ID: 1462551)
  - Chloromethane

QC Batch: MSV/65185

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- LCS (Lab ID: 1463655)
  - Bromoform

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

QC Batch: MSV/65176

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/65179

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/65185

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

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PROJECT NARRATIVE

Project: FORT SMITH AR
Pace Project No.: 60180331

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: November 13, 2014

QC Batch: MSV/65205

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH AR
Pace Project No.: 60180331

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: Environ_AR
Date: November 13, 2014

General Information:
19 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.: 60180331

Method: **SM 3500-Fe B#4**
Description: Iron, Ferric (Calculation)
Client: Environ_AR
Date: November 13, 2014

General Information:
19 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.: 60180331

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: November 13, 2014

General Information:
19 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.
- IW-73-201410 (Lab ID: 60180331015)
- IW-74-201410 (Lab ID: 60180331010)
- IW-80-201410 (Lab ID: 60180331004)
- MW-26-201410 (Lab ID: 60180331017)
- MW-27-201410 (Lab ID: 60180331019)
- MW-28-201410 (Lab ID: 60180331001)
- MW-31-201410 (Lab ID: 60180331005)
- MW-32-201410 (Lab ID: 60180331006)
- MW-35R-201410 (Lab ID: 60180331016)
- MW-36-201410 (Lab ID: 60180331003)
- MW-50-201410 (Lab ID: 60180331002)
- MW-60-201410 (Lab ID: 60180331014)
- MW-61-201410 (Lab ID: 60180331013)
- MW-62-201410 (Lab ID: 60180331011)
- MW-63-201410 (Lab ID: 60180331012)
- MW-65-201410 (Lab ID: 60180331018)
- MW-68-201410 (Lab ID: 60180331009)
- MW-71-201410 (Lab ID: 60180331008)
- RW-69-201410 (Lab ID: 60180331007)

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/51120

1e: Field pH
- IW-73-201410 (Lab ID: 60180331015)
  - pH at 25 Degrees C
- IW-74-201410 (Lab ID: 60180331010)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: FORT SMITH AR
Pace Project No.: 60180331

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: November 13, 2014

Analyte Comments:

QC Batch: WET/51120

1e: Field pH

- IW-80-201410 (Lab ID: 60180331004)
  - pH at 25 Degrees C
- MW-26-201410 (Lab ID: 60180331017)
  - pH at 25 Degrees C
- MW-27-201410 (Lab ID: 60180331019)
  - pH at 25 Degrees C
- MW-28-201410 (Lab ID: 60180331001)
  - pH at 25 Degrees C
- MW-31-201410 (Lab ID: 60180331005)
  - pH at 25 Degrees C
- MW-32-201410 (Lab ID: 60180331006)
  - pH at 25 Degrees C
- MW-35R-201410 (Lab ID: 60180331016)
  - pH at 25 Degrees C
- MW-36-201410 (Lab ID: 60180331003)
  - pH at 25 Degrees C
- MW-50-201410 (Lab ID: 60180331002)
  - pH at 25 Degrees C
- MW-60-201410 (Lab ID: 60180331014)
  - pH at 25 Degrees C
- MW-61-201410 (Lab ID: 60180331013)
  - pH at 25 Degrees C
- MW-62-201410 (Lab ID: 60180331011)
  - pH at 25 Degrees C
- MW-63-201410 (Lab ID: 60180331012)
  - pH at 25 Degrees C
- MW-65-201410 (Lab ID: 60180331018)
  - pH at 25 Degrees C
- MW-68-201410 (Lab ID: 60180331009)
  - pH at 25 Degrees C
- MW-71-201410 (Lab ID: 60180331008)
  - pH at 25 Degrees C
- RW-69-201410 (Lab ID: 60180331007)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: FORT SMITH AR
Pace Project No.: 60180331

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Environ_AR
Date: November 13, 2014

General Information:
19 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: FORT SMITH AR
Pace Project No.: 60180331

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Environ_AR
Date: November 13, 2014

General Information:
19 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: FORT SMITH AR
Pace Project No.: 60180331

Method: **EPA 350.1**
Description: 350.1 Ammonia
Client: Environ_AR
Date: November 13, 2014

General Information:
19 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/31458

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180331001,60180444001

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

- MS (Lab ID: 1464772)
  - Nitrogen, Ammonia
- MS (Lab ID: 1464773)
  - 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.: 60180331

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Environ_AR
Date: November 13, 2014

General Information:
19 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/31368

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180221002,60180221005,60180227005

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

- MS (Lab ID: 1461097)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrite

QC Batch: WETA/31370

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180313009,60180313010

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

- MS (Lab ID: 1461103)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrate

QC Batch: WETA/31383

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180336003,60180412014

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

- MS (Lab ID: 1461340)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrite

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

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORT SMITH AR
Pace Project No.: 60180331

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Environ_AR
Date: November 13, 2014

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH AR
Pace Project No.: 60180331

Method: **SM 4500-CO2 D**
Description: Total Carbon Dioxide Calc
Client: Environ_AR
Date: November 13, 2014

General Information:
19 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.: 60180331

Method: **SM 5310C**
Description: 5310C TOC
Client: Environ_AR
Date: November 13, 2014

General Information:
19 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/31449

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180640002

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

- MS (Lab ID: 1464012)
  - 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: FORT SMITH AR
Pace Project No.: 60180331

Method: **SM 4500-P E**
Description: SM4500P-E, Total Phosphorus
Client: Environ_AR
Date: November 13, 2014

General Information:
19 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: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-28-201410 **Lab ID: 60180331001** Collected: 10/14/14 14:05 Received: 10/15/14 08:45 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		10/17/14 17:55	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**438**	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 17:14	7439-89-6	
Manganese	**55.7**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 17:14	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 03:51	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 03:51	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 03:51	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 03:51	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 03:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 03:51	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 03:51	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 03:51	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 03:51	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 03:51	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 03:51	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 03:51	74-87-3	L3
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 03:51	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 03:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 03:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 03:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 03:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 03:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 03:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 03:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 03:51	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 03:51	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 03:51	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 03:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 03:51	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 03:51	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 03:51	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 03:51	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 03:51	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 03:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 03:51	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 03:51	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 03:51	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 03:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		10/20/14 03:51	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		10/20/14 03:51	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		10/20/14 03:51	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 03:51		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-28-201410 **Lab ID: 60180331001** Collected: 10/14/14 14:05 Received: 10/15/14 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**99.0**	mg/L	20.0	2.0	1		10/22/14 10:22		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/22/14 10:22		
Alkalinity, Total as CaCO3	**99.0**	mg/L	20.0	2.0	1		10/22/14 10:22		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.44**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:04	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**23.4**	mg/L	2.0	1.0	2		10/30/14 10:55	16887-00-6	
Sulfate	**39.8**	mg/L	2.0	1.0	2		10/30/14 10:55	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/22/14 11:15	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		10/16/14 08:21		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 08:21		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		10/16/14 08:21		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**234**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.82J**	mg/L	1.0	0.50	1		10/20/14 23:20	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.29**	mg/L	0.030	0.010	1	10/21/14 09:29	10/21/14 13:48		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-50-201410 **Lab ID: 60180331002** Collected: 10/14/14 11:50 Received: 10/15/14 08:45 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		10/17/14 18:07	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**886**	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 17:20	7439-89-6	
Manganese	**156**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 17:20	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 04:06	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 04:06	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 04:06	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 04:06	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 04:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 04:06	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 04:06	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 04:06	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 04:06	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 04:06	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 04:06	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 04:06	74-87-3	L3
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 04:06	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 04:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 04:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 04:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 04:06	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 04:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 04:06	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 04:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 04:06	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 04:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 04:06	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:06	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 04:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:06	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:06	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 04:06	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 04:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/20/14 04:06	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		10/20/14 04:06	17060-07-0	
Toluene-d8 (S)	103	%	80-120		1		10/20/14 04:06	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 04:06		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-50-201410 **Lab ID: 60180331002** Collected: 10/14/14 11:50 Received: 10/15/14 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**195**	mg/L	20.0	2.0	1		10/22/14 10:31		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/22/14 10:31		
Alkalinity, Total as CaCO3	**195**	mg/L	20.0	2.0	1		10/22/14 10:31		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.89**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:05	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**240**	mg/L	20.0	10.0	20		10/30/14 11:24	16887-00-6	
Sulfate	ND	mg/L	10.0	5.0	10		10/25/14 01:55	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/22/14 11:17	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		10/16/14 08:18		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 08:18		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		10/16/14 08:18		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**313**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		10/20/14 23:46	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	10/21/14 09:29	10/21/14 13:51		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-36-201410 **Lab ID: 60180331003** Collected: 10/14/14 10:05 Received: 10/15/14 08:45 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		10/17/14 18:18	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**51.9**	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 17:22	7439-89-6	
Manganese	**482**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 17:22	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**6.4J**	ug/L	10.0	5.0	1		10/19/14 16:30	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/19/14 16:30	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/19/14 16:30	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/19/14 16:30	75-25-2	
Bromomethane	**12.1**	ug/L	7.0	2.5	1		10/19/14 16:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/19/14 16:30	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/19/14 16:30	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/19/14 16:30	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/19/14 16:30	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/19/14 16:30	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/19/14 16:30	67-66-3	
Chloromethane	**2.9J**	ug/L	10.0	0.50	1		10/19/14 16:30	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/19/14 16:30	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/19/14 16:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 16:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/19/14 16:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 16:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 16:30	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/19/14 16:30	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/19/14 16:30	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/19/14 16:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/19/14 16:30	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/19/14 16:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/19/14 16:30	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:30	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/19/14 16:30	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 16:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 16:30	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:30	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/19/14 16:30	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/19/14 16:30	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/19/14 16:30	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		10/19/14 16:30	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		10/19/14 16:30	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/19/14 16:30		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-36-201410 **Lab ID: 60180331003** Collected: 10/14/14 10:05 Received: 10/15/14 08:45 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		10/22/14 10:33		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/22/14 10:33		
Alkalinity, Total as CaCO3	**13.7J**	mg/L	20.0	2.0	1		10/22/14 10:33		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.052J**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:06	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**248**	mg/L	20.0	10.0	20		10/29/14 12:47	16887-00-6	
Sulfate	**45.5**	mg/L	10.0	5.0	10		10/25/14 02:10	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/22/14 11:22	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		10/15/14 14:35		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/15/14 14:35		
Nitrogen, NO2 plus NO3	**0.021J**	mg/L	0.10	0.012	1		10/15/14 14:35		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		10/20/14 23:59	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	10/21/14 09:29	10/21/14 13:51		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: IW-80-201410 **Lab ID: 60180331004** Collected: 10/14/14 11:00 Received: 10/15/14 08:45 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		10/17/14 18:30	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**337**	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 17:25	7439-89-6	
Manganese	**63.8**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 17:25	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**24.2**	ug/L	10.0	5.0	1		10/19/14 16:46	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/19/14 16:46	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/19/14 16:46	75-27-4	
Bromoform	**2.0J**	ug/L	5.0	0.50	1		10/19/14 16:46	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/19/14 16:46	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/19/14 16:46	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/19/14 16:46	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/19/14 16:46	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/19/14 16:46	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/19/14 16:46	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/19/14 16:46	67-66-3	
Chloromethane	**0.85J**	ug/L	10.0	0.50	1		10/19/14 16:46	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/19/14 16:46	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/19/14 16:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 16:46	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:46	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:46	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/19/14 16:46	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 16:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 16:46	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/19/14 16:46	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/19/14 16:46	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/19/14 16:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/19/14 16:46	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/19/14 16:46	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/19/14 16:46	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/19/14 16:46	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/19/14 16:46	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 16:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 16:46	79-00-5	
Trichloroethene	**11.8**	ug/L	5.0	0.50	1		10/19/14 16:46	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/19/14 16:46	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/19/14 16:46	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/19/14 16:46	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		10/19/14 16:46	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		10/19/14 16:46	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/19/14 16:46		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: IW-80-201410 **Lab ID: 60180331004** Collected: 10/14/14 11:00 Received: 10/15/14 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**225**	mg/L	20.0	2.0	1		10/22/14 10:37		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/22/14 10:37		
Alkalinity, Total as CaCO3	**225**	mg/L	20.0	2.0	1		10/22/14 10:37		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.33**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:06	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**194**	mg/L	20.0	10.0	20		10/29/14 13:01	16887-00-6	
Sulfate	**121**	mg/L	10.0	5.0	10		10/31/14 09:29	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.35**	mg/L	0.10	0.023	1		10/22/14 11:23	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.9**	mg/L	0.10	0.012	1		10/16/14 08:14		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 08:14		
Nitrogen, NO2 plus NO3	**1.9**	mg/L	0.10	0.012	1		10/16/14 08:14		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**325**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.1**	mg/L	1.0	0.50	1		10/21/14 00:12	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	10/21/14 09:29	10/21/14 13:51		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-31-201410 **Lab ID: 60180331005** Collected: 10/14/14 13:10 Received: 10/15/14 08:45 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		10/17/14 18:41	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**152**	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 17:27	7439-89-6	
Manganese	**233**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 17:27	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 04:20	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 04:20	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 04:20	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 04:20	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 04:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 04:20	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 04:20	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 04:20	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 04:20	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 04:20	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 04:20	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 04:20	74-87-3	L3
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 04:20	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 04:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:20	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 04:20	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 04:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 04:20	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 04:20	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 04:20	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 04:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 04:20	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 04:20	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 04:20	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:20	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 04:20	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:20	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:20	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 04:20	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 04:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/20/14 04:20	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		10/20/14 04:20	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		10/20/14 04:20	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 04:20		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-31-201410 **Lab ID: 60180331005** Collected: 10/14/14 13:10 Received: 10/15/14 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**17.9J**	mg/L	20.0	2.0	1		10/22/14 10:40		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/22/14 10:40		
Alkalinity, Total as CaCO3	**17.9J**	mg/L	20.0	2.0	1		10/22/14 10:40		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.13J**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:06	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**96.4**	mg/L	10.0	5.0	10		10/25/14 03:12	16887-00-6	
Sulfate	**31.5**	mg/L	2.0	1.0	2		10/30/14 11:53	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/22/14 11:24	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.21**	mg/L	0.10	0.012	1		10/16/14 08:20		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 08:20		
Nitrogen, NO2 plus NO3	**0.21**	mg/L	0.10	0.012	1		10/16/14 08:20		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.64J**	mg/L	1.0	0.50	1		10/21/14 00:52	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	10/24/14 09:04	10/24/14 14:23		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-32-201410 **Lab ID: 60180331006** Collected: 10/14/14 14:30 Received: 10/15/14 08:45 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		10/17/14 18:53	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**229**	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 17:29	7439-89-6	
Manganese	**388**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 17:29	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 04:35	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 04:35	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 04:35	75-27-4	
Bromoform	**0.59J**	ug/L	5.0	0.50	1		10/20/14 04:35	75-25-2	
Bromomethane	**2.8J**	ug/L	7.0	2.5	1		10/20/14 04:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 04:35	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 04:35	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 04:35	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 04:35	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 04:35	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 04:35	67-66-3	
Chloromethane	**1.6J**	ug/L	10.0	0.50	1		10/20/14 04:35	74-87-3	L1
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 04:35	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 04:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:35	75-35-4	
cis-1,2-Dichloroethene	**0.80J**	ug/L	5.0	0.50	1		10/20/14 04:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 04:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 04:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 04:35	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 04:35	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 04:35	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 04:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 04:35	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 04:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 04:35	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:35	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 04:35	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:35	79-00-5	
Trichloroethene	**29.7**	ug/L	5.0	0.50	1		10/20/14 04:35	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 04:35	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 04:35	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/20/14 04:35	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		10/20/14 04:35	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		10/20/14 04:35	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 04:35		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-32-201410 **Lab ID: 60180331006** Collected: 10/14/14 14:30 Received: 10/15/14 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**7.4J**	mg/L	20.0	2.0	1		10/22/14 10:43		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/22/14 10:43		
Alkalinity, Total as CaCO3	**7.4J**	mg/L	20.0	2.0	1		10/22/14 10:43		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.23**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:07	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**126**	mg/L	10.0	5.0	10		10/25/14 03:27	16887-00-6	
Sulfate	**34.9**	mg/L	5.0	2.5	5		10/30/14 12:07	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/22/14 11:25	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.17**	mg/L	0.10	0.012	1		10/16/14 08:26		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 08:26		
Nitrogen, NO2 plus NO3	**0.17**	mg/L	0.10	0.012	1		10/16/14 08:26		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		10/21/14 01:05	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	10/24/14 09:04	10/24/14 14:24		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: RW-69-201410 **Lab ID: 60180331007** Collected: 10/14/14 11:35 Received: 10/15/14 08:45 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		10/17/14 19:04	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**1110**	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 17:36	7439-89-6	
Manganese	**664**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 17:36	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 05:35	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 05:35	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 05:35	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 05:35	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 05:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 05:35	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 05:35	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 05:35	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 05:35	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 05:35	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 05:35	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 05:35	74-87-3	L3
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 05:35	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 05:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:35	107-06-2	
1,1-Dichloroethene	**0.85J**	ug/L	5.0	0.50	1		10/20/14 05:35	75-35-4	
cis-1,2-Dichloroethene	**6.9**	ug/L	5.0	0.50	1		10/20/14 05:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 05:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 05:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 05:35	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 05:35	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 05:35	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 05:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 05:35	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 05:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 05:35	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:35	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 05:35	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:35	79-00-5	
Trichloroethene	**173**	ug/L	25.0	2.5	5		10/20/14 19:01	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 05:35	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 05:35	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	91	%	80-120		1		10/20/14 05:35	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120		1		10/20/14 05:35	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		10/20/14 05:35	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 05:35		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: RW-69-201410 **Lab ID: 60180331007** Collected: 10/14/14 11:35 Received: 10/15/14 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**14.2J**	mg/L	20.0	2.0	1		10/22/14 10:54		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/22/14 10:54		
Alkalinity, Total as CaCO3	**14.2J**	mg/L	20.0	2.0	1		10/22/14 10:54		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.15J**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:07	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**276**	mg/L	20.0	10.0	20		11/03/14 04:25	16887-00-6	
Sulfate	**1.9**	mg/L	1.0	0.50	1		11/03/14 06:35	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/22/14 11:27	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		10/16/14 08:15		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 08:15		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		10/16/14 08:15		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.74J**	mg/L	1.0	0.50	1		10/21/14 01:18	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	10/24/14 09:04	10/24/14 14:25		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-71-201410 **Lab ID: 60180331008** Collected: 10/14/14 09:50 Received: 10/15/14 08:45 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		10/17/14 19:16	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**1000**	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 17:39	7439-89-6	
Manganese	**1660**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 17:39	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 19:16	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 19:16	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 19:16	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 19:16	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 19:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 19:16	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 19:16	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 19:16	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 19:16	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 19:16	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 19:16	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 19:16	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 19:16	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 19:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 19:16	107-06-2	
1,1-Dichloroethene	**1.3J**	ug/L	5.0	0.50	1		10/20/14 19:16	75-35-4	
cis-1,2-Dichloroethene	**6.0**	ug/L	5.0	0.50	1		10/20/14 19:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 19:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 19:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 19:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 19:16	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 19:16	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 19:16	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 19:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 19:16	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 19:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 19:16	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 19:16	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 19:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 19:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 19:16	79-00-5	
Trichloroethene	**185**	ug/L	5.0	0.50	1		10/20/14 19:16	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 19:16	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 19:16	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		10/20/14 19:16	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		10/20/14 19:16	17060-07-0	
Toluene-d8 (S)	103	%	80-120		1		10/20/14 19:16	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 19:16		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-71-201410 **Lab ID: 60180331008** Collected: 10/14/14 09:50 Received: 10/15/14 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**20.7**	mg/L	20.0	2.0	1		10/22/14 10:58		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/22/14 10:58		
Alkalinity, Total as CaCO3	**20.7**	mg/L	20.0	2.0	1		10/22/14 10:58		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.21**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:08	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**258**	mg/L	20.0	10.0	20		11/03/14 05:09	16887-00-6	
Sulfate	**1.9**	mg/L	1.0	0.50	1		11/03/14 07:18	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/22/14 11:28	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		10/15/14 14:40		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/15/14 14:40		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		10/15/14 14:40		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**235**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		10/21/14 01:31	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	10/24/14 09:04	10/24/14 14:25		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-68-201410 **Lab ID: 60180331009** Collected: 10/14/14 14:05 Received: 10/15/14 08:45 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		10/17/14 19:27	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**24.1J**	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 17:41	7439-89-6	
Manganese	**1630**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 17:41	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 04:50	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 04:50	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 04:50	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 04:50	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 04:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 04:50	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 04:50	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 04:50	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 04:50	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 04:50	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 04:50	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 04:50	74-87-3	L3
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 04:50	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 04:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 04:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 04:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 04:50	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 04:50	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 04:50	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 04:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 04:50	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 04:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 04:50	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:50	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 04:50	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:50	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:50	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 04:50	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 04:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	90	%	80-120		1		10/20/14 04:50	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		10/20/14 04:50	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		10/20/14 04:50	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 04:50		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-68-201410 **Lab ID: 60180331009** Collected: 10/14/14 14:05 Received: 10/15/14 08:45 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		10/22/14 11:01		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/22/14 11:01		
Alkalinity, Total as CaCO3	**12.4J**	mg/L	20.0	2.0	1		10/22/14 11:01		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.025J**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:09	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**313**	mg/L	50.0	25.0	50		11/03/14 05:23	16887-00-6	
Sulfate	**0.80J**	mg/L	1.0	0.50	1		11/03/14 07:33	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/22/14 11:29	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		10/16/14 08:23		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 08:23		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		10/16/14 08:23		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		10/21/14 01:44	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	10/24/14 09:04	10/24/14 14:25		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: IW-74-201410 **Lab ID: 60180331010** Collected: 10/14/14 14:05 Received: 10/15/14 08:45 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		10/17/14 19:39	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**36.9J**	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 17:43	7439-89-6	
Manganese	**591**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 17:43	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 19:31	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 19:31	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 19:31	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 19:31	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 19:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 19:31	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 19:31	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 19:31	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 19:31	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 19:31	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 19:31	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 19:31	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 19:31	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 19:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 19:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 19:31	75-35-4	
cis-1,2-Dichloroethene	**3.3J**	ug/L	5.0	0.50	1		10/20/14 19:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 19:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 19:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 19:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 19:31	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 19:31	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 19:31	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 19:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 19:31	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 19:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 19:31	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 19:31	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 19:31	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 19:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 19:31	79-00-5	
Trichloroethene	**144**	ug/L	5.0	0.50	1		10/20/14 19:31	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 19:31	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 19:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		10/20/14 19:31	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		10/20/14 19:31	17060-07-0	
Toluene-d8 (S)	104	%	80-120		1		10/20/14 19:31	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 19:31		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: IW-74-201410 **Lab ID: 60180331010** Collected: 10/14/14 14:05 Received: 10/15/14 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**75.2**	mg/L	20.0	2.0	1		10/22/14 11:04		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/22/14 11:04		
Alkalinity, Total as CaCO3	**75.2**	mg/L	20.0	2.0	1		10/22/14 11:04		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.037J**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:09	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**220**	mg/L	20.0	10.0	20		11/03/14 05:37	16887-00-6	
Sulfate	**3.1**	mg/L	1.0	0.50	1		11/03/14 07:47	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/22/14 11:30	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		10/16/14 08:24		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 08:24		
Nitrogen, NO2 plus NO3	**0.53**	mg/L	0.10	0.012	1		10/16/14 08:24		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**251**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.55J**	mg/L	1.0	0.50	1		10/21/14 01:57	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	10/24/14 09:04	10/24/14 14:25		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-62-201410 **Lab ID: 60180331011** Collected: 10/14/14 11:30 Received: 10/15/14 08:45 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		10/17/14 20:25	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**87.4**	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 17:45	7439-89-6	
Manganese	**22.4**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 17:45	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 05:05	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 05:05	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 05:05	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 05:05	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 05:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 05:05	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 05:05	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 05:05	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 05:05	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 05:05	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 05:05	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 05:05	74-87-3	L3
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 05:05	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 05:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 05:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 05:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 05:05	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 05:05	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 05:05	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 05:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 05:05	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 05:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 05:05	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:05	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 05:05	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:05	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:05	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 05:05	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 05:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		10/20/14 05:05	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		10/20/14 05:05	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		10/20/14 05:05	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 05:05		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-62-201410 **Lab ID: 60180331011** Collected: 10/14/14 11:30 Received: 10/15/14 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**28.0**	mg/L	20.0	2.0	1		10/23/14 08:44		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 08:44		
Alkalinity, Total as CaCO3	**28.0**	mg/L	20.0	2.0	1		10/23/14 08:44		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.087J**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:10	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**149**	mg/L	10.0	5.0	10		11/03/14 05:52	16887-00-6	
Sulfate	**7.2**	mg/L	1.0	0.50	1		11/03/14 08:02	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/22/14 11:31	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.74**	mg/L	0.10	0.012	1		10/16/14 08:15		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 08:15		
Nitrogen, NO2 plus NO3	**0.74**	mg/L	0.10	0.012	1		10/16/14 08:15		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**159**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		10/21/14 02:10	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.018J**	mg/L	0.030	0.010	1	10/24/14 09:04	10/24/14 14:25		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-63-201410 **Lab ID: 60180331012** Collected: 10/14/14 14:45 Received: 10/15/14 08:45 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		10/17/14 20:36	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**1290**	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 17:48	7439-89-6	
Manganese	**40.0**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 17:48	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 05:20	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 05:20	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 05:20	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 05:20	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 05:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 05:20	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 05:20	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 05:20	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 05:20	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 05:20	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 05:20	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 05:20	74-87-3	L3
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 05:20	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 05:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:20	75-35-4	
cis-1,2-Dichloroethene	**0.98J**	ug/L	5.0	0.50	1		10/20/14 05:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 05:20	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 05:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 05:20	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 05:20	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 05:20	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 05:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 05:20	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 05:20	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 05:20	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:20	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 05:20	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:20	79-00-5	
Trichloroethene	**9.4**	ug/L	5.0	0.50	1		10/20/14 05:20	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 05:20	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 05:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/20/14 05:20	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		10/20/14 05:20	17060-07-0	
Toluene-d8 (S)	106	%	80-120		1		10/20/14 05:20	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 05:20		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-63-201410 **Lab ID: 60180331012** Collected: 10/14/14 14:45 Received: 10/15/14 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**33.8**	mg/L	20.0	2.0	1		10/23/14 08:47		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 08:47		
Alkalinity, Total as CaCO3	**33.8**	mg/L	20.0	2.0	1		10/23/14 08:47		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**1.2**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:11	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**161**	mg/L	10.0	5.0	10		10/25/14 04:59	16887-00-6	
Sulfate	**8.0**	mg/L	1.0	0.50	1		10/29/14 15:25	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/22/14 11:32	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.38**	mg/L	0.10	0.012	1		10/16/14 08:28		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 08:28		
Nitrogen, NO2 plus NO3	**0.38**	mg/L	0.10	0.012	1		10/16/14 08:28		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**188**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		10/21/14 02:23	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	10/24/14 09:04	10/24/14 14:26		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-61-201410 **Lab ID: 60180331013** Collected: 10/14/14 14:15 Received: 10/15/14 08:45 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		10/17/14 20:48	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**2090**	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 17:50	7439-89-6	
Manganese	**28.6**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 17:50	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 04:48	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 04:48	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 04:48	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 04:48	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 04:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 04:48	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 04:48	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 04:48	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 04:48	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 04:48	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 04:48	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 04:48	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 04:48	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 04:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 04:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 04:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 04:48	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 04:48	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 04:48	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 04:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 04:48	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 04:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 04:48	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:48	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 04:48	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:48	79-00-5	
Trichloroethene	**7.9**	ug/L	5.0	0.50	1		10/20/14 04:48	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 04:48	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 04:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/20/14 04:48	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		10/20/14 04:48	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		10/20/14 04:48	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 04:48		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-61-201410 **Lab ID: 60180331013** Collected: 10/14/14 14:15 Received: 10/15/14 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**109**	mg/L	20.0	2.0	1		10/23/14 08:53		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 08:53		
Alkalinity, Total as CaCO3	**109**	mg/L	20.0	2.0	1		10/23/14 08:53		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**2.1**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:13	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**104**	mg/L	10.0	5.0	10		10/25/14 05:15	16887-00-6	
Sulfate	**20.9**	mg/L	2.0	1.0	2		10/29/14 15:39	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/22/14 11:36	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		10/16/14 08:25		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 08:25		
Nitrogen, NO2 plus NO3	**1.5**	mg/L	0.10	0.012	1		10/16/14 08:25		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**201**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		10/21/14 02:36	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.50**	mg/L	0.030	0.010	1	10/24/14 09:04	10/24/14 14:26		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-60-201410 **Lab ID: 60180331014** Collected: 10/14/14 15:35 Received: 10/15/14 08:45 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		10/17/14 20:59	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**9510**	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 17:52	7439-89-6	
Manganese	**908**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 17:52	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 05:04	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 05:04	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 05:04	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 05:04	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 05:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 05:04	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 05:04	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 05:04	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 05:04	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 05:04	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 05:04	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 05:04	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 05:04	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 05:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 05:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 05:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 05:04	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 05:04	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 05:04	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 05:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 05:04	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 05:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 05:04	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:04	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 05:04	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:04	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:04	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 05:04	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 05:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/14 05:04	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		10/20/14 05:04	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		10/20/14 05:04	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 05:04		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-60-201410 **Lab ID: 60180331014** Collected: 10/14/14 15:35 Received: 10/15/14 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**385**	mg/L	20.0	2.0	1		10/23/14 08:59		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 08:59		
Alkalinity, Total as CaCO3	**385**	mg/L	20.0	2.0	1		10/23/14 08:59		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**9.5**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:13	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**135**	mg/L	10.0	5.0	10		10/29/14 15:54	16887-00-6	
Sulfate	**27.7**	mg/L	5.0	2.5	5		10/29/14 16:08	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/22/14 11:37	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		10/16/14 08:29		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 08:29		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		10/16/14 08:29		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**500**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.9**	mg/L	1.0	0.50	1		10/21/14 13:55	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	10/24/14 09:04	10/24/14 14:26		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: IW-73-201410 **Lab ID: 60180331015** Collected: 10/14/14 15:35 Received: 10/15/14 08:45 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		10/17/14 21:11	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**1740**	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 17:54	7439-89-6	
Manganese	**196**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 17:54	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 05:20	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 05:20	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 05:20	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 05:20	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 05:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 05:20	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 05:20	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 05:20	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 05:20	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 05:20	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 05:20	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 05:20	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 05:20	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 05:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:20	75-35-4	
cis-1,2-Dichloroethene	**0.84J**	ug/L	5.0	0.50	1		10/20/14 05:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 05:20	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 05:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 05:20	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 05:20	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 05:20	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 05:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 05:20	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 05:20	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 05:20	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:20	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 05:20	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:20	79-00-5	
Trichloroethene	**8.5**	ug/L	5.0	0.50	1		10/20/14 05:20	79-01-6	
Vinyl chloride	**1.1J**	ug/L	2.0	0.50	1		10/20/14 05:20	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 05:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/14 05:20	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		10/20/14 05:20	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		10/20/14 05:20	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 05:20		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: IW-73-201410 **Lab ID: 60180331015** Collected: 10/14/14 15:35 Received: 10/15/14 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**35.8**	mg/L	20.0	2.0	1		10/23/14 09:03		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 09:03		
Alkalinity, Total as CaCO3	**35.8**	mg/L	20.0	2.0	1		10/23/14 09:03		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**1.6**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:14	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**23.6**	mg/L	2.0	1.0	2		10/29/14 16:52	16887-00-6	
Sulfate	**3.0**	mg/L	1.0	0.50	1		10/29/14 17:06	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/22/14 11:38	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.053J**	mg/L	0.10	0.012	1		10/16/14 08:30		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 08:30		
Nitrogen, NO2 plus NO3	**0.053J**	mg/L	0.10	0.012	1		10/16/14 08:30		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**50.0**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**7.8**	mg/L	1.0	0.50	1		10/21/14 14:08	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.27**	mg/L	0.030	0.010	1	10/24/14 09:04	10/24/14 14:26		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-35R-201410 **Lab ID: 60180331016** Collected: 10/14/14 16:10 Received: 10/15/14 08:45 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		10/17/14 21:22	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**69.0**	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 17:57	7439-89-6	
Manganese	**38.3**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 17:57	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**48.9**	ug/L	10.0	5.0	1		10/19/14 17:02	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/19/14 17:02	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/19/14 17:02	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/19/14 17:02	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/19/14 17:02	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/19/14 17:02	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/19/14 17:02	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/19/14 17:02	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/19/14 17:02	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/19/14 17:02	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/19/14 17:02	67-66-3	
Chloromethane	**7.2J**	ug/L	10.0	0.50	1		10/19/14 17:02	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/19/14 17:02	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/19/14 17:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 17:02	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 17:02	75-35-4	
cis-1,2-Dichloroethene	**2.6J**	ug/L	5.0	0.50	1		10/19/14 17:02	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 17:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/19/14 17:02	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 17:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 17:02	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/19/14 17:02	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/19/14 17:02	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/19/14 17:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/19/14 17:02	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/19/14 17:02	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/19/14 17:02	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/19/14 17:02	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/19/14 17:02	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 17:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 17:02	79-00-5	
Trichloroethene	**79.2**	ug/L	5.0	0.50	1		10/19/14 17:02	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/19/14 17:02	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/19/14 17:02	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/19/14 17:02	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		10/19/14 17:02	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		10/19/14 17:02	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/19/14 17:02		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-35R-201410 **Lab ID: 60180331016** Collected: 10/14/14 16:10 Received: 10/15/14 08:45 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		10/23/14 09:13		
Alkalinity, Carbonate (CaCO3)	**970**	mg/L	20.0	2.0	1		10/23/14 09:13		
Alkalinity, Total as CaCO3	**1250**	mg/L	20.0	2.0	1		10/23/14 09:13		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.059J**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:14	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**343**	mg/L	50.0	25.0	50		10/29/14 17:20	16887-00-6	
Sulfate	**5110**	mg/L	500	250	500		10/31/14 09:44	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.0**	mg/L	0.10	0.023	1		10/22/14 11:39	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.9**	mg/L	0.10	0.012	1		10/16/14 10:25		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 10:25		
Nitrogen, NO2 plus NO3	**1.9**	mg/L	0.10	0.012	1		10/16/14 10:25		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**427**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**12.9**	mg/L	1.0	0.50	1		10/21/14 14:22	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**3.1**	mg/L	0.060	0.020	2	10/24/14 09:04	10/24/14 14:27		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-26-201410 **Lab ID: 60180331017** Collected: 10/14/14 16:10 Received: 10/15/14 08:45 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		10/17/14 21:33	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 18:04	7439-89-6	
Manganese	**399**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 18:04	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 05:37	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 05:37	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 05:37	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 05:37	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 05:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 05:37	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 05:37	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 05:37	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 05:37	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 05:37	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 05:37	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 05:37	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 05:37	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 05:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 05:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 05:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 05:37	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 05:37	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 05:37	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 05:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 05:37	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 05:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 05:37	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:37	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 05:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:37	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:37	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 05:37	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 05:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/14 05:37	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		10/20/14 05:37	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		10/20/14 05:37	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 05:37		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-26-201410 **Lab ID: 60180331017** Collected: 10/14/14 16:10 Received: 10/15/14 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**21.4**	mg/L	20.0	2.0	1		10/23/14 09:15		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 09:15		
Alkalinity, Total as CaCO3	**21.4**	mg/L	20.0	2.0	1		10/23/14 09:15		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.0080J**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:14	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**416**	mg/L	50.0	25.0	50		10/29/14 17:49	16887-00-6	
Sulfate	**8.7**	mg/L	1.0	0.50	1		10/29/14 18:04	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/22/14 12:21	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**2.9**	mg/L	0.10	0.012	1		10/16/14 10:26		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 10:26		
Nitrogen, NO2 plus NO3	**2.9**	mg/L	0.10	0.012	1		10/16/14 10:26		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**400**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		10/21/14 14:35	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	10/24/14 09:04	10/24/14 14:27		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-65-201410 **Lab ID: 60180331018** Collected: 10/14/14 16:08 Received: 10/15/14 08:45 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		10/17/14 21:45	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**88.2**	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 18:06	7439-89-6	
Manganese	**35.0**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 18:06	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**45.3**	ug/L	10.0	5.0	1		10/19/14 17:18	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/19/14 17:18	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/19/14 17:18	75-27-4	
Bromoform	**1.9J**	ug/L	5.0	0.50	1		10/19/14 17:18	75-25-2	
Bromomethane	**5.2J**	ug/L	7.0	2.5	1		10/19/14 17:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/19/14 17:18	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/19/14 17:18	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/19/14 17:18	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/19/14 17:18	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/19/14 17:18	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/19/14 17:18	67-66-3	
Chloromethane	**3.9J**	ug/L	10.0	0.50	1		10/19/14 17:18	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/19/14 17:18	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/19/14 17:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 17:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 17:18	75-35-4	
cis-1,2-Dichloroethene	**0.54J**	ug/L	5.0	0.50	1		10/19/14 17:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 17:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/19/14 17:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 17:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 17:18	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/19/14 17:18	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/19/14 17:18	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/19/14 17:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/19/14 17:18	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/19/14 17:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/19/14 17:18	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/19/14 17:18	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/19/14 17:18	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 17:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 17:18	79-00-5	
Trichloroethene	**30.8**	ug/L	5.0	0.50	1		10/19/14 17:18	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/19/14 17:18	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/19/14 17:18	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/19/14 17:18	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		10/19/14 17:18	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		10/19/14 17:18	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/19/14 17:18		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-65-201410 **Lab ID: 60180331018** Collected: 10/14/14 16:08 Received: 10/15/14 08:45 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		10/23/14 09:32		
Alkalinity, Carbonate (CaCO3)	**514**	mg/L	20.0	2.0	1		10/23/14 09:32		
Alkalinity, Total as CaCO3	**876**	mg/L	20.0	2.0	1		10/23/14 09:32		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.088J**	mg/L	0.20		1		10/24/14 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**12.0**	Std. Units	0.10	0.10	1		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:14	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**307**	mg/L	20.0	10.0	20		10/29/14 18:18	16887-00-6	
Sulfate	**3080**	mg/L	500	250	500		10/29/14 18:32	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.83**	mg/L	0.10	0.023	1		10/22/14 11:41	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		10/16/14 08:32		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 08:32		
Nitrogen, NO2 plus NO3	**2.7**	mg/L	0.10	0.012	1		10/16/14 08:32		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**226**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**5.9**	mg/L	1.0	0.50	1		10/21/14 15:14	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**2.8**	mg/L	0.060	0.020	2	10/24/14 09:04	10/24/14 14:28		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-27-201410 **Lab ID: 60180331019** Collected: 10/14/14 15:45 Received: 10/15/14 08:45 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		10/17/14 21:56	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**473**	ug/L	50.0	24.0	1	10/15/14 16:00	10/17/14 18:08	7439-89-6	
Manganese	**102**	ug/L	5.0	2.5	1	10/15/14 16:00	10/17/14 18:08	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 05:53	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 05:53	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 05:53	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 05:53	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 05:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 05:53	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 05:53	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 05:53	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 05:53	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 05:53	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 05:53	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 05:53	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 05:53	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 05:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 05:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 05:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 05:53	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 05:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 05:53	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 05:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 05:53	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 05:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 05:53	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:53	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 05:53	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 05:53	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 05:53	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 05:53	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 05:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/20/14 05:53	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		10/20/14 05:53	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		10/20/14 05:53	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 05:53		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: MW-27-201410 **Lab ID: 60180331019** Collected: 10/14/14 15:45 Received: 10/15/14 08:45 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**32.8**	mg/L	20.0	2.0	1		10/23/14 09:34		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 09:34		
Alkalinity, Total as CaCO3	**32.8**	mg/L	20.0	2.0	1		10/23/14 09:34		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.063J**	mg/L	0.20		1		10/24/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:15	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**31.5**	mg/L	2.0	1.0	2		10/29/14 18:47	16887-00-6	
Sulfate	**15.5**	mg/L	2.0	1.0	2		10/29/14 18:47	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/22/14 11:42	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.31**	mg/L	0.10	0.012	1		10/16/14 08:31		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 08:31		
Nitrogen, NO2 plus NO3	**0.31**	mg/L	0.10	0.012	1		10/16/14 08:31		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**256**	mg/L			1		10/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.1**	mg/L	1.0	0.50	1		10/21/14 15:27	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	10/24/14 09:04	10/24/14 14:28		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: DUP-01-201410 **Lab ID: 60180331020** Collected: 10/14/14 14:05 Received: 10/15/14 08:45 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		10/20/14 06:09	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 06:09	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 06:09	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 06:09	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 06:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 06:09	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 06:09	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 06:09	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 06:09	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 06:09	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 06:09	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 06:09	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 06:09	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 06:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 06:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 06:09	75-35-4	
cis-1,2-Dichloroethene	**3.3J**	ug/L	5.0	0.50	1		10/20/14 06:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 06:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 06:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 06:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 06:09	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 06:09	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 06:09	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 06:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 06:09	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 06:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 06:09	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 06:09	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 06:09	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 06:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 06:09	79-00-5	
Trichloroethene	**143**	ug/L	5.0	0.50	1		10/20/14 06:09	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 06:09	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 06:09	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/20/14 06:09	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		10/20/14 06:09	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		10/20/14 06:09	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 06:09		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: TB-10-201410 **Lab ID: 60180331021** Collected: 10/14/14 00:00 Received: 10/15/14 08:45 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		10/20/14 04:00	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 04:00	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 04:00	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 04:00	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 04:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 04:00	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 04:00	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 04:00	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 04:00	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 04:00	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 04:00	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 04:00	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 04:00	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 04:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 04:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 04:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 04:00	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 04:00	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 04:00	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 04:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 04:00	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 04:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 04:00	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:00	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 04:00	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:00	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:00	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 04:00	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 04:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/20/14 04:00	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		10/20/14 04:00	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		10/20/14 04:00	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 04:00		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: EB-02-201410 **Lab ID: 60180331022** Collected: 10/14/14 16:55 Received: 10/15/14 08:45 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		10/20/14 04:32	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 04:32	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 04:32	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 04:32	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 04:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 04:32	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 04:32	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 04:32	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 04:32	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 04:32	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 04:32	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 04:32	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 04:32	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 04:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:32	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 04:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 04:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 04:32	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 04:32	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 04:32	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 04:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 04:32	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 04:32	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 04:32	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:32	127-18-4	
Toluene	**1.6J**	ug/L	5.0	0.50	1		10/20/14 04:32	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:32	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:32	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 04:32	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 04:32	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/20/14 04:32	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		10/20/14 04:32	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		10/20/14 04:32	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 04:32		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: TB-09-201410 **Lab ID: 60180331023** Collected: 10/14/14 09:50 Received: 10/15/14 08:45 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		10/20/14 04:16	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 04:16	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 04:16	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 04:16	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 04:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 04:16	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 04:16	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 04:16	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 04:16	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 04:16	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 04:16	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 04:16	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 04:16	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 04:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:16	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 04:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 04:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 04:16	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 04:16	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 04:16	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 04:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 04:16	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 04:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 04:16	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:16	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 04:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 04:16	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 04:16	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 04:16	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 04:16	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/20/14 04:16	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		10/20/14 04:16	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		10/20/14 04:16	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 04:16		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: TB-11-201410 **Lab ID: 60180331024** Collected: 10/14/14 09:50 Received: 10/15/14 08:45 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		10/20/14 10:06	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 10:06	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 10:06	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 10:06	75-25-2	L3
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 10:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 10:06	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 10:06	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 10:06	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 10:06	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 10:06	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 10:06	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 10:06	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 10:06	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 10:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 10:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 10:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 10:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 10:06	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 10:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 10:06	591-78-6	
Methylene chloride	**0.88J**	ug/L	5.0	0.50	1		10/20/14 10:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 10:06	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 10:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 10:06	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:06	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 10:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 10:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 10:06	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:06	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 10:06	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 10:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	92	%	80-120		1		10/20/14 10:06	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		10/20/14 10:06	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		10/20/14 10:06	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 10:06		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: TB-14-201410 **Lab ID: 60180331025** Collected: 10/14/14 09:50 Received: 10/15/14 08:45 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		10/20/14 10:21	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 10:21	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 10:21	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 10:21	75-25-2	L3
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 10:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 10:21	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 10:21	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 10:21	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 10:21	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 10:21	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 10:21	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 10:21	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 10:21	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 10:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 10:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 10:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 10:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 10:21	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 10:21	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 10:21	591-78-6	
Methylene chloride	**0.84J**	ug/L	5.0	0.50	1		10/20/14 10:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 10:21	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 10:21	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 10:21	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:21	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 10:21	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 10:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 10:21	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:21	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 10:21	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 10:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/20/14 10:21	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		10/20/14 10:21	17060-07-0	
Toluene-d8 (S)	103	%	80-120		1		10/20/14 10:21	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 10:21		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180331

Sample: TB-05-201410 **Lab ID: 60180331026** Collected: 10/14/14 09:50 Received: 10/15/14 08:45 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		10/20/14 10:36	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 10:36	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 10:36	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 10:36	75-25-2	L3
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 10:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 10:36	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 10:36	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 10:36	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 10:36	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 10:36	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 10:36	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 10:36	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 10:36	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 10:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 10:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 10:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 10:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 10:36	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 10:36	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 10:36	591-78-6	
Methylene chloride	**0.86J**	ug/L	5.0	0.50	1		10/20/14 10:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 10:36	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 10:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 10:36	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:36	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 10:36	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 10:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 10:36	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:36	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 10:36	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 10:36	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	91	%	80-120		1		10/20/14 10:36	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		10/20/14 10:36	17060-07-0	
Toluene-d8 (S)	106	%	80-120		1		10/20/14 10:36	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 10:36		

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

QC Batch: GCSV/3076 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60180331001, 60180331002, 60180331003, 60180331004, 60180331005, 60180331006, 60180331007, 60180331008, 60180331009, 60180331010, 60180331011, 60180331012, 60180331013, 60180331014, 60180331015, 60180331016, 60180331017, 60180331018, 60180331019

METHOD BLANK: 102005 Matrix: Water
Associated Lab Samples: 60180331001, 60180331002, 60180331003, 60180331004, 60180331005, 60180331006, 60180331007, 60180331008, 60180331009, 60180331010, 60180331011, 60180331012, 60180331013, 60180331014, 60180331015, 60180331016, 60180331017, 60180331018, 60180331019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	10/17/14 17:09	

LABORATORY CONTROL SAMPLE: 102006

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	107000	107	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 102007 102008

Parameter	Units	60180331001 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	109000	110000	109	110	40-140	1	40	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

QC Batch: MPRP/29342 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60180331001, 60180331002, 60180331003, 60180331004, 60180331005, 60180331006, 60180331007, 60180331008, 60180331009, 60180331010, 60180331011, 60180331012, 60180331013, 60180331014, 60180331015, 60180331016, 60180331017, 60180331018, 60180331019

METHOD BLANK: 1460800 Matrix: Water
Associated Lab Samples: 60180331001, 60180331002, 60180331003, 60180331004, 60180331005, 60180331006, 60180331007, 60180331008, 60180331009, 60180331010, 60180331011, 60180331012, 60180331013, 60180331014, 60180331015, 60180331016, 60180331017, 60180331018, 60180331019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	10/17/14 17:11	
Manganese	ug/L	ND	5.0	10/17/14 17:11	

LABORATORY CONTROL SAMPLE: 1460801

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9970	100	80-120	
Manganese	ug/L	1000	1030	103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1460802 1460803

Parameter	Units	60180331001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	438	10000	10000	10300	10300	98	98	75-125	0	20	
Manganese	ug/L	55.7	1000	1000	1060	1060	101	100	75-125	1	20	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

QC Batch: MSV/65160 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60180331001, 60180331002, 60180331005, 60180331006, 60180331007, 60180331009, 60180331011, 60180331012

METHOD BLANK: 1462550 Matrix: Water
Associated Lab Samples: 60180331001, 60180331002, 60180331005, 60180331006, 60180331007, 60180331009, 60180331011, 60180331012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	10/20/14 03:06	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/20/14 03:06	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/20/14 03:06	
1,1-Dichloroethane	ug/L	ND	2.4	10/20/14 03:06	
1,1-Dichloroethene	ug/L	ND	5.0	10/20/14 03:06	
1,2-Dichloroethane	ug/L	ND	5.0	10/20/14 03:06	
1,2-Dichloropropane	ug/L	ND	5.0	10/20/14 03:06	
2-Butanone (MEK)	ug/L	ND	10.0	10/20/14 03:06	
2-Hexanone	ug/L	ND	10.0	10/20/14 03:06	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/20/14 03:06	
Acetone	ug/L	ND	10.0	10/20/14 03:06	
Benzene	ug/L	ND	5.0	10/20/14 03:06	
Bromodichloromethane	ug/L	ND	5.0	10/20/14 03:06	
Bromoform	ug/L	ND	5.0	10/20/14 03:06	
Bromomethane	ug/L	ND	7.0	10/20/14 03:06	
Carbon disulfide	ug/L	ND	10.0	10/20/14 03:06	
Carbon tetrachloride	ug/L	ND	5.0	10/20/14 03:06	
Chlorobenzene	ug/L	ND	5.0	10/20/14 03:06	
Chloroethane	ug/L	ND	10.0	10/20/14 03:06	
Chloroform	ug/L	ND	5.0	10/20/14 03:06	
Chloromethane	ug/L	ND	10.0	10/20/14 03:06	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/20/14 03:06	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/20/14 03:06	
Dibromochloromethane	ug/L	ND	5.0	10/20/14 03:06	
Ethylbenzene	ug/L	ND	5.0	10/20/14 03:06	
Methylene chloride	ug/L	ND	5.0	10/20/14 03:06	
Styrene	ug/L	ND	5.0	10/20/14 03:06	
Tetrachloroethene	ug/L	ND	5.0	10/20/14 03:06	
Toluene	ug/L	ND	5.0	10/20/14 03:06	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/20/14 03:06	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/20/14 03:06	
Trichloroethene	ug/L	ND	5.0	10/20/14 03:06	
Vinyl chloride	ug/L	ND	2.0	10/20/14 03:06	
Xylene (Total)	ug/L	ND	5.0	10/20/14 03:06	
1,2-Dichloroethane-d4 (S)	%	100	80-120	10/20/14 03:06	
4-Bromofluorobenzene (S)	%	92	80-120	10/20/14 03:06	
Toluene-d8 (S)	%	105	80-120	10/20/14 03:06	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

LABORATORY CONTROL SAMPLE: 1462551

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.2	106	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	16.8	84	73-124	
1,1,2-Trichloroethane	ug/L	20	19.7	98	80-120	
1,1-Dichloroethane	ug/L	20	20.7	104	77-120	
1,1-Dichloroethene	ug/L	20	21.0	105	78-126	
1,2-Dichloroethane	ug/L	20	20.4	102	77-123	
1,2-Dichloropropane	ug/L	20	20.3	102	80-121	
2-Butanone (MEK)	ug/L	100	96.0	96	52-145	
2-Hexanone	ug/L	100	93.5	94	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	101	101	71-131	
Acetone	ug/L	100	93.5	94	32-155	
Benzene	ug/L	20	20.7	103	80-120	
Bromodichloromethane	ug/L	20	21.1	105	80-120	
Bromoform	ug/L	20	23.4	117	73-124	
Bromomethane	ug/L	20	15.2	76	31-144	
Carbon disulfide	ug/L	20	18.8	94	65-125	
Carbon tetrachloride	ug/L	20	22.3	112	78-128	
Chlorobenzene	ug/L	20	21.8	109	80-120	
Chloroethane	ug/L	20	20.8	104	55-137	
Chloroform	ug/L	20	21.9	110	79-120	
Chloromethane	ug/L	20	29.9	149	22-138	L0
cis-1,2-Dichloroethene	ug/L	20	20.9	104	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.0	95	80-120	
Dibromochloromethane	ug/L	20	22.4	112	80-120	
Ethylbenzene	ug/L	20	21.2	106	80-121	
Methylene chloride	ug/L	20	20.0	100	73-126	
Styrene	ug/L	20	22.5	113	80-120	
Tetrachloroethene	ug/L	20	21.7	108	80-121	
Toluene	ug/L	20	20.5	103	80-122	
trans-1,2-Dichloroethene	ug/L	20	20.5	103	79-121	
trans-1,3-Dichloropropene	ug/L	20	19.8	99	80-127	
Trichloroethene	ug/L	20	21.6	108	80-120	
Vinyl chloride	ug/L	20	18.7	93	59-120	
Xylene (Total)	ug/L	60	66.1	110	80-121	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			89	80-120	
Toluene-d8 (S)	%			102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1462552 1462553

Parameter	Units	60180331001 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	20.6	22.1	103	110	71-136	7	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	17.2	18.7	86	94	61-127	8	21	
1,1,2-Trichloroethane	ug/L	ND	20	20	18.9	19.6	95	98	63-123	3	22	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1462552 1462553

Parameter	Units	60180331001 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	19.9	21.0	100	105	62-128	5	25	
1,1-Dichloroethene	ug/L	ND	20	20	19.5	22.2	98	111	60-144	13	28	
1,2-Dichloroethane	ug/L	ND	20	20	18.7	19.5	94	98	49-148	4	35	
1,2-Dichloropropane	ug/L	ND	20	20	18.6	20.3	93	101	66-130	9	22	
2-Butanone (MEK)	ug/L	ND	100	100	81.1	88.7	81	89	36-145	9	23	
2-Hexanone	ug/L	ND	100	100	84.1	89.9	84	90	42-140	7	24	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	85.7	93.0	86	93	52-137	8	24	
Acetone	ug/L	ND	100	100	78.9	85.9	79	86	24-151	8	23	
Benzene	ug/L	ND	20	20	19.7	21.0	99	105	37-157	6	32	
Bromodichloromethane	ug/L	ND	20	20	19.7	21.1	99	106	67-125	7	21	
Bromoform	ug/L	ND	20	20	21.6	22.4	108	112	55-124	4	23	
Bromomethane	ug/L	ND	20	20	13.7	17.6	69	88	25-138	25	42	
Carbon disulfide	ug/L	ND	20	20	19.2	20.4	96	101	57-133	6	23	
Carbon tetrachloride	ug/L	ND	20	20	21.6	23.1	108	116	68-142	7	21	
Chlorobenzene	ug/L	ND	20	20	20.7	22.0	104	110	66-133	6	20	
Chloroethane	ug/L	ND	20	20	22.8	20.6	114	103	46-147	10	28	
Chloroform	ug/L	ND	20	20	19.9	21.3	99	107	66-127	7	20	
Chloromethane	ug/L	ND	20	20	19.5	14.8	98	74	19-136	28	36	
cis-1,2-Dichloroethene	ug/L	ND	20	20	19.1	19.9	95	100	55-140	4	23	
cis-1,3-Dichloropropene	ug/L	ND	20	20	17.3	18.5	86	92	62-122	7	22	
Dibromochloromethane	ug/L	ND	20	20	20.1	21.7	100	109	62-130	8	22	
Ethylbenzene	ug/L	ND	20	20	21.0	21.8	105	109	31-160	4	32	
Methylene chloride	ug/L	ND	20	20	18.3	19.4	92	97	55-132	6	23	
Styrene	ug/L	ND	20	20	20.9	22.2	105	111	55-134	6	25	
Tetrachloroethene	ug/L	ND	20	20	21.9	22.4	109	112	69-133	2	20	
Toluene	ug/L	ND	20	20	20.2	21.3	101	106	35-157	5	37	
trans-1,2-Dichloroethene	ug/L	ND	20	20	19.8	21.1	99	105	66-131	6	23	
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.1	19.5	91	97	62-131	7	23	
Trichloroethene	ug/L	ND	20	20	19.6	20.9	98	105	61-135	6	21	
Vinyl chloride	ug/L	ND	20	20	18.9	20.6	95	103	44-128	9	22	
Xylene (Total)	ug/L	ND	60	60	63.6	66.3	106	110	34-156	4	37	
1,2-Dichloroethane-d4 (S)	%						101	97	80-120			
4-Bromofluorobenzene (S)	%						92	91	80-120			
Toluene-d8 (S)	%						103	104	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.: 60180331

QC Batch: MSV/65179 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60180331013, 60180331014, 60180331015, 60180331017, 60180331019, 60180331020, 60180331021, 60180331022, 60180331023

METHOD BLANK: 1463445 Matrix: Water
Associated Lab Samples: 60180331013, 60180331014, 60180331015, 60180331017, 60180331019, 60180331020, 60180331021, 60180331022, 60180331023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	10/20/14 03:11	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/20/14 03:11	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/20/14 03:11	
1,1-Dichloroethane	ug/L	ND	2.4	10/20/14 03:11	
1,1-Dichloroethene	ug/L	ND	5.0	10/20/14 03:11	
1,2-Dichloroethane	ug/L	ND	5.0	10/20/14 03:11	
1,2-Dichloropropane	ug/L	ND	5.0	10/20/14 03:11	
2-Butanone (MEK)	ug/L	ND	10.0	10/20/14 03:11	
2-Hexanone	ug/L	ND	10.0	10/20/14 03:11	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/20/14 03:11	
Acetone	ug/L	ND	10.0	10/20/14 03:11	
Benzene	ug/L	ND	5.0	10/20/14 03:11	
Bromodichloromethane	ug/L	ND	5.0	10/20/14 03:11	
Bromoform	ug/L	ND	5.0	10/20/14 03:11	
Bromomethane	ug/L	ND	7.0	10/20/14 03:11	
Carbon disulfide	ug/L	ND	10.0	10/20/14 03:11	
Carbon tetrachloride	ug/L	ND	5.0	10/20/14 03:11	
Chlorobenzene	ug/L	ND	5.0	10/20/14 03:11	
Chloroethane	ug/L	ND	10.0	10/20/14 03:11	
Chloroform	ug/L	ND	5.0	10/20/14 03:11	
Chloromethane	ug/L	ND	10.0	10/20/14 03:11	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/20/14 03:11	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/20/14 03:11	
Dibromochloromethane	ug/L	ND	5.0	10/20/14 03:11	
Ethylbenzene	ug/L	ND	5.0	10/20/14 03:11	
Methylene chloride	ug/L	ND	5.0	10/20/14 03:11	
Styrene	ug/L	ND	5.0	10/20/14 03:11	
Tetrachloroethene	ug/L	ND	5.0	10/20/14 03:11	
Toluene	ug/L	ND	5.0	10/20/14 03:11	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/20/14 03:11	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/20/14 03:11	
Trichloroethene	ug/L	ND	5.0	10/20/14 03:11	
Vinyl chloride	ug/L	ND	2.0	10/20/14 03:11	
Xylene (Total)	ug/L	ND	5.0	10/20/14 03:11	
1,2-Dichloroethane-d4 (S)	%	105	80-120	10/20/14 03:11	
4-Bromofluorobenzene (S)	%	99	80-120	10/20/14 03:11	
Toluene-d8 (S)	%	100	80-120	10/20/14 03:11	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

LABORATORY CONTROL SAMPLE: 1463446

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.5	103	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	16.7	84	73-124	
1,1,2-Trichloroethane	ug/L	20	19.8	99	80-120	
1,1-Dichloroethane	ug/L	20	20.5	103	77-120	
1,1-Dichloroethene	ug/L	20	20.8	104	78-126	
1,2-Dichloroethane	ug/L	20	21.2	106	77-123	
1,2-Dichloropropane	ug/L	20	20.4	102	80-121	
2-Butanone (MEK)	ug/L	100	92.6	93	52-145	
2-Hexanone	ug/L	100	98.4	98	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	103	103	71-131	
Acetone	ug/L	100	102	102	32-155	
Benzene	ug/L	20	20.1	101	80-120	
Bromodichloromethane	ug/L	20	20.1	101	80-120	
Bromoform	ug/L	20	19.3	96	73-124	
Bromomethane	ug/L	20	17.8	89	31-144	
Carbon disulfide	ug/L	20	20.8	104	65-125	
Carbon tetrachloride	ug/L	20	20.3	102	78-128	
Chlorobenzene	ug/L	20	20.2	101	80-120	
Chloroethane	ug/L	20	19.3	97	55-137	
Chloroform	ug/L	20	20.4	102	79-120	
Chloromethane	ug/L	20	23.4	117	22-138	
cis-1,2-Dichloroethene	ug/L	20	19.9	99	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.1	96	80-120	
Dibromochloromethane	ug/L	20	20.1	100	80-120	
Ethylbenzene	ug/L	20	19.8	99	80-121	
Methylene chloride	ug/L	20	18.6	93	73-126	
Styrene	ug/L	20	21.4	107	80-120	
Tetrachloroethene	ug/L	20	19.6	98	80-121	
Toluene	ug/L	20	19.9	100	80-122	
trans-1,2-Dichloroethene	ug/L	20	20.6	103	79-121	
trans-1,3-Dichloropropene	ug/L	20	21.4	107	80-127	
Trichloroethene	ug/L	20	21.8	109	80-120	
Vinyl chloride	ug/L	20	20.6	103	59-120	
Xylene (Total)	ug/L	60	62.7	104	80-121	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

QC Batch: MSV/65185 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60180331024, 60180331025, 60180331026

METHOD BLANK: 1463654 Matrix: Water
Associated Lab Samples: 60180331024, 60180331025, 60180331026

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	10/20/14 09:21	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/20/14 09:21	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/20/14 09:21	
1,1-Dichloroethane	ug/L	ND	2.4	10/20/14 09:21	
1,1-Dichloroethene	ug/L	ND	5.0	10/20/14 09:21	
1,2-Dichloroethane	ug/L	ND	5.0	10/20/14 09:21	
1,2-Dichloropropane	ug/L	ND	5.0	10/20/14 09:21	
2-Butanone (MEK)	ug/L	ND	10.0	10/20/14 09:21	
2-Hexanone	ug/L	ND	10.0	10/20/14 09:21	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/20/14 09:21	
Acetone	ug/L	ND	10.0	10/20/14 09:21	
Benzene	ug/L	ND	5.0	10/20/14 09:21	
Bromodichloromethane	ug/L	ND	5.0	10/20/14 09:21	
Bromoform	ug/L	ND	5.0	10/20/14 09:21	
Bromomethane	ug/L	ND	7.0	10/20/14 09:21	
Carbon disulfide	ug/L	ND	10.0	10/20/14 09:21	
Carbon tetrachloride	ug/L	ND	5.0	10/20/14 09:21	
Chlorobenzene	ug/L	ND	5.0	10/20/14 09:21	
Chloroethane	ug/L	ND	10.0	10/20/14 09:21	
Chloroform	ug/L	ND	5.0	10/20/14 09:21	
Chloromethane	ug/L	ND	10.0	10/20/14 09:21	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/20/14 09:21	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/20/14 09:21	
Dibromochloromethane	ug/L	ND	5.0	10/20/14 09:21	
Ethylbenzene	ug/L	ND	5.0	10/20/14 09:21	
Methylene chloride	ug/L	ND	5.0	10/20/14 09:21	
Styrene	ug/L	ND	5.0	10/20/14 09:21	
Tetrachloroethene	ug/L	ND	5.0	10/20/14 09:21	
Toluene	ug/L	ND	5.0	10/20/14 09:21	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/20/14 09:21	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/20/14 09:21	
Trichloroethene	ug/L	ND	5.0	10/20/14 09:21	
Vinyl chloride	ug/L	ND	2.0	10/20/14 09:21	
Xylene (Total)	ug/L	ND	5.0	10/20/14 09:21	
1,2-Dichloroethane-d4 (S)	%	104	80-120	10/20/14 09:21	
4-Bromofluorobenzene (S)	%	92	80-120	10/20/14 09:21	
Toluene-d8 (S)	%	103	80-120	10/20/14 09:21	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

LABORATORY CONTROL SAMPLE: 1463655

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.0	105	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	19.5	98	73-124	
1,1,2-Trichloroethane	ug/L	20	20.9	104	80-120	
1,1-Dichloroethane	ug/L	20	20.6	103	77-120	
1,1-Dichloroethene	ug/L	20	20.4	102	78-126	
1,2-Dichloroethane	ug/L	20	20.0	100	77-123	
1,2-Dichloropropane	ug/L	20	19.6	98	80-121	
2-Butanone (MEK)	ug/L	100	96.9	97	52-145	
2-Hexanone	ug/L	100	104	104	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	101	101	71-131	
Acetone	ug/L	100	95.3	95	32-155	
Benzene	ug/L	20	20.1	100	80-120	
Bromodichloromethane	ug/L	20	21.4	107	80-120	
Bromoform	ug/L	20	25.1	125	73-124	L0
Bromomethane	ug/L	20	18.5	92	31-144	
Carbon disulfide	ug/L	20	18.4	92	65-125	
Carbon tetrachloride	ug/L	20	22.1	110	78-128	
Chlorobenzene	ug/L	20	23.2	116	80-120	
Chloroethane	ug/L	20	19.1	96	55-137	
Chloroform	ug/L	20	20.6	103	79-120	
Chloromethane	ug/L	20	19.4	97	22-138	
cis-1,2-Dichloroethene	ug/L	20	20.2	101	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.0	100	80-120	
Dibromochloromethane	ug/L	20	23.7	119	80-120	
Ethylbenzene	ug/L	20	22.3	111	80-121	
Methylene chloride	ug/L	20	19.3	97	73-126	
Styrene	ug/L	20	23.8	119	80-120	
Tetrachloroethene	ug/L	20	23.6	118	80-121	
Toluene	ug/L	20	21.4	107	80-122	
trans-1,2-Dichloroethene	ug/L	20	19.8	99	79-121	
trans-1,3-Dichloropropene	ug/L	20	23.4	117	80-127	
Trichloroethene	ug/L	20	19.9	100	80-120	
Vinyl chloride	ug/L	20	17.5	88	59-120	
Xylene (Total)	ug/L	60	70.4	117	80-121	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			86	80-120	
Toluene-d8 (S)	%			104	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

QC Batch: MSV/65205 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60180331007, 60180331008, 60180331010

METHOD BLANK: 1463828 Matrix: Water
Associated Lab Samples: 60180331007, 60180331008, 60180331010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	10/20/14 15:19	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/20/14 15:19	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/20/14 15:19	
1,1-Dichloroethane	ug/L	ND	2.4	10/20/14 15:19	
1,1-Dichloroethene	ug/L	ND	5.0	10/20/14 15:19	
1,2-Dichloroethane	ug/L	ND	5.0	10/20/14 15:19	
1,2-Dichloropropane	ug/L	ND	5.0	10/20/14 15:19	
2-Butanone (MEK)	ug/L	ND	10.0	10/20/14 15:19	
2-Hexanone	ug/L	ND	10.0	10/20/14 15:19	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/20/14 15:19	
Acetone	ug/L	ND	10.0	10/20/14 15:19	
Benzene	ug/L	ND	5.0	10/20/14 15:19	
Bromodichloromethane	ug/L	ND	5.0	10/20/14 15:19	
Bromoform	ug/L	ND	5.0	10/20/14 15:19	
Bromomethane	ug/L	ND	7.0	10/20/14 15:19	
Carbon disulfide	ug/L	ND	10.0	10/20/14 15:19	
Carbon tetrachloride	ug/L	ND	5.0	10/20/14 15:19	
Chlorobenzene	ug/L	ND	5.0	10/20/14 15:19	
Chloroethane	ug/L	ND	10.0	10/20/14 15:19	
Chloroform	ug/L	ND	5.0	10/20/14 15:19	
Chloromethane	ug/L	ND	10.0	10/20/14 15:19	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/20/14 15:19	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/20/14 15:19	
Dibromochloromethane	ug/L	ND	5.0	10/20/14 15:19	
Ethylbenzene	ug/L	ND	5.0	10/20/14 15:19	
Methylene chloride	ug/L	ND	5.0	10/20/14 15:19	
Styrene	ug/L	ND	5.0	10/20/14 15:19	
Tetrachloroethene	ug/L	ND	5.0	10/20/14 15:19	
Toluene	ug/L	ND	5.0	10/20/14 15:19	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/20/14 15:19	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/20/14 15:19	
Trichloroethene	ug/L	ND	5.0	10/20/14 15:19	
Vinyl chloride	ug/L	ND	2.0	10/20/14 15:19	
Xylene (Total)	ug/L	ND	5.0	10/20/14 15:19	
1,2-Dichloroethane-d4 (S)	%	103	80-120	10/20/14 15:19	
4-Bromofluorobenzene (S)	%	90	80-120	10/20/14 15:19	
Toluene-d8 (S)	%	101	80-120	10/20/14 15:19	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

LABORATORY CONTROL SAMPLE: 1463829

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.6	98	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	18.6	93	73-124	
1,1,2-Trichloroethane	ug/L	20	20.6	103	80-120	
1,1-Dichloroethane	ug/L	20	19.0	95	77-120	
1,1-Dichloroethene	ug/L	20	17.9	89	78-126	
1,2-Dichloroethane	ug/L	20	19.5	97	77-123	
1,2-Dichloropropane	ug/L	20	18.7	94	80-121	
2-Butanone (MEK)	ug/L	100	92.0	92	52-145	
2-Hexanone	ug/L	100	98.5	99	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	93.9	94	71-131	
Acetone	ug/L	100	86.6	87	32-155	
Benzene	ug/L	20	19.3	97	80-120	
Bromodichloromethane	ug/L	20	20.1	101	80-120	
Bromoform	ug/L	20	23.6	118	73-124	
Bromomethane	ug/L	20	13.7	68	31-144	
Carbon disulfide	ug/L	20	16.8	84	65-125	
Carbon tetrachloride	ug/L	20	20.7	104	78-128	
Chlorobenzene	ug/L	20	21.9	110	80-120	
Chloroethane	ug/L	20	17.2	86	55-137	
Chloroform	ug/L	20	20.1	101	79-120	
Chloromethane	ug/L	20	12.1	60	22-138	
cis-1,2-Dichloroethene	ug/L	20	18.9	95	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.6	93	80-120	
Dibromochloromethane	ug/L	20	22.6	113	80-120	
Ethylbenzene	ug/L	20	21.3	107	80-121	
Methylene chloride	ug/L	20	18.1	90	73-126	
Styrene	ug/L	20	22.3	111	80-120	
Tetrachloroethene	ug/L	20	22.4	112	80-121	
Toluene	ug/L	20	20.6	103	80-122	
trans-1,2-Dichloroethene	ug/L	20	18.7	93	79-121	
trans-1,3-Dichloropropene	ug/L	20	21.5	108	80-127	
Trichloroethene	ug/L	20	20.2	101	80-120	
Vinyl chloride	ug/L	20	16.0	80	59-120	
Xylene (Total)	ug/L	60	66.1	110	80-121	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			93	80-120	
Toluene-d8 (S)	%			103	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

QC Batch: MSV/65176 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60180331003, 60180331004, 60180331016, 60180331018

METHOD BLANK: 1463439 Matrix: Water
Associated Lab Samples: 60180331003, 60180331004, 60180331016, 60180331018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	10/19/14 14:06	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/19/14 14:06	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/19/14 14:06	
1,1-Dichloroethane	ug/L	ND	2.4	10/19/14 14:06	
1,1-Dichloroethene	ug/L	ND	5.0	10/19/14 14:06	
1,2-Dichloroethane	ug/L	ND	5.0	10/19/14 14:06	
1,2-Dichloropropane	ug/L	ND	5.0	10/19/14 14:06	
2-Butanone (MEK)	ug/L	ND	10.0	10/19/14 14:06	
2-Hexanone	ug/L	ND	10.0	10/19/14 14:06	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/19/14 14:06	
Acetone	ug/L	ND	10.0	10/19/14 14:06	
Benzene	ug/L	ND	5.0	10/19/14 14:06	
Bromodichloromethane	ug/L	ND	5.0	10/19/14 14:06	
Bromoform	ug/L	ND	5.0	10/19/14 14:06	
Bromomethane	ug/L	ND	7.0	10/19/14 14:06	
Carbon disulfide	ug/L	ND	10.0	10/19/14 14:06	
Carbon tetrachloride	ug/L	ND	5.0	10/19/14 14:06	
Chlorobenzene	ug/L	ND	5.0	10/19/14 14:06	
Chloroethane	ug/L	ND	10.0	10/19/14 14:06	
Chloroform	ug/L	ND	5.0	10/19/14 14:06	
Chloromethane	ug/L	ND	10.0	10/19/14 14:06	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/19/14 14:06	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/19/14 14:06	
Dibromochloromethane	ug/L	ND	5.0	10/19/14 14:06	
Ethylbenzene	ug/L	ND	5.0	10/19/14 14:06	
Methylene chloride	ug/L	ND	5.0	10/19/14 14:06	
Styrene	ug/L	ND	5.0	10/19/14 14:06	
Tetrachloroethene	ug/L	ND	5.0	10/19/14 14:06	
Toluene	ug/L	ND	5.0	10/19/14 14:06	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/19/14 14:06	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/19/14 14:06	
Trichloroethene	ug/L	ND	5.0	10/19/14 14:06	
Vinyl chloride	ug/L	ND	2.0	10/19/14 14:06	
Xylene (Total)	ug/L	ND	5.0	10/19/14 14:06	
1,2-Dichloroethane-d4 (S)	%	101	80-120	10/19/14 14:06	
4-Bromofluorobenzene (S)	%	99	80-120	10/19/14 14:06	
Toluene-d8 (S)	%	100	80-120	10/19/14 14:06	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

LABORATORY CONTROL SAMPLE: 1463440

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.0	105	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	20.6	103	73-124	
1,1,2-Trichloroethane	ug/L	20	21.0	105	80-120	
1,1-Dichloroethane	ug/L	20	21.2	106	77-120	
1,1-Dichloroethene	ug/L	20	21.7	108	78-126	
1,2-Dichloroethane	ug/L	20	21.5	108	77-123	
1,2-Dichloropropane	ug/L	20	20.7	104	80-121	
2-Butanone (MEK)	ug/L	100	93.5	93	52-145	
2-Hexanone	ug/L	100	101	101	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	102	102	71-131	
Acetone	ug/L	100	103	103	32-155	
Benzene	ug/L	20	20.6	103	80-120	
Bromodichloromethane	ug/L	20	20.8	104	80-120	
Bromoform	ug/L	20	21.5	108	73-124	
Bromomethane	ug/L	20	19.8	99	31-144	
Carbon disulfide	ug/L	20	21.7	108	65-125	
Carbon tetrachloride	ug/L	20	20.9	105	78-128	
Chlorobenzene	ug/L	20	20.9	104	80-120	
Chloroethane	ug/L	20	19.6	98	55-137	
Chloroform	ug/L	20	20.8	104	79-120	
Chloromethane	ug/L	20	24.7	123	22-138	
cis-1,2-Dichloroethene	ug/L	20	20.8	104	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.2	101	80-120	
Dibromochloromethane	ug/L	20	21.1	105	80-120	
Ethylbenzene	ug/L	20	20.7	104	80-121	
Methylene chloride	ug/L	20	19.4	97	73-126	
Styrene	ug/L	20	22.7	114	80-120	
Tetrachloroethene	ug/L	20	20.8	104	80-121	
Toluene	ug/L	20	20.4	102	80-122	
trans-1,2-Dichloroethene	ug/L	20	20.8	104	79-121	
trans-1,3-Dichloropropene	ug/L	20	22.8	114	80-127	
Trichloroethene	ug/L	20	20.3	102	80-120	
Vinyl chloride	ug/L	20	21.5	108	59-120	
Xylene (Total)	ug/L	60	64.9	108	80-121	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

QC Batch: WET/51036 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60180331001, 60180331002, 60180331003, 60180331004, 60180331005, 60180331006, 60180331007, 60180331008, 60180331009, 60180331010

METHOD BLANK: 1464633 Matrix: Water
Associated Lab Samples: 60180331001, 60180331002, 60180331003, 60180331004, 60180331005, 60180331006, 60180331007, 60180331008, 60180331009, 60180331010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	10/22/14 09:29	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	10/22/14 09:29	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	10/22/14 09:29	

LABORATORY CONTROL SAMPLE: 1464634

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	520	104	90-110	

SAMPLE DUPLICATE: 1464635

Parameter	Units	60180640002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	129	129	0	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	129	129	0	10	

SAMPLE DUPLICATE: 1464636

Parameter	Units	60180331001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	99.0	99.0	0	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	99.0	99.0	0	10	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

QC Batch: WET/51064 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60180331011, 60180331012, 60180331013, 60180331014, 60180331015, 60180331016, 60180331017, 60180331018, 60180331019

METHOD BLANK: 1465173 Matrix: Water
Associated Lab Samples: 60180331011, 60180331012, 60180331013, 60180331014, 60180331015, 60180331016, 60180331017, 60180331018, 60180331019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	10/23/14 08:41	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	10/23/14 08:41	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	10/23/14 08:41	

LABORATORY CONTROL SAMPLE: 1465174

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	490	98	90-110	

SAMPLE DUPLICATE: 1465175

Parameter	Units	60180331012 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	33.8	36.6	8	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	33.8	36.6	8	10	

SAMPLE DUPLICATE: 1465176

Parameter	Units	60180331019 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	32.8	32.2	2	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	32.8	32.2	2	10	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

QC Batch: WET/50985 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60180331001, 60180331002, 60180331003, 60180331004, 60180331005, 60180331006, 60180331007, 60180331008, 60180331009, 60180331010

METHOD BLANK: 1463490 Matrix: Water
Associated Lab Samples: 60180331001, 60180331002, 60180331003, 60180331004, 60180331005, 60180331006, 60180331007, 60180331008, 60180331009, 60180331010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	10/20/14 10:58	

LABORATORY CONTROL SAMPLE: 1463491

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.52	104	80-120	

MATRIX SPIKE SAMPLE: 1463493

Parameter	Units	60180331001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.52	104	75-125	

SAMPLE DUPLICATE: 1463492

Parameter	Units	60180221002 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.: 60180331

QC Batch: WET/50994 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60180331011, 60180331012, 60180331013, 60180331014, 60180331015, 60180331016, 60180331017, 60180331018, 60180331019

METHOD BLANK: 1463605 Matrix: Water
Associated Lab Samples: 60180331011, 60180331012, 60180331013, 60180331014, 60180331015, 60180331016, 60180331017, 60180331018, 60180331019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	10/20/14 11:09	

LABORATORY CONTROL SAMPLE: 1463606

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.52	104	80-120	

MATRIX SPIKE SAMPLE: 1463607

Parameter	Units	60180331011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.43	85	75-125	

SAMPLE DUPLICATE: 1463608

Parameter	Units	60180331012 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.: 60180331

QC Batch: WETA/31498 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60180331001, 60180331002, 60180331003, 60180331004, 60180331005, 60180331006, 60180331012, 60180331013, 60180331014, 60180331015, 60180331016, 60180331017, 60180331018, 60180331019

METHOD BLANK: 1466713 Matrix: Water
Associated Lab Samples: 60180331002, 60180331003, 60180331005, 60180331012, 60180331013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	10/25/14 00:07	
Sulfate	mg/L	ND	1.0	10/25/14 00:07	

METHOD BLANK: 1470403 Matrix: Water
Associated Lab Samples: 60180331001, 60180331002, 60180331005, 60180331006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	10/29/14 09:10	
Sulfate	mg/L	ND	1.0	10/29/14 09:10	

METHOD BLANK: 1470405 Matrix: Water
Associated Lab Samples: 60180331003, 60180331004, 60180331012, 60180331013, 60180331014, 60180331015, 60180331016, 60180331017, 60180331018, 60180331019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	10/30/14 08:31	
Sulfate	mg/L	ND	1.0	10/30/14 08:31	

METHOD BLANK: 1471147 Matrix: Water
Associated Lab Samples: 60180331004, 60180331016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	10/31/14 09:00	

LABORATORY CONTROL SAMPLE: 1466714

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	97	90-110	
Sulfate	mg/L	5	5.4	109	90-110	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

LABORATORY CONTROL SAMPLE: 1470404

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	99	90-110	
Sulfate	mg/L	5	4.6	93	90-110	

LABORATORY CONTROL SAMPLE: 1470406

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	99	90-110	
Sulfate	mg/L	5	4.8	95	90-110	

LABORATORY CONTROL SAMPLE: 1471148

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	5	4.8	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1466715 1466716

Parameter	Units	2010777001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	3180	2500	2500	6040	5600	114	97	80-120	8	15	
Sulfate	mg/L	233	100	100	339	331	106	98	80-120	2	15	

MATRIX SPIKE SAMPLE: 1466717

Parameter	Units	60180331001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	23.4	10	34.3	109	80-120	
Sulfate	mg/L	39.8	10	50.5	107	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

QC Batch: WETA/31638 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60180331007, 60180331008, 60180331009, 60180331010, 60180331011

METHOD BLANK: 1471850 Matrix: Water
Associated Lab Samples: 60180331007, 60180331008, 60180331009, 60180331010, 60180331011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	11/03/14 03:57	
Sulfate	mg/L	ND	1.0	11/03/14 03:57	

LABORATORY CONTROL SAMPLE: 1471851

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	97	90-110	
Sulfate	mg/L	5	4.8	96	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1471848 1471849

Parameter	Units	60180331007 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	276	100	100	383	380	106	104	80-120	1	15	
Sulfate	mg/L	1.9	5	5	6.6	7.0	93	101	80-120	6	15	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

QC Batch: WETA/31458 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60180331001, 60180331002, 60180331003, 60180331004, 60180331005, 60180331006, 60180331007, 60180331008, 60180331009, 60180331010, 60180331011, 60180331012, 60180331013, 60180331014, 60180331015, 60180331016, 60180331017, 60180331018, 60180331019

METHOD BLANK: 1464770 Matrix: Water
Associated Lab Samples: 60180331001, 60180331002, 60180331003, 60180331004, 60180331005, 60180331006, 60180331007, 60180331008, 60180331009, 60180331010, 60180331011, 60180331012, 60180331013, 60180331014, 60180331015, 60180331016, 60180331017, 60180331018, 60180331019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	10/22/14 11:11	

LABORATORY CONTROL SAMPLE: 1464771

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.0	102	90-110	

MATRIX SPIKE SAMPLE: 1464772

Parameter	Units	60180444001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	4.4	4	7.7	82	90-110	M1

MATRIX SPIKE SAMPLE: 1464773

Parameter	Units	60180331001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.4	69	90-110	M1

SAMPLE DUPLICATE: 1464774

Parameter	Units	60180331002 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.: 60180331

QC Batch: WETA/31368
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60180331003, 60180331008

METHOD BLANK: 1460690 Matrix: Water
Associated Lab Samples: 60180331003, 60180331008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	10/15/14 14:19	
Nitrogen, Nitrite	mg/L	ND	0.10	10/15/14 14:19	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	10/15/14 14:19	

LABORATORY CONTROL SAMPLE: 1460691

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.7	106	85-115	
Nitrogen, Nitrite	mg/L	.4	0.37	93	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	103	90-110	

MATRIX SPIKE SAMPLE: 1460692

Parameter	Units	60180221002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	0.22	1.6	1.9	104	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.42	106	90-110	
Nitrogen, NO2 plus NO3	mg/L	0.22	2	2.3	105	90-110	

MATRIX SPIKE SAMPLE: 1460694

Parameter	Units	60180227005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.9	1.6	3.6	106	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.43	108	90-110	
Nitrogen, NO2 plus NO3	mg/L	1.9	2	4.0	106	90-110	

MATRIX SPIKE SAMPLE: 1461097

Parameter	Units	60180221005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.1	1.6	2.9	113	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.50	125	90-110	M1
Nitrogen, NO2 plus NO3	mg/L	1.1	2	3.4	115	90-110	M1

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

QC Batch: WETA/31370 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60180331001, 60180331002, 60180331004, 60180331005, 60180331006, 60180331007, 60180331009, 60180331010, 60180331011, 60180331012, 60180331013, 60180331014, 60180331015, 60180331018, 60180331019

METHOD BLANK: 1461101 Matrix: Water
Associated Lab Samples: 60180331001, 60180331002, 60180331004, 60180331005, 60180331006, 60180331007, 60180331009, 60180331010, 60180331011, 60180331012, 60180331013, 60180331014, 60180331015, 60180331018, 60180331019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	10/16/14 08:08	
Nitrogen, Nitrite	mg/L	ND	0.10	10/16/14 08:08	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	10/16/14 08:08	

LABORATORY CONTROL SAMPLE: 1461102

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.6	102	85-115	
Nitrogen, Nitrite	mg/L	.4	0.37	93	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.0	100	90-110	

MATRIX SPIKE SAMPLE: 1461103

Parameter	Units	60180313009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	ND	1.6	1.9	117	85-115	M1
Nitrogen, Nitrite	mg/L	ND	.4	0.42	106	90-110	
Nitrogen, NO2 plus NO3	mg/L	ND	2	2.3	114	90-110	M1

MATRIX SPIKE SAMPLE: 1461105

Parameter	Units	60180313010 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	0.16	1.6	1.8	103	85-115	
Nitrogen, Nitrite	mg/L	0.052J	.4	0.44	96	90-110	
Nitrogen, NO2 plus NO3	mg/L	0.21	2	2.2	101	90-110	

SAMPLE DUPLICATE: 1461104

Parameter	Units	60180313009 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.037J		20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	ND	0.037J		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

QC Batch: WETA/31383 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60180331016, 60180331017

METHOD BLANK: 1461338 Matrix: Water
Associated Lab Samples: 60180331016, 60180331017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	10/16/14 10:21	
Nitrogen, Nitrite	mg/L	ND	0.10	10/16/14 10:21	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	10/16/14 10:21	

LABORATORY CONTROL SAMPLE: 1461339

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.6	103	85-115	
Nitrogen, Nitrite	mg/L	.4	0.37	91	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.0	100	90-110	

MATRIX SPIKE SAMPLE: 1461340

Parameter	Units	60180336003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	17.6	16	35.2	110	85-115	
Nitrogen, Nitrite	mg/L	ND	4	4.8	121	90-110	M1
Nitrogen, NO2 plus NO3	mg/L	17.6	20	40.0	112	90-110	M1

MATRIX SPIKE SAMPLE: 1461343

Parameter	Units	60180412014 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.7	1.6	3.1	88	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.43	109	90-110	
Nitrogen, NO2 plus NO3	mg/L	1.7	2	3.6	92	90-110	

SAMPLE DUPLICATE: 1461341

Parameter	Units	60180331017 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	2.9	2.9	0	20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	2.9	2.9	0	20	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

QC Batch: WETA/31434 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60180331001, 60180331002, 60180331003, 60180331004, 60180331005, 60180331006, 60180331007, 60180331008, 60180331009, 60180331010, 60180331011, 60180331012, 60180331013

METHOD BLANK: 1463601 Matrix: Water
Associated Lab Samples: 60180331001, 60180331002, 60180331003, 60180331004, 60180331005, 60180331006, 60180331007, 60180331008, 60180331009, 60180331010, 60180331011, 60180331012, 60180331013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	10/20/14 20:44	

LABORATORY CONTROL SAMPLE: 1463602

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: 1463604

Parameter	Units	60180331001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	0.82J	5	5.6	95	80-120	

SAMPLE DUPLICATE: 1463603

Parameter	Units	60180347001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	1.6	1.6	1	25	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

QC Batch: WETA/31449 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60180331014, 60180331015, 60180331016, 60180331017, 60180331018, 60180331019

METHOD BLANK: 1464009 Matrix: Water
Associated Lab Samples: 60180331014, 60180331015, 60180331016, 60180331017, 60180331018, 60180331019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	10/21/14 09:50	

LABORATORY CONTROL SAMPLE: 1464010

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.2	105	80-120	

MATRIX SPIKE SAMPLE: 1464012

Parameter	Units	60180640002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	6.2	5	10.1	79	80-120	M1

SAMPLE DUPLICATE: 1464011

Parameter	Units	60180640001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	5.3	5.6	7	25	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

QC Batch: WETA/6315 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60180331001, 60180331002, 60180331003, 60180331004

METHOD BLANK: 102290 Matrix: Water
Associated Lab Samples: 60180331001, 60180331002, 60180331003, 60180331004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	10/21/14 13:47	

LABORATORY CONTROL SAMPLE: 102291

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.5	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 102297 102298

Parameter	Units	60180331001 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	0.29	1.5	1.5	1.7	1.7	94	95	80-120	1	20	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180331

QC Batch: WETA/6349 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60180331005, 60180331006, 60180331007, 60180331008, 60180331009, 60180331010, 60180331011, 60180331012, 60180331013, 60180331014, 60180331015, 60180331016, 60180331017, 60180331018, 60180331019

METHOD BLANK: 103110 Matrix: Water
Associated Lab Samples: 60180331005, 60180331006, 60180331007, 60180331008, 60180331009, 60180331010, 60180331011, 60180331012, 60180331013, 60180331014, 60180331015, 60180331016, 60180331017, 60180331018, 60180331019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	10/24/14 14:23	

LABORATORY CONTROL SAMPLE: 103111

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.5	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 103112 103113

Parameter	Units	60180331005 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	1.3	1.3	86	82	80-120	5	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 103116 103117

Parameter	Units	60180441004 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	0.014J	1.5	1.5	1.3	1.4	85	91	80-120	7	20	

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QUALIFIERS

Project: FORT SMITH AR
Pace Project No.: 60180331

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/65176

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/65179

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/65185

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/65205

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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.
L1	Analyte recovery in the laboratory control sample (LCS) was above QC limits. Results for this analyte in associated samples may be biased high.
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.
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: FORT SMITH AR
Pace Project No.: 60180331

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180331001	**MW-28-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331002	**MW-50-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331003	**MW-36-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331004	**IW-80-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331005	**MW-31-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331006	**MW-32-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331007	**RW-69-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331008	**MW-71-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331009	**MW-68-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331010	**IW-74-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331011	**MW-62-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331012	**MW-63-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331013	**MW-61-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331014	**MW-60-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331015	**IW-73-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331016	**MW-35R-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331017	**MW-26-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331018	**MW-65-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331019	**MW-27-201410**	EPA 8015 - Alcohol	GCSV/3076		
60180331001	**MW-28-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331002	**MW-50-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331003	**MW-36-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331004	**IW-80-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331005	**MW-31-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331006	**MW-32-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331007	**RW-69-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331008	**MW-71-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331009	**MW-68-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331010	**IW-74-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331011	**MW-62-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331012	**MW-63-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331013	**MW-61-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331014	**MW-60-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331015	**IW-73-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331016	**MW-35R-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331017	**MW-26-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331018	**MW-65-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331019	**MW-27-201410**	EPA 3010	MPRP/29342	EPA 6010	ICP/22047
60180331001	**MW-28-201410**	EPA 5030B/8260	MSV/65160		
60180331002	**MW-50-201410**	EPA 5030B/8260	MSV/65160		
60180331005	**MW-31-201410**	EPA 5030B/8260	MSV/65160		
60180331006	**MW-32-201410**	EPA 5030B/8260	MSV/65160		
60180331007	**RW-69-201410**	EPA 5030B/8260	MSV/65160		
60180331007	**RW-69-201410**	EPA 5030B/8260	MSV/65205		
60180331008	**MW-71-201410**	EPA 5030B/8260	MSV/65205		
60180331009	**MW-68-201410**	EPA 5030B/8260	MSV/65160		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR
Pace Project No.: 60180331

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180331010	IW-74-201410	EPA 5030B/8260	MSV/65205		
60180331011	MW-62-201410	EPA 5030B/8260	MSV/65160		
60180331012	MW-63-201410	EPA 5030B/8260	MSV/65160		
60180331013	MW-61-201410	EPA 5030B/8260	MSV/65179		
60180331014	MW-60-201410	EPA 5030B/8260	MSV/65179		
60180331015	IW-73-201410	EPA 5030B/8260	MSV/65179		
60180331017	MW-26-201410	EPA 5030B/8260	MSV/65179		
60180331019	MW-27-201410	EPA 5030B/8260	MSV/65179		
60180331020	DUP-01-201410	EPA 5030B/8260	MSV/65179		
60180331021	TB-10-201410	EPA 5030B/8260	MSV/65179		
60180331022	EB-02-201410	EPA 5030B/8260	MSV/65179		
60180331023	TB-09-201410	EPA 5030B/8260	MSV/65179		
60180331024	TB-11-201410	EPA 5030B/8260	MSV/65185		
60180331025	TB-14-201410	EPA 5030B/8260	MSV/65185		
60180331026	TB-05-201410	EPA 5030B/8260	MSV/65185		
60180331003	MW-36-201410	EPA 5030B/8260	MSV/65176		
60180331004	IW-80-201410	EPA 5030B/8260	MSV/65176		
60180331016	MW-35R-201410	EPA 5030B/8260	MSV/65176		
60180331018	MW-65-201410	EPA 5030B/8260	MSV/65176		
60180331001	MW-28-201410	SM 2320B	WET/51036		
60180331002	MW-50-201410	SM 2320B	WET/51036		
60180331003	MW-36-201410	SM 2320B	WET/51036		
60180331004	IW-80-201410	SM 2320B	WET/51036		
60180331005	MW-31-201410	SM 2320B	WET/51036		
60180331006	MW-32-201410	SM 2320B	WET/51036		
60180331007	RW-69-201410	SM 2320B	WET/51036		
60180331008	MW-71-201410	SM 2320B	WET/51036		
60180331009	MW-68-201410	SM 2320B	WET/51036		
60180331010	IW-74-201410	SM 2320B	WET/51036		
60180331011	MW-62-201410	SM 2320B	WET/51064		
60180331012	MW-63-201410	SM 2320B	WET/51064		
60180331013	MW-61-201410	SM 2320B	WET/51064		
60180331014	MW-60-201410	SM 2320B	WET/51064		
60180331015	IW-73-201410	SM 2320B	WET/51064		
60180331016	MW-35R-201410	SM 2320B	WET/51064		
60180331017	MW-26-201410	SM 2320B	WET/51064		
60180331018	MW-65-201410	SM 2320B	WET/51064		
60180331019	MW-27-201410	SM 2320B	WET/51064		
60180331001	MW-28-201410	SM 3500-Fe B#4	WET/51127		
60180331002	MW-50-201410	SM 3500-Fe B#4	WET/51127		
60180331003	MW-36-201410	SM 3500-Fe B#4	WET/51127		
60180331004	IW-80-201410	SM 3500-Fe B#4	WET/51127		
60180331005	MW-31-201410	SM 3500-Fe B#4	WET/51127		
60180331006	MW-32-201410	SM 3500-Fe B#4	WET/51127		
60180331007	RW-69-201410	SM 3500-Fe B#4	WET/51127		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR
Pace Project No.: 60180331

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180331008	**MW-71-201410**	SM 3500-Fe B#4	WET/51127		
60180331009	**MW-68-201410**	SM 3500-Fe B#4	WET/51127		
60180331010	**IW-74-201410**	SM 3500-Fe B#4	WET/51127		
60180331011	**MW-62-201410**	SM 3500-Fe B#4	WET/51127		
60180331012	**MW-63-201410**	SM 3500-Fe B#4	WET/51127		
60180331013	**MW-61-201410**	SM 3500-Fe B#4	WET/51127		
60180331014	**MW-60-201410**	SM 3500-Fe B#4	WET/51127		
60180331015	**IW-73-201410**	SM 3500-Fe B#4	WET/51127		
60180331016	**MW-35R-201410**	SM 3500-Fe B#4	WET/51127		
60180331017	**MW-26-201410**	SM 3500-Fe B#4	WET/51127		
60180331018	**MW-65-201410**	SM 3500-Fe B#4	WET/51127		
60180331019	**MW-27-201410**	SM 3500-Fe B#4	WET/51127		
60180331001	**MW-28-201410**	SM 4500-H+B	WET/51120		
60180331002	**MW-50-201410**	SM 4500-H+B	WET/51120		
60180331003	**MW-36-201410**	SM 4500-H+B	WET/51120		
60180331004	**IW-80-201410**	SM 4500-H+B	WET/51120		
60180331005	**MW-31-201410**	SM 4500-H+B	WET/51120		
60180331006	**MW-32-201410**	SM 4500-H+B	WET/51120		
60180331007	**RW-69-201410**	SM 4500-H+B	WET/51120		
60180331008	**MW-71-201410**	SM 4500-H+B	WET/51120		
60180331009	**MW-68-201410**	SM 4500-H+B	WET/51120		
60180331010	**IW-74-201410**	SM 4500-H+B	WET/51120		
60180331011	**MW-62-201410**	SM 4500-H+B	WET/51120		
60180331012	**MW-63-201410**	SM 4500-H+B	WET/51120		
60180331013	**MW-61-201410**	SM 4500-H+B	WET/51120		
60180331014	**MW-60-201410**	SM 4500-H+B	WET/51120		
60180331015	**IW-73-201410**	SM 4500-H+B	WET/51120		
60180331016	**MW-35R-201410**	SM 4500-H+B	WET/51120		
60180331017	**MW-26-201410**	SM 4500-H+B	WET/51120		
60180331018	**MW-65-201410**	SM 4500-H+B	WET/51120		
60180331019	**MW-27-201410**	SM 4500-H+B	WET/51120		
60180331001	**MW-28-201410**	SM 4500-S-2 D	WET/50985		
60180331002	**MW-50-201410**	SM 4500-S-2 D	WET/50985		
60180331003	**MW-36-201410**	SM 4500-S-2 D	WET/50985		
60180331004	**IW-80-201410**	SM 4500-S-2 D	WET/50985		
60180331005	**MW-31-201410**	SM 4500-S-2 D	WET/50985		
60180331006	**MW-32-201410**	SM 4500-S-2 D	WET/50985		
60180331007	**RW-69-201410**	SM 4500-S-2 D	WET/50985		
60180331008	**MW-71-201410**	SM 4500-S-2 D	WET/50985		
60180331009	**MW-68-201410**	SM 4500-S-2 D	WET/50985		
60180331010	**IW-74-201410**	SM 4500-S-2 D	WET/50985		
60180331011	**MW-62-201410**	SM 4500-S-2 D	WET/50994		
60180331012	**MW-63-201410**	SM 4500-S-2 D	WET/50994		
60180331013	**MW-61-201410**	SM 4500-S-2 D	WET/50994		
60180331014	**MW-60-201410**	SM 4500-S-2 D	WET/50994		
60180331015	**IW-73-201410**	SM 4500-S-2 D	WET/50994		
60180331016	**MW-35R-201410**	SM 4500-S-2 D	WET/50994		

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR
Pace Project No.: 60180331

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180331017	MW-26-201410	SM 4500-S-2 D	WET/50994		
60180331018	MW-65-201410	SM 4500-S-2 D	WET/50994		
60180331019	MW-27-201410	SM 4500-S-2 D	WET/50994		
60180331001	MW-28-201410	EPA 300.0	WETA/31498		
60180331002	MW-50-201410	EPA 300.0	WETA/31498		
60180331003	MW-36-201410	EPA 300.0	WETA/31498		
60180331004	IW-80-201410	EPA 300.0	WETA/31498		
60180331005	MW-31-201410	EPA 300.0	WETA/31498		
60180331006	MW-32-201410	EPA 300.0	WETA/31498		
60180331007	RW-69-201410	EPA 300.0	WETA/31638		
60180331008	MW-71-201410	EPA 300.0	WETA/31638		
60180331009	MW-68-201410	EPA 300.0	WETA/31638		
60180331010	IW-74-201410	EPA 300.0	WETA/31638		
60180331011	MW-62-201410	EPA 300.0	WETA/31638		
60180331012	MW-63-201410	EPA 300.0	WETA/31498		
60180331013	MW-61-201410	EPA 300.0	WETA/31498		
60180331014	MW-60-201410	EPA 300.0	WETA/31498		
60180331015	IW-73-201410	EPA 300.0	WETA/31498		
60180331016	MW-35R-201410	EPA 300.0	WETA/31498		
60180331017	MW-26-201410	EPA 300.0	WETA/31498		
60180331018	MW-65-201410	EPA 300.0	WETA/31498		
60180331019	MW-27-201410	EPA 300.0	WETA/31498		
60180331001	MW-28-201410	EPA 350.1	WETA/31458		
60180331002	MW-50-201410	EPA 350.1	WETA/31458		
60180331003	MW-36-201410	EPA 350.1	WETA/31458		
60180331004	IW-80-201410	EPA 350.1	WETA/31458		
60180331005	MW-31-201410	EPA 350.1	WETA/31458		
60180331006	MW-32-201410	EPA 350.1	WETA/31458		
60180331007	RW-69-201410	EPA 350.1	WETA/31458		
60180331008	MW-71-201410	EPA 350.1	WETA/31458		
60180331009	MW-68-201410	EPA 350.1	WETA/31458		
60180331010	IW-74-201410	EPA 350.1	WETA/31458		
60180331011	MW-62-201410	EPA 350.1	WETA/31458		
60180331012	MW-63-201410	EPA 350.1	WETA/31458		
60180331013	MW-61-201410	EPA 350.1	WETA/31458		
60180331014	MW-60-201410	EPA 350.1	WETA/31458		
60180331015	IW-73-201410	EPA 350.1	WETA/31458		
60180331016	MW-35R-201410	EPA 350.1	WETA/31458		
60180331017	MW-26-201410	EPA 350.1	WETA/31458		
60180331018	MW-65-201410	EPA 350.1	WETA/31458		
60180331019	MW-27-201410	EPA 350.1	WETA/31458		
60180331001	MW-28-201410	EPA 353.2	WETA/31370		
60180331002	MW-50-201410	EPA 353.2	WETA/31370		
60180331003	MW-36-201410	EPA 353.2	WETA/31368		
60180331004	IW-80-201410	EPA 353.2	WETA/31370		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR
Pace Project No.: 60180331

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180331005	MW-31-201410	EPA 353.2	WETA/31370		
60180331006	MW-32-201410	EPA 353.2	WETA/31370		
60180331007	RW-69-201410	EPA 353.2	WETA/31370		
60180331008	MW-71-201410	EPA 353.2	WETA/31368		
60180331009	MW-68-201410	EPA 353.2	WETA/31370		
60180331010	IW-74-201410	EPA 353.2	WETA/31370		
60180331011	MW-62-201410	EPA 353.2	WETA/31370		
60180331012	MW-63-201410	EPA 353.2	WETA/31370		
60180331013	MW-61-201410	EPA 353.2	WETA/31370		
60180331014	MW-60-201410	EPA 353.2	WETA/31370		
60180331015	IW-73-201410	EPA 353.2	WETA/31370		
60180331016	MW-35R-201410	EPA 353.2	WETA/31383		
60180331017	MW-26-201410	EPA 353.2	WETA/31383		
60180331018	MW-65-201410	EPA 353.2	WETA/31370		
60180331019	MW-27-201410	EPA 353.2	WETA/31370		
60180331001	MW-28-201410	SM 4500-CO2 D	WETA/31501		
60180331002	MW-50-201410	SM 4500-CO2 D	WETA/31501		
60180331003	MW-36-201410	SM 4500-CO2 D	WETA/31501		
60180331004	IW-80-201410	SM 4500-CO2 D	WETA/31501		
60180331005	MW-31-201410	SM 4500-CO2 D	WETA/31501		
60180331006	MW-32-201410	SM 4500-CO2 D	WETA/31501		
60180331007	RW-69-201410	SM 4500-CO2 D	WETA/31501		
60180331008	MW-71-201410	SM 4500-CO2 D	WETA/31501		
60180331009	MW-68-201410	SM 4500-CO2 D	WETA/31501		
60180331010	IW-74-201410	SM 4500-CO2 D	WETA/31501		
60180331011	MW-62-201410	SM 4500-CO2 D	WETA/31501		
60180331012	MW-63-201410	SM 4500-CO2 D	WETA/31501		
60180331013	MW-61-201410	SM 4500-CO2 D	WETA/31501		
60180331014	MW-60-201410	SM 4500-CO2 D	WETA/31501		
60180331015	IW-73-201410	SM 4500-CO2 D	WETA/31501		
60180331016	MW-35R-201410	SM 4500-CO2 D	WETA/31501		
60180331017	MW-26-201410	SM 4500-CO2 D	WETA/31501		
60180331018	MW-65-201410	SM 4500-CO2 D	WETA/31501		
60180331019	MW-27-201410	SM 4500-CO2 D	WETA/31501		
60180331001	MW-28-201410	SM 5310C	WETA/31434		
60180331002	MW-50-201410	SM 5310C	WETA/31434		
60180331003	MW-36-201410	SM 5310C	WETA/31434		
60180331004	IW-80-201410	SM 5310C	WETA/31434		
60180331005	MW-31-201410	SM 5310C	WETA/31434		
60180331006	MW-32-201410	SM 5310C	WETA/31434		
60180331007	RW-69-201410	SM 5310C	WETA/31434		
60180331008	MW-71-201410	SM 5310C	WETA/31434		
60180331009	MW-68-201410	SM 5310C	WETA/31434		
60180331010	IW-74-201410	SM 5310C	WETA/31434		
60180331011	MW-62-201410	SM 5310C	WETA/31434		
60180331012	MW-63-201410	SM 5310C	WETA/31434		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR
Pace Project No.: 60180331

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180331013	**MW-61-201410**	SM 5310C	WETA/31434		
60180331014	**MW-60-201410**	SM 5310C	WETA/31449		
60180331015	**IW-73-201410**	SM 5310C	WETA/31449		
60180331016	**MW-35R-201410**	SM 5310C	WETA/31449		
60180331017	**MW-26-201410**	SM 5310C	WETA/31449		
60180331018	**MW-65-201410**	SM 5310C	WETA/31449		
60180331019	**MW-27-201410**	SM 5310C	WETA/31449		
60180331001	**MW-28-201410**	SM4500-P B	WETA/6315	SM 4500-P E	WETA/6316
60180331002	**MW-50-201410**	SM4500-P B	WETA/6315	SM 4500-P E	WETA/6316
60180331003	**MW-36-201410**	SM4500-P B	WETA/6315	SM 4500-P E	WETA/6316
60180331004	**IW-80-201410**	SM4500-P B	WETA/6315	SM 4500-P E	WETA/6316
60180331005	**MW-31-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180331006	**MW-32-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180331007	**RW-69-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180331008	**MW-71-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180331009	**MW-68-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180331010	**IW-74-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180331011	**MW-62-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180331012	**MW-63-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180331013	**MW-61-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180331014	**MW-60-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180331015	**IW-73-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180331016	**MW-35R-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180331017	**MW-26-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180331018	**MW-65-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180331019	**MW-27-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353

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Sample Condition Upon Receipt

WO# : 60180331

60180331

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☑ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 5689 1283 9478; -9490; -9467; -9456; -9498 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: 3.8, 2.2, 2.1, 2.0, 2.4

Date and initials of person examining contents: JTS 10/15/14 1050

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. NO_2 NO_3
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	7.
Sufficient volume:	☑Yes ☐No ☐N/A	8. According to client website
Correct containers used:	☑Yes ☐No ☐N/A	003, 004, 016 VOA vials preserved w/ Ascorbic Acid rather than HCl
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: 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 MA / Lot # of added preservative
Trip Blank present: Pace Trip Blank lot # (if purchased): received	☑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: [signature] Date: 10/15

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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.

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. 60180331
1	MW-28-201410-MS/MSD	WT	G	10/14/14	1405	—	—		14	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	N	
2	MW-50-201410	WT	G	10/14/14	1150	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	N	
3	MW-36-201410	WT	G	10/14/14	1005	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	N	
4	IW-80-201410	WT	G	10/14/14	1100	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	N	
5	MW-31-201410	WT	G	10/14/14	1310	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	N	
6	MW-32-201410	WT	G	10/14/14	1430	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	N	
7	RW-69-201410	WT	G	10/14/14	1135	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	N	
8	MW-71-201410	WT	G	10/14/14	0950	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	N	
9	MW-68-201410	WT	G	10/14/14	1405	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	N	
10	IW-74-201410	WT	G	10/14/14	1405	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	N	
11	DUP-1-201410	WT	G	10/14/14	1405	—	—		11	X	X	X	X	X			X		X									N	3 (DEHP)
12	MW-62-201410	WT	G	10/14/14	1130	—	—		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	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Level IV data package required	Justin Stumpf	10/14/14	1825	Pace	10/15/14	845	2.4/2.2	Y	Y	Y
Do not include MS/MSD in sample ID, only to indicate QC sample							1.0/1.2	Y	Y	Y
							3.8	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Justine Stumpf

SIGNATURE of SAMPLER: Justin Stumpf DATE Signed (MM/DD/YY): 10/14/14

*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:		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

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	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)	8010-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-63-201410	WT	G	10/14/14	1445	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	N	
2	MW-61-201410	WT	G	10/14/14	1415	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	X	N	013
3	MW-60-201410	WT	G	10/14/14	1535	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	X	N	014
4	MW-73-201410	WT	G	10/14/14	1535	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	X	N	015
5	TB-10-201410	WT	G	10/14/14	—	—	—		3				X						X									N	021
6	MW-35R-201410	WT	G	10/14/14	1610	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	X	N	
7	EB-02-201410	WT	G	10/14/14	1655	—	—		3				X						X									N	022
~~8~~	~~MW-62-201410 WRS~~	WT	G	10/14/14	1130	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	X	N	
9	TB-09-201410	WT	G	10/14/14	—	—	—		3				X						X									N	023
10	MW-26-201410	WT	G	10/14/14	1035	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	X	N	
11	TB-11-201410	WT	G	10/14/14	—	—	—		3				X						X									N	024
12	TB-14-201410	WT	G	10/14/14	—	—	—		3				X						X									N	025

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Level IV data package required	Mystine Stumpf	10/14/14	1825		10/15/14	845

SAMPLE CONDITIONS	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	3.6	Y	Y	Y
	2.2/2.4	Y	Y	Y
	1.2/1.0	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Mystine Stumpf

SIGNATURE of SAMPLER: Mystine Stumpf

DATE Signed (MM/DD/YY): 10/14/14

*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:		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

Requested Analysis Filtered (Y/N)

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

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	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)	8010-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-65-20141O	WT	G	10/14/14	1608	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	N	2(DEPTH) (INCLUDES) (BTEX) (CHLORIDE) (SULFATE) (CH4) (C2H6)
2	TB-05-20141O	WT	G	10/14/14	—	—	—		3				X						X									N	2(DEPTH)
3	MW-27-20141O	WT	G	10/14/14	1545	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X			(DEPTH) (INCLUDES) (BTEX) (CHLORIDE) (SULFATE) (CH4) (C2H6)
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	Justine Stumpf	10/14/14	1825		10/15/14	845	1-2/4.0	Y	Y	Y
							22/24	Y	Y	Y
							3.6	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Justine Stumpf

SIGNATURE of SAMPLER: Justine Stumpf DATE Signed (MM/DD/YY): 10/14/14

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.

Chain of Custody

Pace Analytical®
www.pacelabs.com

10/27/14 per MSO

Workorder: 60180331 Pace Dallas

Report To	Subcontract To
Pace Analytical Services, Inc. 9608 Loiret Blvd. Lenexa, KS 66219 Phone (913)599-5665 Fax (913)599-1759	

WO# : 7519856

7519856

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: none	Preserved Containers: H2SO4					Requested Analysis: 8015 2-Chloroethanol	Requested Analysis: Total Phosphate									LAB USE ONLY
1	MW-28-201410	RQS	10/14/14 14:05	60180331001	WT	3	1					X	X									001
2	MW-50-201410	PS	10/14/14 11:50	60180331002	WT	3	1					X	X									002
3	MW-36-201410	PS	10/14/14 10:05	60180331003	WT	3	1					X	X									003
4	IW-80-201410	PS	10/14/14 11:00	60180331004	WT	3	1					X	X									004
5	MW-31-201410	PS	10/14/14 13:10	60180331005	WT	3	1					X	X									005
6	MW-32-201410	PS	10/14/14 14:30	60180331006	WT	3	1					X	X									006
7	RW-69-201410	PS	10/14/14 11:35	60180331007	WT	3	1					X	X									007
8	MW-71-201410	PS	10/14/14 09:50	60180331008	WT	3	1					X	X									008
9	MW-68-201410	PS	10/14/14 14:05	60180331009	WT	3	1					X	X									009
10	IW-74-201410	PS	10/14/14 14:05	60180331010	WT	3	1					X	X									010
11	MW-62-201410	PS	10/14/14 11:30	60180331011	WT	3	1					X	X									011
12	MW-63-201410	PS	10/14/14 14:45	60180331012	WT	3	1					X	X									012
13	MW-61-201410	PS	10/14/14 14:15	60180331013	WT	3	1					X	X									013
14	MW-60-201410	PS	10/14/14 15:35	60180331014	WT	3	1					X	X									014
15	IW-73-201410	PS	10/14/14 15:35	60180331015	WT	3	1					X	X									015
16	MW-35R-201410	PS	10/14/14 16:10	60180331016	WT	3	1					X	X									016
17	MW-26-201410	PS	10/14/14 16:10	60180331017	WT	3	1					X	X									017
18	MW-65-201410	PS	10/14/14 16:08	60180331018	WT	3	1					X	X									018
19	MW-27-201410	PS	10/14/14 15:45	60180331019	WT	3	1					X	X									019

Comments

WO# 7579856

Transfers	Released By	Date/Time	Received By	Date/Time	
1				10-16-14 0830	
2					
3	IR01				

Cooler Temperature on Receipt 1.6 °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: 7519854

Courier: FedEX ☒ UPS ☐ USPS ☐ Client ☐ Courier ☐ LSO ☐ PACE ☐ Other:_____

Tracking#: 6113 5262 0974

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: 1.6 (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 ☐ 10-17-14 MM	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: 6403001 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: 10-17-14

Pace Analytical Services - Dallas

Sample Container Count-

COC PAGE ____ of ____

COC ID# _____

Pace Project #51985

Sample Line Item	AG1S	AG1U	AG3S	BG1H	BG1S	BP1U	BP2N	BP2S	BP2U	BP20	SP5T	VG9H	VG9M	VG9T	VG9U	VG9W	WGFU	WGKU	BP3S	DG9U	
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																			1	3	
11																			1	3	
12																			1	3	

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 # 7519856

Sample Line Item	AG1S	AG1U	AG3S	BG1H	BG1S	BP1U	BP2N	BP2S	BP2U	BP20	SP5T	VG9H	VG9M	VG9T	VG9U	VG9W	WGFU	WGKU	BP3S	DG9U	
1																			1	3	
2																			1	3	
3																			1	3	
4																			1	3	
5																			1	3	
6																			1	3	
7																			1	3	
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						

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

October 31, 2014

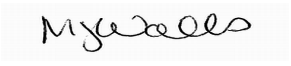
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH AR
Pace Project No.: 60180441

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on October 16, 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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Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: FORT SMITH AR
Pace Project No.: 60180441

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
(913)599-5665

SAMPLE SUMMARY

Project: FORT SMITH AR
Pace Project No.: 60180441

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60180441001	MW-41-201410	Water	10/15/14 09:10	10/16/14 01:27
60180441002	IW-76-201410	Water	10/15/14 10:55	10/16/14 01:27
60180441003	ITMW-21-201410	Water	10/15/14 13:50	10/16/14 01:27
60180441004	ITMW-6-201410	Water	10/15/14 14:45	10/16/14 01:27
60180441005	MW-29-201410	Water	10/15/14 11:55	10/16/14 01:27
60180441006	ITMW-20-201410	Water	10/15/14 09:30	10/16/14 01:27
60180441007	MW-33-201410	Water	10/15/14 13:25	10/16/14 01:27
60180441008	IW-77-201410	Water	10/15/14 10:55	10/16/14 01:27
60180441009	MW-34-201410	Water	10/15/14 09:15	10/16/14 01:27
60180441010	ITMW-1-201410	Water	10/15/14 09:20	10/16/14 01:27
60180441011	ITMW-2-201410	Water	10/15/14 12:50	10/16/14 01:27
60180441012	MW-22-201410	Water	10/15/14 15:00	10/16/14 01:27
60180441013	ITMW-10-201410	Water	10/15/14 14:40	10/16/14 01:27
60180441014	ITMW-9-201410	Water	10/15/14 12:35	10/16/14 01:27
60180441015	ITMW-12-201410	Water	10/15/14 16:42	10/16/14 01:27
60180441016	ITMW-14-201410	Water	10/15/14 13:09	10/16/14 01:27
60180441017	ITMW-18-201410	Water	10/15/14 16:13	10/16/14 01:27
60180441018	ITMW-16-201410	Water	10/15/14 08:59	10/16/14 01:27
60180441019	MW-57-201410	Water	10/15/14 16:00	10/16/14 01:27
60180441020	MW-58-201410	Water	10/15/14 12:45	10/16/14 01:27
60180441021	MW-56-201410	Water	10/15/14 15:00	10/16/14 01:27
60180441022	ITMW-7-201410	Water	10/15/14 16:15	10/16/14 01:27
60180441023	ITMW-11-201410	Water	10/15/14 17:15	10/16/14 01:27
60180441024	ITMW-13-2014	Water	10/15/14 11:12	10/16/14 01:27
60180441025	TB-03-201410	Water	10/15/14 00:00	10/16/14 01:27
60180441026	TB-16-201410	Water	10/15/14 00:00	10/16/14 01:27
60180441027	TB-12-201410	Water	10/15/14 00:00	10/16/14 01:27
60180441028	DUP-04-201410	Water	10/15/14 16:42	10/16/14 01:27
60180441029	DUP-02-201410	Water	10/15/14 12:35	10/16/14 01:27
60180441030	TB-08-201410	Water	10/15/14 00:00	10/16/14 01:27
60180441031	TB-01-201410	Water	10/15/14 00:00	10/16/14 01:27
60180441032	EB-03-201410	Water	10/15/14 17:35	10/16/14 01:27
60180441033	TB-07-201410	Water	10/15/14 00:00	10/16/14 01:27

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Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: FORT SMITH AR
Pace Project No.: 60180441

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60180441001	**MW-41-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180441002	**IW-76-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180441003	**ITMW-21-201410**	EPA 8015 - Alcohol	TA	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	OL	2	PASI-K
		EPA 350.1	AJM	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: FORT SMITH AR
Pace Project No.: 60180441

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60180441004	**ITMW-6-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180441005	**MW-29-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180441006	**ITMW-20-201410**	EPA 8015 - Alcohol	TA	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	AJM	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR
Pace Project No.: 60180441

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		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
60180441007	**MW-33-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180441008	**IW-77-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180441009	**MW-34-201410**	EPA 8015 - Alcohol	TA	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

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR
Pace Project No.: 60180441

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 300.0	TDB	2	PASI-K
		EPA 350.1	AJM	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
60180441010	**ITMW-1-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180441011	**ITMW-2-201410**	EPA 8015 - Alcohol	TA	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	OL	2	PASI-K
		EPA 350.1	AJM	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
60180441012	**MW-22-201410**	EPA 8015 - Alcohol	TA	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: FORT SMITH AR
Pace Project No.: 60180441

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	AJM	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
60180441013	**ITMW-10-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180441014	**ITMW-9-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180441015	**ITMW-12-201410**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR
Pace Project No.: 60180441

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		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	AJM	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
60180441016	**ITMW-14-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180441017	**ITMW-18-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180441018	**ITMW-16-201410**	EPA 8015 - Alcohol	TA	1	PASI-D

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR
Pace Project No.: 60180441

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		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	AJM	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
60180441019	**MW-57-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180441020	**MW-58-201410**	EPA 8015 - Alcohol	TA	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	AJM	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR
Pace Project No.: 60180441

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-P E	BAF	1	PASI-D
60180441021	**MW-56-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180441022	**ITMW-7-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180441023	**ITMW-11-201410**	EPA 8015 - Alcohol	TA	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	AJM	1	PASI-K
		EPA 353.2	JMC1	3	PASI-K

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SAMPLE ANALYTE COUNT

Project: FORT SMITH AR
Pace Project No.: 60180441

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60180441024	**ITMW-13-2014**	EPA 8015 - Alcohol	TA	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	AJM	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
60180441025	**TB-03-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180441026	**TB-16-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180441027	**TB-12-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180441028	**DUP-04-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180441029	**DUP-02-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180441030	**TB-08-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180441031	**TB-01-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180441032	**EB-03-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180441033	**TB-07-201410**	EPA 5030B/8260	PRG	38	PASI-K

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PROJECT NARRATIVE

Project: FORT SMITH AR
Pace Project No.: 60180441

Method: **EPA 8015 - Alcohol**
Description: Alcohol by Direct Inject GCFID
Client: Environ_AR
Date: October 31, 2014

General Information:
24 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.: 60180441

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Environ_AR
Date: October 31, 2014

General Information:
24 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.: 60180441

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: October 31, 2014

General Information:
33 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/65176

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/65190

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180441004,60180441006

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

- MS (Lab ID: 1463692)
  - Styrene
- MS (Lab ID: 1463694)
  - Styrene
- MSD (Lab ID: 1463693)
  - Styrene
- MSD (Lab ID: 1463695)
  - Styrene

QC Batch: MSV/65207

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORT SMITH AR
Pace Project No.: 60180441

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: October 31, 2014

QC Batch: MSV/65208

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/65245

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/65247

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH AR
Pace Project No.: 60180441

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: Environ_AR
Date: October 31, 2014

General Information:
24 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.: 60180441

Method: **SM 3500-Fe B#4**
Description: Iron, Ferric (Calculation)
Client: Environ_AR
Date: October 31, 2014

General Information:
24 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.: 60180441

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: October 31, 2014

General Information:
24 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-1-201410 (Lab ID: 60180441010)
- ITMW-10-201410 (Lab ID: 60180441013)
- ITMW-11-201410 (Lab ID: 60180441023)
- ITMW-12-201410 (Lab ID: 60180441015)
- ITMW-13-2014 (Lab ID: 60180441024)
- ITMW-14-201410 (Lab ID: 60180441016)
- ITMW-16-201410 (Lab ID: 60180441018)
- ITMW-18-201410 (Lab ID: 60180441017)
- ITMW-2-201410 (Lab ID: 60180441011)
- ITMW-20-201410 (Lab ID: 60180441006)
- ITMW-21-201410 (Lab ID: 60180441003)
- ITMW-6-201410 (Lab ID: 60180441004)
- ITMW-7-201410 (Lab ID: 60180441022)
- ITMW-9-201410 (Lab ID: 60180441014)
- IW-76-201410 (Lab ID: 60180441002)
- IW-77-201410 (Lab ID: 60180441008)
- MW-22-201410 (Lab ID: 60180441012)
- MW-29-201410 (Lab ID: 60180441005)
- MW-33-201410 (Lab ID: 60180441007)
- MW-34-201410 (Lab ID: 60180441009)
- MW-41-201410 (Lab ID: 60180441001)
- MW-56-201410 (Lab ID: 60180441021)
- MW-57-201410 (Lab ID: 60180441019)
- MW-58-201410 (Lab ID: 60180441020)

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.: 60180441

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: October 31, 2014

Analyte Comments:

QC Batch: WET/51128

1e: Field pH

- ITMW-1-201410 (Lab ID: 60180441010)
  - pH at 25 Degrees C
- ITMW-10-201410 (Lab ID: 60180441013)
  - pH at 25 Degrees C
- ITMW-12-201410 (Lab ID: 60180441015)
  - pH at 25 Degrees C
- ITMW-14-201410 (Lab ID: 60180441016)
  - pH at 25 Degrees C
- ITMW-16-201410 (Lab ID: 60180441018)
  - pH at 25 Degrees C
- ITMW-18-201410 (Lab ID: 60180441017)
  - pH at 25 Degrees C
- ITMW-2-201410 (Lab ID: 60180441011)
  - pH at 25 Degrees C
- ITMW-20-201410 (Lab ID: 60180441006)
  - pH at 25 Degrees C
- ITMW-21-201410 (Lab ID: 60180441003)
  - pH at 25 Degrees C
- ITMW-6-201410 (Lab ID: 60180441004)
  - pH at 25 Degrees C
- ITMW-9-201410 (Lab ID: 60180441014)
  - pH at 25 Degrees C
- IW-76-201410 (Lab ID: 60180441002)
  - pH at 25 Degrees C
- IW-77-201410 (Lab ID: 60180441008)
  - pH at 25 Degrees C
- MW-22-201410 (Lab ID: 60180441012)
  - pH at 25 Degrees C
- MW-29-201410 (Lab ID: 60180441005)
  - pH at 25 Degrees C
- MW-33-201410 (Lab ID: 60180441007)
  - pH at 25 Degrees C
- MW-34-201410 (Lab ID: 60180441009)
  - pH at 25 Degrees C
- MW-41-201410 (Lab ID: 60180441001)
  - pH at 25 Degrees C
- MW-57-201410 (Lab ID: 60180441019)
  - pH at 25 Degrees C
- MW-58-201410 (Lab ID: 60180441020)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: FORT SMITH AR
Pace Project No.: 60180441

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: October 31, 2014

Analyte Comments:

QC Batch: WET/51129

1e: Field pH

- ITMW-11-201410 (Lab ID: 60180441023)
  - pH at 25 Degrees C
- ITMW-13-2014 (Lab ID: 60180441024)
  - pH at 25 Degrees C
- ITMW-7-201410 (Lab ID: 60180441022)
  - pH at 25 Degrees C
- MW-56-201410 (Lab ID: 60180441021)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: FORT SMITH AR
Pace Project No.: 60180441

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Environ_AR
Date: October 31, 2014

General Information:
24 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/50995

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180441004

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

- MS (Lab ID: 1463612)
  - Sulfide, Total

QC Batch: WET/50996

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180441017

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

- MS (Lab ID: 1463616)
  - 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.: 60180441

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Environ_AR
Date: October 31, 2014

General Information:
24 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/31528

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180441016,60180441017

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

- MS (Lab ID: 1468104)
  - Sulfate
- MSD (Lab ID: 1468105)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH AR
Pace Project No.: 60180441

Method: **EPA 350.1**
Description: 350.1 Ammonia
Client: Environ_AR
Date: October 31, 2014

General Information:
24 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/31460

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180392003,60180420002

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

- MS (Lab ID: 1464783)
  - Nitrogen, Ammonia

QC Batch: WETA/31461

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180441004,60180441006

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

- MS (Lab ID: 1464787)
  - Nitrogen, Ammonia
- MS (Lab ID: 1464788)
  - 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.: 60180441

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Environ_AR
Date: October 31, 2014

General Information:
24 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/31395

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180426004,60180441006

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

- MS (Lab ID: 1461713)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrate
- MS (Lab ID: 1461715)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrate

QC Batch: WETA/31397

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180441004,92221830003

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

- MS (Lab ID: 1461961)
  - Nitrogen, Nitrite

QC Batch: WETA/31404

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180441015

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

- MS (Lab ID: 1462225)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrate
  - Nitrogen, Nitrite

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PROJECT NARRATIVE

Project: FORT SMITH AR
Pace Project No.: 60180441

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Environ_AR
Date: October 31, 2014

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.: 60180441

Method: **SM 4500-CO2 D**
Description: Total Carbon Dioxide Calc
Client: Environ_AR
Date: October 31, 2014

General Information:
24 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.: 60180441

Method: **SM 5310C**
Description: 5310C TOC
Client: Environ_AR
Date: October 31, 2014

General Information:
24 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/31484

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180441004,60180441006

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

- MS (Lab ID: 1465744)
  - Total Organic Carbon
- MS (Lab ID: 1465745)
  - 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: FORT SMITH AR
Pace Project No.: 60180441

Method: **SM 4500-P E**
Description: SM4500P-E, Total Phosphorus
Client: Environ_AR
Date: October 31, 2014

General Information:
24 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: FORT SMITH AR
Pace Project No.: 60180441

Sample: MW-41-201410 **Lab ID: 60180441001** Collected: 10/15/14 09:10 Received: 10/16/14 01:27 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		10/23/14 12:54	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**4090**	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 14:41	7439-89-6	
Manganese	**5760**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 14:41	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/21/14 17:28	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 17:28	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 17:28	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 17:28	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 17:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 17:28	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 17:28	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 17:28	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 17:28	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 17:28	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 17:28	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 17:28	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 17:28	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 17:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 17:28	107-06-2	
1,1-Dichloroethene	**1.6J**	ug/L	5.0	0.50	1		10/21/14 17:28	75-35-4	
cis-1,2-Dichloroethene	**16.9**	ug/L	5.0	0.50	1		10/21/14 17:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 17:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 17:28	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 17:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 17:28	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 17:28	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 17:28	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 17:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 17:28	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 17:28	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 17:28	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 17:28	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 17:28	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 17:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 17:28	79-00-5	
Trichloroethene	**491**	ug/L	50.0	5.0	10		10/20/14 14:26	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/21/14 17:28	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 17:28	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/21/14 17:28	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		10/21/14 17:28	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		10/21/14 17:28	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 17:28		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: MW-41-201410 **Lab ID: 60180441001** Collected: 10/15/14 09:10 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**36.1**	mg/L	20.0	2.0	1		10/23/14 10:49		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 10:49		
Alkalinity, Total as CaCO3	**36.1**	mg/L	20.0	2.0	1		10/23/14 10:49		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.79**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:25	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**448**	mg/L	50.0	25.0	50		10/28/14 14:42	16887-00-6	
Sulfate	**2.6**	mg/L	1.0	0.054	1		10/28/14 14:56	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.095J**	mg/L	0.10	0.023	1		10/23/14 08:52	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.039J**	mg/L	0.10	0.012	1		10/16/14 16:08		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 16:08		
Nitrogen, NO2 plus NO3	**0.039J**	mg/L	0.10	0.012	1		10/16/14 16:08		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**226**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		10/23/14 16:15	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	10/24/14 09:04	10/24/14 14:28		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: IW-76-201410 **Lab ID: 60180441002** Collected: 10/15/14 10:55 Received: 10/16/14 01:27 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		10/23/14 13:05	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 14:44	7439-89-6	
Manganese	**49.3**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 14:44	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**23.1**	ug/L	10.0	5.0	1		10/21/14 14:00	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 14:00	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 14:00	75-27-4	
Bromoform	**9.6**	ug/L	5.0	0.50	1		10/21/14 14:00	75-25-2	
Bromomethane	**58.5**	ug/L	7.0	2.5	1		10/21/14 14:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 14:00	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 14:00	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 14:00	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 14:00	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 14:00	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 14:00	67-66-3	
Chloromethane	**11.3**	ug/L	10.0	0.50	1		10/21/14 14:00	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 14:00	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 14:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 14:00	107-06-2	
1,1-Dichloroethene	**0.61J**	ug/L	5.0	0.50	1		10/21/14 14:00	75-35-4	
cis-1,2-Dichloroethene	**6.7**	ug/L	5.0	0.50	1		10/21/14 14:00	156-59-2	
trans-1,2-Dichloroethene	**0.62J**	ug/L	5.0	0.50	1		10/21/14 14:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 14:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 14:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 14:00	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 14:00	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 14:00	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 14:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 14:00	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 14:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 14:00	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 14:00	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 14:00	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 14:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 14:00	79-00-5	
Trichloroethene	**214**	ug/L	25.0	2.5	5		10/19/14 17:50	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/21/14 14:00	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 14:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/21/14 14:00	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		10/21/14 14:00	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		10/21/14 14:00	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 14:00		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: IW-76-201410 **Lab ID: 60180441002** Collected: 10/15/14 10:55 Received: 10/16/14 01:27 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		10/23/14 10:52		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 10:52		
Alkalinity, Total as CaCO3	**13.1J**	mg/L	20.0	2.0	1		10/23/14 10:52		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.019J**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:25	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**316**	mg/L	50.0	25.0	50		10/28/14 15:11	16887-00-6	
Sulfate	**477**	mg/L	50.0	2.7	50		10/28/14 15:11	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 08:53	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		10/16/14 16:17		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 16:17		
Nitrogen, NO2 plus NO3	**1.1**	mg/L	0.10	0.012	1		10/16/14 16:17		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.55J**	mg/L	1.0	0.50	1		10/23/14 16:49	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	10/24/14 09:04	10/24/14 14:28		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-21-201410 **Lab ID: 60180441003** Collected: 10/15/14 13:50 Received: 10/16/14 01:27 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		10/23/14 13:17	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 14:46	7439-89-6	
Manganese	**801**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 14:46	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 10:26	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 10:26	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 10:26	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 10:26	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 10:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 10:26	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 10:26	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 10:26	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 10:26	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 10:26	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 10:26	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 10:26	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 10:26	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 10:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 10:26	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 10:26	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 10:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 10:26	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 10:26	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 10:26	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 10:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 10:26	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 10:26	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 10:26	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:26	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 10:26	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 10:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 10:26	79-00-5	
Trichloroethene	**6.0**	ug/L	5.0	0.50	1		10/20/14 10:26	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 10:26	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 10:26	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/20/14 10:26	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		10/20/14 10:26	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		10/20/14 10:26	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 10:26		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-21-201410 **Lab ID: 60180441003** Collected: 10/15/14 13:50 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**9.8J**	mg/L	20.0	2.0	1		10/23/14 10:54		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 10:54		
Alkalinity, Total as CaCO3	**9.8J**	mg/L	20.0	2.0	1		10/23/14 10:54		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.0J**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:25	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**766**	mg/L	100	50.0	100		10/29/14 15:13	16887-00-6	
Sulfate	**7.0**	mg/L	1.0	0.054	1		10/29/14 14:05	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 08:54	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		10/16/14 18:16		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 18:16		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		10/16/14 18:16		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		10/23/14 17:07	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	10/24/14 09:04	10/24/14 14:28		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-6-201410 **Lab ID: 60180441004** Collected: 10/15/14 14:45 Received: 10/16/14 01:27 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		10/23/14 13:28	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 14:48	7439-89-6	
Manganese	**155**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 14:48	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 10:42	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 10:42	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 10:42	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 10:42	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 10:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 10:42	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 10:42	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 10:42	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 10:42	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 10:42	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 10:42	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 10:42	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 10:42	124-48-1	
1,1-Dichloroethane	**4.8**	ug/L	2.4	0.50	1		10/20/14 10:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 10:42	107-06-2	
1,1-Dichloroethene	**0.53J**	ug/L	5.0	0.50	1		10/20/14 10:42	75-35-4	
cis-1,2-Dichloroethene	**5.2**	ug/L	5.0	0.50	1		10/20/14 10:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 10:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 10:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 10:42	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 10:42	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 10:42	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 10:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 10:42	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 10:42	100-42-5	M1
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 10:42	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:42	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 10:42	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 10:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 10:42	79-00-5	
Trichloroethene	**3.1J**	ug/L	5.0	0.50	1		10/20/14 10:42	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 10:42	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 10:42	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/14 10:42	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		10/20/14 10:42	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		10/20/14 10:42	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 10:42		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-6-201410 **Lab ID: 60180441004** Collected: 10/15/14 14:45 Received: 10/16/14 01:27 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		10/23/14 17:39		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 17:39		
Alkalinity, Total as CaCO3	**145**	mg/L	20.0	2.0	1		10/23/14 17:39		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.0070J**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:26	18496-25-8	M1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**161**	mg/L	10.0	5.0	10		10/27/14 16:05	16887-00-6	
Sulfate	**86.9**	mg/L	10.0	0.54	10		10/27/14 16:05	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 09:02	7664-41-7	M1
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**26.6**	mg/L	1.0	0.12	10		10/16/14 18:29		
Nitrogen, Nitrite	ND	mg/L	1.0	0.12	10		10/16/14 18:29		M1
Nitrogen, NO2 plus NO3	**26.6**	mg/L	1.0	0.12	10		10/16/14 18:29		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**546**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.70J**	mg/L	1.0	0.50	1		10/23/14 17:24	7440-44-0	M1
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.014J**	mg/L	0.030	0.010	1	10/24/14 09:04	10/24/14 14:28		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: MW-29-201410 **Lab ID: 60180441005** Collected: 10/15/14 11:55 Received: 10/16/14 01:27 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		10/23/14 13:39	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 14:55	7439-89-6	
Manganese	**126**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 14:55	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 10:58	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 10:58	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 10:58	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 10:58	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 10:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 10:58	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 10:58	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 10:58	56-23-5	
Chlorobenzene	**4.7J**	ug/L	5.0	0.50	1		10/20/14 10:58	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 10:58	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 10:58	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 10:58	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 10:58	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 10:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 10:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 10:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 10:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 10:58	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 10:58	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 10:58	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 10:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 10:58	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 10:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 10:58	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:58	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 10:58	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 10:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 10:58	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 10:58	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 10:58	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 10:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/20/14 10:58	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		10/20/14 10:58	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		10/20/14 10:58	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 10:58		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: MW-29-201410 **Lab ID: 60180441005** Collected: 10/15/14 11:55 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**16.3J**	mg/L	20.0	2.0	1		10/23/14 17:45		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 17:45		
Alkalinity, Total as CaCO3	**16.3J**	mg/L	20.0	2.0	1		10/23/14 17:45		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.015J**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:27	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**113**	mg/L	10.0	5.0	10		10/27/14 16:47	16887-00-6	
Sulfate	**57.1**	mg/L	10.0	0.54	10		10/27/14 16:47	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 08:55	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.9**	mg/L	0.10	0.012	1		10/16/14 16:22		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 16:22		
Nitrogen, NO2 plus NO3	**1.9**	mg/L	0.10	0.012	1		10/16/14 16:22		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.88J**	mg/L	1.0	0.50	1		10/23/14 17:55	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	10/24/14 09:04	10/24/14 14:30		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-20-201410 **Lab ID: 60180441006** Collected: 10/15/14 09:30 Received: 10/16/14 01:27 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		10/23/14 13:51	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 14:57	7439-89-6	
Manganese	**6.4**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 14:57	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 11:14	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 11:14	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 11:14	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 11:14	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 11:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 11:14	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 11:14	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 11:14	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 11:14	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 11:14	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 11:14	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 11:14	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 11:14	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 11:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 11:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 11:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 11:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 11:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 11:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 11:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 11:14	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 11:14	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 11:14	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 11:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 11:14	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 11:14	100-42-5	M1
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 11:14	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 11:14	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 11:14	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 11:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 11:14	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 11:14	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 11:14	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 11:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/20/14 11:14	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		10/20/14 11:14	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		10/20/14 11:14	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 11:14		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-20-201410 **Lab ID: 60180441006** Collected: 10/15/14 09:30 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**135**	mg/L	20.0	2.0	1		10/23/14 17:49		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 17:49		
Alkalinity, Total as CaCO3	**135**	mg/L	20.0	2.0	1		10/23/14 17:49		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.0J**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**108**	mg/L	10.0	5.0	10		10/27/14 17:30	16887-00-6	
Sulfate	**18.2**	mg/L	2.0	0.11	2		10/28/14 15:39	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 09:07	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		10/16/14 16:12		M1
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 16:12		
Nitrogen, NO2 plus NO3	**1.2**	mg/L	0.10	0.012	1		10/16/14 16:12		M1
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**223**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.60J**	mg/L	1.0	0.50	1		10/23/14 18:37	7440-44-0	M1
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	10/24/14 14:51	10/24/14 15:29		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: MW-33-201410 **Lab ID: 60180441007** Collected: 10/15/14 13:25 Received: 10/16/14 01:27 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		10/23/14 14:02	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**342**	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 15:06	7439-89-6	
Manganese	**126**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 15:06	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/21/14 17:44	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 17:44	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 17:44	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 17:44	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 17:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 17:44	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 17:44	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 17:44	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 17:44	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 17:44	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 17:44	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 17:44	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 17:44	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 17:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 17:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 17:44	75-35-4	
cis-1,2-Dichloroethene	**15.3**	ug/L	5.0	0.50	1		10/21/14 17:44	156-59-2	
trans-1,2-Dichloroethene	**2.2J**	ug/L	5.0	0.50	1		10/21/14 17:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 17:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 17:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 17:44	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 17:44	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 17:44	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 17:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 17:44	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 17:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 17:44	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 17:44	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 17:44	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 17:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 17:44	79-00-5	
Trichloroethene	**1290**	ug/L	50.0	5.0	10		10/20/14 14:42	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/21/14 17:44	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 17:44	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		10/21/14 17:44	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		10/21/14 17:44	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		10/21/14 17:44	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 17:44		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: MW-33-201410 **Lab ID: 60180441007** Collected: 10/15/14 13:25 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**10.2J**	mg/L	20.0	2.0	1		10/23/14 17:56		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 17:56		
Alkalinity, Total as CaCO3	**10.2J**	mg/L	20.0	2.0	1		10/23/14 17:56		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.34**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:29	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**196**	mg/L	20.0	10.0	20		10/28/14 16:07	16887-00-6	
Sulfate	**11.0**	mg/L	2.0	0.11	2		10/28/14 16:22	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 08:56	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		10/16/14 18:15		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 18:15		
Nitrogen, NO2 plus NO3	**2.4**	mg/L	0.10	0.012	1		10/16/14 18:15		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		10/23/14 19:03	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	10/24/14 14:51	10/24/14 15:30		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: IW-77-201410 **Lab ID: 60180441008** Collected: 10/15/14 10:55 Received: 10/16/14 01:27 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		10/23/14 14:14	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**64.9**	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 15:08	7439-89-6	
Manganese	**6.1**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 15:08	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**15.9**	ug/L	10.0	5.0	1		10/21/14 13:44	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 13:44	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 13:44	75-27-4	
Bromoform	**2.3J**	ug/L	5.0	0.50	1		10/21/14 13:44	75-25-2	
Bromomethane	**15.3**	ug/L	7.0	2.5	1		10/21/14 13:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 13:44	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 13:44	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 13:44	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 13:44	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 13:44	75-00-3	
Chloroform	**0.51J**	ug/L	5.0	0.50	1		10/21/14 13:44	67-66-3	
Chloromethane	**13.9**	ug/L	10.0	0.50	1		10/21/14 13:44	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 13:44	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 13:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 13:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 13:44	75-35-4	
cis-1,2-Dichloroethene	**15.8**	ug/L	5.0	0.50	1		10/21/14 13:44	156-59-2	
trans-1,2-Dichloroethene	**2.9J**	ug/L	5.0	0.50	1		10/21/14 13:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 13:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 13:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 13:44	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 13:44	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 13:44	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 13:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 13:44	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 13:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 13:44	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 13:44	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 13:44	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 13:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 13:44	79-00-5	
Trichloroethene	**741**	ug/L	100	10.0	20		10/19/14 18:06	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/21/14 13:44	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 13:44	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		10/21/14 13:44	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	80-120		1		10/21/14 13:44	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		10/21/14 13:44	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 13:44		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: IW-77-201410 **Lab ID: 60180441008** Collected: 10/15/14 10:55 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**98.9**	mg/L	20.0	2.0	1		10/23/14 17:59		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 17:59		
Alkalinity, Total as CaCO3	**98.9**	mg/L	20.0	2.0	1		10/23/14 17:59		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.065J**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:29	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**300**	mg/L	50.0	25.0	50		10/28/14 16:36	16887-00-6	
Sulfate	**669**	mg/L	50.0	2.7	50		10/28/14 16:36	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.13**	mg/L	0.10	0.023	1		10/23/14 08:58	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		10/16/14 16:18		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 16:18		
Nitrogen, NO2 plus NO3	**2.7**	mg/L	0.10	0.012	1		10/16/14 16:18		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**348**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.72J**	mg/L	1.0	0.50	1		10/23/14 19:30	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.90**	mg/L	0.030	0.010	1	10/24/14 14:51	10/24/14 15:30		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: MW-34-201410 **Lab ID: 60180441009** Collected: 10/15/14 09:15 Received: 10/16/14 01:27 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		10/23/14 14:25	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**238**	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 15:11	7439-89-6	
Manganese	**158**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 15:11	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**30.4**	ug/L	10.0	5.0	1		10/19/14 17:34	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/19/14 17:34	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/19/14 17:34	75-27-4	
Bromoform	**1.9J**	ug/L	5.0	0.50	1		10/19/14 17:34	75-25-2	
Bromomethane	**34.9**	ug/L	7.0	2.5	1		10/19/14 17:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/19/14 17:34	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/19/14 17:34	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/19/14 17:34	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/19/14 17:34	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/19/14 17:34	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/19/14 17:34	67-66-3	
Chloromethane	**6.2J**	ug/L	10.0	0.50	1		10/19/14 17:34	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/19/14 17:34	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/19/14 17:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 17:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 17:34	75-35-4	
cis-1,2-Dichloroethene	**0.96J**	ug/L	5.0	0.50	1		10/19/14 17:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/19/14 17:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/19/14 17:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 17:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/19/14 17:34	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/19/14 17:34	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/19/14 17:34	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/19/14 17:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/19/14 17:34	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/19/14 17:34	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/19/14 17:34	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/19/14 17:34	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/19/14 17:34	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 17:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/19/14 17:34	79-00-5	
Trichloroethene	**47.7**	ug/L	5.0	0.50	1		10/19/14 17:34	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/19/14 17:34	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/19/14 17:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/19/14 17:34	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		10/19/14 17:34	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		10/19/14 17:34	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/19/14 17:34		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: MW-34-201410 **Lab ID: 60180441009** Collected: 10/15/14 09:15 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**3.2J**	mg/L	20.0	2.0	1		10/23/14 18:02		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 18:02		
Alkalinity, Total as CaCO3	**3.2J**	mg/L	20.0	2.0	1		10/23/14 18:02		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.24**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:29	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**299**	mg/L	20.0	10.0	20		10/28/14 17:18	16887-00-6	
Sulfate	**273**	mg/L	20.0	1.1	20		10/28/14 17:18	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 08:59	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.45**	mg/L	0.10	0.012	1		10/16/14 16:09		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 16:09		
Nitrogen, NO2 plus NO3	**0.45**	mg/L	0.10	0.012	1		10/16/14 16:09		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.53J**	mg/L	1.0	0.50	1		10/23/14 19:43	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	10/24/14 14:51	10/24/14 15:30		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-1-201410 **Lab ID: 60180441010** Collected: 10/15/14 09:20 Received: 10/16/14 01:27 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		10/23/14 14:36	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 15:13	7439-89-6	
Manganese	**16.4**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 15:13	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 11:30	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 11:30	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 11:30	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 11:30	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 11:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 11:30	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 11:30	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 11:30	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 11:30	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 11:30	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 11:30	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 11:30	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 11:30	124-48-1	
1,1-Dichloroethane	**1.1J**	ug/L	2.4	0.50	1		10/20/14 11:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 11:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 11:30	75-35-4	
cis-1,2-Dichloroethene	**4.5J**	ug/L	5.0	0.50	1		10/20/14 11:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 11:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 11:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 11:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 11:30	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 11:30	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 11:30	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 11:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 11:30	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 11:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 11:30	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 11:30	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 11:30	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 11:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 11:30	79-00-5	
Trichloroethene	**6.1**	ug/L	5.0	0.50	1		10/20/14 11:30	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 11:30	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 11:30	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/20/14 11:30	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		10/20/14 11:30	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		10/20/14 11:30	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 11:30		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-1-201410 **Lab ID: 60180441010** Collected: 10/15/14 09:20 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**70.9**	mg/L	20.0	2.0	1		10/23/14 18:14		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 18:14		
Alkalinity, Total as CaCO3	**70.9**	mg/L	20.0	2.0	1		10/23/14 18:14		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.0J**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:30	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**96.6**	mg/L	10.0	5.0	10		10/27/14 18:40	16887-00-6	
Sulfate	**23.8**	mg/L	2.0	0.11	2		10/28/14 17:33	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 09:09	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.76**	mg/L	0.10	0.012	1		10/16/14 16:11		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 16:11		
Nitrogen, NO2 plus NO3	**0.76**	mg/L	0.10	0.012	1		10/16/14 16:11		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**198**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.52J**	mg/L	1.0	0.50	1		10/23/14 19:56	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	10/24/14 14:51	10/24/14 15:30		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-2-201410 **Lab ID: 60180441011** Collected: 10/15/14 12:50 Received: 10/16/14 01:27 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		10/23/14 14:48	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**519**	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 15:16	7439-89-6	
Manganese	**46.1**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 15:16	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 11:46	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 11:46	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 11:46	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 11:46	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 11:46	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 11:46	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 11:46	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 11:46	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 11:46	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 11:46	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 11:46	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 11:46	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 11:46	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 11:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 11:46	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 11:46	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 11:46	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 11:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 11:46	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 11:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 11:46	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 11:46	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 11:46	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 11:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 11:46	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 11:46	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 11:46	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 11:46	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 11:46	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 11:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 11:46	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 11:46	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 11:46	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 11:46	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/20/14 11:46	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		10/20/14 11:46	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		10/20/14 11:46	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 11:46		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-2-201410 **Lab ID: 60180441011** Collected: 10/15/14 12:50 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**57.4**	mg/L	20.0	2.0	1		10/23/14 18:17		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 18:17		
Alkalinity, Total as CaCO3	**57.4**	mg/L	20.0	2.0	1		10/23/14 18:17		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.52**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:30	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**110**	mg/L	10.0	5.0	10		10/29/14 12:57	16887-00-6	
Sulfate	**19.5**	mg/L	2.0	0.11	2		10/29/14 12:43	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.11**	mg/L	0.10	0.023	1		10/23/14 09:10	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		10/16/14 18:09		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 18:09		
Nitrogen, NO2 plus NO3	**1.0**	mg/L	0.10	0.012	1		10/16/14 18:09		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**176**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		10/23/14 20:09	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	10/24/14 14:51	10/24/14 15:30		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: MW-22-201410 **Lab ID: 60180441012** Collected: 10/15/14 15:00 Received: 10/16/14 01:27 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		10/23/14 17:54	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 15:18	7439-89-6	
Manganese	**94.8**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 15:18	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 12:02	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 12:02	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 12:02	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 12:02	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 12:02	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 12:02	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 12:02	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 12:02	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 12:02	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 12:02	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 12:02	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 12:02	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 12:02	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 12:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 12:02	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 12:02	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 12:02	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 12:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 12:02	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 12:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 12:02	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 12:02	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 12:02	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 12:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 12:02	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 12:02	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 12:02	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 12:02	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 12:02	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 12:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 12:02	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 12:02	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 12:02	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 12:02	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/20/14 12:02	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		10/20/14 12:02	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		10/20/14 12:02	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 12:02		

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: MW-22-201410 **Lab ID: 60180441012** Collected: 10/15/14 15:00 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**45.6**	mg/L	20.0	2.0	1		10/23/14 18:19		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 18:19		
Alkalinity, Total as CaCO3	**45.6**	mg/L	20.0	2.0	1		10/23/14 18:19		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.0J**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:31	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**14.7**	mg/L	1.0	0.50	1		10/28/14 18:01	16887-00-6	
Sulfate	**10.3**	mg/L	1.0	0.054	1		10/28/14 18:01	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 09:11	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		10/17/14 11:53		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/17/14 11:53		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		10/17/14 11:53		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**297**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.80J**	mg/L	1.0	0.50	1		10/23/14 20:22	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.014J**	mg/L	0.030	0.010	1	10/24/14 14:51	10/24/14 15:30		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-10-201410 **Lab ID: 60180441013** Collected: 10/15/14 14:40 Received: 10/16/14 01:27 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		10/23/14 18:06	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 15:20	7439-89-6	
Manganese	**330**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 15:20	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/21/14 18:00	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 18:00	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 18:00	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 18:00	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 18:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 18:00	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 18:00	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 18:00	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 18:00	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 18:00	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 18:00	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 18:00	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 18:00	124-48-1	
1,1-Dichloroethane	**2.8**	ug/L	2.4	0.50	1		10/21/14 18:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 18:00	107-06-2	
1,1-Dichloroethene	**3.8J**	ug/L	5.0	0.50	1		10/21/14 18:00	75-35-4	
cis-1,2-Dichloroethene	**32.3**	ug/L	5.0	0.50	1		10/21/14 18:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 18:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 18:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 18:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 18:00	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 18:00	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 18:00	591-78-6	
Methylene chloride	**0.61J**	ug/L	5.0	0.50	1		10/21/14 18:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 18:00	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 18:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 18:00	79-34-5	
Tetrachloroethene	**0.64J**	ug/L	5.0	0.50	1		10/21/14 18:00	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 18:00	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 18:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 18:00	79-00-5	
Trichloroethene	**243**	ug/L	25.0	2.5	5		10/20/14 13:22	79-01-6	
Vinyl chloride	**1.7J**	ug/L	2.0	0.50	1		10/21/14 18:00	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 18:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/21/14 18:00	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		10/21/14 18:00	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		10/21/14 18:00	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 18:00		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-10-201410 **Lab ID: 60180441013** Collected: 10/15/14 14:40 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**82.8**	mg/L	20.0	2.0	1		10/23/14 18:22		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 18:22		
Alkalinity, Total as CaCO3	**82.8**	mg/L	20.0	2.0	1		10/23/14 18:22		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.0J**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:31	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**138**	mg/L	10.0	5.0	10		10/27/14 19:23	16887-00-6	
Sulfate	**39.2**	mg/L	10.0	0.54	10		10/27/14 19:23	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 09:12	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		10/16/14 18:28		
Nitrogen, Nitrite	ND	mg/L	0.20	0.023	2		10/16/14 18:28		
Nitrogen, NO2 plus NO3	**5.7**	mg/L	0.20	0.023	2		10/16/14 18:28		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**427**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.3**	mg/L	1.0	0.50	1		10/23/14 20:35	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	10/24/14 14:51	10/24/14 15:30		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-9-201410 **Lab ID: 60180441014** Collected: 10/15/14 12:35 Received: 10/16/14 01:27 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		10/23/14 18:17	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 15:22	7439-89-6	
Manganese	**257**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 15:22	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 12:18	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 12:18	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 12:18	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 12:18	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 12:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 12:18	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 12:18	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 12:18	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 12:18	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 12:18	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 12:18	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 12:18	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 12:18	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 12:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 12:18	107-06-2	
1,1-Dichloroethene	**1.5J**	ug/L	5.0	0.50	1		10/20/14 12:18	75-35-4	
cis-1,2-Dichloroethene	**39.1**	ug/L	5.0	0.50	1		10/20/14 12:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 12:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 12:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 12:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 12:18	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 12:18	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 12:18	591-78-6	
Methylene chloride	**0.88J**	ug/L	5.0	0.50	1		10/20/14 12:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 12:18	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 12:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 12:18	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 12:18	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 12:18	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 12:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 12:18	79-00-5	
Trichloroethene	**76.9**	ug/L	5.0	0.50	1		10/20/14 12:18	79-01-6	
Vinyl chloride	**1.8J**	ug/L	2.0	0.50	1		10/20/14 12:18	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 12:18	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/20/14 12:18	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		10/20/14 12:18	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		10/20/14 12:18	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 12:18		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-9-201410 **Lab ID: 60180441014** Collected: 10/15/14 12:35 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**91.4**	mg/L	20.0	2.0	1		10/23/14 18:25		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 18:25		
Alkalinity, Total as CaCO3	**91.4**	mg/L	20.0	2.0	1		10/23/14 18:25		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.0J**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:31	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**61.8**	mg/L	10.0	5.0	10		10/27/14 19:37	16887-00-6	
Sulfate	**36.1**	mg/L	10.0	0.54	10		10/27/14 19:37	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 09:13	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**14.9**	mg/L	0.50	0.058	5		10/16/14 16:30		
Nitrogen, Nitrite	ND	mg/L	0.50	0.058	5		10/16/14 16:30		
Nitrogen, NO2 plus NO3	**14.9**	mg/L	0.50	0.058	5		10/16/14 16:30		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**1670**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**2.6**	mg/L	1.0	0.50	1		10/23/14 21:15	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	10/24/14 14:51	10/24/14 15:30		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-12-201410 **Lab ID: 60180441015** Collected: 10/15/14 16:42 Received: 10/16/14 01:27 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		10/23/14 18:28	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**55.7**	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 15:25	7439-89-6	
Manganese	**114**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 15:25	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/21/14 17:12	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 17:12	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 17:12	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 17:12	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 17:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 17:12	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 17:12	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 17:12	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 17:12	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 17:12	75-00-3	
Chloroform	**0.54J**	ug/L	5.0	0.50	1		10/21/14 17:12	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 17:12	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 17:12	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 17:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 17:12	107-06-2	
1,1-Dichloroethene	**2.0J**	ug/L	5.0	0.50	1		10/21/14 17:12	75-35-4	
cis-1,2-Dichloroethene	**188**	ug/L	125	12.5	25		10/20/14 14:58	156-59-2	
trans-1,2-Dichloroethene	**1.0J**	ug/L	5.0	0.50	1		10/21/14 17:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 17:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 17:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 17:12	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 17:12	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 17:12	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 17:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 17:12	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 17:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 17:12	79-34-5	
Tetrachloroethene	**1.3J**	ug/L	5.0	0.50	1		10/21/14 17:12	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 17:12	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 17:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 17:12	79-00-5	
Trichloroethene	**2570**	ug/L	125	12.5	25		10/20/14 14:58	79-01-6	
Vinyl chloride	**3.5**	ug/L	2.0	0.50	1		10/21/14 17:12	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 17:12	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/21/14 17:12	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		10/21/14 17:12	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		10/21/14 17:12	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 17:12		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-12-201410 **Lab ID: 60180441015** Collected: 10/15/14 16:42 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**76.8**	mg/L	20.0	2.0	1		10/23/14 18:29		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 18:29		
Alkalinity, Total as CaCO3	**76.8**	mg/L	20.0	2.0	1		10/23/14 18:29		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.0J**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:32	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**18.5**	mg/L	2.0	1.0	2		10/28/14 18:15	16887-00-6	
Sulfate	**13.2**	mg/L	2.0	0.11	2		10/28/14 18:15	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.15**	mg/L	0.10	0.023	1		10/23/14 09:15	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		10/17/14 11:59		M1
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/17/14 11:59		M1
Nitrogen, NO2 plus NO3	**0.13**	mg/L	0.10	0.012	1		10/17/14 11:59		M1
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**225**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.88J**	mg/L	1.0	0.50	1		10/23/14 21:28	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	10/24/14 14:51	10/24/14 15:31		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-14-201410 **Lab ID: 60180441016** Collected: 10/15/14 13:09 Received: 10/16/14 01:27 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		10/23/14 18:40	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**385**	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 15:31	7439-89-6	
Manganese	**15.1**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 15:31	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 12:34	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 12:34	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 12:34	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 12:34	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 12:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 12:34	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 12:34	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 12:34	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 12:34	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 12:34	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 12:34	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 12:34	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 12:34	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 12:34	75-34-3	
1,2-Dichloroethane	**0.55J**	ug/L	5.0	0.50	1		10/20/14 12:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 12:34	75-35-4	
cis-1,2-Dichloroethene	**9.4**	ug/L	5.0	0.50	1		10/20/14 12:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 12:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 12:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 12:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 12:34	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 12:34	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 12:34	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 12:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 12:34	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 12:34	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 12:34	79-34-5	
Tetrachloroethene	**22.0**	ug/L	5.0	0.50	1		10/20/14 12:34	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 12:34	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 12:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 12:34	79-00-5	
Trichloroethene	**4.1J**	ug/L	5.0	0.50	1		10/20/14 12:34	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 12:34	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 12:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/20/14 12:34	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		10/20/14 12:34	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		10/20/14 12:34	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 12:34		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-14-201410 **Lab ID: 60180441016** Collected: 10/15/14 13:09 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**41.8**	mg/L	20.0	2.0	1		10/23/14 18:32		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 18:32		
Alkalinity, Total as CaCO3	**41.8**	mg/L	20.0	2.0	1		10/23/14 18:32		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.38**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:32	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**6.6**	mg/L	1.0	0.50	1		10/29/14 19:59	16887-00-6	
Sulfate	**9.4**	mg/L	1.0	0.50	1		10/29/14 19:59	14808-79-8	M1
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.14**	mg/L	0.10	0.023	1		10/23/14 09:16	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.39**	mg/L	0.10	0.012	1		10/16/14 18:13		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 18:13		
Nitrogen, NO2 plus NO3	**0.39**	mg/L	0.10	0.012	1		10/16/14 18:13		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**145**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.88J**	mg/L	1.0	0.50	1		10/23/14 21:41	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	10/24/14 14:51	10/24/14 15:31		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-18-201410 **Lab ID: 60180441017** Collected: 10/15/14 16:13 Received: 10/16/14 01:27 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		10/23/14 18:51	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**45.5J**	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 15:34	7439-89-6	
Manganese	**7.7**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 15:34	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**11.8**	ug/L	10.0	5.0	1		10/21/14 16:40	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 16:40	71-43-2	
Bromodichloromethane	**0.51J**	ug/L	5.0	0.50	1		10/21/14 16:40	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 16:40	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 16:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 16:40	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 16:40	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 16:40	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 16:40	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 16:40	75-00-3	
Chloroform	**2.2J**	ug/L	5.0	0.50	1		10/21/14 16:40	67-66-3	
Chloromethane	**5.0J**	ug/L	10.0	0.50	1		10/21/14 16:40	74-87-3	
Dibromochloromethane	**1.5J**	ug/L	5.0	0.50	1		10/21/14 16:40	124-48-1	
1,1-Dichloroethane	**1.5J**	ug/L	2.4	0.50	1		10/21/14 16:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 16:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 16:40	75-35-4	
cis-1,2-Dichloroethene	**68.5**	ug/L	5.0	0.50	1		10/21/14 16:40	156-59-2	
trans-1,2-Dichloroethene	**13.9**	ug/L	5.0	0.50	1		10/21/14 16:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 16:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 16:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 16:40	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 16:40	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 16:40	591-78-6	
Methylene chloride	**0.59J**	ug/L	5.0	0.50	1		10/21/14 16:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 16:40	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 16:40	100-42-5	
1,1,2,2-Tetrachloroethane	**0.76J**	ug/L	1.0	0.50	1		10/21/14 16:40	79-34-5	
Tetrachloroethene	**1.5J**	ug/L	5.0	0.50	1		10/21/14 16:40	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 16:40	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 16:40	71-55-6	
1,1,2-Trichloroethane	**0.58J**	ug/L	5.0	0.50	1		10/21/14 16:40	79-00-5	
Trichloroethene	**3540**	ug/L	500	50.0	100		10/20/14 15:14	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/21/14 16:40	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 16:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/21/14 16:40	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		10/21/14 16:40	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		10/21/14 16:40	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 16:40		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-18-201410 **Lab ID: 60180441017** Collected: 10/15/14 16:13 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**56.2**	mg/L	20.0	2.0	1		10/23/14 18:35		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 18:35		
Alkalinity, Total as CaCO3	**56.2**	mg/L	20.0	2.0	1		10/23/14 18:35		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.045J**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:34	18496-25-8	M1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**135**	mg/L	10.0	5.0	10		10/29/14 20:42	16887-00-6	
Sulfate	**324**	mg/L	20.0	10.0	20		10/29/14 21:11	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 09:19	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**2.9**	mg/L	0.10	0.012	1		10/17/14 11:57		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/17/14 11:57		
Nitrogen, NO2 plus NO3	**2.9**	mg/L	0.10	0.012	1		10/17/14 11:57		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**212**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.63J**	mg/L	1.0		1		10/27/14 18:27	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	10/24/14 14:51	10/24/14 15:31		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-16-201410 **Lab ID: 60180441018** Collected: 10/15/14 08:59 Received: 10/16/14 01:27 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		10/23/14 19:03	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**712**	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 15:36	7439-89-6	
Manganese	**18.4**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 15:36	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 12:50	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 12:50	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 12:50	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 12:50	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 12:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 12:50	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 12:50	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 12:50	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 12:50	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 12:50	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 12:50	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 12:50	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 12:50	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 12:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 12:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 12:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 12:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 12:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 12:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 12:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 12:50	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 12:50	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 12:50	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 12:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 12:50	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 12:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 12:50	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 12:50	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 12:50	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 12:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 12:50	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 12:50	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 12:50	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 12:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/20/14 12:50	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		10/20/14 12:50	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		10/20/14 12:50	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 12:50		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-16-201410 **Lab ID: 60180441018** Collected: 10/15/14 08:59 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**34.4**	mg/L	20.0	2.0	1		10/23/14 18:39		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 18:39		
Alkalinity, Total as CaCO3	**34.4**	mg/L	20.0	2.0	1		10/23/14 18:39		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.71**	mg/L	0.20		1		10/27/14 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**7.0**	Std. Units	0.10	0.10	1		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:35	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**1.0**	mg/L	1.0	0.50	1		10/29/14 21:40	16887-00-6	
Sulfate	**32.8**	mg/L	5.0	2.5	5		10/29/14 21:54	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 09:20	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		10/16/14 16:07		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 16:07		
Nitrogen, NO2 plus NO3	**1.1**	mg/L	0.10	0.012	1		10/16/14 16:07		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**36.7**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**2.9**	mg/L	1.0		1		10/27/14 19:06	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	10/24/14 14:51	10/24/14 15:31		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: MW-57-201410 **Lab ID: 60180441019** Collected: 10/15/14 16:00 Received: 10/16/14 01:27 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		10/23/14 19:14	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**7490**	ug/L	50.0	24.0	1	10/20/14 13:00	10/22/14 15:38	7439-89-6	
Manganese	**338**	ug/L	5.0	2.5	1	10/20/14 13:00	10/22/14 15:38	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/21/14 14:16	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 14:16	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 14:16	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 14:16	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 14:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 14:16	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 14:16	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 14:16	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 14:16	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 14:16	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 14:16	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 14:16	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 14:16	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 14:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 14:16	107-06-2	
1,1-Dichloroethene	**0.59J**	ug/L	5.0	0.50	1		10/21/14 14:16	75-35-4	
cis-1,2-Dichloroethene	**4.2J**	ug/L	5.0	0.50	1		10/21/14 14:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 14:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 14:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 14:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 14:16	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 14:16	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 14:16	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 14:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 14:16	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 14:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 14:16	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 14:16	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 14:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 14:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 14:16	79-00-5	
Trichloroethene	**172**	ug/L	5.0	0.50	1		10/21/14 14:16	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/21/14 14:16	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 14:16	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/21/14 14:16	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120		1		10/21/14 14:16	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		10/21/14 14:16	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 14:16		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: MW-57-201410 **Lab ID: 60180441019** Collected: 10/15/14 16:00 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**30.2**	mg/L	20.0	2.0	1		10/23/14 18:43		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 18:43		
Alkalinity, Total as CaCO3	**30.2**	mg/L	20.0	2.0	1		10/23/14 18:43		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**7.1**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:36	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**283**	mg/L	20.0	10.0	20		10/29/14 22:37	16887-00-6	
Sulfate	**3.9**	mg/L	1.0	0.50	1		10/29/14 22:52	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 09:21	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		10/17/14 11:56		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/17/14 11:56		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		10/17/14 11:56		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**246**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.33J**	mg/L	1.0		1		10/27/14 19:44	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	10/24/14 14:51	10/24/14 15:32		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: MW-58-201410 **Lab ID: 60180441020** Collected: 10/15/14 12:45 Received: 10/16/14 01:27 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		10/23/14 19:25	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**827**	ug/L	50.0	24.0	1	10/20/14 13:00	10/23/14 13:03	7439-89-6	
Manganese	**359**	ug/L	5.0	2.5	1	10/20/14 13:00	10/23/14 13:03	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/21/14 14:32	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 14:32	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 14:32	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 14:32	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 14:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 14:32	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 14:32	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 14:32	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 14:32	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 14:32	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 14:32	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 14:32	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 14:32	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 14:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 14:32	107-06-2	
1,1-Dichloroethene	**2.1J**	ug/L	5.0	0.50	1		10/21/14 14:32	75-35-4	
cis-1,2-Dichloroethene	**10.8**	ug/L	5.0	0.50	1		10/21/14 14:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 14:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 14:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 14:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 14:32	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 14:32	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 14:32	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 14:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 14:32	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 14:32	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 14:32	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 14:32	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 14:32	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 14:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 14:32	79-00-5	
Trichloroethene	**360**	ug/L	25.0	2.5	5		10/21/14 18:32	79-01-6	
Vinyl chloride	**0.68J**	ug/L	2.0	0.50	1		10/21/14 14:32	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 14:32	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/21/14 14:32	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		10/21/14 14:32	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		10/21/14 14:32	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 14:32		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: MW-58-201410 **Lab ID: 60180441020** Collected: 10/15/14 12:45 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**9.6J**	mg/L	20.0	2.0	1		10/23/14 18:53		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 18:53		
Alkalinity, Total as CaCO3	**9.6J**	mg/L	20.0	2.0	1		10/23/14 18:53		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.16J**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:36	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**267**	mg/L	50.0	25.0	50		10/30/14 13:48	16887-00-6	
Sulfate	**2.4**	mg/L	1.0	0.50	1		10/29/14 23:20	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 09:23	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		10/16/14 18:08		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 18:08		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		10/16/14 18:08		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.29J**	mg/L	1.0		1		10/27/14 20:04	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	10/24/14 14:51	10/24/14 15:32		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: MW-56-201410 **Lab ID: 60180441021** Collected: 10/15/14 15:00 Received: 10/16/14 01:27 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		10/25/14 14:22	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**1210**	ug/L	50.0	24.0	1	10/20/14 13:00	10/23/14 13:10	7439-89-6	
Manganese	**158**	ug/L	5.0	2.5	1	10/20/14 13:00	10/23/14 13:10	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/21/14 18:16	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 18:16	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 18:16	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 18:16	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 18:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 18:16	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 18:16	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 18:16	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 18:16	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 18:16	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 18:16	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 18:16	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 18:16	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 18:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 18:16	107-06-2	
1,1-Dichloroethene	**1.0J**	ug/L	5.0	0.50	1		10/21/14 18:16	75-35-4	
cis-1,2-Dichloroethene	**12.1**	ug/L	5.0	0.50	1		10/21/14 18:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 18:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 18:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 18:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 18:16	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 18:16	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 18:16	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 18:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 18:16	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 18:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 18:16	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 18:16	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 18:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 18:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 18:16	79-00-5	
Trichloroethene	**408**	ug/L	25.0	2.5	5		10/20/14 14:10	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/21/14 18:16	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 18:16	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		10/21/14 18:16	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		10/21/14 18:16	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		10/21/14 18:16	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 18:16		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: MW-56-201410 **Lab ID: 60180441021** Collected: 10/15/14 15:00 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**26.6**	mg/L	20.0	2.0	1		10/23/14 18:56		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 18:56		
Alkalinity, Total as CaCO3	**26.6**	mg/L	20.0	2.0	1		10/23/14 18:56		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.69**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	**0.031J**	mg/L	0.050	0.0096	1		10/20/14 11:38	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**165**	mg/L	10.0	5.0	10		10/29/14 23:35	16887-00-6	
Sulfate	**4.9**	mg/L	1.0	0.50	1		10/29/14 23:49	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 09:24	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		10/17/14 11:55		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/17/14 11:55		
Nitrogen, NO2 plus NO3	**0.13**	mg/L	0.10	0.012	1		10/17/14 11:55		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**154**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.48J**	mg/L	1.0		1		10/27/14 20:23	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	10/24/14 14:51	10/24/14 15:32		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-7-201410 **Lab ID: 60180441022** Collected: 10/15/14 16:15 Received: 10/16/14 01:27 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		10/25/14 14:33	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	10/20/14 13:00	10/23/14 13:12	7439-89-6	
Manganese	**80.5**	ug/L	5.0	2.5	1	10/20/14 13:00	10/23/14 13:12	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 13:06	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 13:06	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 13:06	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 13:06	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 13:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 13:06	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 13:06	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 13:06	56-23-5	
Chlorobenzene	**0.56J**	ug/L	5.0	0.50	1		10/20/14 13:06	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 13:06	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 13:06	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 13:06	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 13:06	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 13:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 13:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 13:06	75-35-4	
cis-1,2-Dichloroethene	**10.3**	ug/L	5.0	0.50	1		10/20/14 13:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 13:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 13:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 13:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 13:06	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 13:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 13:06	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 13:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 13:06	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 13:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 13:06	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 13:06	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 13:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 13:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 13:06	79-00-5	
Trichloroethene	**33.7**	ug/L	5.0	0.50	1		10/20/14 13:06	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 13:06	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 13:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/20/14 13:06	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		10/20/14 13:06	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		10/20/14 13:06	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 13:06		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-7-201410 **Lab ID: 60180441022** Collected: 10/15/14 16:15 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**12.1J**	mg/L	20.0	2.0	1		10/23/14 18:59		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 18:59		
Alkalinity, Total as CaCO3	**12.1J**	mg/L	20.0	2.0	1		10/23/14 18:59		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.080J**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:39	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**278**	mg/L	50.0	25.0	50		10/30/14 00:04	16887-00-6	
Sulfate	**9.7**	mg/L	1.0	0.50	1		10/30/14 00:18	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.23**	mg/L	0.10	0.023	1		10/23/14 09:25	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		10/17/14 11:58		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/17/14 11:58		
Nitrogen, NO2 plus NO3	**2.7**	mg/L	0.10	0.012	1		10/17/14 11:58		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.21J**	mg/L	1.0		1		10/27/14 21:38	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	10/24/14 14:51	10/24/14 15:32		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-11-201410 **Lab ID: 60180441023** Collected: 10/15/14 17:15 Received: 10/16/14 01:27 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		10/25/14 14:45	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**382**	ug/L	50.0	24.0	1	10/20/14 13:00	10/23/14 13:14	7439-89-6	
Manganese	**136**	ug/L	5.0	2.5	1	10/20/14 13:00	10/23/14 13:14	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/21/14 16:56	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 16:56	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 16:56	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 16:56	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 16:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 16:56	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 16:56	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 16:56	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 16:56	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 16:56	75-00-3	
Chloroform	**0.52J**	ug/L	5.0	0.50	1		10/21/14 16:56	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 16:56	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 16:56	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 16:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 16:56	107-06-2	
1,1-Dichloroethene	**0.71J**	ug/L	5.0	0.50	1		10/21/14 16:56	75-35-4	
cis-1,2-Dichloroethene	**70.4**	ug/L	5.0	0.50	1		10/21/14 16:56	156-59-2	
trans-1,2-Dichloroethene	**0.54J**	ug/L	5.0	0.50	1		10/21/14 16:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 16:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 16:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 16:56	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 16:56	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 16:56	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 16:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 16:56	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 16:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 16:56	79-34-5	
Tetrachloroethene	**0.94J**	ug/L	5.0	0.50	1		10/21/14 16:56	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 16:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 16:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 16:56	79-00-5	
Trichloroethene	**2050**	ug/L	500	50.0	100		10/20/14 15:30	79-01-6	
Vinyl chloride	**3.5**	ug/L	2.0	0.50	1		10/21/14 16:56	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 16:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/21/14 16:56	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		10/21/14 16:56	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		10/21/14 16:56	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 16:56		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-11-201410 **Lab ID: 60180441023** Collected: 10/15/14 17:15 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**92.9**	mg/L	20.0	2.0	1		10/23/14 19:04		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/23/14 19:04		
Alkalinity, Total as CaCO3	**92.9**	mg/L	20.0	2.0	1		10/23/14 19:04		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.38**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:39	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**4.6**	mg/L	1.0	0.50	1		10/30/14 00:33	16887-00-6	
Sulfate	**14.1**	mg/L	1.0	0.50	1		10/30/14 00:33	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 09:26	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		10/17/14 12:03		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/17/14 12:03		
Nitrogen, NO2 plus NO3	**0.19**	mg/L	0.10	0.012	1		10/17/14 12:03		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**356**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.64J**	mg/L	1.0		1		10/27/14 21:51	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	10/24/14 14:51	10/24/14 15:32		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-13-2014 **Lab ID: 60180441024** Collected: 10/15/14 11:12 Received: 10/16/14 01:27 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		10/25/14 14:56	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	10/20/14 13:00	10/23/14 13:17	7439-89-6	
Manganese	**16.5**	ug/L	5.0	2.5	1	10/20/14 13:00	10/23/14 13:17	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/20/14 18:26	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 18:26	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 18:26	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 18:26	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 18:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 18:26	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 18:26	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 18:26	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 18:26	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 18:26	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 18:26	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 18:26	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 18:26	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 18:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 18:26	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 18:26	75-35-4	
cis-1,2-Dichloroethene	**25.9**	ug/L	5.0	0.50	1		10/20/14 18:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 18:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 18:26	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 18:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 18:26	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 18:26	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 18:26	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 18:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 18:26	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 18:26	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 18:26	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 18:26	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 18:26	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 18:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 18:26	79-00-5	
Trichloroethene	**40.8**	ug/L	5.0	0.50	1		10/20/14 18:26	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 18:26	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 18:26	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/20/14 18:26	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		10/20/14 18:26	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		10/20/14 18:26	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 18:26		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: ITMW-13-2014 **Lab ID: 60180441024** Collected: 10/15/14 11:12 Received: 10/16/14 01:27 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**53.6**	mg/L	20.0	2.0	1		10/24/14 09:09		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/24/14 09:09		
Alkalinity, Total as CaCO3	**53.6**	mg/L	20.0	2.0	1		10/24/14 09:09		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.014J**	mg/L	0.20		1		10/27/14 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		10/24/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:39	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**22.8**	mg/L	2.0	1.0	2		10/30/14 00:47	16887-00-6	
Sulfate	**6.2**	mg/L	1.0	0.50	1		10/30/14 01:30	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 09:27	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		10/16/14 16:19		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/16/14 16:19		
Nitrogen, NO2 plus NO3	**0.16**	mg/L	0.10	0.012	1		10/16/14 16:19		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**157**	mg/L			1		10/27/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.49J**	mg/L	1.0		1		10/27/14 22:05	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	10/24/14 14:51	10/24/14 15:33		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: TB-03-201410 **Lab ID: 60180441025** Collected: 10/15/14 00:00 Received: 10/16/14 01:27 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		10/20/14 17:38	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 17:38	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 17:38	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 17:38	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 17:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 17:38	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 17:38	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 17:38	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 17:38	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 17:38	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 17:38	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 17:38	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 17:38	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 17:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 17:38	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 17:38	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 17:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 17:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 17:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 17:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 17:38	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 17:38	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 17:38	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 17:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 17:38	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 17:38	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 17:38	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 17:38	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 17:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 17:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 17:38	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 17:38	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 17:38	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 17:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/20/14 17:38	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		10/20/14 17:38	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		10/20/14 17:38	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 17:38		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: TB-16-201410 **Lab ID: 60180441026** Collected: 10/15/14 00:00 Received: 10/16/14 01:27 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		10/20/14 17:54	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 17:54	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 17:54	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 17:54	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 17:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 17:54	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 17:54	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 17:54	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 17:54	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 17:54	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 17:54	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 17:54	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 17:54	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 17:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 17:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 17:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 17:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 17:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 17:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 17:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 17:54	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 17:54	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 17:54	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 17:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 17:54	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 17:54	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 17:54	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 17:54	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 17:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 17:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 17:54	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 17:54	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 17:54	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 17:54	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/20/14 17:54	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		10/20/14 17:54	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		10/20/14 17:54	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 17:54		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: TB-12-201410 **Lab ID: 60180441027** Collected: 10/15/14 00:00 Received: 10/16/14 01:27 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		10/20/14 18:10	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 18:10	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 18:10	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 18:10	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 18:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 18:10	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 18:10	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 18:10	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 18:10	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 18:10	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 18:10	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 18:10	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 18:10	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 18:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 18:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 18:10	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 18:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 18:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 18:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 18:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 18:10	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 18:10	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 18:10	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 18:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 18:10	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 18:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 18:10	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 18:10	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 18:10	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 18:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 18:10	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 18:10	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 18:10	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 18:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/20/14 18:10	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		10/20/14 18:10	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		10/20/14 18:10	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 18:10		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: DUP-04-201410 **Lab ID: 60180441028** Collected: 10/15/14 16:42 Received: 10/16/14 01:27 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		10/20/14 18:58	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 18:58	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 18:58	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 18:58	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 18:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 18:58	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 18:58	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 18:58	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 18:58	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 18:58	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 18:58	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 18:58	74-87-3	
Dibromochloromethane	**1.3J**	ug/L	5.0	0.50	1		10/20/14 18:58	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 18:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 18:58	107-06-2	
1,1-Dichloroethene	**1.8J**	ug/L	5.0	0.50	1		10/20/14 18:58	75-35-4	
cis-1,2-Dichloroethene	**192**	ug/L	5.0	0.50	1		10/20/14 18:58	156-59-2	
trans-1,2-Dichloroethene	**1.1J**	ug/L	5.0	0.50	1		10/20/14 18:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 18:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 18:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 18:58	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 18:58	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 18:58	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 18:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 18:58	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 18:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 18:58	79-34-5	
Tetrachloroethene	**1.2J**	ug/L	5.0	0.50	1		10/20/14 18:58	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 18:58	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 18:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 18:58	79-00-5	
Trichloroethene	**2950**	ug/L	500	50.0	100		10/21/14 18:48	79-01-6	
Vinyl chloride	**3.7**	ug/L	2.0	0.50	1		10/20/14 18:58	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 18:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/20/14 18:58	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		10/20/14 18:58	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		10/20/14 18:58	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 18:58		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: DUP-02-201410 **Lab ID: 60180441029** Collected: 10/15/14 12:35 Received: 10/16/14 01:27 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		10/20/14 18:42	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 18:42	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 18:42	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 18:42	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 18:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 18:42	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 18:42	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 18:42	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 18:42	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 18:42	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 18:42	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 18:42	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 18:42	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 18:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 18:42	107-06-2	
1,1-Dichloroethene	**1.6J**	ug/L	5.0	0.50	1		10/20/14 18:42	75-35-4	
cis-1,2-Dichloroethene	**38.8**	ug/L	5.0	0.50	1		10/20/14 18:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 18:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 18:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 18:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 18:42	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 18:42	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 18:42	591-78-6	
Methylene chloride	**0.84J**	ug/L	5.0	0.50	1		10/20/14 18:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 18:42	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 18:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 18:42	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 18:42	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 18:42	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 18:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 18:42	79-00-5	
Trichloroethene	**75.3**	ug/L	5.0	0.50	1		10/20/14 18:42	79-01-6	
Vinyl chloride	**1.7J**	ug/L	2.0	0.50	1		10/20/14 18:42	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 18:42	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/14 18:42	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		10/20/14 18:42	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		10/20/14 18:42	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 18:42		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: TB-08-201410 **Lab ID: 60180441030** Collected: 10/15/14 00:00 Received: 10/16/14 01:27 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		10/20/14 21:45	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 21:45	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 21:45	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 21:45	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 21:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 21:45	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 21:45	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 21:45	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 21:45	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 21:45	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 21:45	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 21:45	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 21:45	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 21:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 21:45	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 21:45	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 21:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 21:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 21:45	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 21:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 21:45	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 21:45	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 21:45	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 21:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 21:45	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 21:45	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 21:45	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 21:45	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 21:45	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 21:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 21:45	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 21:45	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 21:45	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 21:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	91	%	80-120		1		10/20/14 21:45	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		10/20/14 21:45	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		10/20/14 21:45	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 21:45		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: TB-01-201410 **Lab ID: 60180441031** Collected: 10/15/14 00:00 Received: 10/16/14 01:27 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		10/20/14 21:59	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 21:59	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 21:59	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 21:59	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 21:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 21:59	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 21:59	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 21:59	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 21:59	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 21:59	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 21:59	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 21:59	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 21:59	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 21:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 21:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 21:59	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 21:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 21:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 21:59	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 21:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 21:59	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 21:59	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 21:59	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 21:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 21:59	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 21:59	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 21:59	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 21:59	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 21:59	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 21:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 21:59	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 21:59	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 21:59	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 21:59	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	92	%	80-120		1		10/20/14 21:59	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		10/20/14 21:59	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		10/20/14 21:59	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 21:59		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: EB-03-201410 **Lab ID: 60180441032** Collected: 10/15/14 17:35 Received: 10/16/14 01:27 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		10/21/14 01:11	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 01:11	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 01:11	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 01:11	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 01:11	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 01:11	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 01:11	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 01:11	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 01:11	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 01:11	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 01:11	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 01:11	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 01:11	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 01:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 01:11	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 01:11	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 01:11	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 01:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 01:11	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 01:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 01:11	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 01:11	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 01:11	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 01:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 01:11	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 01:11	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 01:11	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 01:11	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 01:11	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 01:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 01:11	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 01:11	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/21/14 01:11	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 01:11	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	90	%	80-120		1		10/21/14 01:11	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		10/21/14 01:11	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		10/21/14 01:11	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 01:11		

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ANALYTICAL RESULTS

Project: FORT SMITH AR
Pace Project No.: 60180441

Sample: TB-07-201410 **Lab ID: 60180441033** Collected: 10/15/14 00:00 Received: 10/16/14 01:27 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		10/20/14 22:14	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/20/14 22:14	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/20/14 22:14	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/20/14 22:14	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/20/14 22:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/20/14 22:14	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/20/14 22:14	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/20/14 22:14	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/20/14 22:14	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/20/14 22:14	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/20/14 22:14	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/20/14 22:14	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/20/14 22:14	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/20/14 22:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 22:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 22:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 22:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 22:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/20/14 22:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 22:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/20/14 22:14	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/20/14 22:14	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/20/14 22:14	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/20/14 22:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/20/14 22:14	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/20/14 22:14	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/20/14 22:14	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/20/14 22:14	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/20/14 22:14	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 22:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/20/14 22:14	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/20/14 22:14	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/20/14 22:14	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/20/14 22:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	87	%	80-120		1		10/20/14 22:14	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		10/20/14 22:14	17060-07-0	
Toluene-d8 (S)	107	%	80-120		1		10/20/14 22:14	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/20/14 22:14		

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: GCSV/3088 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60180441001, 60180441002, 60180441003, 60180441004, 60180441005, 60180441006, 60180441007, 60180441008, 60180441009, 60180441010, 60180441011, 60180441012, 60180441013, 60180441014, 60180441015, 60180441016, 60180441017, 60180441018, 60180441019, 60180441020

METHOD BLANK: 102940 Matrix: Water
Associated Lab Samples: 60180441001, 60180441002, 60180441003, 60180441004, 60180441005, 60180441006, 60180441007, 60180441008, 60180441009, 60180441010, 60180441011, 60180441012, 60180441013, 60180441014, 60180441015, 60180441016, 60180441017, 60180441018, 60180441019, 60180441020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	10/23/14 12:31	

LABORATORY CONTROL SAMPLE: 102941

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	107000	107	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 102942 102943

Parameter	Units	60180441004 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	95700	109000	96	109	40-140	13	40	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: GCSV/3093 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60180441021, 60180441022, 60180441023, 60180441024

METHOD BLANK: 103374 Matrix: Water
Associated Lab Samples: 60180441021, 60180441022, 60180441023, 60180441024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	10/25/14 13:36	

LABORATORY CONTROL SAMPLE: 103375

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	109000	109	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 103376 103377

Parameter	Units	60180441021 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	109000	107000	109	107	40-140	2	40	

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.: 60180441

QC Batch: MPRP/29391 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60180441001, 60180441002, 60180441003, 60180441004, 60180441005, 60180441006, 60180441007, 60180441008, 60180441009, 60180441010, 60180441011, 60180441012, 60180441013, 60180441014, 60180441015, 60180441016, 60180441017, 60180441018, 60180441019

METHOD BLANK: 1463773 Matrix: Water
Associated Lab Samples: 60180441001, 60180441002, 60180441003, 60180441004, 60180441005, 60180441006, 60180441007, 60180441008, 60180441009, 60180441010, 60180441011, 60180441012, 60180441013, 60180441014, 60180441015, 60180441016, 60180441017, 60180441018, 60180441019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	10/22/14 14:37	
Manganese	ug/L	ND	5.0	10/22/14 14:37	

LABORATORY CONTROL SAMPLE: 1463774

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9720	97	80-120	
Manganese	ug/L	1000	963	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1463775 1463776

Parameter	Units	60180441004 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	9960	9700	100	97	75-125	3	20	
Manganese	ug/L	155	1000	1000	1120	1090	96	93	75-125	3	20	

MATRIX SPIKE SAMPLE: 1463777

Parameter	Units	60180441006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	ND	10000	9740	97	75-125	
Manganese	ug/L	6.4	1000	960	95	75-125	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: MPRP/29392 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60180441020, 60180441021, 60180441022, 60180441023, 60180441024

METHOD BLANK: 1463779 Matrix: Water
Associated Lab Samples: 60180441020, 60180441021, 60180441022, 60180441023, 60180441024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	10/23/14 12:58	
Manganese	ug/L	ND	5.0	10/23/14 12:58	

LABORATORY CONTROL SAMPLE: 1463780

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9510	95	80-120	
Manganese	ug/L	1000	1010	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1463781 1463782

Parameter	Units	60180441020 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	827	10000	10000	10200	10100	94	92	75-125	1	20	
Manganese	ug/L	359	1000	1000	1300	1290	94	93	75-125	1	20	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: MSV/65190 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60180441001, 60180441003, 60180441004, 60180441005, 60180441006, 60180441007, 60180441010, 60180441011, 60180441012, 60180441013, 60180441014, 60180441015, 60180441016, 60180441017, 60180441018, 60180441021, 60180441022, 60180441023

METHOD BLANK: 1463690 Matrix: Water
Associated Lab Samples: 60180441001, 60180441003, 60180441004, 60180441005, 60180441006, 60180441007, 60180441010, 60180441011, 60180441012, 60180441013, 60180441014, 60180441015, 60180441016, 60180441017, 60180441018, 60180441021, 60180441022, 60180441023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	10/20/14 10:07	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/20/14 10:07	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/20/14 10:07	
1,1-Dichloroethane	ug/L	ND	2.4	10/20/14 10:07	
1,1-Dichloroethene	ug/L	ND	5.0	10/20/14 10:07	
1,2-Dichloroethane	ug/L	ND	5.0	10/20/14 10:07	
1,2-Dichloropropane	ug/L	ND	5.0	10/20/14 10:07	
2-Butanone (MEK)	ug/L	ND	10.0	10/20/14 10:07	
2-Hexanone	ug/L	ND	10.0	10/20/14 10:07	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/20/14 10:07	
Acetone	ug/L	ND	10.0	10/20/14 10:07	
Benzene	ug/L	ND	5.0	10/20/14 10:07	
Bromodichloromethane	ug/L	ND	5.0	10/20/14 10:07	
Bromoform	ug/L	ND	5.0	10/20/14 10:07	
Bromomethane	ug/L	ND	7.0	10/20/14 10:07	
Carbon disulfide	ug/L	ND	10.0	10/20/14 10:07	
Carbon tetrachloride	ug/L	ND	5.0	10/20/14 10:07	
Chlorobenzene	ug/L	ND	5.0	10/20/14 10:07	
Chloroethane	ug/L	ND	10.0	10/20/14 10:07	
Chloroform	ug/L	ND	5.0	10/20/14 10:07	
Chloromethane	ug/L	ND	10.0	10/20/14 10:07	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/20/14 10:07	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/20/14 10:07	
Dibromochloromethane	ug/L	ND	5.0	10/20/14 10:07	
Ethylbenzene	ug/L	ND	5.0	10/20/14 10:07	
Methylene chloride	ug/L	ND	5.0	10/20/14 10:07	
Styrene	ug/L	ND	5.0	10/20/14 10:07	
Tetrachloroethene	ug/L	ND	5.0	10/20/14 10:07	
Toluene	ug/L	ND	5.0	10/20/14 10:07	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/20/14 10:07	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/20/14 10:07	
Trichloroethene	ug/L	ND	5.0	10/20/14 10:07	
Vinyl chloride	ug/L	ND	2.0	10/20/14 10:07	
Xylene (Total)	ug/L	ND	5.0	10/20/14 10:07	
1,2-Dichloroethane-d4 (S)	%	103	80-120	10/20/14 10:07	
4-Bromofluorobenzene (S)	%	101	80-120	10/20/14 10:07	
Toluene-d8 (S)	%	100	80-120	10/20/14 10:07	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

LABORATORY CONTROL SAMPLE: 1463691

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.8	104	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	20.0	100	73-124	
1,1,2-Trichloroethane	ug/L	20	19.6	98	80-120	
1,1-Dichloroethane	ug/L	20	20.4	102	77-120	
1,1-Dichloroethene	ug/L	20	20.8	104	78-126	
1,2-Dichloroethane	ug/L	20	20.6	103	77-123	
1,2-Dichloropropane	ug/L	20	20.3	101	80-121	
2-Butanone (MEK)	ug/L	100	84.5	84	52-145	
2-Hexanone	ug/L	100	95.0	95	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	93.7	94	71-131	
Acetone	ug/L	100	91.6	92	32-155	
Benzene	ug/L	20	19.9	99	80-120	
Bromodichloromethane	ug/L	20	19.8	99	80-120	
Bromoform	ug/L	20	19.1	96	73-124	
Bromomethane	ug/L	20	18.1	91	31-144	
Carbon disulfide	ug/L	20	20.1	100	65-125	
Carbon tetrachloride	ug/L	20	20.4	102	78-128	
Chlorobenzene	ug/L	20	20.8	104	80-120	
Chloroethane	ug/L	20	19.0	95	55-137	
Chloroform	ug/L	20	20.8	104	79-120	
Chloromethane	ug/L	20	21.0	105	22-138	
cis-1,2-Dichloroethene	ug/L	20	19.7	99	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.0	100	80-120	
Dibromochloromethane	ug/L	20	20.7	104	80-120	
Ethylbenzene	ug/L	20	20.4	102	80-121	
Methylene chloride	ug/L	20	19.1	96	73-126	
Styrene	ug/L	20	21.4	107	80-120	
Tetrachloroethene	ug/L	20	20.7	104	80-121	
Toluene	ug/L	20	19.8	99	80-122	
trans-1,2-Dichloroethene	ug/L	20	20.7	103	79-121	
trans-1,3-Dichloropropene	ug/L	20	21.8	109	80-127	
Trichloroethene	ug/L	20	19.5	98	80-120	
Vinyl chloride	ug/L	20	19.2	96	59-120	
Xylene (Total)	ug/L	60	64.0	107	80-121	
1,2-Dichloroethane-d4 (S)	%			103	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1463692 1463693

Parameter	Units	60180441004 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	21.9	22.5	110	112	71-136	3	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.0	19.9	95	100	61-127	5	21	
1,1,2-Trichloroethane	ug/L	ND	20	20	18.9	19.4	95	97	63-123	3	22	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1463692 1463693

Parameter	Units	60180441004 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	4.8	20	20	26.2	27.1	107	112	62-128	3	25	
1,1-Dichloroethene	ug/L	0.53J	20	20	23.1	23.7	113	116	60-144	2	28	
1,2-Dichloroethane	ug/L	ND	20	20	20.8	21.6	104	108	49-148	4	35	
1,2-Dichloropropane	ug/L	ND	20	20	19.8	20.7	99	103	66-130	4	22	
2-Butanone (MEK)	ug/L	ND	100	100	80.6	85.7	81	86	36-145	6	23	
2-Hexanone	ug/L	ND	100	100	88.8	91.3	89	91	42-140	3	24	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	89.3	96.0	89	96	52-137	7	24	
Acetone	ug/L	ND	100	100	88.5	93.0	88	93	24-151	5	23	
Benzene	ug/L	ND	20	20	20.5	21.3	103	106	37-157	4	32	
Bromodichloromethane	ug/L	ND	20	20	19.6	20.2	98	101	67-125	3	21	
Bromoform	ug/L	ND	20	20	18.5	19.1	92	95	55-124	3	23	
Bromomethane	ug/L	ND	20	20	18.4	20.2	92	101	25-138	9	42	
Carbon disulfide	ug/L	ND	20	20	22.5	22.6	113	113	57-133	0	23	
Carbon tetrachloride	ug/L	ND	20	20	21.8	22.5	109	113	68-142	4	21	
Chlorobenzene	ug/L	ND	20	20	20.5	21.2	103	106	66-133	3	20	
Chloroethane	ug/L	ND	20	20	20.2	21.1	101	106	46-147	4	28	
Chloroform	ug/L	ND	20	20	20.8	21.5	104	108	66-127	4	20	
Chloromethane	ug/L	ND	20	20	26.0	25.6	130	128	19-136	1	36	
cis-1,2-Dichloroethene	ug/L	5.2	20	20	25.6	26.2	102	105	55-140	2	23	
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.0	19.7	95	99	62-122	4	22	
Dibromochloromethane	ug/L	ND	20	20	20.9	21.5	104	108	62-130	3	22	
Ethylbenzene	ug/L	ND	20	20	20.4	21.2	102	106	31-160	4	32	
Methylene chloride	ug/L	ND	20	20	19.6	20.7	97	103	55-132	5	23	
Styrene	ug/L	ND	20	20	7.6	9.0	38	45	55-134	17	25	M1
Tetrachloroethene	ug/L	ND	20	20	20.8	21.2	104	106	69-133	2	20	
Toluene	ug/L	ND	20	20	20.0	20.7	100	104	35-157	4	37	
trans-1,2-Dichloroethene	ug/L	ND	20	20	22.1	23.1	111	115	66-131	4	23	
trans-1,3-Dichloropropene	ug/L	ND	20	20	21.0	21.0	105	105	62-131	0	23	
Trichloroethene	ug/L	3.1J	20	20	22.5	23.5	97	102	61-135	5	21	
Vinyl chloride	ug/L	ND	20	20	22.9	23.6	113	117	44-128	3	22	
Xylene (Total)	ug/L	ND	60	60	63.5	65.9	106	110	34-156	4	37	
1,2-Dichloroethane-d4 (S)	%						102	104	80-120			
4-Bromofluorobenzene (S)	%						100	98	80-120			
Toluene-d8 (S)	%						100	101	80-120			
Preservation pH		1.0			1.0	1.0				0		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1463694 1463695

Parameter	Units	60180441006 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	21.8	22.0	109	110	71-136	1	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.2	19.5	96	98	61-127	2	21	
1,1,2-Trichloroethane	ug/L	ND	20	20	19.0	19.8	95	99	63-123	4	22	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1463694 1463695

Parameter	Units	60180441006 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	21.4	21.7	107	109	62-128	2	25	
1,1-Dichloroethene	ug/L	ND	20	20	22.8	23.0	114	115	60-144	1	28	
1,2-Dichloroethane	ug/L	ND	20	20	20.6	21.5	103	108	49-148	4	35	
1,2-Dichloropropane	ug/L	ND	20	20	20.1	20.5	101	103	66-130	2	22	
2-Butanone (MEK)	ug/L	ND	100	100	80.8	81.9	81	82	36-145	1	23	
2-Hexanone	ug/L	ND	100	100	88.1	92.6	88	93	42-140	5	24	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	89.8	92.8	90	93	52-137	3	24	
Acetone	ug/L	ND	100	100	90.5	92.9	91	93	24-151	3	23	
Benzene	ug/L	ND	20	20	20.6	20.9	103	105	37-157	1	32	
Bromodichloromethane	ug/L	ND	20	20	20.0	20.0	100	100	67-125	0	21	
Bromoform	ug/L	ND	20	20	17.9	18.9	89	95	55-124	6	23	
Bromomethane	ug/L	ND	20	20	20.5	20.5	103	102	25-138	0	42	
Carbon disulfide	ug/L	ND	20	20	22.9	21.9	114	109	57-133	4	23	
Carbon tetrachloride	ug/L	ND	20	20	21.9	22.0	110	110	68-142	0	21	
Chlorobenzene	ug/L	ND	20	20	20.7	21.1	103	105	66-133	2	20	
Chloroethane	ug/L	ND	20	20	21.4	20.5	107	103	46-147	4	28	
Chloroform	ug/L	ND	20	20	21.1	20.9	105	105	66-127	1	20	
Chloromethane	ug/L	ND	20	20	26.5	25.5	133	128	19-136	4	36	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.1	20.5	101	102	55-140	2	23	
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.2	19.3	96	97	62-122	0	22	
Dibromochloromethane	ug/L	ND	20	20	20.9	21.3	105	106	62-130	2	22	
Ethylbenzene	ug/L	ND	20	20	20.6	20.9	103	104	31-160	1	32	
Methylene chloride	ug/L	ND	20	20	19.2	19.5	96	97	55-132	1	23	
Styrene	ug/L	ND	20	20	0.71J	0.66J	4	3	55-134		25	M1
Tetrachloroethene	ug/L	ND	20	20	21.2	20.7	106	103	69-133	3	20	
Toluene	ug/L	ND	20	20	20.4	20.2	102	101	35-157	1	37	
trans-1,2-Dichloroethene	ug/L	ND	20	20	22.2	21.9	111	109	66-131	1	23	
trans-1,3-Dichloropropene	ug/L	ND	20	20	21.1	21.2	106	106	62-131	0	23	
Trichloroethene	ug/L	ND	20	20	20.2	20.1	101	101	61-135	0	21	
Vinyl chloride	ug/L	ND	20	20	22.4	22.9	112	114	44-128	2	22	
Xylene (Total)	ug/L	ND	60	60	64.7	65.4	108	109	34-156	1	37	
1,2-Dichloroethane-d4 (S)	%						101	102	80-120			
4-Bromofluorobenzene (S)	%						100	99	80-120			
Toluene-d8 (S)	%						100	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.: 60180441

QC Batch: MSV/65207 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60180441024, 60180441025, 60180441026, 60180441027, 60180441028, 60180441029

METHOD BLANK: 1463834 Matrix: Water
Associated Lab Samples: 60180441024, 60180441025, 60180441026, 60180441027, 60180441028, 60180441029

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	10/20/14 17:22	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/20/14 17:22	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/20/14 17:22	
1,1-Dichloroethane	ug/L	ND	2.4	10/20/14 17:22	
1,1-Dichloroethene	ug/L	ND	5.0	10/20/14 17:22	
1,2-Dichloroethane	ug/L	ND	5.0	10/20/14 17:22	
1,2-Dichloropropane	ug/L	ND	5.0	10/20/14 17:22	
2-Butanone (MEK)	ug/L	ND	10.0	10/20/14 17:22	
2-Hexanone	ug/L	ND	10.0	10/20/14 17:22	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/20/14 17:22	
Acetone	ug/L	ND	10.0	10/20/14 17:22	
Benzene	ug/L	ND	5.0	10/20/14 17:22	
Bromodichloromethane	ug/L	ND	5.0	10/20/14 17:22	
Bromoform	ug/L	ND	5.0	10/20/14 17:22	
Bromomethane	ug/L	ND	7.0	10/20/14 17:22	
Carbon disulfide	ug/L	ND	10.0	10/20/14 17:22	
Carbon tetrachloride	ug/L	ND	5.0	10/20/14 17:22	
Chlorobenzene	ug/L	ND	5.0	10/20/14 17:22	
Chloroethane	ug/L	ND	10.0	10/20/14 17:22	
Chloroform	ug/L	ND	5.0	10/20/14 17:22	
Chloromethane	ug/L	ND	10.0	10/20/14 17:22	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/20/14 17:22	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/20/14 17:22	
Dibromochloromethane	ug/L	ND	5.0	10/20/14 17:22	
Ethylbenzene	ug/L	ND	5.0	10/20/14 17:22	
Methylene chloride	ug/L	ND	5.0	10/20/14 17:22	
Styrene	ug/L	ND	5.0	10/20/14 17:22	
Tetrachloroethene	ug/L	ND	5.0	10/20/14 17:22	
Toluene	ug/L	ND	5.0	10/20/14 17:22	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/20/14 17:22	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/20/14 17:22	
Trichloroethene	ug/L	ND	5.0	10/20/14 17:22	
Vinyl chloride	ug/L	ND	2.0	10/20/14 17:22	
Xylene (Total)	ug/L	ND	5.0	10/20/14 17:22	
1,2-Dichloroethane-d4 (S)	%	104	80-120	10/20/14 17:22	
4-Bromofluorobenzene (S)	%	97	80-120	10/20/14 17:22	
Toluene-d8 (S)	%	100	80-120	10/20/14 17:22	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

LABORATORY CONTROL SAMPLE: 1463835

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.8	104	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	19.4	97	73-124	
1,1,2-Trichloroethane	ug/L	20	21.1	105	80-120	
1,1-Dichloroethane	ug/L	20	21.2	106	77-120	
1,1-Dichloroethene	ug/L	20	21.1	106	78-126	
1,2-Dichloroethane	ug/L	20	22.0	110	77-123	
1,2-Dichloropropane	ug/L	20	20.7	104	80-121	
2-Butanone (MEK)	ug/L	100	91.1	91	52-145	
2-Hexanone	ug/L	100	105	105	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	106	106	71-131	
Acetone	ug/L	100	97.0	97	32-155	
Benzene	ug/L	20	20.1	100	80-120	
Bromodichloromethane	ug/L	20	21.1	106	80-120	
Bromoform	ug/L	20	20.2	101	73-124	
Bromomethane	ug/L	20	19.0	95	31-144	
Carbon disulfide	ug/L	20	19.4	97	65-125	
Carbon tetrachloride	ug/L	20	20.2	101	78-128	
Chlorobenzene	ug/L	20	21.4	107	80-120	
Chloroethane	ug/L	20	18.0	90	55-137	
Chloroform	ug/L	20	20.8	104	79-120	
Chloromethane	ug/L	20	20.5	103	22-138	
cis-1,2-Dichloroethene	ug/L	20	19.7	98	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.9	100	80-120	
Dibromochloromethane	ug/L	20	20.4	102	80-120	
Ethylbenzene	ug/L	20	20.6	103	80-121	
Methylene chloride	ug/L	20	19.4	97	73-126	
Styrene	ug/L	20	22.5	113	80-120	
Tetrachloroethene	ug/L	20	20.1	100	80-121	
Toluene	ug/L	20	20.0	100	80-122	
trans-1,2-Dichloroethene	ug/L	20	20.5	102	79-121	
trans-1,3-Dichloropropene	ug/L	20	22.6	113	80-127	
Trichloroethene	ug/L	20	21.4	107	80-120	
Vinyl chloride	ug/L	20	18.4	92	59-120	
Xylene (Total)	ug/L	60	65.4	109	80-121	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			100	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: MSV/65208 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60180441030, 60180441031, 60180441032, 60180441033

METHOD BLANK: 1463836 Matrix: Water
Associated Lab Samples: 60180441030, 60180441031, 60180441032, 60180441033

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	10/20/14 21:30	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/20/14 21:30	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/20/14 21:30	
1,1-Dichloroethane	ug/L	ND	2.4	10/20/14 21:30	
1,1-Dichloroethene	ug/L	ND	5.0	10/20/14 21:30	
1,2-Dichloroethane	ug/L	ND	5.0	10/20/14 21:30	
1,2-Dichloropropane	ug/L	ND	5.0	10/20/14 21:30	
2-Butanone (MEK)	ug/L	ND	10.0	10/20/14 21:30	
2-Hexanone	ug/L	ND	10.0	10/20/14 21:30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/20/14 21:30	
Acetone	ug/L	ND	10.0	10/20/14 21:30	
Benzene	ug/L	ND	5.0	10/20/14 21:30	
Bromodichloromethane	ug/L	ND	5.0	10/20/14 21:30	
Bromoform	ug/L	ND	5.0	10/20/14 21:30	
Bromomethane	ug/L	ND	7.0	10/20/14 21:30	
Carbon disulfide	ug/L	ND	10.0	10/20/14 21:30	
Carbon tetrachloride	ug/L	ND	5.0	10/20/14 21:30	
Chlorobenzene	ug/L	ND	5.0	10/20/14 21:30	
Chloroethane	ug/L	ND	10.0	10/20/14 21:30	
Chloroform	ug/L	ND	5.0	10/20/14 21:30	
Chloromethane	ug/L	ND	10.0	10/20/14 21:30	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/20/14 21:30	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/20/14 21:30	
Dibromochloromethane	ug/L	ND	5.0	10/20/14 21:30	
Ethylbenzene	ug/L	ND	5.0	10/20/14 21:30	
Methylene chloride	ug/L	0.73J	5.0	10/20/14 21:30	
Styrene	ug/L	ND	5.0	10/20/14 21:30	
Tetrachloroethene	ug/L	ND	5.0	10/20/14 21:30	
Toluene	ug/L	ND	5.0	10/20/14 21:30	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/20/14 21:30	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/20/14 21:30	
Trichloroethene	ug/L	ND	5.0	10/20/14 21:30	
Vinyl chloride	ug/L	ND	2.0	10/20/14 21:30	
Xylene (Total)	ug/L	ND	5.0	10/20/14 21:30	
1,2-Dichloroethane-d4 (S)	%	96	80-120	10/20/14 21:30	
4-Bromofluorobenzene (S)	%	93	80-120	10/20/14 21:30	
Toluene-d8 (S)	%	104	80-120	10/20/14 21:30	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

LABORATORY CONTROL SAMPLE: 1463837

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.3	102	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	18.1	90	73-124	
1,1,2-Trichloroethane	ug/L	20	20.7	103	80-120	
1,1-Dichloroethane	ug/L	20	19.9	100	77-120	
1,1-Dichloroethene	ug/L	20	19.5	97	78-126	
1,2-Dichloroethane	ug/L	20	19.8	99	77-123	
1,2-Dichloropropane	ug/L	20	19.5	97	80-121	
2-Butanone (MEK)	ug/L	100	93.5	93	52-145	
2-Hexanone	ug/L	100	95.5	96	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	96.4	96	71-131	
Acetone	ug/L	100	90.4	90	32-155	
Benzene	ug/L	20	19.5	97	80-120	
Bromodichloromethane	ug/L	20	21.7	108	80-120	
Bromoform	ug/L	20	24.3	121	73-124	
Bromomethane	ug/L	20	17.2	86	31-144	
Carbon disulfide	ug/L	20	16.6	83	65-125	
Carbon tetrachloride	ug/L	20	21.4	107	78-128	
Chlorobenzene	ug/L	20	22.7	114	80-120	
Chloroethane	ug/L	20	17.0	85	55-137	
Chloroform	ug/L	20	20.8	104	79-120	
Chloromethane	ug/L	20	15.5	78	22-138	
cis-1,2-Dichloroethene	ug/L	20	19.7	99	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.3	101	80-120	
Dibromochloromethane	ug/L	20	22.6	113	80-120	
Ethylbenzene	ug/L	20	21.1	106	80-121	
Methylene chloride	ug/L	20	19.8	99	73-126	
Styrene	ug/L	20	23.2	116	80-120	
Tetrachloroethene	ug/L	20	22.9	114	80-121	
Toluene	ug/L	20	21.4	107	80-122	
trans-1,2-Dichloroethene	ug/L	20	19.9	100	79-121	
trans-1,3-Dichloropropene	ug/L	20	22.0	110	80-127	
Trichloroethene	ug/L	20	20.2	101	80-120	
Vinyl chloride	ug/L	20	15.7	79	59-120	
Xylene (Total)	ug/L	60	68.1	114	80-121	
1,2-Dichloroethane-d4 (S)	%			95	80-120	
4-Bromofluorobenzene (S)	%			91	80-120	
Toluene-d8 (S)	%			105	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: MSV/65247 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60180441001, 60180441007, 60180441013, 60180441015, 60180441017, 60180441019, 60180441020, 60180441021, 60180441023, 60180441028

METHOD BLANK: 1464527 Matrix: Water
Associated Lab Samples: 60180441001, 60180441007, 60180441013, 60180441015, 60180441017, 60180441019, 60180441020, 60180441021, 60180441023, 60180441028

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	10/21/14 13:25	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/21/14 13:25	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/21/14 13:25	
1,1-Dichloroethane	ug/L	ND	2.4	10/21/14 13:25	
1,1-Dichloroethene	ug/L	ND	5.0	10/21/14 13:25	
1,2-Dichloroethane	ug/L	ND	5.0	10/21/14 13:25	
1,2-Dichloropropane	ug/L	ND	5.0	10/21/14 13:25	
2-Butanone (MEK)	ug/L	ND	10.0	10/21/14 13:25	
2-Hexanone	ug/L	ND	10.0	10/21/14 13:25	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/21/14 13:25	
Acetone	ug/L	ND	10.0	10/21/14 13:25	
Benzene	ug/L	ND	5.0	10/21/14 13:25	
Bromodichloromethane	ug/L	ND	5.0	10/21/14 13:25	
Bromoform	ug/L	ND	5.0	10/21/14 13:25	
Bromomethane	ug/L	ND	7.0	10/21/14 13:25	
Carbon disulfide	ug/L	ND	10.0	10/21/14 13:25	
Carbon tetrachloride	ug/L	ND	5.0	10/21/14 13:25	
Chlorobenzene	ug/L	ND	5.0	10/21/14 13:25	
Chloroethane	ug/L	ND	10.0	10/21/14 13:25	
Chloroform	ug/L	ND	5.0	10/21/14 13:25	
Chloromethane	ug/L	ND	10.0	10/21/14 13:25	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/21/14 13:25	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/21/14 13:25	
Dibromochloromethane	ug/L	ND	5.0	10/21/14 13:25	
Ethylbenzene	ug/L	ND	5.0	10/21/14 13:25	
Methylene chloride	ug/L	ND	5.0	10/21/14 13:25	
Styrene	ug/L	ND	5.0	10/21/14 13:25	
Tetrachloroethene	ug/L	ND	5.0	10/21/14 13:25	
Toluene	ug/L	ND	5.0	10/21/14 13:25	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/21/14 13:25	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/21/14 13:25	
Trichloroethene	ug/L	ND	5.0	10/21/14 13:25	
Vinyl chloride	ug/L	ND	2.0	10/21/14 13:25	
Xylene (Total)	ug/L	ND	5.0	10/21/14 13:25	
1,2-Dichloroethane-d4 (S)	%	101	80-120	10/21/14 13:25	
4-Bromofluorobenzene (S)	%	96	80-120	10/21/14 13:25	
Toluene-d8 (S)	%	96	80-120	10/21/14 13:25	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

LABORATORY CONTROL SAMPLE: 1464528

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.2	96	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	19.8	99	73-124	
1,1,2-Trichloroethane	ug/L	20	19.8	99	80-120	
1,1-Dichloroethane	ug/L	20	19.4	97	77-120	
1,1-Dichloroethene	ug/L	20	19.3	96	78-126	
1,2-Dichloroethane	ug/L	20	19.1	95	77-123	
1,2-Dichloropropane	ug/L	20	18.9	94	80-121	
2-Butanone (MEK)	ug/L	100	77.6	78	52-145	
2-Hexanone	ug/L	100	93.3	93	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	89.6	90	71-131	
Acetone	ug/L	100	87.2	87	32-155	
Benzene	ug/L	20	18.7	94	80-120	
Bromodichloromethane	ug/L	20	19.0	95	80-120	
Bromoform	ug/L	20	18.8	94	73-124	
Bromomethane	ug/L	20	17.1	86	31-144	
Carbon disulfide	ug/L	20	18.9	95	65-125	
Carbon tetrachloride	ug/L	20	18.6	93	78-128	
Chlorobenzene	ug/L	20	20.5	103	80-120	
Chloroethane	ug/L	20	17.1	86	55-137	
Chloroform	ug/L	20	19.6	98	79-120	
Chloromethane	ug/L	20	19.1	96	22-138	
cis-1,2-Dichloroethene	ug/L	20	18.7	93	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.7	93	80-120	
Dibromochloromethane	ug/L	20	20.1	101	80-120	
Ethylbenzene	ug/L	20	20.5	102	80-121	
Methylene chloride	ug/L	20	18.0	90	73-126	
Styrene	ug/L	20	22.3	111	80-120	
Tetrachloroethene	ug/L	20	19.5	97	80-121	
Toluene	ug/L	20	18.7	93	80-122	
trans-1,2-Dichloroethene	ug/L	20	19.9	100	79-121	
trans-1,3-Dichloropropene	ug/L	20	22.0	110	80-127	
Trichloroethene	ug/L	20	18.2	91	80-120	
Vinyl chloride	ug/L	20	17.2	86	59-120	
Xylene (Total)	ug/L	60	64.5	108	80-121	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			96	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: MSV/65176 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60180441002, 60180441008, 60180441009

METHOD BLANK: 1463439 Matrix: Water
Associated Lab Samples: 60180441002, 60180441008, 60180441009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	10/19/14 14:06	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/19/14 14:06	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/19/14 14:06	
1,1-Dichloroethane	ug/L	ND	2.4	10/19/14 14:06	
1,1-Dichloroethene	ug/L	ND	5.0	10/19/14 14:06	
1,2-Dichloroethane	ug/L	ND	5.0	10/19/14 14:06	
1,2-Dichloropropane	ug/L	ND	5.0	10/19/14 14:06	
2-Butanone (MEK)	ug/L	ND	10.0	10/19/14 14:06	
2-Hexanone	ug/L	ND	10.0	10/19/14 14:06	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/19/14 14:06	
Acetone	ug/L	ND	10.0	10/19/14 14:06	
Benzene	ug/L	ND	5.0	10/19/14 14:06	
Bromodichloromethane	ug/L	ND	5.0	10/19/14 14:06	
Bromoform	ug/L	ND	5.0	10/19/14 14:06	
Bromomethane	ug/L	ND	7.0	10/19/14 14:06	
Carbon disulfide	ug/L	ND	10.0	10/19/14 14:06	
Carbon tetrachloride	ug/L	ND	5.0	10/19/14 14:06	
Chlorobenzene	ug/L	ND	5.0	10/19/14 14:06	
Chloroethane	ug/L	ND	10.0	10/19/14 14:06	
Chloroform	ug/L	ND	5.0	10/19/14 14:06	
Chloromethane	ug/L	ND	10.0	10/19/14 14:06	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/19/14 14:06	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/19/14 14:06	
Dibromochloromethane	ug/L	ND	5.0	10/19/14 14:06	
Ethylbenzene	ug/L	ND	5.0	10/19/14 14:06	
Methylene chloride	ug/L	ND	5.0	10/19/14 14:06	
Styrene	ug/L	ND	5.0	10/19/14 14:06	
Tetrachloroethene	ug/L	ND	5.0	10/19/14 14:06	
Toluene	ug/L	ND	5.0	10/19/14 14:06	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/19/14 14:06	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/19/14 14:06	
Trichloroethene	ug/L	ND	5.0	10/19/14 14:06	
Vinyl chloride	ug/L	ND	2.0	10/19/14 14:06	
Xylene (Total)	ug/L	ND	5.0	10/19/14 14:06	
1,2-Dichloroethane-d4 (S)	%	101	80-120	10/19/14 14:06	
4-Bromofluorobenzene (S)	%	99	80-120	10/19/14 14:06	
Toluene-d8 (S)	%	100	80-120	10/19/14 14:06	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

LABORATORY CONTROL SAMPLE: 1463440

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.0	105	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	20.6	103	73-124	
1,1,2-Trichloroethane	ug/L	20	21.0	105	80-120	
1,1-Dichloroethane	ug/L	20	21.2	106	77-120	
1,1-Dichloroethene	ug/L	20	21.7	108	78-126	
1,2-Dichloroethane	ug/L	20	21.5	108	77-123	
1,2-Dichloropropane	ug/L	20	20.7	104	80-121	
2-Butanone (MEK)	ug/L	100	93.5	93	52-145	
2-Hexanone	ug/L	100	101	101	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	102	102	71-131	
Acetone	ug/L	100	103	103	32-155	
Benzene	ug/L	20	20.6	103	80-120	
Bromodichloromethane	ug/L	20	20.8	104	80-120	
Bromoform	ug/L	20	21.5	108	73-124	
Bromomethane	ug/L	20	19.8	99	31-144	
Carbon disulfide	ug/L	20	21.7	108	65-125	
Carbon tetrachloride	ug/L	20	20.9	105	78-128	
Chlorobenzene	ug/L	20	20.9	104	80-120	
Chloroethane	ug/L	20	19.6	98	55-137	
Chloroform	ug/L	20	20.8	104	79-120	
Chloromethane	ug/L	20	24.7	123	22-138	
cis-1,2-Dichloroethene	ug/L	20	20.8	104	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.2	101	80-120	
Dibromochloromethane	ug/L	20	21.1	105	80-120	
Ethylbenzene	ug/L	20	20.7	104	80-121	
Methylene chloride	ug/L	20	19.4	97	73-126	
Styrene	ug/L	20	22.7	114	80-120	
Tetrachloroethene	ug/L	20	20.8	104	80-121	
Toluene	ug/L	20	20.4	102	80-122	
trans-1,2-Dichloroethene	ug/L	20	20.8	104	79-121	
trans-1,3-Dichloropropene	ug/L	20	22.8	114	80-127	
Trichloroethene	ug/L	20	20.3	102	80-120	
Vinyl chloride	ug/L	20	21.5	108	59-120	
Xylene (Total)	ug/L	60	64.9	108	80-121	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: MSV/65245
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60180441002, 60180441008

METHOD BLANK: 1464523
Matrix: Water
Associated Lab Samples: 60180441002, 60180441008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	10/21/14 13:25	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/21/14 13:25	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/21/14 13:25	
1,1-Dichloroethane	ug/L	ND	2.4	10/21/14 13:25	
1,1-Dichloroethene	ug/L	ND	5.0	10/21/14 13:25	
1,2-Dichloroethane	ug/L	ND	5.0	10/21/14 13:25	
1,2-Dichloropropane	ug/L	ND	5.0	10/21/14 13:25	
2-Butanone (MEK)	ug/L	ND	10.0	10/21/14 13:25	
2-Hexanone	ug/L	ND	10.0	10/21/14 13:25	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/21/14 13:25	
Acetone	ug/L	ND	10.0	10/21/14 13:25	
Benzene	ug/L	ND	5.0	10/21/14 13:25	
Bromodichloromethane	ug/L	ND	5.0	10/21/14 13:25	
Bromoform	ug/L	ND	5.0	10/21/14 13:25	
Bromomethane	ug/L	ND	7.0	10/21/14 13:25	
Carbon disulfide	ug/L	ND	10.0	10/21/14 13:25	
Carbon tetrachloride	ug/L	ND	5.0	10/21/14 13:25	
Chlorobenzene	ug/L	ND	5.0	10/21/14 13:25	
Chloroethane	ug/L	ND	10.0	10/21/14 13:25	
Chloroform	ug/L	ND	5.0	10/21/14 13:25	
Chloromethane	ug/L	ND	10.0	10/21/14 13:25	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/21/14 13:25	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/21/14 13:25	
Dibromochloromethane	ug/L	ND	5.0	10/21/14 13:25	
Ethylbenzene	ug/L	ND	5.0	10/21/14 13:25	
Methylene chloride	ug/L	ND	5.0	10/21/14 13:25	
Styrene	ug/L	ND	5.0	10/21/14 13:25	
Tetrachloroethene	ug/L	ND	5.0	10/21/14 13:25	
Toluene	ug/L	ND	5.0	10/21/14 13:25	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/21/14 13:25	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/21/14 13:25	
Vinyl chloride	ug/L	ND	2.0	10/21/14 13:25	
Xylene (Total)	ug/L	ND	5.0	10/21/14 13:25	
1,2-Dichloroethane-d4 (S)	%	101	80-120	10/21/14 13:25	
4-Bromofluorobenzene (S)	%	96	80-120	10/21/14 13:25	
Toluene-d8 (S)	%	96	80-120	10/21/14 13:25	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

LABORATORY CONTROL SAMPLE: 1464524

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.2	96	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	19.8	99	73-124	
1,1,2-Trichloroethane	ug/L	20	19.8	99	80-120	
1,1-Dichloroethane	ug/L	20	19.4	97	77-120	
1,1-Dichloroethene	ug/L	20	19.3	96	78-126	
1,2-Dichloroethane	ug/L	20	19.1	95	77-123	
1,2-Dichloropropane	ug/L	20	18.9	94	80-121	
2-Butanone (MEK)	ug/L	100	77.6	78	52-145	
2-Hexanone	ug/L	100	93.3	93	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	89.6	90	71-131	
Acetone	ug/L	100	87.2	87	32-155	
Benzene	ug/L	20	18.7	94	80-120	
Bromodichloromethane	ug/L	20	19.0	95	80-120	
Bromoform	ug/L	20	18.8	94	73-124	
Bromomethane	ug/L	20	17.1	86	31-144	
Carbon disulfide	ug/L	20	18.9	95	65-125	
Carbon tetrachloride	ug/L	20	18.6	93	78-128	
Chlorobenzene	ug/L	20	20.5	103	80-120	
Chloroethane	ug/L	20	17.1	86	55-137	
Chloroform	ug/L	20	19.6	98	79-120	
Chloromethane	ug/L	20	19.1	96	22-138	
cis-1,2-Dichloroethene	ug/L	20	18.7	93	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.7	93	80-120	
Dibromochloromethane	ug/L	20	20.1	101	80-120	
Ethylbenzene	ug/L	20	20.5	102	80-121	
Methylene chloride	ug/L	20	18.0	90	73-126	
Styrene	ug/L	20	22.3	111	80-120	
Tetrachloroethene	ug/L	20	19.5	97	80-121	
Toluene	ug/L	20	18.7	93	80-122	
trans-1,2-Dichloroethene	ug/L	20	19.9	100	79-121	
trans-1,3-Dichloropropene	ug/L	20	22.0	110	80-127	
Vinyl chloride	ug/L	20	17.2	86	59-120	
Xylene (Total)	ug/L	60	64.5	108	80-121	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			96	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: WET/51064 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60180441001, 60180441002, 60180441003

METHOD BLANK: 1465173 Matrix: Water
Associated Lab Samples: 60180441001, 60180441002, 60180441003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	10/23/14 08:41	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	10/23/14 08:41	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	10/23/14 08:41	

LABORATORY CONTROL SAMPLE: 1465174

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	490	98	90-110	

SAMPLE DUPLICATE: 1465175

Parameter	Units	60180331012 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	33.8	36.6	8	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	33.8	36.6	8	10	

SAMPLE DUPLICATE: 1465176

Parameter	Units	60180331019 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	32.8	32.2	2	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	32.8	32.2	2	10	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: WET/51103 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60180441004, 60180441005, 60180441006, 60180441007, 60180441008, 60180441009, 60180441010, 60180441011, 60180441012, 60180441013, 60180441014, 60180441015, 60180441016, 60180441017, 60180441018, 60180441019, 60180441020, 60180441021, 60180441022, 60180441023

METHOD BLANK: 1466391 Matrix: Water
Associated Lab Samples: 60180441004, 60180441005, 60180441006, 60180441007, 60180441008, 60180441009, 60180441010, 60180441011, 60180441012, 60180441013, 60180441014, 60180441015, 60180441016, 60180441017, 60180441018, 60180441019, 60180441020, 60180441021, 60180441022, 60180441023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	10/23/14 17:34	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	10/23/14 17:34	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	10/23/14 17:34	

LABORATORY CONTROL SAMPLE: 1466392

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	483	97	90-110	

SAMPLE DUPLICATE: 1466393

Parameter	Units	60180441004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	145	144	0	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	145	144	0	10	

SAMPLE DUPLICATE: 1466394

Parameter	Units	60180441006 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	135	139	3	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	135	139	3	10	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: WET/51104 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60180441024

METHOD BLANK: 1466400 Matrix: Water
Associated Lab Samples: 60180441024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	10/24/14 09:05	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	10/24/14 09:05	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	10/24/14 09:05	

LABORATORY CONTROL SAMPLE: 1466401

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	495	99	90-110	

SAMPLE DUPLICATE: 1466402

Parameter	Units	60180495001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	328	337	3	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	328	337	3	10	

SAMPLE DUPLICATE: 1466403

Parameter	Units	60180608002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	272	273	1	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	272	273	1	10	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: WET/50995 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60180441001, 60180441002, 60180441003, 60180441004, 60180441005, 60180441006, 60180441007, 60180441008, 60180441009, 60180441010, 60180441011, 60180441012, 60180441013, 60180441014, 60180441015, 60180441016

METHOD BLANK: 1463610 Matrix: Water
Associated Lab Samples: 60180441001, 60180441002, 60180441003, 60180441004, 60180441005, 60180441006, 60180441007, 60180441008, 60180441009, 60180441010, 60180441011, 60180441012, 60180441013, 60180441014, 60180441015, 60180441016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	10/20/14 11:22	

LABORATORY CONTROL SAMPLE: 1463611

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.52	103	80-120	

MATRIX SPIKE SAMPLE: 1463612

Parameter	Units	60180441004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.31	62	75-125	M1

SAMPLE DUPLICATE: 1463613

Parameter	Units	60180441006 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.: 60180441

QC Batch: WET/50996 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60180441017, 60180441018, 60180441019, 60180441020, 60180441021, 60180441022, 60180441023, 60180441024

METHOD BLANK: 1463614 Matrix: Water
Associated Lab Samples: 60180441017, 60180441018, 60180441019, 60180441020, 60180441021, 60180441022, 60180441023, 60180441024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	10/20/14 11:33	

LABORATORY CONTROL SAMPLE: 1463615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.52	103	80-120	

MATRIX SPIKE SAMPLE: 1463616

Parameter	Units	60180441017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.16	33	75-125	M1

SAMPLE DUPLICATE: 1463617

Parameter	Units	60180441018 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.: 60180441

QC Batch: WETA/31527 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60180441001, 60180441002, 60180441004, 60180441005, 60180441006, 60180441007, 60180441008, 60180441009, 60180441010, 60180441012, 60180441013, 60180441014, 60180441015

METHOD BLANK: 1468097 Matrix: Water
Associated Lab Samples: 60180441004, 60180441005, 60180441012, 60180441013, 60180441014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	10/27/14 13:29	
Sulfate	mg/L	ND	1.0	10/27/14 13:29	

METHOD BLANK: 1469207 Matrix: Water
Associated Lab Samples: 60180441001, 60180441002, 60180441006, 60180441007, 60180441008, 60180441009, 60180441010, 60180441015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	10/29/14 00:24	
Sulfate	mg/L	ND	1.0	10/29/14 00:24	

LABORATORY CONTROL SAMPLE: 1468098

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.0	99	90-110	
Sulfate	mg/L	5	5.1	101	90-110	

LABORATORY CONTROL SAMPLE: 1469208

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	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1468123 1468124

Parameter	Units	60180441004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	161	50	50	221	218	119	113	80-120	1	15	
Sulfate	mg/L	86.9	50	50	142	140	110	107	80-120	1	15	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

MATRIX SPIKE SAMPLE: 1468125

Parameter	Units	60180441006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	108	50	165	113	80-120	
Sulfate	mg/L	18.2	10	28.8	106	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: WETA/31528 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60180441016, 60180441017, 60180441018, 60180441019, 60180441020, 60180441021, 60180441022, 60180441023, 60180441024

METHOD BLANK: 1468102 Matrix: Water
Associated Lab Samples: 60180441016, 60180441017, 60180441018, 60180441019, 60180441020, 60180441021, 60180441022, 60180441023, 60180441024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	10/29/14 19:01	
Sulfate	mg/L	ND	1.0	10/29/14 19:01	

METHOD BLANK: 1470871 Matrix: Water
Associated Lab Samples: 60180441020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	10/30/14 13:19	

LABORATORY CONTROL SAMPLE: 1468103

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.0	100	90-110	
Sulfate	mg/L	5	4.7	95	90-110	

LABORATORY CONTROL SAMPLE: 1470872

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.0	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1468104 1468105

Parameter	Units	60180441016 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	6.6	5	5	11.7	11.6	101	100	80-120	0	15	
Sulfate	mg/L	9.4	5	5	13.1	13.0	74	72	80-120	1	15	M1

MATRIX SPIKE SAMPLE: 1468106

Parameter	Units	60180441017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	135	50	191	113	80-120	
Sulfate	mg/L	324	100	435	111	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: WETA/31574 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60180441003, 60180441011

METHOD BLANK: 1469364 Matrix: Water
Associated Lab Samples: 60180441003, 60180441011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	10/29/14 13:38	
Sulfate	mg/L	ND	1.0	10/29/14 13:38	

LABORATORY CONTROL SAMPLE: 1469365

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	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1469366 1469367

Parameter	Units	60180441003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	766	500	500	1300	1250	108	97	80-120	4	15	
Sulfate	mg/L	7.0	5	5	11.7	11.5	95	91	80-120	2	15	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: WETA/31460 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60180441001, 60180441002, 60180441003, 60180441005, 60180441007, 60180441008, 60180441009

METHOD BLANK: 1464780 Matrix: Water
Associated Lab Samples: 60180441001, 60180441002, 60180441003, 60180441005, 60180441007, 60180441008, 60180441009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	10/23/14 08:27	

LABORATORY CONTROL SAMPLE: 1464781

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.1	103	90-110	

MATRIX SPIKE SAMPLE: 1464782

Parameter	Units	60180392003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	2.1	107	90-110	

MATRIX SPIKE SAMPLE: 1464783

Parameter	Units	60180420002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	4.3	4	7.3	75	90-110	M1

SAMPLE DUPLICATE: 1464784

Parameter	Units	60180421002 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.: 60180441

QC Batch: WETA/31461 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60180441004, 60180441006, 60180441010, 60180441011, 60180441012, 60180441013, 60180441014, 60180441015, 60180441016, 60180441017, 60180441018, 60180441019, 60180441020, 60180441021, 60180441022, 60180441023, 60180441024

METHOD BLANK: 1464785 Matrix: Water
Associated Lab Samples: 60180441004, 60180441006, 60180441010, 60180441011, 60180441012, 60180441013, 60180441014, 60180441015, 60180441016, 60180441017, 60180441018, 60180441019, 60180441020, 60180441021, 60180441022, 60180441023, 60180441024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	10/23/14 09:00	

LABORATORY CONTROL SAMPLE: 1464786

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.0	98	90-110	

MATRIX SPIKE SAMPLE: 1464787

Parameter	Units	60180441004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.1	56	90-110	M1

MATRIX SPIKE SAMPLE: 1464788

Parameter	Units	60180441006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.1	55	90-110	M1

SAMPLE DUPLICATE: 1464789

Parameter	Units	60180442002 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.: 60180441

QC Batch: WETA/31395 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60180441001, 60180441002, 60180441005, 60180441006, 60180441008, 60180441009, 60180441010, 60180441014, 60180441018, 60180441024

METHOD BLANK: 1461711 Matrix: Water
Associated Lab Samples: 60180441001, 60180441002, 60180441005, 60180441006, 60180441008, 60180441009, 60180441010, 60180441014, 60180441018, 60180441024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	10/16/14 16:01	
Nitrogen, Nitrite	mg/L	ND	0.10	10/16/14 16:01	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	10/16/14 16:01	

LABORATORY CONTROL SAMPLE: 1461712

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.7	106	85-115	
Nitrogen, Nitrite	mg/L	.4	0.36	91	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	103	90-110	

MATRIX SPIKE SAMPLE: 1461713

Parameter	Units	60180426004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	ND	1.6	1.9	122	85-115	M1
Nitrogen, Nitrite	mg/L	ND	.4	0.43	107	90-110	
Nitrogen, NO2 plus NO3	mg/L	ND	2	2.4	119	90-110	M1

MATRIX SPIKE SAMPLE: 1461715

Parameter	Units	60180441006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.2	1.6	3.1	116	85-115	M1
Nitrogen, Nitrite	mg/L	ND	.4	0.42	106	90-110	
Nitrogen, NO2 plus NO3	mg/L	1.2	2	3.5	114	90-110	M1

SAMPLE DUPLICATE: 1461714

Parameter	Units	60180453001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.034J		20	
Nitrogen, Nitrite	mg/L	ND	0.072J		20	
Nitrogen, NO2 plus NO3	mg/L	0.10	0.11	4	20	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: WETA/31397 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60180441003, 60180441004, 60180441007, 60180441011, 60180441013, 60180441016, 60180441020

METHOD BLANK: 1461957 Matrix: Water
Associated Lab Samples: 60180441003, 60180441004, 60180441007, 60180441011, 60180441013, 60180441016, 60180441020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	10/16/14 18:03	
Nitrogen, Nitrite	mg/L	ND	0.10	10/16/14 18:03	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	10/16/14 18:03	

LABORATORY CONTROL SAMPLE: 1461958

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.7	103	85-115	
Nitrogen, Nitrite	mg/L	.4	0.37	91	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.0	101	90-110	

MATRIX SPIKE SAMPLE: 1461960

Parameter	Units	92221830003 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	0.39	97	90-110	
Nitrogen, NO2 plus NO3	mg/L	ND	2	2.2	109	90-110	

MATRIX SPIKE SAMPLE: 1461961

Parameter	Units	60180441004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	26.6	16	41.7	94	85-115	
Nitrogen, Nitrite	mg/L	ND	4	4.6	115	90-110	M1
Nitrogen, NO2 plus NO3	mg/L	26.6	20	46.3	98	90-110	

SAMPLE DUPLICATE: 1461959

Parameter	Units	92221830002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	3.4	3.4	1	20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	3.4	3.4	1	20	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: WETA/31404 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60180441012, 60180441015, 60180441017, 60180441019, 60180441021, 60180441022, 60180441023

METHOD BLANK: 1462221 Matrix: Water
Associated Lab Samples: 60180441012, 60180441015, 60180441017, 60180441019, 60180441021, 60180441022, 60180441023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	10/17/14 11:43	
Nitrogen, Nitrite	mg/L	ND	0.10	10/17/14 11:43	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	10/17/14 11:43	

LABORATORY CONTROL SAMPLE: 1462222

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.8	111	85-115	
Nitrogen, Nitrite	mg/L	.4	0.36	91	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	107	90-110	

MATRIX SPIKE SAMPLE: 1462225

Parameter	Units	60180441015 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	0.13	1.6	2.2	129	85-115	M1
Nitrogen, Nitrite	mg/L	ND	.4	0.45	112	90-110	M1
Nitrogen, NO2 plus NO3	mg/L	0.13	2	2.6	126	90-110	M1

SAMPLE DUPLICATE: 1462223

Parameter	Units	60180441022 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	2.7	2.3	16	20	H1
Nitrogen, Nitrite	mg/L	ND	ND		20	H1
Nitrogen, NO2 plus NO3	mg/L	2.7	2.3	16	20	H1

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: WETA/31484 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60180441001, 60180441002, 60180441003, 60180441004, 60180441005, 60180441006, 60180441007, 60180441008, 60180441009, 60180441010, 60180441011, 60180441012, 60180441013, 60180441014, 60180441015, 60180441016

METHOD BLANK: 1465741 Matrix: Water
Associated Lab Samples: 60180441001, 60180441002, 60180441003, 60180441004, 60180441005, 60180441006, 60180441007, 60180441008, 60180441009, 60180441010, 60180441011, 60180441012, 60180441013, 60180441014, 60180441015, 60180441016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	10/23/14 15:24	

LABORATORY CONTROL SAMPLE: 1465742

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.2	103	80-120	

MATRIX SPIKE SAMPLE: 1465744

Parameter	Units	60180441004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	0.70J	5	4.4	74	80-120	M1

MATRIX SPIKE SAMPLE: 1465745

Parameter	Units	60180441006 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	0.60J	5	4.5	78	80-120	M1

SAMPLE DUPLICATE: 1465743

Parameter	Units	60180441001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	ND		25	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: WETA/31506 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60180441017, 60180441018, 60180441019, 60180441020, 60180441021, 60180441022, 60180441023, 60180441024

METHOD BLANK: 1466854 Matrix: Water
Associated Lab Samples: 60180441017, 60180441018, 60180441019, 60180441020, 60180441021, 60180441022, 60180441023, 60180441024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	0.16J	1.0	10/27/14 17:48	

LABORATORY CONTROL SAMPLE: 1466855

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.3	107	80-120	

MATRIX SPIKE SAMPLE: 1466856

Parameter	Units	60180441017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	0.63J	5	4.9	86	80-120	

SAMPLE DUPLICATE: 1466857

Parameter	Units	60180441018 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	2.9	2.9	1	25	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: WETA/6349 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60180441001, 60180441002, 60180441003, 60180441004, 60180441005

METHOD BLANK: 103110 Matrix: Water
Associated Lab Samples: 60180441001, 60180441002, 60180441003, 60180441004, 60180441005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	10/24/14 14:23	

LABORATORY CONTROL SAMPLE: 103111

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.5	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 103112 103113

Parameter	Units	60180331005 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	1.3	1.3	86	82	80-120	5	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 103116 103117

Parameter	Units	60180441004 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	0.014J	1.5	1.5	1.3	1.4	85	91	80-120	7	20	

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QUALITY CONTROL DATA

Project: FORT SMITH AR
Pace Project No.: 60180441

QC Batch: WETA/6356 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60180441006, 60180441007, 60180441008, 60180441009, 60180441010, 60180441011, 60180441012, 60180441013, 60180441014, 60180441015, 60180441016, 60180441017, 60180441018, 60180441019, 60180441020, 60180441021, 60180441022, 60180441023, 60180441024

METHOD BLANK: 103306 Matrix: Water
Associated Lab Samples: 60180441006, 60180441007, 60180441008, 60180441009, 60180441010, 60180441011, 60180441012, 60180441013, 60180441014, 60180441015, 60180441016, 60180441017, 60180441018, 60180441019, 60180441020, 60180441021, 60180441022, 60180441023, 60180441024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	10/24/14 15:28	

LABORATORY CONTROL SAMPLE: 103307

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: 103308 103309

Parameter	Units	60180441006 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	1.6	100	102	80-120	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 103312 103313

Parameter	Units	60180441021 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	1.7	102	107	80-120	4	20	

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QUALIFIERS

Project: FORT SMITH AR
Pace Project No.: 60180441

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/65176
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/65207
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/65208
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/65245
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/65247
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1e	Field pH
H1	Analysis conducted outside the EPA 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: FORT SMITH AR
Pace Project No.: 60180441

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180441001	MW-41-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441002	IW-76-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441003	ITMW-21-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441004	ITMW-6-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441005	MW-29-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441006	ITMW-20-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441007	MW-33-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441008	IW-77-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441009	MW-34-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441010	ITMW-1-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441011	ITMW-2-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441012	MW-22-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441013	ITMW-10-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441014	ITMW-9-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441015	ITMW-12-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441016	ITMW-14-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441017	ITMW-18-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441018	ITMW-16-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441019	MW-57-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441020	MW-58-201410	EPA 8015 - Alcohol	GCSV/3088		
60180441021	MW-56-201410	EPA 8015 - Alcohol	GCSV/3093		
60180441022	ITMW-7-201410	EPA 8015 - Alcohol	GCSV/3093		
60180441023	ITMW-11-201410	EPA 8015 - Alcohol	GCSV/3093		
60180441024	ITMW-13-2014	EPA 8015 - Alcohol	GCSV/3093		
60180441001	MW-41-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441002	IW-76-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441003	ITMW-21-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441004	ITMW-6-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441005	MW-29-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441006	ITMW-20-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441007	MW-33-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441008	IW-77-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441009	MW-34-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441010	ITMW-1-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441011	ITMW-2-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441012	MW-22-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441013	ITMW-10-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441014	ITMW-9-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441015	ITMW-12-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441016	ITMW-14-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441017	ITMW-18-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441018	ITMW-16-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441019	MW-57-201410	EPA 3010	MPRP/29391	EPA 6010	ICP/22073
60180441020	MW-58-201410	EPA 3010	MPRP/29392	EPA 6010	ICP/22075
60180441021	MW-56-201410	EPA 3010	MPRP/29392	EPA 6010	ICP/22075
60180441022	ITMW-7-201410	EPA 3010	MPRP/29392	EPA 6010	ICP/22075
60180441023	ITMW-11-201410	EPA 3010	MPRP/29392	EPA 6010	ICP/22075

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR
Pace Project No.: 60180441

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180441024	ITMW-13-2014	EPA 3010	MPRP/29392	EPA 6010	ICP/22075
60180441001	MW-41-201410	EPA 5030B/8260	MSV/65190		
60180441001	MW-41-201410	EPA 5030B/8260	MSV/65247		
60180441003	ITMW-21-201410	EPA 5030B/8260	MSV/65190		
60180441004	ITMW-6-201410	EPA 5030B/8260	MSV/65190		
60180441005	MW-29-201410	EPA 5030B/8260	MSV/65190		
60180441006	ITMW-20-201410	EPA 5030B/8260	MSV/65190		
60180441007	MW-33-201410	EPA 5030B/8260	MSV/65190		
60180441007	MW-33-201410	EPA 5030B/8260	MSV/65247		
60180441010	ITMW-1-201410	EPA 5030B/8260	MSV/65190		
60180441011	ITMW-2-201410	EPA 5030B/8260	MSV/65190		
60180441012	MW-22-201410	EPA 5030B/8260	MSV/65190		
60180441013	ITMW-10-201410	EPA 5030B/8260	MSV/65190		
60180441013	ITMW-10-201410	EPA 5030B/8260	MSV/65247		
60180441014	ITMW-9-201410	EPA 5030B/8260	MSV/65190		
60180441015	ITMW-12-201410	EPA 5030B/8260	MSV/65190		
60180441015	ITMW-12-201410	EPA 5030B/8260	MSV/65247		
60180441016	ITMW-14-201410	EPA 5030B/8260	MSV/65190		
60180441017	ITMW-18-201410	EPA 5030B/8260	MSV/65190		
60180441017	ITMW-18-201410	EPA 5030B/8260	MSV/65247		
60180441018	ITMW-16-201410	EPA 5030B/8260	MSV/65190		
60180441019	MW-57-201410	EPA 5030B/8260	MSV/65247		
60180441020	MW-58-201410	EPA 5030B/8260	MSV/65247		
60180441021	MW-56-201410	EPA 5030B/8260	MSV/65190		
60180441021	MW-56-201410	EPA 5030B/8260	MSV/65247		
60180441022	ITMW-7-201410	EPA 5030B/8260	MSV/65190		
60180441023	ITMW-11-201410	EPA 5030B/8260	MSV/65190		
60180441023	ITMW-11-201410	EPA 5030B/8260	MSV/65247		
60180441024	ITMW-13-2014	EPA 5030B/8260	MSV/65207		
60180441025	TB-03-201410	EPA 5030B/8260	MSV/65207		
60180441026	TB-16-201410	EPA 5030B/8260	MSV/65207		
60180441027	TB-12-201410	EPA 5030B/8260	MSV/65207		
60180441028	DUP-04-201410	EPA 5030B/8260	MSV/65207		
60180441028	DUP-04-201410	EPA 5030B/8260	MSV/65247		
60180441029	DUP-02-201410	EPA 5030B/8260	MSV/65207		
60180441030	TB-08-201410	EPA 5030B/8260	MSV/65208		
60180441031	TB-01-201410	EPA 5030B/8260	MSV/65208		
60180441032	EB-03-201410	EPA 5030B/8260	MSV/65208		
60180441033	TB-07-201410	EPA 5030B/8260	MSV/65208		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR
Pace Project No.: 60180441

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180441002	IW-76-201410	EPA 5030B/8260	MSV/65176		
60180441002	IW-76-201410	EPA 5030B/8260	MSV/65245		
60180441008	IW-77-201410	EPA 5030B/8260	MSV/65176		
60180441008	IW-77-201410	EPA 5030B/8260	MSV/65245		
60180441009	MW-34-201410	EPA 5030B/8260	MSV/65176		
60180441001	MW-41-201410	SM 2320B	WET/51064		
60180441002	IW-76-201410	SM 2320B	WET/51064		
60180441003	ITMW-21-201410	SM 2320B	WET/51064		
60180441004	ITMW-6-201410	SM 2320B	WET/51103		
60180441005	MW-29-201410	SM 2320B	WET/51103		
60180441006	ITMW-20-201410	SM 2320B	WET/51103		
60180441007	MW-33-201410	SM 2320B	WET/51103		
60180441008	IW-77-201410	SM 2320B	WET/51103		
60180441009	MW-34-201410	SM 2320B	WET/51103		
60180441010	ITMW-1-201410	SM 2320B	WET/51103		
60180441011	ITMW-2-201410	SM 2320B	WET/51103		
60180441012	MW-22-201410	SM 2320B	WET/51103		
60180441013	ITMW-10-201410	SM 2320B	WET/51103		
60180441014	ITMW-9-201410	SM 2320B	WET/51103		
60180441015	ITMW-12-201410	SM 2320B	WET/51103		
60180441016	ITMW-14-201410	SM 2320B	WET/51103		
60180441017	ITMW-18-201410	SM 2320B	WET/51103		
60180441018	ITMW-16-201410	SM 2320B	WET/51103		
60180441019	MW-57-201410	SM 2320B	WET/51103		
60180441020	MW-58-201410	SM 2320B	WET/51103		
60180441021	MW-56-201410	SM 2320B	WET/51103		
60180441022	ITMW-7-201410	SM 2320B	WET/51103		
60180441023	ITMW-11-201410	SM 2320B	WET/51103		
60180441024	ITMW-13-2014	SM 2320B	WET/51104		
60180441001	MW-41-201410	SM 3500-Fe B#4	WET/51163		
60180441002	IW-76-201410	SM 3500-Fe B#4	WET/51163		
60180441003	ITMW-21-201410	SM 3500-Fe B#4	WET/51163		
60180441004	ITMW-6-201410	SM 3500-Fe B#4	WET/51163		
60180441005	MW-29-201410	SM 3500-Fe B#4	WET/51163		
60180441006	ITMW-20-201410	SM 3500-Fe B#4	WET/51163		
60180441007	MW-33-201410	SM 3500-Fe B#4	WET/51163		
60180441008	IW-77-201410	SM 3500-Fe B#4	WET/51163		
60180441009	MW-34-201410	SM 3500-Fe B#4	WET/51163		
60180441010	ITMW-1-201410	SM 3500-Fe B#4	WET/51163		
60180441011	ITMW-2-201410	SM 3500-Fe B#4	WET/51163		
60180441012	MW-22-201410	SM 3500-Fe B#4	WET/51163		
60180441013	ITMW-10-201410	SM 3500-Fe B#4	WET/51163		
60180441014	ITMW-9-201410	SM 3500-Fe B#4	WET/51163		
60180441015	ITMW-12-201410	SM 3500-Fe B#4	WET/51163		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR
Pace Project No.: 60180441

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180441016	**ITMW-14-201410**	SM 3500-Fe B#4	WET/51163		
60180441017	**ITMW-18-201410**	SM 3500-Fe B#4	WET/51163		
60180441018	**ITMW-16-201410**	SM 3500-Fe B#4	WET/51163		
60180441019	**MW-57-201410**	SM 3500-Fe B#4	WET/51163		
60180441020	**MW-58-201410**	SM 3500-Fe B#4	WET/51163		
60180441021	**MW-56-201410**	SM 3500-Fe B#4	WET/51164		
60180441022	**ITMW-7-201410**	SM 3500-Fe B#4	WET/51164		
60180441023	**ITMW-11-201410**	SM 3500-Fe B#4	WET/51164		
60180441024	**ITMW-13-2014**	SM 3500-Fe B#4	WET/51164		
60180441001	**MW-41-201410**	SM 4500-H+B	WET/51128		
60180441002	**IW-76-201410**	SM 4500-H+B	WET/51128		
60180441003	**ITMW-21-201410**	SM 4500-H+B	WET/51128		
60180441004	**ITMW-6-201410**	SM 4500-H+B	WET/51128		
60180441005	**MW-29-201410**	SM 4500-H+B	WET/51128		
60180441006	**ITMW-20-201410**	SM 4500-H+B	WET/51128		
60180441007	**MW-33-201410**	SM 4500-H+B	WET/51128		
60180441008	**IW-77-201410**	SM 4500-H+B	WET/51128		
60180441009	**MW-34-201410**	SM 4500-H+B	WET/51128		
60180441010	**ITMW-1-201410**	SM 4500-H+B	WET/51128		
60180441011	**ITMW-2-201410**	SM 4500-H+B	WET/51128		
60180441012	**MW-22-201410**	SM 4500-H+B	WET/51128		
60180441013	**ITMW-10-201410**	SM 4500-H+B	WET/51128		
60180441014	**ITMW-9-201410**	SM 4500-H+B	WET/51128		
60180441015	**ITMW-12-201410**	SM 4500-H+B	WET/51128		
60180441016	**ITMW-14-201410**	SM 4500-H+B	WET/51128		
60180441017	**ITMW-18-201410**	SM 4500-H+B	WET/51128		
60180441018	**ITMW-16-201410**	SM 4500-H+B	WET/51128		
60180441019	**MW-57-201410**	SM 4500-H+B	WET/51128		
60180441020	**MW-58-201410**	SM 4500-H+B	WET/51128		
60180441021	**MW-56-201410**	SM 4500-H+B	WET/51129		
60180441022	**ITMW-7-201410**	SM 4500-H+B	WET/51129		
60180441023	**ITMW-11-201410**	SM 4500-H+B	WET/51129		
60180441024	**ITMW-13-2014**	SM 4500-H+B	WET/51129		
60180441001	**MW-41-201410**	SM 4500-S-2 D	WET/50995		
60180441002	**IW-76-201410**	SM 4500-S-2 D	WET/50995		
60180441003	**ITMW-21-201410**	SM 4500-S-2 D	WET/50995		
60180441004	**ITMW-6-201410**	SM 4500-S-2 D	WET/50995		
60180441005	**MW-29-201410**	SM 4500-S-2 D	WET/50995		
60180441006	**ITMW-20-201410**	SM 4500-S-2 D	WET/50995		
60180441007	**MW-33-201410**	SM 4500-S-2 D	WET/50995		
60180441008	**IW-77-201410**	SM 4500-S-2 D	WET/50995		
60180441009	**MW-34-201410**	SM 4500-S-2 D	WET/50995		
60180441010	**ITMW-1-201410**	SM 4500-S-2 D	WET/50995		
60180441011	**ITMW-2-201410**	SM 4500-S-2 D	WET/50995		
60180441012	**MW-22-201410**	SM 4500-S-2 D	WET/50995		
60180441013	**ITMW-10-201410**	SM 4500-S-2 D	WET/50995		
60180441014	**ITMW-9-201410**	SM 4500-S-2 D	WET/50995		

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Project: FORT SMITH AR
Pace Project No.: 60180441

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180441015	ITMW-12-201410	SM 4500-S-2 D	WET/50995		
60180441016	ITMW-14-201410	SM 4500-S-2 D	WET/50995		
60180441017	ITMW-18-201410	SM 4500-S-2 D	WET/50996		
60180441018	ITMW-16-201410	SM 4500-S-2 D	WET/50996		
60180441019	MW-57-201410	SM 4500-S-2 D	WET/50996		
60180441020	MW-58-201410	SM 4500-S-2 D	WET/50996		
60180441021	MW-56-201410	SM 4500-S-2 D	WET/50996		
60180441022	ITMW-7-201410	SM 4500-S-2 D	WET/50996		
60180441023	ITMW-11-201410	SM 4500-S-2 D	WET/50996		
60180441024	ITMW-13-2014	SM 4500-S-2 D	WET/50996		
60180441001	MW-41-201410	EPA 300.0	WETA/31527		
60180441002	IW-76-201410	EPA 300.0	WETA/31527		
60180441003	ITMW-21-201410	EPA 300.0	WETA/31574		
60180441004	ITMW-6-201410	EPA 300.0	WETA/31527		
60180441005	MW-29-201410	EPA 300.0	WETA/31527		
60180441006	ITMW-20-201410	EPA 300.0	WETA/31527		
60180441007	MW-33-201410	EPA 300.0	WETA/31527		
60180441008	IW-77-201410	EPA 300.0	WETA/31527		
60180441009	MW-34-201410	EPA 300.0	WETA/31527		
60180441010	ITMW-1-201410	EPA 300.0	WETA/31527		
60180441011	ITMW-2-201410	EPA 300.0	WETA/31574		
60180441012	MW-22-201410	EPA 300.0	WETA/31527		
60180441013	ITMW-10-201410	EPA 300.0	WETA/31527		
60180441014	ITMW-9-201410	EPA 300.0	WETA/31527		
60180441015	ITMW-12-201410	EPA 300.0	WETA/31527		
60180441016	ITMW-14-201410	EPA 300.0	WETA/31528		
60180441017	ITMW-18-201410	EPA 300.0	WETA/31528		
60180441018	ITMW-16-201410	EPA 300.0	WETA/31528		
60180441019	MW-57-201410	EPA 300.0	WETA/31528		
60180441020	MW-58-201410	EPA 300.0	WETA/31528		
60180441021	MW-56-201410	EPA 300.0	WETA/31528		
60180441022	ITMW-7-201410	EPA 300.0	WETA/31528		
60180441023	ITMW-11-201410	EPA 300.0	WETA/31528		
60180441024	ITMW-13-2014	EPA 300.0	WETA/31528		
60180441001	MW-41-201410	EPA 350.1	WETA/31460		
60180441002	IW-76-201410	EPA 350.1	WETA/31460		
60180441003	ITMW-21-201410	EPA 350.1	WETA/31460		
60180441004	ITMW-6-201410	EPA 350.1	WETA/31461		
60180441005	MW-29-201410	EPA 350.1	WETA/31460		
60180441006	ITMW-20-201410	EPA 350.1	WETA/31461		
60180441007	MW-33-201410	EPA 350.1	WETA/31460		
60180441008	IW-77-201410	EPA 350.1	WETA/31460		
60180441009	MW-34-201410	EPA 350.1	WETA/31460		

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Project: FORT SMITH AR
Pace Project No.: 60180441

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180441010	ITMW-1-201410	EPA 350.1	WETA/31461		
60180441011	ITMW-2-201410	EPA 350.1	WETA/31461		
60180441012	MW-22-201410	EPA 350.1	WETA/31461		
60180441013	ITMW-10-201410	EPA 350.1	WETA/31461		
60180441014	ITMW-9-201410	EPA 350.1	WETA/31461		
60180441015	ITMW-12-201410	EPA 350.1	WETA/31461		
60180441016	ITMW-14-201410	EPA 350.1	WETA/31461		
60180441017	ITMW-18-201410	EPA 350.1	WETA/31461		
60180441018	ITMW-16-201410	EPA 350.1	WETA/31461		
60180441019	MW-57-201410	EPA 350.1	WETA/31461		
60180441020	MW-58-201410	EPA 350.1	WETA/31461		
60180441021	MW-56-201410	EPA 350.1	WETA/31461		
60180441022	ITMW-7-201410	EPA 350.1	WETA/31461		
60180441023	ITMW-11-201410	EPA 350.1	WETA/31461		
60180441024	ITMW-13-2014	EPA 350.1	WETA/31461		
60180441001	MW-41-201410	EPA 353.2	WETA/31395		
60180441002	IW-76-201410	EPA 353.2	WETA/31395		
60180441003	ITMW-21-201410	EPA 353.2	WETA/31397		
60180441004	ITMW-6-201410	EPA 353.2	WETA/31397		
60180441005	MW-29-201410	EPA 353.2	WETA/31395		
60180441006	ITMW-20-201410	EPA 353.2	WETA/31395		
60180441007	MW-33-201410	EPA 353.2	WETA/31397		
60180441008	IW-77-201410	EPA 353.2	WETA/31395		
60180441009	MW-34-201410	EPA 353.2	WETA/31395		
60180441010	ITMW-1-201410	EPA 353.2	WETA/31395		
60180441011	ITMW-2-201410	EPA 353.2	WETA/31397		
60180441012	MW-22-201410	EPA 353.2	WETA/31404		
60180441013	ITMW-10-201410	EPA 353.2	WETA/31397		
60180441014	ITMW-9-201410	EPA 353.2	WETA/31395		
60180441015	ITMW-12-201410	EPA 353.2	WETA/31404		
60180441016	ITMW-14-201410	EPA 353.2	WETA/31397		
60180441017	ITMW-18-201410	EPA 353.2	WETA/31404		
60180441018	ITMW-16-201410	EPA 353.2	WETA/31395		
60180441019	MW-57-201410	EPA 353.2	WETA/31404		
60180441020	MW-58-201410	EPA 353.2	WETA/31397		
60180441021	MW-56-201410	EPA 353.2	WETA/31404		
60180441022	ITMW-7-201410	EPA 353.2	WETA/31404		
60180441023	ITMW-11-201410	EPA 353.2	WETA/31404		
60180441024	ITMW-13-2014	EPA 353.2	WETA/31395		

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR
Pace Project No.: 60180441

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180441001	MW-41-201410	SM 4500-CO2 D	WETA/31505		
60180441002	IW-76-201410	SM 4500-CO2 D	WETA/31505		
60180441003	ITMW-21-201410	SM 4500-CO2 D	WETA/31505		
60180441004	ITMW-6-201410	SM 4500-CO2 D	WETA/31505		
60180441005	MW-29-201410	SM 4500-CO2 D	WETA/31505		
60180441006	ITMW-20-201410	SM 4500-CO2 D	WETA/31505		
60180441007	MW-33-201410	SM 4500-CO2 D	WETA/31505		
60180441008	IW-77-201410	SM 4500-CO2 D	WETA/31505		
60180441009	MW-34-201410	SM 4500-CO2 D	WETA/31505		
60180441010	ITMW-1-201410	SM 4500-CO2 D	WETA/31505		
60180441011	ITMW-2-201410	SM 4500-CO2 D	WETA/31505		
60180441012	MW-22-201410	SM 4500-CO2 D	WETA/31505		
60180441013	ITMW-10-201410	SM 4500-CO2 D	WETA/31505		
60180441014	ITMW-9-201410	SM 4500-CO2 D	WETA/31505		
60180441015	ITMW-12-201410	SM 4500-CO2 D	WETA/31505		
60180441016	ITMW-14-201410	SM 4500-CO2 D	WETA/31505		
60180441017	ITMW-18-201410	SM 4500-CO2 D	WETA/31505		
60180441018	ITMW-16-201410	SM 4500-CO2 D	WETA/31505		
60180441019	MW-57-201410	SM 4500-CO2 D	WETA/31505		
60180441020	MW-58-201410	SM 4500-CO2 D	WETA/31505		
60180441021	MW-56-201410	SM 4500-CO2 D	WETA/31534		
60180441022	ITMW-7-201410	SM 4500-CO2 D	WETA/31534		
60180441023	ITMW-11-201410	SM 4500-CO2 D	WETA/31534		
60180441024	ITMW-13-2014	SM 4500-CO2 D	WETA/31534		
60180441001	MW-41-201410	SM 5310C	WETA/31484		
60180441002	IW-76-201410	SM 5310C	WETA/31484		
60180441003	ITMW-21-201410	SM 5310C	WETA/31484		
60180441004	ITMW-6-201410	SM 5310C	WETA/31484		
60180441005	MW-29-201410	SM 5310C	WETA/31484		
60180441006	ITMW-20-201410	SM 5310C	WETA/31484		
60180441007	MW-33-201410	SM 5310C	WETA/31484		
60180441008	IW-77-201410	SM 5310C	WETA/31484		
60180441009	MW-34-201410	SM 5310C	WETA/31484		
60180441010	ITMW-1-201410	SM 5310C	WETA/31484		
60180441011	ITMW-2-201410	SM 5310C	WETA/31484		
60180441012	MW-22-201410	SM 5310C	WETA/31484		
60180441013	ITMW-10-201410	SM 5310C	WETA/31484		
60180441014	ITMW-9-201410	SM 5310C	WETA/31484		
60180441015	ITMW-12-201410	SM 5310C	WETA/31484		
60180441016	ITMW-14-201410	SM 5310C	WETA/31484		
60180441017	ITMW-18-201410	SM 5310C	WETA/31506		
60180441018	ITMW-16-201410	SM 5310C	WETA/31506		
60180441019	MW-57-201410	SM 5310C	WETA/31506		
60180441020	MW-58-201410	SM 5310C	WETA/31506		
60180441021	MW-56-201410	SM 5310C	WETA/31506		
60180441022	ITMW-7-201410	SM 5310C	WETA/31506		
60180441023	ITMW-11-201410	SM 5310C	WETA/31506		

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Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH AR
Pace Project No.: 60180441

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180441024	**ITMW-13-2014**	SM 5310C	WETA/31506		
60180441001	**MW-41-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180441002	**IW-76-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180441003	**ITMW-21-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180441004	**ITMW-6-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180441005	**MW-29-201410**	SM4500-P B	WETA/6349	SM 4500-P E	WETA/6353
60180441006	**ITMW-20-201410**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357
60180441007	**MW-33-201410**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357
60180441008	**IW-77-201410**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357
60180441009	**MW-34-201410**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357
60180441010	**ITMW-1-201410**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357
60180441011	**ITMW-2-201410**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357
60180441012	**MW-22-201410**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357
60180441013	**ITMW-10-201410**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357
60180441014	**ITMW-9-201410**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357
60180441015	**ITMW-12-201410**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357
60180441016	**ITMW-14-201410**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357
60180441017	**ITMW-18-201410**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357
60180441018	**ITMW-16-201410**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357
60180441019	**MW-57-201410**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357
60180441020	**MW-58-201410**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357
60180441021	**MW-56-201410**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357
60180441022	**ITMW-7-201410**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357
60180441023	**ITMW-11-201410**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357
60180441024	**ITMW-13-2014**	SM4500-P B	WETA/6356	SM 4500-P E	WETA/6357

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Sample Condition Upon Receipt

WO# : 60180441

60180441

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace ☐ Other ☐ N/A

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: 3.2, 0.6, 3.4, 4.2, 2.0, 1.8

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JHS 10/16/14 1010

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. NO_2NO_3, pH
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: 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 JHS / Lot # of added preservative
Trip Blank present:	☑Yes ☐No ☐N/A	
Pace Trip Blank lot # (if purchased): covered		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:

RWO -- 15498 Dallas

Project Manager Review: MW Date: 10/17/14

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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 3

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

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	CO_2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-41-201410	WT	G	10/15/14	0910	—	—		11	X	X	X	X	X	01	X		X	X	X	X	X	X	X	X	X	X	X	M	60180441
A 2	~~DAW~~ IW-76-201410	WT	G	10/15/14	1055	—	—		10	X	X	X	X	X	02	X		X	X	X	X	X	X	X	X	X	X	X	N	Ascorbic Acid for VOCs
3	ITMW-21-201410	WT	G	10/15/14	1350	—	—		11	X	X	X	X	X	03	X		X	X	X	X	X	X	X	X	X	X	X	N	
4	ITMW-6-201410 MS/MSD	WT	G	10/15/14	1445	—	—		14	X	X	X	X	X	04	X		X	X	X	X	X	X	X	X	X	X	X	N	MS/MSD
5	MW-29-201410	WT	G	10/15/14	1155	—	—		11	X	X	X	X	X	05	X		X	X	X	X	X	X	X	X	X	X	X	N	
6	ITMW-20-201410 MS/MSD	WT	G	10/15/14	0930	—	—		14	X	X	X	X	X	06	X		X	X	X	X	X	X	X	X	X	X	X	N	MS/MSD
7	MW-33-201410	WT	G	10/15/14	1325	—	—		11	X	X	X	X	X	07	X		X	X	X	X	X	X	X	X	X	X	X	N	
8	TB-03-201410	WT	G	10/15/14	—	—	—		2				X		05	X													N	2 (DLGH)
A 9	IW-77-201410	WT	G	10/15/14	1055	—	—		11	X	X	X	X	X	08	X		X	X	X	X	X	X	X	X	X	X	X	N	
10 A	MW-34-201410	WT	G	10/15/14	0915	—	—		11	X	X	X	X	X	09	X		X	X	X	X	X	X	X	X	X	X	X	N	
11	ITMW-1-201410	WT	G	10/15/14	0920	—	—		11	X	X	X	X	X	10	X		X	X	X	X	X	X	X	X	X	X	X	N	
12	TB-16-201410	WT	G	10/15/14	—	—	—		2				X		06	X														2 (DLGH)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Level IV data package required	Wendy Stonestreet	10/15/14	1756	Pace	10/16/14	127	3.2/0.6	Y	Y	Y
MS/MSD on ITMW-6							4.2/2B	Y	Y	Y
MS/MSD on ITMW-20							2.0/3A	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: LUCY MARTON

SIGNATURE of SAMPLER: Lucy Marton DATE Signed (MM/DD/YY): 10/15/14

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.

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: 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	SAMPLE TYPE	COLLECTED DATE	COLLECTED 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 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	8010-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-2-201410	WT	G	10/15/14	1250	—	—		11	X	X	X	X	X	OR		X		X	X	X	X	X	X	X	X	X	X	X	N	
2	~~MW-7b-201410~~	~~WT~~	~~G~~	~~10/15/14~~	~~1055~~	—	—		11	X	X	X	X	X			X		X	X	X	X	X	X	X	X	X	X	X	N	
3	MW-22-201410	WT	G	10/15/14	1500	—	—		11	X	X	X	X	X	02		X		X	X	X	X	X	X	X	X	X	X	X	N	
4	ITMW-10-201410	WT	G	10/15/14	1440	—	—		11	X	X	X	X	X	03		X		X	X	X	X	X	X	X	X	X	X	X	N	
5	TB-12-201410	WT	G	10/15/14	—	—	—		2				X		02				X											N	2(DLGH)
6	ITMW-9-201410	WT	G	10/15/14	1235	—	—		11	X	X	X	X	X	04		X		X	X	X	X	X	X	X	X	X	X	X	N	
7	ITMW-12-201410	WT	G	10/15/14	1642	—	—		11	X	X	X	X	X	05		X		X	X	X	X	X	X	X	X	X	X	X	N	
8	DUP-4-201410	WT	G	10/15/14	1642	—	—		3				X		08				X											N	3(DLGH)
9	DUP-2-201410	WT	G	10/15/14	1235	—	—		3				X		09				X													
10	ITMW-14-201410	WT	G	10/15/14	1309	—	—		11	X	X	X	X	X	06		X		X	X	X	X	X	X	X	X	X	X	X	N	
11	ITMW-18-201410	WT	G	10/15/14	1613	—	—		11	X	X	X	X	X	07		X		X	X	X	X	X	X	X	X	X	X	X	N	
12	TB-8-201410	WT	G	10/15/14	—	—	—		2				X		10				X												2(DLGH)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Level IV data package required		10/15/14	1756		10/16/14	127	3.7/0.6	Y	Y	Y
							4.2/1.8	Y	Y	Y
							2.0/3.4	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: LUCY MARTON

SIGNATURE of SAMPLER: Lucy Marton

DATE Signed (MM/DD/YY): 10/15/14

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
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220 William Pitt Way
Pittsburgh, PA 15238
412-826-5245

Microseeps

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

004217

Section A Required Client Information:

Company:	ENVIRON
Address:	7500 College Blvd 925 Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone:	913-5535926 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
Project Number:	

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

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

ITEM #	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	Analysis Test Y/N	VOC	Alkalinity	TDL	Chloride Sulfate	BOIS CN PACE DALLAS	LOID Iron/MN	Ferrous Iron Calc	Ammonia	Nitrate+Nitrite	Total Phosphate	Sulfide	AOZ Calc (Alk+P#)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WT	G	10/15/14	0859	—	—		11	X	X	X	X	098	X	X		Y	X	X	X	X	X	X	X	X	X	X	N	
2	WT	G	10/15/14	1000	—	—		11	X	X	X	X	099	X	X		N	X	X	X	X	X	X	X	X	X	X	N	
3	WT	G	10/15/14	—	—	—		BZ	X	X	X	X	031	X	X			X											2(DUPH)
4	WT	G	10/15/14	1735	—	—		3				X	032					X											3(DUPH)
5	WT	G	10/15/14	1245	—	—		11	X	X	X	X	020	X	X			X	X	X	X	X	X	X	X	X	X	N	
6	WT	G	10/15/14	1500	—	—		11	X	X	X	X	021	X	X			X	X	X	X	X	X	X	X	X	X	N	
7	WT	G	10/15/14	1615	—	—		11	X	X	X	X	022	X	X			X	X	X	X	X	X	X	X	X	X	N	
8	WT	G	10/15/14	1715	—	—		11	X	X	X	X	023	X	X			X	X	X	X	X	X	X	X	X	X	N	
9	WT	G	10/15/14	—	—	—		2				X	033					X	X	X	X	X	X	X	X	X	X	N	2(DUPH)
10	WT	G	10/15/14	1112	—	—		11	X	X	X	X	024	X	X			X	X	X	X	X	X	X	X	X	X	N	
11																													
12																													

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Wendy Stonestreet	10/15/14	1756	[signature]	10/16/14	127

SAMPLE CONDITIONS

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
1.6/2.0	Y	Y	Y
4.2/4.4	Y	Y	Y
3.2/0.6	Y	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: LUCY MAXTON

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10/15/14

*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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November 03, 2014

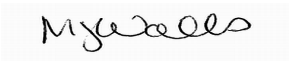
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH, AR
Pace Project No.: 60180635

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on October 17, 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

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60180635

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.: 60180635

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60180635001	ITMW-15-201410	Water	10/16/14 08:28	10/17/14 11:05
60180635002	MW-25-201410	Water	10/16/14 10:55	10/17/14 11:05
60180635003	ITMW-4-201410	Water	10/16/14 08:25	10/17/14 11:05
60180635004	ITMW-19-201410	Water	10/16/14 08:40	10/17/14 11:05
60180635005	ITMW-17-201410	Water	10/16/14 08:55	10/17/14 11:05
60180635006	MW-38-201410	Water	10/16/14 11:27	10/17/14 11:05
60180635007	MW-46R-201410	Water	10/16/14 08:55	10/17/14 11:05
60180635008	DUP-05-201410	Water	10/16/14 08:28	10/17/14 11:05
60180635009	EB-04-201410	Water	10/16/14 12:55	10/17/14 11:05
60180635010	DUP-06-201410	Water	10/16/14 11:27	10/17/14 11:05
60180635011	DUP-03-201410	Water	10/16/14 08:55	10/17/14 11:05
60180635012	EB-05-201410	Water	10/16/14 14:35	10/17/14 11:05
60180635013	EB-06-201410	Water	10/16/14 16:39	10/17/14 11:05
60180635014	TB-06-201410	Water	10/16/14 08:25	10/17/14 11:05
60180635015	TB-02-201410	Water	10/16/14 08:25	10/17/14 11:05

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60180635

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60180635001	**ITMW-15-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180635002	**MW-25-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180635003	**ITMW-4-201410**	EPA 8015 - Alcohol	TA	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	AJM	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: FORT SMITH, AR
Pace Project No.: 60180635

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60180635004	**ITMW-19-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180635005	**ITMW-17-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180635006	**MW-38-201410**	EPA 8015 - Alcohol	TA	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	AJM	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60180635

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		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
60180635007	**MW-46R-201410**	EPA 8015 - Alcohol	TA	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	AJM	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
60180635008	**DUP-05-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180635009	**EB-04-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180635010	**DUP-06-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180635011	**DUP-03-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180635012	**EB-05-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180635013	**EB-06-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180635014	**TB-06-201410**	EPA 5030B/8260	PRG	38	PASI-K
60180635015	**TB-02-201410**	EPA 5030B/8260	PRG	38	PASI-K

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60180635

Method: **EPA 8015 - Alcohol**
Description: Alcohol by Direct Inject GCFID
Client: Environ_AR
Date: November 03, 2014

General Information:
7 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.: 60180635

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Environ_AR
Date: November 03, 2014

General Information:
7 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.: 60180635

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: November 03, 2014

General Information:
15 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.

QC Batch: MSV/65210

B: Analyte was detected in the associated method blank.
- BLANK for HBN 359969 [MSV/6521 (Lab ID: 1463848)
  - Methylene chloride

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/65210

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180406002

R1: RPD value was outside control limits.
- MSD (Lab ID: 1463851)
  - Chloromethane

QC Batch: MSV/65211

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/65247

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60180635

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: November 03, 2014

QC Batch: MSV/65266

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60180635

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: Environ_AR
Date: November 03, 2014

General Information:
7 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.: 60180635

Method: **SM 3500-Fe B#4**
Description: Iron, Ferric (Calculation)
Client: Environ_AR
Date: November 03, 2014

General Information:
7 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.: 60180635

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: November 03, 2014

General Information:
7 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-15-201410 (Lab ID: 60180635001)
- ITMW-17-201410 (Lab ID: 60180635005)
- ITMW-19-201410 (Lab ID: 60180635004)
- ITMW-4-201410 (Lab ID: 60180635003)
- MW-25-201410 (Lab ID: 60180635002)
- MW-38-201410 (Lab ID: 60180635006)
- MW-46R-201410 (Lab ID: 60180635007)

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/51193

1e: Field pH
- ITMW-15-201410 (Lab ID: 60180635001)
  - pH at 25 Degrees C
- ITMW-17-201410 (Lab ID: 60180635005)
  - pH at 25 Degrees C
- ITMW-19-201410 (Lab ID: 60180635004)
  - pH at 25 Degrees C
- ITMW-4-201410 (Lab ID: 60180635003)
  - pH at 25 Degrees C
- MW-25-201410 (Lab ID: 60180635002)
  - pH at 25 Degrees C
- MW-38-201410 (Lab ID: 60180635006)
  - pH at 25 Degrees C
- MW-46R-201410 (Lab ID: 60180635007)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60180635

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Environ_AR
Date: November 03, 2014

General Information:
7 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/50996

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180441017

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

- MS (Lab ID: 1463616)
  - 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.: 60180635

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Environ_AR
Date: November 03, 2014

General Information:
7 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: FORT SMITH, AR
Pace Project No.: 60180635

Method: **EPA 350.1**
Description: 350.1 Ammonia
Client: Environ_AR
Date: November 03, 2014

General Information:
7 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/31463

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60180608002,60180619004

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

- MS (Lab ID: 1464797)
  - 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.: 60180635

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Environ_AR
Date: November 03, 2014

General Information:
7 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.

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.: 60180635

Method: **SM 4500-CO2 D**
Description: Total Carbon Dioxide Calc
Client: Environ_AR
Date: November 03, 2014

General Information:
7 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.: 60180635

Method: **SM 5310C**
Description: 5310C TOC
Client: Environ_AR
Date: November 03, 2014

General Information:
7 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.: 60180635

Method: **SM 4500-P E**
Description: SM4500P-E, Total Phosphorus
Client: Environ_AR
Date: November 03, 2014

General Information:
7 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: FORT SMITH, AR
Pace Project No.: 60180635

Sample: ITMW-15-201410 **Lab ID: 60180635001** Collected: 10/16/14 08:28 Received: 10/17/14 11:05 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		10/25/14 15:07	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**248**	ug/L	50.0	24.0	1	10/22/14 14:30	10/24/14 13:19	7439-89-6	
Manganese	**24.9**	ug/L	5.0	2.5	1	10/22/14 14:30	10/24/14 13:19	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/21/14 16:08	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 16:08	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 16:08	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 16:08	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 16:08	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 16:08	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 16:08	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 16:08	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 16:08	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 16:08	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 16:08	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 16:08	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 16:08	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 16:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 16:08	107-06-2	
1,1-Dichloroethene	**3.4J**	ug/L	5.0	0.50	1		10/21/14 16:08	75-35-4	
cis-1,2-Dichloroethene	**63.0**	ug/L	5.0	0.50	1		10/21/14 16:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 16:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 16:08	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 16:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 16:08	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 16:08	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 16:08	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 16:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 16:08	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 16:08	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 16:08	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 16:08	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 16:08	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 16:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 16:08	79-00-5	
Trichloroethene	**1490**	ug/L	50.0	5.0	10		10/21/14 06:38	79-01-6	
Vinyl chloride	**2.0**	ug/L	2.0	0.50	1		10/21/14 16:08	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 16:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		10/21/14 16:08	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		10/21/14 16:08	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		10/21/14 16:08	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 16:08		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: ITMW-15-201410 **Lab ID: 60180635001** Collected: 10/16/14 08:28 Received: 10/17/14 11:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**230**	mg/L	20.0	2.0	1		10/24/14 10:40		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/24/14 10:40		
Alkalinity, Total as CaCO3	**230**	mg/L	20.0	2.0	1		10/24/14 10:40		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.25**	mg/L	0.20		1		10/28/14 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**7.0**	Std. Units	0.10	0.10	1		10/28/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:43	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**120**	mg/L	10.0	5.0	10		10/30/14 16:12	16887-00-6	
Sulfate	**8.8**	mg/L	1.0	0.50	1		10/31/14 10:56	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 10:41	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.60**	mg/L	0.10	0.012	1		10/18/14 06:47		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/18/14 06:47		
Nitrogen, NO2 plus NO3	**0.60**	mg/L	0.10	0.012	1		10/18/14 06:47		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**244**	mg/L			1		10/28/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.70J**	mg/L	1.0		1		10/27/14 23:10	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	10/27/14 08:36	10/27/14 11:28		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: MW-25-201410 **Lab ID: 60180635002** Collected: 10/16/14 10:55 Received: 10/17/14 11:05 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		10/25/14 15:19	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**1310**	ug/L	50.0	24.0	1	10/22/14 14:30	10/24/14 13:22	7439-89-6	
Manganese	**248**	ug/L	5.0	2.5	1	10/22/14 14:30	10/24/14 13:22	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**41.8**	ug/L	10.0	5.0	1		10/21/14 14:48	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 14:48	71-43-2	
Bromodichloromethane	**0.68J**	ug/L	5.0	0.50	1		10/21/14 14:48	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 14:48	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 14:48	74-83-9	
2-Butanone (MEK)	**5.4J**	ug/L	10.0	5.0	1		10/21/14 14:48	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 14:48	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 14:48	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 14:48	108-90-7	
Chloroethane	**0.89J**	ug/L	10.0	0.50	1		10/21/14 14:48	75-00-3	
Chloroform	**5.6**	ug/L	5.0	0.50	1		10/21/14 14:48	67-66-3	
Chloromethane	**2.1J**	ug/L	10.0	0.50	1		10/21/14 14:48	74-87-3	
Dibromochloromethane	**18.2**	ug/L	5.0	0.50	1		10/21/14 14:48	124-48-1	
1,1-Dichloroethane	**5.3**	ug/L	2.4	0.50	1		10/21/14 14:48	75-34-3	
1,2-Dichloroethane	**1.7J**	ug/L	5.0	0.50	1		10/21/14 14:48	107-06-2	
1,1-Dichloroethene	**3.1J**	ug/L	5.0	0.50	1		10/21/14 14:48	75-35-4	
cis-1,2-Dichloroethene	**2870J**	ug/L	5000	500	1000		10/21/14 06:53	156-59-2	
trans-1,2-Dichloroethene	**595J**	ug/L	5000	500	1000		10/21/14 06:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 14:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 14:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 14:48	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 14:48	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 14:48	591-78-6	
Methylene chloride	**3.8J**	ug/L	5.0	0.50	1		10/21/14 14:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 14:48	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 14:48	100-42-5	
1,1,2,2-Tetrachloroethane	**57.7**	ug/L	1.0	0.50	1		10/21/14 14:48	79-34-5	
Tetrachloroethene	**18.1**	ug/L	5.0	0.50	1		10/21/14 14:48	127-18-4	
Toluene	**1.7J**	ug/L	5.0	0.50	1		10/21/14 14:48	108-88-3	
1,1,1-Trichloroethane	**9.7**	ug/L	5.0	0.50	1		10/21/14 14:48	71-55-6	
1,1,2-Trichloroethane	**1.9J**	ug/L	5.0	0.50	1		10/21/14 14:48	79-00-5	
Trichloroethene	**42500**	ug/L	5000	500	1000		10/21/14 06:53	79-01-6	
Vinyl chloride	**540J**	ug/L	2000	500	1000		10/21/14 06:53	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 14:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	92	%	80-120		1		10/21/14 14:48	460-00-4	
1,2-Dichloroethane-d4 (S)	94	%	80-120		1		10/21/14 14:48	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		10/21/14 14:48	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 14:48		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: MW-25-201410 **Lab ID: 60180635002** Collected: 10/16/14 10:55 Received: 10/17/14 11:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**34.8**	mg/L	20.0	2.0	1		10/24/14 10:43		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/24/14 10:43		
Alkalinity, Total as CaCO3	**34.8**	mg/L	20.0	2.0	1		10/24/14 10:43		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**1.3**	mg/L	0.20		1		10/28/14 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		10/28/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:43	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**482**	mg/L	50.0	25.0	50		10/31/14 11:39	16887-00-6	
Sulfate	**373**	mg/L	50.0	25.0	50		10/31/14 11:39	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 10:42	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		10/18/14 06:52		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/18/14 06:52		
Nitrogen, NO2 plus NO3	**0.27**	mg/L	0.10	0.012	1		10/18/14 06:52		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**413**	mg/L			1		10/28/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**4.6**	mg/L	1.0		1		10/27/14 23:23	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	10/27/14 08:36	10/27/14 11:28		

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: ITMW-4-201410 **Lab ID: 60180635003** Collected: 10/16/14 08:25 Received: 10/17/14 11:05 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		10/25/14 15:30	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**2770**	ug/L	50.0	24.0	1	10/22/14 14:30	10/24/14 13:24	7439-89-6	
Manganese	**3540**	ug/L	5.0	2.5	1	10/22/14 14:30	10/24/14 13:24	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/21/14 06:23	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 06:23	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 06:23	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 06:23	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 06:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 06:23	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 06:23	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 06:23	56-23-5	
Chlorobenzene	**1.5J**	ug/L	5.0	0.50	1		10/21/14 06:23	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 06:23	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 06:23	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 06:23	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 06:23	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 06:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 06:23	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 06:23	75-35-4	
cis-1,2-Dichloroethene	**4.9J**	ug/L	5.0	0.50	1		10/21/14 06:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 06:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 06:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 06:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 06:23	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 06:23	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 06:23	591-78-6	
Methylene chloride	**2.3J**	ug/L	5.0	0.50	1		10/21/14 06:23	75-09-2	B
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 06:23	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 06:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 06:23	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 06:23	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 06:23	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 06:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 06:23	79-00-5	
Trichloroethene	**3.4J**	ug/L	5.0	0.50	1		10/21/14 06:23	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/21/14 06:23	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 06:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		10/21/14 06:23	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		10/21/14 06:23	17060-07-0	
Toluene-d8 (S)	105	%	80-120		1		10/21/14 06:23	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 06:23		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: ITMW-4-201410 **Lab ID: 60180635003** Collected: 10/16/14 08:25 Received: 10/17/14 11:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**72.7**	mg/L	20.0	2.0	1		10/24/14 12:55		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/24/14 12:55		
Alkalinity, Total as CaCO3	**72.7**	mg/L	20.0	2.0	1		10/24/14 12:55		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.0J**	mg/L	0.20		1		10/28/14 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		10/28/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	**0.027J**	mg/L	0.050	0.0096	1		10/20/14 11:44	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**9.0**	mg/L	1.0	0.50	1		10/31/14 12:08	16887-00-6	
Sulfate	**17.4**	mg/L	1.0	0.50	1		10/31/14 12:08	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.12**	mg/L	0.10	0.023	1		10/23/14 10:43	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		10/18/14 06:47		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/18/14 06:47		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		10/18/14 06:47		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**122**	mg/L			1		10/28/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**12.0**	mg/L	1.0		1		10/27/14 23:36	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.035**	mg/L	0.030	0.010	1	10/27/14 08:36	10/27/14 11:28		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: ITMW-19-201410 **Lab ID: 60180635004** Collected: 10/16/14 08:40 Received: 10/17/14 11:05 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		10/25/14 15:42	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	10/22/14 14:30	10/24/14 13:26	7439-89-6	
Manganese	**78.2**	ug/L	5.0	2.5	1	10/22/14 14:30	10/24/14 13:26	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/21/14 15:04	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 15:04	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 15:04	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 15:04	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 15:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 15:04	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 15:04	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 15:04	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 15:04	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 15:04	75-00-3	
Chloroform	**3.7J**	ug/L	5.0	0.50	1		10/21/14 15:04	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 15:04	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 15:04	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 15:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 15:04	107-06-2	
1,1-Dichloroethene	**19.9**	ug/L	5.0	0.50	1		10/21/14 15:04	75-35-4	
cis-1,2-Dichloroethene	**76.7**	ug/L	5.0	0.50	1		10/21/14 15:04	156-59-2	
trans-1,2-Dichloroethene	**1.1J**	ug/L	5.0	0.50	1		10/21/14 15:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 15:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 15:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 15:04	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 15:04	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 15:04	591-78-6	
Methylene chloride	**0.65J**	ug/L	5.0	0.50	1		10/21/14 15:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 15:04	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 15:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 15:04	79-34-5	
Tetrachloroethene	**2.7J**	ug/L	5.0	0.50	1		10/21/14 15:04	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 15:04	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 15:04	71-55-6	
1,1,2-Trichloroethane	**0.92J**	ug/L	5.0	0.50	1		10/21/14 15:04	79-00-5	
Trichloroethene	**12800**	ug/L	500	50.0	100		10/21/14 07:08	79-01-6	
Vinyl chloride	**1.9J**	ug/L	2.0	0.50	1		10/21/14 15:04	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 15:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	92	%	80-120		1		10/21/14 15:04	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		10/21/14 15:04	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		10/21/14 15:04	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 15:04		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: ITMW-19-201410 **Lab ID: 60180635004** Collected: 10/16/14 08:40 Received: 10/17/14 11:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**73.4**	mg/L	20.0	2.0	1		10/24/14 12:58		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/24/14 12:58		
Alkalinity, Total as CaCO3	**73.4**	mg/L	20.0	2.0	1		10/24/14 12:58		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.0060J**	mg/L	0.20		1		10/28/14 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		10/28/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:45	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**285**	mg/L	20.0	10.0	20		10/31/14 12:22	16887-00-6	
Sulfate	**6.1**	mg/L	1.0	0.50	1		10/31/14 12:37	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 10:44	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.2**	mg/L	0.10	0.012	1		10/18/14 06:48		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/18/14 06:48		
Nitrogen, NO2 plus NO3	**1.2**	mg/L	0.10	0.012	1		10/18/14 06:48		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**135**	mg/L			1		10/28/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.26J**	mg/L	1.0		1		10/28/14 00:15	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.035**	mg/L	0.030	0.010	1	10/27/14 08:36	10/27/14 11:28		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: ITMW-17-201410 **Lab ID: 60180635005** Collected: 10/16/14 08:55 Received: 10/17/14 11:05 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		10/25/14 15:53	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**150**	ug/L	50.0	24.0	1	10/22/14 14:30	10/24/14 13:29	7439-89-6	
Manganese	**1910**	ug/L	5.0	2.5	1	10/22/14 14:30	10/24/14 13:29	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/21/14 15:52	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 15:52	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 15:52	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 15:52	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 15:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 15:52	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 15:52	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 15:52	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 15:52	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 15:52	75-00-3	
Chloroform	**0.81J**	ug/L	5.0	0.50	1		10/21/14 15:52	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 15:52	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 15:52	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 15:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 15:52	107-06-2	
1,1-Dichloroethene	**5.8**	ug/L	5.0	0.50	1		10/21/14 15:52	75-35-4	
cis-1,2-Dichloroethene	**70.5**	ug/L	5.0	0.50	1		10/21/14 15:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 15:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 15:52	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 15:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 15:52	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 15:52	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 15:52	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 15:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 15:52	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 15:52	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 15:52	79-34-5	
Tetrachloroethene	**0.82J**	ug/L	5.0	0.50	1		10/21/14 15:52	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 15:52	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 15:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 15:52	79-00-5	
Trichloroethene	**3510**	ug/L	250	25.0	50		10/21/14 07:23	79-01-6	
Vinyl chloride	**3.2**	ug/L	2.0	0.50	1		10/21/14 15:52	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 15:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/21/14 15:52	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		10/21/14 15:52	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		10/21/14 15:52	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 15:52		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: ITMW-17-201410 **Lab ID: 60180635005** Collected: 10/16/14 08:55 Received: 10/17/14 11:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**6.4J**	mg/L	20.0	2.0	1		10/24/14 13:04		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/24/14 13:04		
Alkalinity, Total as CaCO3	**6.4J**	mg/L	20.0	2.0	1		10/24/14 13:04		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.13J**	mg/L	0.20		1		10/28/14 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		10/28/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:45	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**280**	mg/L	20.0	10.0	20		10/31/14 12:51	16887-00-6	
Sulfate	**7.1**	mg/L	1.0	0.50	1		10/31/14 13:05	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 10:45	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		10/18/14 06:49		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/18/14 06:49		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		10/18/14 06:49		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		10/28/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.29J**	mg/L	1.0		1		10/28/14 00:28	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.035**	mg/L	0.030	0.010	1	10/27/14 08:36	10/27/14 11:28		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: MW-38-201410 **Lab ID: 60180635006** Collected: 10/16/14 11:27 Received: 10/17/14 11:05 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		10/25/14 16:04	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**1270**	ug/L	50.0	24.0	1	10/22/14 14:30	10/24/14 13:31	7439-89-6	
Manganese	**5670**	ug/L	5.0	2.5	1	10/22/14 14:30	10/24/14 13:31	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/21/14 15:20	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 15:20	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 15:20	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 15:20	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 15:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 15:20	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 15:20	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 15:20	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 15:20	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 15:20	75-00-3	
Chloroform	**2.3J**	ug/L	5.0	0.50	1		10/21/14 15:20	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 15:20	74-87-3	
Dibromochloromethane	**2.6J**	ug/L	5.0	0.50	1		10/21/14 15:20	124-48-1	
1,1-Dichloroethane	**0.98J**	ug/L	2.4	0.50	1		10/21/14 15:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 15:20	107-06-2	
1,1-Dichloroethene	**10.2**	ug/L	5.0	0.50	1		10/21/14 15:20	75-35-4	
cis-1,2-Dichloroethene	**781**	ug/L	500	50.0	100		10/21/14 19:04	156-59-2	
trans-1,2-Dichloroethene	**4.1J**	ug/L	5.0	0.50	1		10/21/14 15:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 15:20	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 15:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 15:20	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 15:20	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 15:20	591-78-6	
Methylene chloride	**21.8**	ug/L	5.0	0.50	1		10/21/14 15:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 15:20	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 15:20	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 15:20	79-34-5	
Tetrachloroethene	**2.5J**	ug/L	5.0	0.50	1		10/21/14 15:20	127-18-4	
Toluene	**2.0J**	ug/L	5.0	0.50	1		10/21/14 15:20	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 15:20	71-55-6	
1,1,2-Trichloroethane	**0.60J**	ug/L	5.0	0.50	1		10/21/14 15:20	79-00-5	
Trichloroethene	**6750**	ug/L	500	50.0	100		10/21/14 19:04	79-01-6	
Vinyl chloride	**321**	ug/L	200	50.0	100		10/21/14 19:04	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 15:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		10/21/14 15:20	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120		1		10/21/14 15:20	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		10/21/14 15:20	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 15:20		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: MW-38-201410 **Lab ID: 60180635006** Collected: 10/16/14 11:27 Received: 10/17/14 11:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**330**	mg/L	20.0	2.0	1		10/24/14 13:10		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/24/14 13:10		
Alkalinity, Total as CaCO3	**330**	mg/L	20.0	2.0	1		10/24/14 13:10		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**1.2**	mg/L	0.20		1		10/28/14 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.8**	Std. Units	0.10	0.10	1		10/28/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:46	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**32.0**	mg/L	2.0	1.0	2		10/31/14 16:43	16887-00-6	
Sulfate	**135**	mg/L	10.0	5.0	10		10/30/14 18:07	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 10:46	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**4.5**	mg/L	0.20	0.023	2		10/18/14 06:57		
Nitrogen, Nitrite	**1.8**	mg/L	0.20	0.023	2		10/18/14 06:57		
Nitrogen, NO2 plus NO3	**6.3**	mg/L	0.20	0.023	2		10/18/14 06:57		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**397**	mg/L			1		10/28/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**2.4**	mg/L	1.0		1		10/28/14 00:41	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	10/27/14 08:36	10/27/14 11:29		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: MW-46R-201410 **Lab ID: 60180635007** Collected: 10/16/14 08:55 Received: 10/17/14 11:05 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		10/25/14 16:16	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**128**	ug/L	50.0	24.0	1	10/22/14 14:30	10/24/14 13:33	7439-89-6	
Manganese	**126**	ug/L	5.0	2.5	1	10/22/14 14:30	10/24/14 13:33	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		10/21/14 16:24	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 16:24	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 16:24	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 16:24	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 16:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 16:24	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 16:24	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 16:24	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 16:24	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 16:24	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 16:24	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 16:24	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 16:24	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 16:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 16:24	107-06-2	
1,1-Dichloroethene	**1.2J**	ug/L	5.0	0.50	1		10/21/14 16:24	75-35-4	
cis-1,2-Dichloroethene	**24.6**	ug/L	5.0	0.50	1		10/21/14 16:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 16:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 16:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 16:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 16:24	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 16:24	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 16:24	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 16:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 16:24	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 16:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 16:24	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 16:24	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 16:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 16:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 16:24	79-00-5	
Trichloroethene	**410**	ug/L	50.0	5.0	10		10/21/14 07:34	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/21/14 16:24	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 16:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/21/14 16:24	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		10/21/14 16:24	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		10/21/14 16:24	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 16:24		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: MW-46R-201410 **Lab ID: 60180635007** Collected: 10/16/14 08:55 Received: 10/17/14 11:05 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**6.2J**	mg/L	20.0	2.0	1		10/24/14 13:12		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		10/24/14 13:12		
Alkalinity, Total as CaCO3	**6.2J**	mg/L	20.0	2.0	1		10/24/14 13:12		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.13J**	mg/L	0.20		1		10/28/14 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		10/28/14 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		10/20/14 11:46	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**248**	mg/L	20.0	10.0	20		10/31/14 16:57	16887-00-6	
Sulfate	**0.58J**	mg/L	1.0	0.50	1		10/31/14 17:11	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.023	1		10/23/14 10:48	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.012	1		10/18/14 06:51		
Nitrogen, Nitrite	ND	mg/L	0.10	0.012	1		10/18/14 06:51		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		10/18/14 06:51		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		10/28/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.19J**	mg/L	1.0		1		10/28/14 00:54	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	10/27/14 08:36	10/27/14 11:29		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: DUP-05-201410 **Lab ID: 60180635008** Collected: 10/16/14 08:28 Received: 10/17/14 11:05 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		10/21/14 07:02	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 07:02	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 07:02	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 07:02	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 07:02	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 07:02	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 07:02	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 07:02	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 07:02	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 07:02	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 07:02	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 07:02	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 07:02	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 07:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 07:02	107-06-2	
1,1-Dichloroethene	**3.9J**	ug/L	5.0	0.50	1		10/21/14 07:02	75-35-4	
cis-1,2-Dichloroethene	**66.4**	ug/L	5.0	0.50	1		10/21/14 07:02	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 07:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 07:02	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 07:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 07:02	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 07:02	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 07:02	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 07:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 07:02	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 07:02	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 07:02	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 07:02	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 07:02	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 07:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 07:02	79-00-5	
Trichloroethene	**1660**	ug/L	250	25.0	50		10/21/14 19:20	79-01-6	
Vinyl chloride	**1.8J**	ug/L	2.0	0.50	1		10/21/14 07:02	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 07:02	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/21/14 07:02	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		10/21/14 07:02	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		10/21/14 07:02	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 07:02		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: EB-04-201410 **Lab ID: 60180635009** Collected: 10/16/14 12:55 Received: 10/17/14 11:05 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		10/21/14 04:53	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 04:53	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 04:53	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 04:53	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 04:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 04:53	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 04:53	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 04:53	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 04:53	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 04:53	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 04:53	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 04:53	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 04:53	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 04:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 04:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 04:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 04:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 04:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 04:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 04:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 04:53	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 04:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 04:53	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 04:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 04:53	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 04:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 04:53	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 04:53	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 04:53	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 04:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 04:53	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 04:53	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/21/14 04:53	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 04:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		10/21/14 04:53	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		10/21/14 04:53	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		10/21/14 04:53	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 04:53		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: DUP-06-201410 **Lab ID: 60180635010** Collected: 10/16/14 11:27 Received: 10/17/14 11:05 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		10/21/14 15:36	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 15:36	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 15:36	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 15:36	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 15:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 15:36	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 15:36	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 15:36	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 15:36	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 15:36	75-00-3	
Chloroform	**2.4J**	ug/L	5.0	0.50	1		10/21/14 15:36	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 15:36	74-87-3	
Dibromochloromethane	**2.4J**	ug/L	5.0	0.50	1		10/21/14 15:36	124-48-1	
1,1-Dichloroethane	**1.1J**	ug/L	2.4	0.50	1		10/21/14 15:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 15:36	107-06-2	
1,1-Dichloroethene	**10.8**	ug/L	5.0	0.50	1		10/21/14 15:36	75-35-4	
cis-1,2-Dichloroethene	**869**	ug/L	500	50.0	100		10/21/14 08:06	156-59-2	
trans-1,2-Dichloroethene	**2.8J**	ug/L	5.0	0.50	1		10/21/14 15:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 15:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 15:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 15:36	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 15:36	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 15:36	591-78-6	
Methylene chloride	**22.4**	ug/L	5.0	0.50	1		10/21/14 15:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 15:36	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 15:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 15:36	79-34-5	
Tetrachloroethene	**2.5J**	ug/L	5.0	0.50	1		10/21/14 15:36	127-18-4	
Toluene	**2.0J**	ug/L	5.0	0.50	1		10/21/14 15:36	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 15:36	71-55-6	
1,1,2-Trichloroethane	**0.69J**	ug/L	5.0	0.50	1		10/21/14 15:36	79-00-5	
Trichloroethene	**6970**	ug/L	500	50.0	100		10/21/14 08:06	79-01-6	
Vinyl chloride	**370**	ug/L	200	50.0	100		10/21/14 08:06	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 15:36	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/21/14 15:36	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120		1		10/21/14 15:36	17060-07-0	
Toluene-d8 (S)	94	%	80-120		1		10/21/14 15:36	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 15:36		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: DUP-03-201410 **Lab ID: 60180635011** Collected: 10/16/14 08:55 Received: 10/17/14 11:05 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		10/21/14 07:18	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 07:18	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 07:18	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 07:18	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 07:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 07:18	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 07:18	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 07:18	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 07:18	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 07:18	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 07:18	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 07:18	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 07:18	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 07:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 07:18	107-06-2	
1,1-Dichloroethene	**1.3J**	ug/L	5.0	0.50	1		10/21/14 07:18	75-35-4	
cis-1,2-Dichloroethene	**25.2**	ug/L	5.0	0.50	1		10/21/14 07:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 07:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 07:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 07:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 07:18	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 07:18	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 07:18	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 07:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 07:18	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 07:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 07:18	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 07:18	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 07:18	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 07:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 07:18	79-00-5	
Trichloroethene	**373**	ug/L	50.0	5.0	10		10/22/14 16:20	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/21/14 07:18	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 07:18	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/21/14 07:18	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		10/21/14 07:18	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		10/21/14 07:18	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 07:18		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: EB-05-201410 **Lab ID: 60180635012** Collected: 10/16/14 14:35 Received: 10/17/14 11:05 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		10/21/14 05:09	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 05:09	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 05:09	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 05:09	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 05:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 05:09	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 05:09	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 05:09	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 05:09	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 05:09	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 05:09	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 05:09	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 05:09	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 05:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 05:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 05:09	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 05:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 05:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 05:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 05:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 05:09	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 05:09	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 05:09	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 05:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 05:09	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 05:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 05:09	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 05:09	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 05:09	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 05:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 05:09	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 05:09	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/21/14 05:09	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 05:09	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/21/14 05:09	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		10/21/14 05:09	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		10/21/14 05:09	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 05:09		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: EB-06-201410 **Lab ID: 60180635013** Collected: 10/16/14 16:39 Received: 10/17/14 11:05 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		10/21/14 05:25	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 05:25	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 05:25	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 05:25	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 05:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 05:25	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 05:25	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 05:25	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 05:25	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 05:25	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 05:25	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 05:25	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 05:25	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 05:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 05:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 05:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 05:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 05:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 05:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 05:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 05:25	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 05:25	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 05:25	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 05:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 05:25	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 05:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 05:25	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 05:25	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 05:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 05:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 05:25	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 05:25	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/21/14 05:25	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 05:25	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/21/14 05:25	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		10/21/14 05:25	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		10/21/14 05:25	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 05:25		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: TB-06-201410 **Lab ID: 60180635014** Collected: 10/16/14 08:25 Received: 10/17/14 11:05 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		10/21/14 04:20	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 04:20	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 04:20	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 04:20	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 04:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 04:20	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 04:20	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 04:20	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 04:20	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 04:20	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 04:20	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 04:20	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 04:20	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 04:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 04:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 04:20	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 04:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 04:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 04:20	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 04:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 04:20	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 04:20	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 04:20	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 04:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 04:20	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 04:20	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 04:20	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 04:20	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 04:20	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 04:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 04:20	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 04:20	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/21/14 04:20	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 04:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/21/14 04:20	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		10/21/14 04:20	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		10/21/14 04:20	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 04:20		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180635

Sample: TB-02-201410 **Lab ID: 60180635015** Collected: 10/16/14 08:25 Received: 10/17/14 11:05 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		10/21/14 04:37	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 04:37	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 04:37	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 04:37	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 04:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 04:37	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 04:37	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 04:37	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 04:37	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 04:37	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 04:37	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 04:37	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 04:37	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 04:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 04:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 04:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 04:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 04:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 04:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 04:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 04:37	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 04:37	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 04:37	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 04:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 04:37	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 04:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 04:37	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 04:37	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 04:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 04:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 04:37	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 04:37	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/21/14 04:37	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 04:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/21/14 04:37	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		10/21/14 04:37	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		10/21/14 04:37	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 04:37		

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180635

QC Batch: GCSV/3093 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60180635001, 60180635002, 60180635003, 60180635004, 60180635005, 60180635006, 60180635007

METHOD BLANK: 103374 Matrix: Water
Associated Lab Samples: 60180635001, 60180635002, 60180635003, 60180635004, 60180635005, 60180635006, 60180635007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	10/25/14 13:36	

LABORATORY CONTROL SAMPLE: 103375

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	109000	109	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 103376 103377

Parameter	Units	60180441021 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	109000	107000	109	107	40-140	2	40	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180635

QC Batch: MPRP/29445 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60180635001, 60180635002, 60180635003, 60180635004, 60180635005, 60180635006, 60180635007

METHOD BLANK: 1465285 Matrix: Water
Associated Lab Samples: 60180635001, 60180635002, 60180635003, 60180635004, 60180635005, 60180635006, 60180635007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	10/24/14 13:13	
Manganese	ug/L	ND	5.0	10/24/14 13:13	

LABORATORY CONTROL SAMPLE: 1465286

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	10000	100	80-120	
Manganese	ug/L	1000	1020	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1465287 1465288

Parameter	Units	60180720006 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	10400	10200	104	102	75-125	2	20	
Manganese	ug/L	389	1000	1000	1450	1410	106	102	75-125	3	20	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180635

QC Batch: MSV/65210 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60180635001, 60180635002, 60180635003, 60180635004, 60180635005

METHOD BLANK: 1463848 Matrix: Water
Associated Lab Samples: 60180635001, 60180635002, 60180635003, 60180635004, 60180635005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	10/21/14 03:25	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/21/14 03:25	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/21/14 03:25	
1,1-Dichloroethane	ug/L	ND	2.4	10/21/14 03:25	
1,1-Dichloroethene	ug/L	ND	5.0	10/21/14 03:25	
1,2-Dichloroethane	ug/L	ND	5.0	10/21/14 03:25	
1,2-Dichloropropane	ug/L	ND	5.0	10/21/14 03:25	
2-Butanone (MEK)	ug/L	ND	10.0	10/21/14 03:25	
2-Hexanone	ug/L	ND	10.0	10/21/14 03:25	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/21/14 03:25	
Acetone	ug/L	ND	10.0	10/21/14 03:25	
Benzene	ug/L	ND	5.0	10/21/14 03:25	
Bromodichloromethane	ug/L	ND	5.0	10/21/14 03:25	
Bromoform	ug/L	ND	5.0	10/21/14 03:25	
Bromomethane	ug/L	ND	7.0	10/21/14 03:25	
Carbon disulfide	ug/L	ND	10.0	10/21/14 03:25	
Carbon tetrachloride	ug/L	ND	5.0	10/21/14 03:25	
Chlorobenzene	ug/L	ND	5.0	10/21/14 03:25	
Chloroethane	ug/L	ND	10.0	10/21/14 03:25	
Chloroform	ug/L	ND	5.0	10/21/14 03:25	
Chloromethane	ug/L	ND	10.0	10/21/14 03:25	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/21/14 03:25	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/21/14 03:25	
Dibromochloromethane	ug/L	ND	5.0	10/21/14 03:25	
Ethylbenzene	ug/L	ND	5.0	10/21/14 03:25	
Methylene chloride	ug/L	0.61J	5.0	10/21/14 03:25	
Styrene	ug/L	ND	5.0	10/21/14 03:25	
Tetrachloroethene	ug/L	ND	5.0	10/21/14 03:25	
Toluene	ug/L	ND	5.0	10/21/14 03:25	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/21/14 03:25	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/21/14 03:25	
Trichloroethene	ug/L	ND	5.0	10/21/14 03:25	
Vinyl chloride	ug/L	ND	2.0	10/21/14 03:25	
Xylene (Total)	ug/L	ND	5.0	10/21/14 03:25	
1,2-Dichloroethane-d4 (S)	%	102	80-120	10/21/14 03:25	
4-Bromofluorobenzene (S)	%	93	80-120	10/21/14 03:25	
Toluene-d8 (S)	%	103	80-120	10/21/14 03:25	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180635

LABORATORY CONTROL SAMPLE: 1463849

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.2	106	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	18.2	91	73-124	
1,1,2-Trichloroethane	ug/L	20	20.5	102	80-120	
1,1-Dichloroethane	ug/L	20	19.9	99	77-120	
1,1-Dichloroethene	ug/L	20	19.2	96	78-126	
1,2-Dichloroethane	ug/L	20	20.2	101	77-123	
1,2-Dichloropropane	ug/L	20	19.6	98	80-121	
2-Butanone (MEK)	ug/L	100	93.4	93	52-145	
2-Hexanone	ug/L	100	96.5	97	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	96.6	97	71-131	
Acetone	ug/L	100	91.2	91	32-155	
Benzene	ug/L	20	19.6	98	80-120	
Bromodichloromethane	ug/L	20	21.4	107	80-120	
Bromoform	ug/L	20	23.9	120	73-124	
Bromomethane	ug/L	20	12.8	64	31-144	
Carbon disulfide	ug/L	20	16.7	84	65-125	
Carbon tetrachloride	ug/L	20	21.8	109	78-128	
Chlorobenzene	ug/L	20	22.2	111	80-120	
Chloroethane	ug/L	20	17.7	89	55-137	
Chloroform	ug/L	20	20.7	103	79-120	
Chloromethane	ug/L	20	14.9	75	22-138	
cis-1,2-Dichloroethene	ug/L	20	19.8	99	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.5	97	80-120	
Dibromochloromethane	ug/L	20	22.5	113	80-120	
Ethylbenzene	ug/L	20	21.0	105	80-121	
Methylene chloride	ug/L	20	20.3	102	73-126	
Styrene	ug/L	20	22.6	113	80-120	
Tetrachloroethene	ug/L	20	22.8	114	80-121	
Toluene	ug/L	20	20.9	105	80-122	
trans-1,2-Dichloroethene	ug/L	20	18.9	94	79-121	
trans-1,3-Dichloropropene	ug/L	20	21.5	107	80-127	
Trichloroethene	ug/L	20	20.7	103	80-120	
Vinyl chloride	ug/L	20	15.7	78	59-120	
Xylene (Total)	ug/L	60	67.3	112	80-121	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			92	80-120	
Toluene-d8 (S)	%			104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1463850 1463851

Parameter	Units	60180406002 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	21.4	21.0	107	105	71-136	2	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	17.6	18.5	88	92	61-127	5	21	
1,1,2-Trichloroethane	ug/L	ND	20	20	19.8	20.0	99	100	63-123	1	22	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180635

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1463850 1463851

Parameter	Units	60180406002 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	20.7	20.0	103	100	62-128	3	25	
1,1-Dichloroethene	ug/L	ND	20	20	21.7	20.6	109	103	60-144	5	28	
1,2-Dichloroethane	ug/L	ND	20	20	19.2	19.0	96	95	49-148	1	35	
1,2-Dichloropropane	ug/L	ND	20	20	19.0	19.1	95	96	66-130	1	22	
2-Butanone (MEK)	ug/L	ND	100	100	85.4	86.1	85	86	36-145	1	23	
2-Hexanone	ug/L	ND	100	100	87.4	89.7	87	90	42-140	3	24	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	89.0	89.3	89	89	52-137	0	24	
Acetone	ug/L	ND	100	100	80.3	79.7	80	80	24-151	1	23	
Benzene	ug/L	ND	20	20	20.4	20.2	102	101	37-157	1	32	
Bromodichloromethane	ug/L	ND	20	20	21.0	20.3	105	101	67-125	4	21	
Bromoform	ug/L	ND	20	20	23.3	22.6	116	113	55-124	3	23	
Bromomethane	ug/L	ND	20	20	13.8	18.4	69	92	25-138	29	42	
Carbon disulfide	ug/L	ND	20	20	19.5	19.7	97	98	57-133	1	23	
Carbon tetrachloride	ug/L	ND	20	20	23.4	22.7	117	113	68-142	3	21	
Chlorobenzene	ug/L	ND	20	20	21.7	21.8	109	109	66-133	1	20	
Chloroethane	ug/L	ND	20	20	19.1	18.6	96	93	46-147	3	28	
Chloroform	ug/L	ND	20	20	21.1	20.2	106	101	66-127	5	20	
Chloromethane	ug/L	ND	20	20	21.8	15.1	109	75	19-136	37	36	R1
cis-1,2-Dichloroethene	ug/L	1.2	20	20	21.6	20.4	102	96	55-140	6	23	
cis-1,3-Dichloropropene	ug/L	ND	20	20	18.2	17.8	91	89	62-122	2	22	
Dibromochloromethane	ug/L	ND	20	20	21.4	22.1	107	111	62-130	4	22	
Ethylbenzene	ug/L	ND	20	20	21.2	20.9	106	105	31-160	1	32	
Methylene chloride	ug/L	ND	20	20	18.7	18.5	92	91	55-132	1	23	
Styrene	ug/L	ND	20	20	22.3	21.9	112	109	55-134	2	25	
Tetrachloroethene	ug/L	ND	20	20	22.9	22.5	115	112	69-133	2	20	
Toluene	ug/L	ND	20	20	21.1	21.3	105	106	35-157	1	37	
trans-1,2-Dichloroethene	ug/L	ND	20	20	20.7	20.5	103	102	66-131	1	23	
trans-1,3-Dichloropropene	ug/L	ND	20	20	20.1	19.8	100	99	62-131	1	23	
Trichloroethene	ug/L	ND	20	20	21.7	19.5	108	98	61-135	10	21	
Vinyl chloride	ug/L	ND	20	20	19.9	19.4	100	97	44-128	3	22	
Xylene (Total)	ug/L	ND	60	60	64.9	66.2	108	110	34-156	2	37	
1,2-Dichloroethane-d4 (S)	%						98	97	80-120			
4-Bromofluorobenzene (S)	%						89	96	80-120			
Toluene-d8 (S)	%						104	104	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.: 60180635

QC Batch: MSV/65211 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60180635007, 60180635008, 60180635009, 60180635010, 60180635011, 60180635012, 60180635013, 60180635014, 60180635015

METHOD BLANK: 1463852 Matrix: Water
Associated Lab Samples: 60180635007, 60180635008, 60180635009, 60180635010, 60180635011, 60180635012, 60180635013, 60180635014, 60180635015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	10/21/14 03:32	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/21/14 03:32	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/21/14 03:32	
1,1-Dichloroethane	ug/L	ND	2.4	10/21/14 03:32	
1,1-Dichloroethene	ug/L	ND	5.0	10/21/14 03:32	
1,2-Dichloroethane	ug/L	ND	5.0	10/21/14 03:32	
1,2-Dichloropropane	ug/L	ND	5.0	10/21/14 03:32	
2-Butanone (MEK)	ug/L	ND	10.0	10/21/14 03:32	
2-Hexanone	ug/L	ND	10.0	10/21/14 03:32	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/21/14 03:32	
Acetone	ug/L	ND	10.0	10/21/14 03:32	
Benzene	ug/L	ND	5.0	10/21/14 03:32	
Bromodichloromethane	ug/L	ND	5.0	10/21/14 03:32	
Bromoform	ug/L	ND	5.0	10/21/14 03:32	
Bromomethane	ug/L	ND	7.0	10/21/14 03:32	
Carbon disulfide	ug/L	ND	10.0	10/21/14 03:32	
Carbon tetrachloride	ug/L	ND	5.0	10/21/14 03:32	
Chlorobenzene	ug/L	ND	5.0	10/21/14 03:32	
Chloroethane	ug/L	ND	10.0	10/21/14 03:32	
Chloroform	ug/L	ND	5.0	10/21/14 03:32	
Chloromethane	ug/L	ND	10.0	10/21/14 03:32	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/21/14 03:32	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/21/14 03:32	
Dibromochloromethane	ug/L	ND	5.0	10/21/14 03:32	
Ethylbenzene	ug/L	ND	5.0	10/21/14 03:32	
Methylene chloride	ug/L	ND	5.0	10/21/14 03:32	
Styrene	ug/L	ND	5.0	10/21/14 03:32	
Tetrachloroethene	ug/L	ND	5.0	10/21/14 03:32	
Toluene	ug/L	ND	5.0	10/21/14 03:32	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/21/14 03:32	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/21/14 03:32	
Trichloroethene	ug/L	ND	5.0	10/21/14 03:32	
Vinyl chloride	ug/L	ND	2.0	10/21/14 03:32	
Xylene (Total)	ug/L	ND	5.0	10/21/14 03:32	
1,2-Dichloroethane-d4 (S)	%	102	80-120	10/21/14 03:32	
4-Bromofluorobenzene (S)	%	99	80-120	10/21/14 03:32	
Toluene-d8 (S)	%	100	80-120	10/21/14 03:32	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180635

LABORATORY CONTROL SAMPLE: 1463853

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.9	104	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	19.3	97	73-124	
1,1,2-Trichloroethane	ug/L	20	20.7	103	80-120	
1,1-Dichloroethane	ug/L	20	20.5	102	77-120	
1,1-Dichloroethene	ug/L	20	20.2	101	78-126	
1,2-Dichloroethane	ug/L	20	21.1	106	77-123	
1,2-Dichloropropane	ug/L	20	20.0	100	80-121	
2-Butanone (MEK)	ug/L	100	84.9	85	52-145	
2-Hexanone	ug/L	100	93.9	94	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	95.5	96	71-131	
Acetone	ug/L	100	96.5	96	32-155	
Benzene	ug/L	20	20.0	100	80-120	
Bromodichloromethane	ug/L	20	20.4	102	80-120	
Bromoform	ug/L	20	19.1	95	73-124	
Bromomethane	ug/L	20	15.8	79	31-144	
Carbon disulfide	ug/L	20	18.8	94	65-125	
Carbon tetrachloride	ug/L	20	20.0	100	78-128	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	17.9	89	55-137	
Chloroform	ug/L	20	20.8	104	79-120	
Chloromethane	ug/L	20	17.4	87	22-138	
cis-1,2-Dichloroethene	ug/L	20	19.5	98	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.7	93	80-120	
Dibromochloromethane	ug/L	20	20.1	101	80-120	
Ethylbenzene	ug/L	20	21.0	105	80-121	
Methylene chloride	ug/L	20	20.4	102	73-126	
Styrene	ug/L	20	22.6	113	80-120	
Tetrachloroethene	ug/L	20	20.2	101	80-121	
Toluene	ug/L	20	19.8	99	80-122	
trans-1,2-Dichloroethene	ug/L	20	20.5	102	79-121	
trans-1,3-Dichloropropene	ug/L	20	20.8	104	80-127	
Trichloroethene	ug/L	20	20.6	103	80-120	
Vinyl chloride	ug/L	20	16.9	85	59-120	
Xylene (Total)	ug/L	60	64.8	108	80-121	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			100	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180635

QC Batch: MSV/65247 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60180635001, 60180635002, 60180635004, 60180635005, 60180635006, 60180635007, 60180635008, 60180635010

METHOD BLANK: 1464527 Matrix: Water
Associated Lab Samples: 60180635001, 60180635002, 60180635004, 60180635005, 60180635006, 60180635007, 60180635008, 60180635010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	10/21/14 13:25	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/21/14 13:25	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/21/14 13:25	
1,1-Dichloroethane	ug/L	ND	2.4	10/21/14 13:25	
1,1-Dichloroethene	ug/L	ND	5.0	10/21/14 13:25	
1,2-Dichloroethane	ug/L	ND	5.0	10/21/14 13:25	
1,2-Dichloropropane	ug/L	ND	5.0	10/21/14 13:25	
2-Butanone (MEK)	ug/L	ND	10.0	10/21/14 13:25	
2-Hexanone	ug/L	ND	10.0	10/21/14 13:25	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/21/14 13:25	
Acetone	ug/L	ND	10.0	10/21/14 13:25	
Benzene	ug/L	ND	5.0	10/21/14 13:25	
Bromodichloromethane	ug/L	ND	5.0	10/21/14 13:25	
Bromoform	ug/L	ND	5.0	10/21/14 13:25	
Bromomethane	ug/L	ND	7.0	10/21/14 13:25	
Carbon disulfide	ug/L	ND	10.0	10/21/14 13:25	
Carbon tetrachloride	ug/L	ND	5.0	10/21/14 13:25	
Chlorobenzene	ug/L	ND	5.0	10/21/14 13:25	
Chloroethane	ug/L	ND	10.0	10/21/14 13:25	
Chloroform	ug/L	ND	5.0	10/21/14 13:25	
Chloromethane	ug/L	ND	10.0	10/21/14 13:25	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/21/14 13:25	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/21/14 13:25	
Dibromochloromethane	ug/L	ND	5.0	10/21/14 13:25	
Ethylbenzene	ug/L	ND	5.0	10/21/14 13:25	
Methylene chloride	ug/L	ND	5.0	10/21/14 13:25	
Styrene	ug/L	ND	5.0	10/21/14 13:25	
Tetrachloroethene	ug/L	ND	5.0	10/21/14 13:25	
Toluene	ug/L	ND	5.0	10/21/14 13:25	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/21/14 13:25	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/21/14 13:25	
Trichloroethene	ug/L	ND	5.0	10/21/14 13:25	
Vinyl chloride	ug/L	ND	2.0	10/21/14 13:25	
Xylene (Total)	ug/L	ND	5.0	10/21/14 13:25	
1,2-Dichloroethane-d4 (S)	%	101	80-120	10/21/14 13:25	
4-Bromofluorobenzene (S)	%	96	80-120	10/21/14 13:25	
Toluene-d8 (S)	%	96	80-120	10/21/14 13:25	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180635

LABORATORY CONTROL SAMPLE: 1464528

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.2	96	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	19.8	99	73-124	
1,1,2-Trichloroethane	ug/L	20	19.8	99	80-120	
1,1-Dichloroethane	ug/L	20	19.4	97	77-120	
1,1-Dichloroethene	ug/L	20	19.3	96	78-126	
1,2-Dichloroethane	ug/L	20	19.1	95	77-123	
1,2-Dichloropropane	ug/L	20	18.9	94	80-121	
2-Butanone (MEK)	ug/L	100	77.6	78	52-145	
2-Hexanone	ug/L	100	93.3	93	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	89.6	90	71-131	
Acetone	ug/L	100	87.2	87	32-155	
Benzene	ug/L	20	18.7	94	80-120	
Bromodichloromethane	ug/L	20	19.0	95	80-120	
Bromoform	ug/L	20	18.8	94	73-124	
Bromomethane	ug/L	20	17.1	86	31-144	
Carbon disulfide	ug/L	20	18.9	95	65-125	
Carbon tetrachloride	ug/L	20	18.6	93	78-128	
Chlorobenzene	ug/L	20	20.5	103	80-120	
Chloroethane	ug/L	20	17.1	86	55-137	
Chloroform	ug/L	20	19.6	98	79-120	
Chloromethane	ug/L	20	19.1	96	22-138	
cis-1,2-Dichloroethene	ug/L	20	18.7	93	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.7	93	80-120	
Dibromochloromethane	ug/L	20	20.1	101	80-120	
Ethylbenzene	ug/L	20	20.5	102	80-121	
Methylene chloride	ug/L	20	18.0	90	73-126	
Styrene	ug/L	20	22.3	111	80-120	
Tetrachloroethene	ug/L	20	19.5	97	80-121	
Toluene	ug/L	20	18.7	93	80-122	
trans-1,2-Dichloroethene	ug/L	20	19.9	100	79-121	
trans-1,3-Dichloropropene	ug/L	20	22.0	110	80-127	
Trichloroethene	ug/L	20	18.2	91	80-120	
Vinyl chloride	ug/L	20	17.2	86	59-120	
Xylene (Total)	ug/L	60	64.5	108	80-121	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			96	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180635

QC Batch: MSV/65266
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60180635011

METHOD BLANK: 1464986 Matrix: Water
Associated Lab Samples: 60180635011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	ug/L	ND	5.0	10/22/14 10:57	
1,2-Dichloroethane-d4 (S)	%	97	80-120	10/22/14 10:57	
4-Bromofluorobenzene (S)	%	96	80-120	10/22/14 10:57	
Toluene-d8 (S)	%	95	80-120	10/22/14 10:57	

LABORATORY CONTROL SAMPLE: 1464987

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	20	18.5	92	80-120	
1,2-Dichloroethane-d4 (S)	%			95	80-120	
4-Bromofluorobenzene (S)	%			96	80-120	
Toluene-d8 (S)	%			94	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180635

QC Batch: WET/51104 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60180635001, 60180635002

METHOD BLANK: 1466400 Matrix: Water
Associated Lab Samples: 60180635001, 60180635002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	10/24/14 09:05	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	10/24/14 09:05	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	10/24/14 09:05	

LABORATORY CONTROL SAMPLE: 1466401

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	495	99	90-110	

SAMPLE DUPLICATE: 1466402

Parameter	Units	60180495001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	328	337	3	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	328	337	3	10	

SAMPLE DUPLICATE: 1466403

Parameter	Units	60180608002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	272	273	1	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	272	273	1	10	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180635

QC Batch: WET/51115 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60180635003, 60180635004, 60180635005, 60180635006, 60180635007

METHOD BLANK: 1466579 Matrix: Water
Associated Lab Samples: 60180635003, 60180635004, 60180635005, 60180635006, 60180635007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	10/24/14 12:52	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	10/24/14 12:52	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	10/24/14 12:52	

LABORATORY CONTROL SAMPLE: 1466580

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	485	97	90-110	

SAMPLE DUPLICATE: 1466581

Parameter	Units	60180635004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	73.4	75.7	3	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	73.4	75.7	3	10	

SAMPLE DUPLICATE: 1466582

Parameter	Units	60180426004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	401	418	4	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	401	418	4	10	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180635

QC Batch: WET/50996 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60180635001, 60180635002, 60180635003, 60180635004, 60180635005, 60180635006, 60180635007

METHOD BLANK: 1463614 Matrix: Water
Associated Lab Samples: 60180635001, 60180635002, 60180635003, 60180635004, 60180635005, 60180635006, 60180635007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	10/20/14 11:33	

LABORATORY CONTROL SAMPLE: 1463615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.52	103	80-120	

MATRIX SPIKE SAMPLE: 1463616

Parameter	Units	60180441017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.16	33	75-125	M1

SAMPLE DUPLICATE: 1463617

Parameter	Units	60180441018 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.: 60180635

QC Batch: WETA/31581 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60180635001, 60180635002, 60180635003, 60180635004, 60180635005, 60180635006, 60180635007

METHOD BLANK: 1469958 Matrix: Water
Associated Lab Samples: 60180635001, 60180635006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	10/30/14 15:14	
Sulfate	mg/L	ND	1.0	10/30/14 15:14	

METHOD BLANK: 1471149 Matrix: Water
Associated Lab Samples: 60180635001, 60180635002, 60180635003, 60180635004, 60180635005, 60180635006, 60180635007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	10/31/14 09:58	
Sulfate	mg/L	ND	1.0	10/31/14 09:58	

LABORATORY CONTROL SAMPLE: 1469959

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	99	90-110	
Sulfate	mg/L	5	4.7	93	90-110	

LABORATORY CONTROL SAMPLE: 1471150

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	98	90-110	
Sulfate	mg/L	5	4.7	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1469960 1469961

Parameter	Units	60180635001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfate	mg/L	8.8	5	5	13.6	13.5	95	95	80-120	0	15	

MATRIX SPIKE SAMPLE: 1469962

Parameter	Units	60180635002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	482	250	748	106	80-120	
Sulfate	mg/L	373	250	630	103	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180635

QC Batch: WETA/31463 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60180635001, 60180635002, 60180635003, 60180635004, 60180635005, 60180635006, 60180635007

METHOD BLANK: 1464795 Matrix: Water
Associated Lab Samples: 60180635001, 60180635002, 60180635003, 60180635004, 60180635005, 60180635006, 60180635007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	10/23/14 10:32	

LABORATORY CONTROL SAMPLE: 1464796

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.1	103	90-110	

MATRIX SPIKE SAMPLE: 1464797

Parameter	Units	60180608002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	17.4	20	33.7	81	90-110	M1

MATRIX SPIKE SAMPLE: 1464798

Parameter	Units	60180619004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	2.1	104	90-110	

SAMPLE DUPLICATE: 1464799

Parameter	Units	60180657001 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.: 60180635

QC Batch: WETA/31409 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60180635001, 60180635002, 60180635003, 60180635004, 60180635005, 60180635006, 60180635007

METHOD BLANK: 1462556 Matrix: Water
Associated Lab Samples: 60180635001, 60180635002, 60180635003, 60180635004, 60180635005, 60180635006, 60180635007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	10/18/14 06:45	
Nitrogen, Nitrite	mg/L	ND	0.10	10/18/14 06:45	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	10/18/14 06:45	

LABORATORY CONTROL SAMPLE: 1462557

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	94	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	106	90-110	

MATRIX SPIKE SAMPLE: 1462980

Parameter	Units	30131840001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.4	1.6	3.1	106	85-115	H1
Nitrogen, Nitrite	mg/L	ND	.4	0.41	101	90-110	H1
Nitrogen, NO2 plus NO3	mg/L	1.4	2	3.5	105	90-110	H1

SAMPLE DUPLICATE: 1462981

Parameter	Units	60180562001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	12.2	11.7	4	20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	12.2	11.7	4	20	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180635

QC Batch: WETA/31506 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60180635001, 60180635002, 60180635003, 60180635004, 60180635005, 60180635006, 60180635007

METHOD BLANK: 1466854 Matrix: Water
Associated Lab Samples: 60180635001, 60180635002, 60180635003, 60180635004, 60180635005, 60180635006, 60180635007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	0.16J	1.0	10/27/14 17:48	

LABORATORY CONTROL SAMPLE: 1466855

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.3	107	80-120	

MATRIX SPIKE SAMPLE: 1466856

Parameter	Units	60180441017 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	0.63J	5	4.9	86	80-120	

SAMPLE DUPLICATE: 1466857

Parameter	Units	60180441018 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	2.9	2.9	1	25	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180635

QC Batch: WETA/6366 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60180635001, 60180635002, 60180635003, 60180635004, 60180635005, 60180635006, 60180635007

METHOD BLANK: 103397 Matrix: Water
Associated Lab Samples: 60180635001, 60180635002, 60180635003, 60180635004, 60180635005, 60180635006, 60180635007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	10/27/14 11:25	

LABORATORY CONTROL SAMPLE: 103398

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.6	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 103399 103400

Parameter	Units	7519863003 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	8.0	15.3	15.3	23.4	22.7	100	96	80-120	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 103403 103404

Parameter	Units	60180635007 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	1.5	103	97	80-120	6	20	

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QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60180635

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/65211

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/65247

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/65266

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1e	Field pH
B	Analyte was detected in the associated method blank.
H1	Analysis conducted outside the EPA 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.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60180635

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180635001	ITMW-15-201410	EPA 8015 - Alcohol	GCSV/3093		
60180635002	MW-25-201410	EPA 8015 - Alcohol	GCSV/3093		
60180635003	ITMW-4-201410	EPA 8015 - Alcohol	GCSV/3093		
60180635004	ITMW-19-201410	EPA 8015 - Alcohol	GCSV/3093		
60180635005	ITMW-17-201410	EPA 8015 - Alcohol	GCSV/3093		
60180635006	MW-38-201410	EPA 8015 - Alcohol	GCSV/3093		
60180635007	MW-46R-201410	EPA 8015 - Alcohol	GCSV/3093		
60180635001	ITMW-15-201410	EPA 3010	MPRP/29445	EPA 6010	ICP/22109
60180635002	MW-25-201410	EPA 3010	MPRP/29445	EPA 6010	ICP/22109
60180635003	ITMW-4-201410	EPA 3010	MPRP/29445	EPA 6010	ICP/22109
60180635004	ITMW-19-201410	EPA 3010	MPRP/29445	EPA 6010	ICP/22109
60180635005	ITMW-17-201410	EPA 3010	MPRP/29445	EPA 6010	ICP/22109
60180635006	MW-38-201410	EPA 3010	MPRP/29445	EPA 6010	ICP/22109
60180635007	MW-46R-201410	EPA 3010	MPRP/29445	EPA 6010	ICP/22109
60180635001	ITMW-15-201410	EPA 5030B/8260	MSV/65210		
60180635001	ITMW-15-201410	EPA 5030B/8260	MSV/65247		
60180635002	MW-25-201410	EPA 5030B/8260	MSV/65210		
60180635002	MW-25-201410	EPA 5030B/8260	MSV/65247		
60180635003	ITMW-4-201410	EPA 5030B/8260	MSV/65210		
60180635004	ITMW-19-201410	EPA 5030B/8260	MSV/65210		
60180635004	ITMW-19-201410	EPA 5030B/8260	MSV/65247		
60180635005	ITMW-17-201410	EPA 5030B/8260	MSV/65210		
60180635005	ITMW-17-201410	EPA 5030B/8260	MSV/65247		
60180635006	MW-38-201410	EPA 5030B/8260	MSV/65247		
60180635007	MW-46R-201410	EPA 5030B/8260	MSV/65211		
60180635007	MW-46R-201410	EPA 5030B/8260	MSV/65247		
60180635008	DUP-05-201410	EPA 5030B/8260	MSV/65211		
60180635008	DUP-05-201410	EPA 5030B/8260	MSV/65247		
60180635009	EB-04-201410	EPA 5030B/8260	MSV/65211		
60180635010	DUP-06-201410	EPA 5030B/8260	MSV/65211		
60180635010	DUP-06-201410	EPA 5030B/8260	MSV/65247		
60180635011	DUP-03-201410	EPA 5030B/8260	MSV/65211		
60180635011	DUP-03-201410	EPA 5030B/8260	MSV/65266		
60180635012	EB-05-201410	EPA 5030B/8260	MSV/65211		
60180635013	EB-06-201410	EPA 5030B/8260	MSV/65211		
60180635014	TB-06-201410	EPA 5030B/8260	MSV/65211		
60180635015	TB-02-201410	EPA 5030B/8260	MSV/65211		
60180635001	ITMW-15-201410	SM 2320B	WET/51104		
60180635002	MW-25-201410	SM 2320B	WET/51104		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60180635

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180635003	ITMW-4-201410	SM 2320B	WET/51115		
60180635004	ITMW-19-201410	SM 2320B	WET/51115		
60180635005	ITMW-17-201410	SM 2320B	WET/51115		
60180635006	MW-38-201410	SM 2320B	WET/51115		
60180635007	MW-46R-201410	SM 2320B	WET/51115		
60180635001	ITMW-15-201410	SM 3500-Fe B#4	WET/51169		
60180635002	MW-25-201410	SM 3500-Fe B#4	WET/51169		
60180635003	ITMW-4-201410	SM 3500-Fe B#4	WET/51169		
60180635004	ITMW-19-201410	SM 3500-Fe B#4	WET/51169		
60180635005	ITMW-17-201410	SM 3500-Fe B#4	WET/51169		
60180635006	MW-38-201410	SM 3500-Fe B#4	WET/51169		
60180635007	MW-46R-201410	SM 3500-Fe B#4	WET/51169		
60180635001	ITMW-15-201410	SM 4500-H+B	WET/51193		
60180635002	MW-25-201410	SM 4500-H+B	WET/51193		
60180635003	ITMW-4-201410	SM 4500-H+B	WET/51193		
60180635004	ITMW-19-201410	SM 4500-H+B	WET/51193		
60180635005	ITMW-17-201410	SM 4500-H+B	WET/51193		
60180635006	MW-38-201410	SM 4500-H+B	WET/51193		
60180635007	MW-46R-201410	SM 4500-H+B	WET/51193		
60180635001	ITMW-15-201410	SM 4500-S-2 D	WET/50996		
60180635002	MW-25-201410	SM 4500-S-2 D	WET/50996		
60180635003	ITMW-4-201410	SM 4500-S-2 D	WET/50996		
60180635004	ITMW-19-201410	SM 4500-S-2 D	WET/50996		
60180635005	ITMW-17-201410	SM 4500-S-2 D	WET/50996		
60180635006	MW-38-201410	SM 4500-S-2 D	WET/50996		
60180635007	MW-46R-201410	SM 4500-S-2 D	WET/50996		
60180635001	ITMW-15-201410	EPA 300.0	WETA/31581		
60180635002	MW-25-201410	EPA 300.0	WETA/31581		
60180635003	ITMW-4-201410	EPA 300.0	WETA/31581		
60180635004	ITMW-19-201410	EPA 300.0	WETA/31581		
60180635005	ITMW-17-201410	EPA 300.0	WETA/31581		
60180635006	MW-38-201410	EPA 300.0	WETA/31581		
60180635007	MW-46R-201410	EPA 300.0	WETA/31581		
60180635001	ITMW-15-201410	EPA 350.1	WETA/31463		
60180635002	MW-25-201410	EPA 350.1	WETA/31463		
60180635003	ITMW-4-201410	EPA 350.1	WETA/31463		
60180635004	ITMW-19-201410	EPA 350.1	WETA/31463		
60180635005	ITMW-17-201410	EPA 350.1	WETA/31463		
60180635006	MW-38-201410	EPA 350.1	WETA/31463		
60180635007	MW-46R-201410	EPA 350.1	WETA/31463		
60180635001	ITMW-15-201410	EPA 353.2	WETA/31409		
60180635002	MW-25-201410	EPA 353.2	WETA/31409		
60180635003	ITMW-4-201410	EPA 353.2	WETA/31409		
60180635004	ITMW-19-201410	EPA 353.2	WETA/31409		
60180635005	ITMW-17-201410	EPA 353.2	WETA/31409		
60180635006	MW-38-201410	EPA 353.2	WETA/31409		

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60180635

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180635007	**MW-46R-201410**	EPA 353.2	WETA/31409		
60180635001	**ITMW-15-201410**	SM 4500-CO2 D	WETA/31535		
60180635002	**MW-25-201410**	SM 4500-CO2 D	WETA/31535		
60180635003	**ITMW-4-201410**	SM 4500-CO2 D	WETA/31535		
60180635004	**ITMW-19-201410**	SM 4500-CO2 D	WETA/31535		
60180635005	**ITMW-17-201410**	SM 4500-CO2 D	WETA/31535		
60180635006	**MW-38-201410**	SM 4500-CO2 D	WETA/31535		
60180635007	**MW-46R-201410**	SM 4500-CO2 D	WETA/31535		
60180635001	**ITMW-15-201410**	SM 5310C	WETA/31506		
60180635002	**MW-25-201410**	SM 5310C	WETA/31506		
60180635003	**ITMW-4-201410**	SM 5310C	WETA/31506		
60180635004	**ITMW-19-201410**	SM 5310C	WETA/31506		
60180635005	**ITMW-17-201410**	SM 5310C	WETA/31506		
60180635006	**MW-38-201410**	SM 5310C	WETA/31506		
60180635007	**MW-46R-201410**	SM 5310C	WETA/31506		
60180635001	**ITMW-15-201410**	SM4500-P B	WETA/6366	SM 4500-P E	WETA/6368
60180635002	**MW-25-201410**	SM4500-P B	WETA/6366	SM 4500-P E	WETA/6368
60180635003	**ITMW-4-201410**	SM4500-P B	WETA/6366	SM 4500-P E	WETA/6368
60180635004	**ITMW-19-201410**	SM4500-P B	WETA/6366	SM 4500-P E	WETA/6368
60180635005	**ITMW-17-201410**	SM4500-P B	WETA/6366	SM 4500-P E	WETA/6368
60180635006	**MW-38-201410**	SM4500-P B	WETA/6366	SM 4500-P E	WETA/6368
60180635007	**MW-46R-201410**	SM4500-P B	WETA/6366	SM 4500-P E	WETA/6368

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Sample Condition Upon Receipt

WO# : 60180635

60180635

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: 3.2 4.4

Temperature should be above freezing to 6°C

Date and initials of person examining contents: CAW 10/17/14

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.
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	TB02 with ITMW15, ITMW4, DUP5, EB4, ITMW17 ~~ITMW18~~ CAW 10/17/14 MW35
Pace Trip Blank lot # (if purchased): _____		15. TB06 with ITMW19, MW39, MW46R, EB5
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	EB6, DUP3, DUP6
		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: 10/17/14

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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 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 DATE	COLLECTED TIME	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)	8010-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-15-201410 A635	WT	G	10/16/14	0828	BP3N		BP3Z		13.0	11	X	X	X	X	X		BP3S			X	X	X	X	X	X	X		X	X	X	X		3(DG9U) 3(DG9H) BP3U
2	DUP5				0828						3				X						X													3(DG9H)
3	MW-25-201410 A635				1055	BP3N		BP3Z		13.0	11	X	X	X	X	X		BP3S			X	X	X	X	X	X	X	X	X	X	X	X	X		3(DG9H) 3(DG9U) BP3U
4	EB-4-201410				1255						3				X						X													
5	ITMW-4-201410				0825	BP3N		BP3Z		13.0	11	X	X	X	X	X		BP3S			X	X	X	X	X	X	X	X	X	X	X	X	X		3(DG9U) BP3U A635
6	ITMW-19-201410				0840		16		17.0		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	X	X		
7	ITMW-17-201410				0855		14.5		13.0		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	X	X		
8	MW-38-201410				1127		14.5		12.0		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	X	X		
9	DUP6				1127						3				X						X													
10	MW-46R-201410				0855	BP3N		BP3Z		13.0	11	X	X	X	X	X		BP3S			X	X	X	X	X	X	X	X	X	X	X	X	X		3(DG9U) BP3U A635
11	DUP3				0855						3				X						X													
12	EB-5-201410	WT	G	10/16/14	1435						3				X						X													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Level IV data package required		10/16/14			10/17	1105	3.2	Y	N	Y
							4.4	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Justine Stumpf

SIGNATURE of SAMPLER: Justine Stumpf DATE Signed (MM/DD/YY): 10/16/14

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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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 _____

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	EB-06-201410	WT	G	10/16/14	1639	—	—		3				X						X		3(D6944)
2	TB-06-201410	WT	G	10/16/14	—	—	—		2				X						X		2(D6944)
3	TB-02-201410	WT	G	10/16/14	—	—	—		2				X						X		↓
4																					
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			
	Wendy Stonestreet	10/17/14	1105	Lo White pace	10.17	1105	3.2	Y	N	Y
							4.4	Y	Y	Y

SAMPLER NAME AND SIGNATURE				
PRINT Name of SAMPLER:	Wendy Stonestreet			
SIGNATURE of SAMPLER:	Wendy Stonestreet	DATE Signed (MM/DD/YY):	10/16/14	

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.

Chain of Custody

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Workorder: 60180635 **Workorder Name:** FORT SMITH, AR **Owner Received Date:** 10/17/2014 **Results Requested By:** 10/29/2014

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# : 7519916

7519916

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	ITMW-15-201410	PS	10/16/2014 08:28	60180635001	Water	1	3					X	X									001
2	MW-25-201410	PS	10/16/2014 10:55	60180635002	Water	1	3					X	X									002
3	ITMW-4-201410	PS	10/16/2014 08:25	60180635003	Water	1	3					X	X									003
4	ITMW-19-201410	PS	10/16/2014 08:40	60180635004	Water	1	3					X	X									004
5	ITMW-17-201410	PS	10/16/2014 08:55	60180635005	Water	1	3					X	X									005
6	MW-38-201410	PS	10/16/2014 11:27	60180635006	Water	1	3					X	X									006
7	MW-46R-201410	PS	10/16/2014 08:55	60180635007	Water	1	3					X	X									007

Comments

Transfers	Released By	Date/Time	Received By	Date/Time
1		10/20/14 1700	Kathy Weems Pace	10/21/14 850 AM
2				
3				

Cooler Temperature on Receipt 1.4 °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: 7519916

Courier: FedEX ☒ UPS ☐ USPS ☐ Client ☐ Courier ☐ LSO ☐ PACE ☐ Other:_____

Tracking#: 6113 5282 2587

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: 1.4°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: 6403001 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: TD Date: 10-21-14

Pace Analytical Services - Dallas

Sample Container Count-

COC PAGE 1 of 1

COC ID# _____

Pace Project # 7519916

Sample Line Item	AG1S	AG1U	AG3S	BG1H	BG1S	BP1U	BP2N	BP2S	BP2U	BP20	SP5T	VG9H	VG9M	VG9T	VG9U	VG9W	WGFU	WGKU	B P3S	DG9U	
1																			1	3	
2																			1	3	
3																			1	3	
4																			1	3	
5																			1	3	
6																			1	3	
7																			1	3	
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						

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

October 31, 2014

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

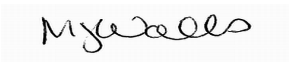
RE: Project: Ft. Smith AR- Microseeps 13708
Pace Project No.: 60180800

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory between October 20, 2014 and October 21, 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.

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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without the written consent of Pace Analytical Services, Inc..

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: Ft. Smith AR- Microseeps 13708
Pace Project No.: 60180800

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60180800001	MW-39-201410	Water	10/13/14 15:28	10/20/14 09:00
60180800002	MW-66-201410	Water	10/13/14 14:55	10/20/14 09:00
60180800003	MW-67-201410	Water	10/13/14 15:45	10/20/14 09:00
60180800004	MW-40-201410	Water	10/13/14 15:55	10/20/14 09:00
60180800005	IW-72-201410	Water	10/13/14 15:40	10/20/14 09:00
60180800006	MW-28-201410	Water	10/14/14 14:05	10/20/14 09:00
60180800007	MW-50-201410	Water	10/14/14 11:50	10/20/14 09:00
60180800008	MW-36-201410	Water	10/14/14 10:05	10/20/14 09:00
60180800009	IW-80-201410	Water	10/14/14 11:00	10/20/14 09:00
60180800010	MW-31-201410	Water	10/14/14 13:10	10/20/14 09:00
60180800011	MW-32-201410	Water	10/14/14 14:30	10/20/14 09:00
60180800012	RW-69-201410	Water	10/14/14 11:35	10/20/14 09:00
60180800013	MW-71-201410	Water	10/14/14 09:50	10/21/14 09:00
60180800014	MW-68-201410	Water	10/14/14 14:05	10/21/14 09:00
60180800015	IW-74-201410	Water	10/14/14 14:05	10/21/14 09:00
60180800016	MW-62-74-201410	Water	10/14/14 11:30	10/21/14 09:00
60180800017	MW-63-74-201410	Water	10/14/14 14:45	10/21/14 09:00
60180800018	MW-61-74-201410	Water	10/14/14 14:15	10/21/14 09:00
60180800019	MW-60-74-201410	Water	10/14/14 15:35	10/21/14 09:00
60180800020	IW-73-201410	Water	10/14/14 15:35	10/21/14 09:00
60180800021	MW-35R-201410	Water	10/14/14 16:10	10/21/14 09:00
60180800022	MW-26-201410	Water	10/14/14 16:35	10/21/14 09:00
60180800023	MW-65-201410	Water	10/14/14 16:08	10/21/14 09:00
60180800024	MW-27-201410	Water	10/14/14 15:45	10/21/14 09:00

REPORT OF LABORATORY ANALYSIS

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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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220 William Pitt Way
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Phone: (412) 826-5245
Fax: (412) 826-3433

October 29, 2014

Mary Jane Walls
Pace Analytical Services
9608 Loiret Blvd
Lenexa, KS 66219

RE: **FT. SMITH, AR**

Microseeps Workorder: 13708

Dear Mary Walls:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, October 20, 2014. 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 10/29/2014
rrobl@microseeps.com RR 10/31/14

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 39

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LABORATORY ACCREDITATIONS & CERTIFICATIONS

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

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SAMPLE SUMMARY

Workorder: 13708 FT. SMITH, AR

Lab ID	Sample ID	Matrix	Date Collected	Date Received
137080001	MW-39-201410	Water	10/13/2014 15:28	10/20/2014 09:00
137080002	MW-66-201410	Water	10/13/2014 14:55	10/20/2014 09:00
137080003	MW-67-201410	Water	10/13/2014 15:45	10/20/2014 09:00
137080004	MW-40-201410	Water	10/13/2014 15:55	10/20/2014 09:00
137080005	IW-72-201410	Water	10/13/2014 15:40	10/20/2014 09:00
137080006	MW-28-201410	Water	10/14/2014 14:05	10/20/2014 09:00
137080007	MW-50-201410	Water	10/14/2014 11:50	10/20/2014 09:00
137080008	MW-36-201410	Water	10/14/2014 10:05	10/20/2014 09:00
137080009	IW-80-201410	Water	10/14/2014 11:00	10/20/2014 09:00
137080010	MW-31-201410	Water	10/14/2014 13:10	10/20/2014 09:00
137080011	MW-32-201410	Water	10/14/2014 14:30	10/20/2014 09:00
137080012	RW-69-201410	Water	10/14/2014 11:35	10/20/2014 09:00
137080013	MW-71-201410	Water	10/14/2014 09:50	10/20/2014 09:00
137080014	MW-68-201410	Water	10/14/2014 14:05	10/20/2014 09:00
137080015	IW-74-201410	Water	10/14/2014 14:05	10/20/2014 09:00
137080016	MW-62-201410	Water	10/14/2014 11:30	10/20/2014 09:00
137080017	MW-63-201410	Water	10/14/2014 14:45	10/20/2014 09:00
137080018	MW-61-201410	Water	10/14/2014 14:15	10/20/2014 09:00
137080019	MW-60-201410	Water	10/14/2014 15:35	10/20/2014 09:00
137080020	IW-73-201410	Water	10/14/2014 15:35	10/20/2014 09:00
137080021	MW-35R-201410	Water	10/14/2014 16:10	10/20/2014 09:00
137080022	MW-26-201410	Water	10/14/2014 16:35	10/20/2014 09:00
137080023	MW-65-201410	Water	10/14/2014 16:08	10/20/2014 09:00
137080024	MW-27-201410	Water	10/14/2014 15:45	10/20/2014 09:00

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PROJECT SUMMARY

Workorder: 13708 FT. SMITH, AR

Batch Comments

Batch: DISG/4122 - AM20GAX Water QC

The percent recovery for the laboratory control sample was above laboratory control limits. Analytes Carbon Dioxide. Results associated to the analytes in samples may be bias high.

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080001** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-39-201410** Date Collected: 10/13/2014 15:28

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	0.81	1			10/22/2014 19:31	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/22/2014 19:31	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/22/2014 19:31	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/22/2014 19:31	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/22/2014 19:31	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.20**	ug/l	0.10	0.042	1			10/24/2014 15:11	SL	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/24/2014 15:11	SL	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/24/2014 15:11	SL	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/24/2014 15:11	SL	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080002** Date Received: 10/20/2014 09:00 Matrix: Water
Sample ID: **MW-66-201410** Date Collected: 10/13/2014 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	0.81	1			10/22/2014 19:52	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/22/2014 19:52	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/22/2014 19:52	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/22/2014 19:52	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/22/2014 19:52	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**<0.10**	ug/l	0.10	0.042	1			10/24/2014 15:24	SL	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/24/2014 15:24	SL	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/24/2014 15:24	SL	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/24/2014 15:24	SL	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080003** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-67-201410** Date Collected: 10/13/2014 15:45

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	0.81	1			10/22/2014 20:13	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/22/2014 20:13	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/22/2014 20:13	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/22/2014 20:13	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/22/2014 20:13	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**<0.10**	ug/l	0.10	0.042	1			10/24/2014 15:36	SL	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/24/2014 15:36	SL	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/24/2014 15:36	SL	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/24/2014 15:36	SL	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080004** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-40-201410** Date Collected: 10/13/2014 15:55

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	0.81	1			10/22/2014 20:34	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/22/2014 20:34	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/22/2014 20:34	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/22/2014 20:34	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/22/2014 20:34	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.32**	ug/l	0.10	0.042	1			10/24/2014 15:48	SL	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/24/2014 15:48	SL	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/24/2014 15:48	SL	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/24/2014 15:48	SL	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080005** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **IW-72-201410** Date Collected: 10/13/2014 15:40

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	0.81	1			10/22/2014 20:55	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/22/2014 20:55	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/22/2014 20:55	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/22/2014 20:55	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/22/2014 20:55	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.54**	ug/l	0.10	0.042	1			10/24/2014 16:01	SL	
Ethane	**0.050**	ug/l	0.025	0.0020	1			10/24/2014 16:01	SL	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/24/2014 16:01	SL	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/24/2014 16:01	SL	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080006** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-28-201410** Date Collected: 10/14/2014 14:05

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	0.81	1			10/22/2014 21:16	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/22/2014 21:16	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/22/2014 21:16	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/22/2014 21:16	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/22/2014 21:16	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**1.2**	ug/l	0.10	0.042	1			10/26/2014 16:10	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/26/2014 16:10	GT	
Ethene	**0.029**	ug/l	0.025	0.0030	1			10/26/2014 16:10	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/26/2014 16:10	GT	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080007** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-50-201410** Date Collected: 10/14/2014 11:50

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	0.81	1			10/22/2014 21:37	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/22/2014 21:37	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/22/2014 21:37	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/22/2014 21:37	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/22/2014 21:37	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.53**	ug/l	0.10	0.042	1			10/26/2014 16:23	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/26/2014 16:23	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/26/2014 16:23	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/26/2014 16:23	GT	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080008** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-36-201410** Date Collected: 10/14/2014 10:05

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	0.81	1			10/22/2014 21:58	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/22/2014 21:58	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/22/2014 21:58	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/22/2014 21:58	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/22/2014 21:58	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**5.8**	ug/l	0.10	0.042	1			10/26/2014 16:35	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/26/2014 16:35	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/26/2014 16:35	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/26/2014 16:35	GT	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080009** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **IW-80-201410** Date Collected: 10/14/2014 11:00

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	0.81	1			10/22/2014 22:19	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/22/2014 22:19	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/22/2014 22:19	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/22/2014 22:19	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/22/2014 22:19	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**1.7**	ug/l	0.10	0.042	1			10/26/2014 16:48	GT	
Ethane	**0.10**	ug/l	0.025	0.0020	1			10/26/2014 16:48	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/26/2014 16:48	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/26/2014 16:48	GT	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080010** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-31-201410** Date Collected: 10/14/2014 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	0.81	1			10/22/2014 22:40	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/22/2014 22:40	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/22/2014 22:40	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/22/2014 22:40	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/22/2014 22:40	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**2.8**	ug/l	0.10	0.042	1			10/26/2014 17:00	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/26/2014 17:00	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/26/2014 17:00	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/26/2014 17:00	GT	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080011** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-32-201410** Date Collected: 10/14/2014 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	0.81	1			10/22/2014 23:01	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/22/2014 23:01	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/22/2014 23:01	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/22/2014 23:01	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/22/2014 23:01	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**9.3**	ug/l	0.10	0.042	1			10/27/2014 10:28	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/27/2014 10:28	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/27/2014 10:28	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 10:28	GT	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080012** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **RW-69-201410** Date Collected: 10/14/2014 11:35

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	0.81	1			10/22/2014 23:22	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/22/2014 23:22	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/22/2014 23:22	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/22/2014 23:22	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/22/2014 23:22	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**34**	ug/l	0.10	0.042	1			10/27/2014 11:17	GT	
Ethane	**0.038**	ug/l	0.025	0.0020	1			10/27/2014 11:17	GT	
Ethene	**0.26**	ug/l	0.025	0.0030	1			10/27/2014 11:17	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 11:17	GT	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080013** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-71-201410** Date Collected: 10/14/2014 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	0.81	1			10/22/2014 23:43	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/22/2014 23:43	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/22/2014 23:43	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/22/2014 23:43	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/22/2014 23:43	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**73**	ug/l	0.10	0.042	1			10/27/2014 11:31	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/27/2014 11:31	GT	
Ethene	**0.050**	ug/l	0.025	0.0030	1			10/27/2014 11:31	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 11:31	GT	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080014** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-68-201410** Date Collected: 10/14/2014 14:05

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	0.81	1			10/23/2014 12:44	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 12:44	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 12:44	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 12:44	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 12:44	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**21**	ug/l	0.10	0.042	1			10/27/2014 08:09	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/27/2014 08:09	GT	
Ethene	**0.025**	ug/l	0.025	0.0030	1			10/27/2014 08:09	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 08:09	GT	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080015** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **IW-74-201410** Date Collected: 10/14/2014 14:05

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	0.81	1			10/23/2014 14:29	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 14:29	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 14:29	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 14:29	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 14:29	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**1.7**	ug/l	0.10	0.042	1			10/27/2014 08:22	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/27/2014 08:22	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/27/2014 08:22	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 08:22	GT	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080016** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-62-201410** Date Collected: 10/14/2014 11:30

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	0.81	1			10/23/2014 14:50	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 14:50	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 14:50	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 14:50	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 14:50	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**<0.10**	ug/l	0.10	0.042	1			10/27/2014 08:35	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/27/2014 08:35	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/27/2014 08:35	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 08:35	GT	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080017** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-63-201410** Date Collected: 10/14/2014 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	0.81	1			10/23/2014 15:11	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 15:11	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 15:11	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 15:11	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 15:11	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.40**	ug/l	0.10	0.042	1			10/27/2014 08:47	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/27/2014 08:47	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/27/2014 08:47	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 08:47	GT	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080018** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-61-201410** Date Collected: 10/14/2014 14:15

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	0.81	1			10/23/2014 15:32	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 15:32	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 15:32	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 15:32	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 15:32	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**<0.10**	ug/l	0.10	0.042	1			10/27/2014 09:00	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/27/2014 09:00	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/27/2014 09:00	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 09:00	GT	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080019** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-60-201410** Date Collected: 10/14/2014 15:35

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	0.81	1			10/23/2014 15:53	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 15:53	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 15:53	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 15:53	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 15:53	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**1.8**	ug/l	0.10	0.042	1			10/27/2014 09:14	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/27/2014 09:14	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/27/2014 09:14	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 09:14	GT	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080020** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **IW-73-201410** Date Collected: 10/14/2014 15:35

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	0.81	1			10/23/2014 16:14	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 16:14	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 16:14	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 16:14	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 16:14	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**5.4**	ug/l	0.10	0.042	1			10/27/2014 09:26	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/27/2014 09:26	GT	
Ethene	**0.036**	ug/l	0.025	0.0030	1			10/27/2014 09:26	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 09:26	GT	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080021** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-35R-201410** Date Collected: 10/14/2014 16:10

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	0.81	1			10/23/2014 16:35	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 16:35	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 16:35	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 16:35	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 16:35	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**17**	ug/l	0.10	0.042	1			10/27/2014 09:38	GT	
Ethane	**0.72**	ug/l	0.025	0.0020	1			10/27/2014 09:38	GT	
Ethene	**0.16**	ug/l	0.025	0.0030	1			10/27/2014 09:38	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 09:38	GT	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080022** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-26-201410** Date Collected: 10/14/2014 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	0.81	1			10/23/2014 16:56	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 16:56	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 16:56	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 16:56	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 16:56	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.80**	ug/l	0.10	0.042	1			10/27/2014 09:51	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/27/2014 09:51	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/27/2014 09:51	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 09:51	GT	

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ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080023** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-65-201410** Date Collected: 10/14/2014 16:08

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	0.81	1			10/23/2014 17:17	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 17:17	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 17:17	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 17:17	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 17:17	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**7.4**	ug/l	0.10	0.042	1			10/27/2014 10:03	GT	
Ethane	**0.25**	ug/l	0.025	0.0020	1			10/27/2014 10:03	GT	
Ethene	**0.050**	ug/l	0.025	0.0030	1			10/27/2014 10:03	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 10:03	GT	

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Pittsburgh, PA 15238
Phone: (412) 826-5245
Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 13708 FT. SMITH, AR

Lab ID: **137080024** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-27-201410** Date Collected: 10/14/2014 15:45

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	0.81	1			10/23/2014 17:38	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 17:38	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 17:38	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 17:38	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 17:38	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**<0.10**	ug/l	0.10	0.042	1			10/27/2014 10:16	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/27/2014 10:16	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/27/2014 10:16	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 10:16	GT	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: 13708 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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Fax: (412) 826-3433

QUALITY CONTROL DATA

Workorder: 13708 FT. SMITH, AR

QC Batch: EDON/2294 Analysis Method: AM21G

QC Batch Method: AM21G

Associated Lab Samples: 137080001, 137080002, 137080003, 137080004, 137080005, 137080006, 137080007, 137080008, 137080009, 137080010, 137080011, 137080012, 137080013

METHOD BLANK: 31063

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	<10	10	
Butyric Acid	mg/l	<5.0	5.0	
Lactic Acid	mg/l	<25	25	

LABORATORY CONTROL SAMPLE: 31064

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Acetic Acid	mg/l	100	100	103	70-130	
Propionic Acid	mg/l	100	100	103	70-130	
Pyruvic Acid	mg/l	100	86	86	70-130	
Butyric Acid	mg/l	100	100	100	70-130	
Lactic Acid	mg/l	100	99	99	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 31065 31066 Original: 137040002

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	100	105	106	70-130	0.95	20	
Propionic Acid	mg/l	0	100	100	100	104	104	70-130	0	20	
Pyruvic Acid	mg/l	0	100	89	89	89	89	70-130	0	20	
Butyric Acid	mg/l	0	100	100	100	100	100	70-130	0	20	
Lactic Acid	mg/l	0	100	88	84	88	84	70-130	4.7	20	

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Fax: (412) 826-3433

QUALITY CONTROL DATA

Workorder: 13708 FT. SMITH, AR

QC Batch: EDON/2297 Analysis Method: AM21G

QC Batch Method: AM21G

Associated Lab Samples: 137080014, 137080015, 137080016, 137080017, 137080018, 137080019, 137080020, 137080021, 137080022, 137080023, 137080024

METHOD BLANK: 31104

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	<10	10	
Butyric Acid	mg/l	<5.0	5.0	
Lactic Acid	mg/l	<25	25	

LABORATORY CONTROL SAMPLE: 31105

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Acetic Acid	mg/l	100	110	108	70-130	
Propionic Acid	mg/l	100	110	107	70-130	
Pyruvic Acid	mg/l	100	90	91	70-130	
Butyric Acid	mg/l	100	100	104	70-130	
Lactic Acid	mg/l	100	100	102	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 31106 31107 Original: 137080014

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	106	107	70-130	0.94	20	
Propionic Acid	mg/l	0	100	110	110	106	108	70-130	1.9	20	
Pyruvic Acid	mg/l	0	100	87	90	87	91	70-130	4.5	20	
Butyric Acid	mg/l	0	100	100	100	104	105	70-130	0.96	20	
Lactic Acid	mg/l	2.4	100	120	110	120	112	70-130	6.9	20	

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QUALITY CONTROL DATA

Workorder: 13708 FT. SMITH, AR

QC Batch: DISG/4122 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 137080001, 137080002, 137080003, 137080004, 137080005

METHOD BLANK: 31151

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: 31153 31155

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	850	830	113	111	80-120	1.8	20	
Ethane	ug/l	38	43	44	114	115	80-120	0.87	20	
Ethene	ug/l	35	40	41	115	115	80-120	0	20	
Acetylene	ug/l	33	36	36	111	110	80-120	0.9	20	

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QUALITY CONTROL DATA

Workorder: 13708 FT. SMITH, AR

QC Batch: DISG/4128 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 137080006, 137080007, 137080008, 137080009, 137080010

METHOD BLANK: 31181

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: 31183 31185

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	730	780	98	104	80-120	5.9	20	
Ethane	ug/l	38	41	40	108	107	80-120	0.93	20	
Ethene	ug/l	35	38	37	107	106	80-120	0.94	20	
Acetylene	ug/l	33	27	27	83	83	80-120	0	20	

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QUALITY CONTROL DATA

Workorder: 13708 FT. SMITH, AR

QC Batch: DISG/4129 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 137080011, 137080012, 137080013, 137080014, 137080015, 137080016, 137080017, 137080018, 137080019, 137080020, 137080021, 137080022, 137080023, 137080024

METHOD BLANK: 31187

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: 31189 31191

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	780	830	105	111	80-120	5.6	20	
Ethane	ug/l	38	43	43	114	114	80-120	0	20	
Ethene	ug/l	35	40	40	113	113	80-120	0	20	
Acetylene	ug/l	33	31	31	94	94	80-120	0	20	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 13708 FT. SMITH, AR

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
137080001	MW-39-201410			AM21G	EDON/2294
137080002	MW-66-201410			AM21G	EDON/2294
137080003	MW-67-201410			AM21G	EDON/2294
137080004	MW-40-201410			AM21G	EDON/2294
137080005	IW-72-201410			AM21G	EDON/2294
137080006	MW-28-201410			AM21G	EDON/2294
137080007	MW-50-201410			AM21G	EDON/2294
137080008	MW-36-201410			AM21G	EDON/2294
137080009	IW-80-201410			AM21G	EDON/2294
137080010	MW-31-201410			AM21G	EDON/2294
137080011	MW-32-201410			AM21G	EDON/2294
137080012	RW-69-201410			AM21G	EDON/2294
137080013	MW-71-201410			AM21G	EDON/2294
137080014	MW-68-201410			AM21G	EDON/2297
137080015	IW-74-201410			AM21G	EDON/2297
137080016	MW-62-201410			AM21G	EDON/2297
137080017	MW-63-201410			AM21G	EDON/2297
137080018	MW-61-201410			AM21G	EDON/2297
137080019	MW-60-201410			AM21G	EDON/2297
137080020	IW-73-201410			AM21G	EDON/2297
137080021	MW-35R-201410			AM21G	EDON/2297
137080022	MW-26-201410			AM21G	EDON/2297
137080023	MW-65-201410			AM21G	EDON/2297
137080024	MW-27-201410			AM21G	EDON/2297
137080001	MW-39-201410			AM20GAX	DISG/4122
137080002	MW-66-201410			AM20GAX	DISG/4122
137080003	MW-67-201410			AM20GAX	DISG/4122
137080004	MW-40-201410			AM20GAX	DISG/4122
137080005	IW-72-201410			AM20GAX	DISG/4122
137080006	MW-28-201410			AM20GAX	DISG/4128
137080007	MW-50-201410			AM20GAX	DISG/4128

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 13708 FT. SMITH, AR

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
137080008	MW-36-201410			AM20GAX	DISG/4128
137080009	IW-80-201410			AM20GAX	DISG/4128
137080010	MW-31-201410			AM20GAX	DISG/4128
137080011	MW-32-201410			AM20GAX	DISG/4129
137080012	RW-69-201410			AM20GAX	DISG/4129
137080013	MW-71-201410			AM20GAX	DISG/4129
137080014	MW-68-201410			AM20GAX	DISG/4129
137080015	IW-74-201410			AM20GAX	DISG/4129
137080016	MW-62-201410			AM20GAX	DISG/4129
137080017	MW-63-201410			AM20GAX	DISG/4129
137080018	MW-61-201410			AM20GAX	DISG/4129
137080019	MW-60-201410			AM20GAX	DISG/4129
137080020	IW-73-201410			AM20GAX	DISG/4129
137080021	MW-35R-201410			AM20GAX	DISG/4129
137080022	MW-26-201410			AM20GAX	DISG/4129
137080023	MW-65-201410			AM20GAX	DISG/4129
137080024	MW-27-201410			AM20GAX	DISG/4129

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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.

13708

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:	Tammy Gleason
Address:	9608 Loiret Blvd	Copy To:	Wendy Stonestreet	Company Name:	ENVIRON
	Lenexa, KS 66219		Tammy Gleason	Address:	250 Monroe Ave. NW Grand Rapids Michigan, 49503
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 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

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	AM 20 GAX *	AM 20 GX - Hydrogen	AM 21 GAX - Volatile Fatty Acids	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-39-201410	WT	G	10/13/14	1528				4	X							X		X		X	N	
2	MW-66-201410				1455				4	X							X		X		X		
3	MW-67-201410				1545				4	X							X		X		X		
4	MW-40-201410				1555				4	X							X		X		X		
5	IW-72-201410				1540				4	X							X		X		X		
6	MW-28-201410			10/14/14	1405				4	X							X		X		X		
7	MW-50-201410				1150				4	X							X		X		X		
8	MW-36-201410				1005				4	X							X		X		X		
9	IW-80-201410				1100				4	X							X		X		X		
10	MW-31-201410				1310				4	X							X		X		X		
11	MW-32-201410				1430				4	X							X		X		X		
12	RW-69-201410				1135				4	X							X		X		X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
*Methane, Ethane, Ethene, Acetylene	Wendy Stonestreet	10/17/14	1115	PACE	10.20	0900	2 J Y
**Dissolved Gases - Hydrogen							

SAMPLER NAME AND SIGNATURE					
PRINT Name of SAMPLER:	Justine Stumpf				
SIGNATURE of SAMPLER:	Justine Stumpf	DATE Signed (MM/DD/YY):	10/16/14		

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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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Pace Analytical Services, Inc.	Report To:	MJ Walls	Attention:	Tammy Gleason
Address:	9608 Loiret Blvd	Copy To:	Wendy Stonestreet	Company Name:	ENVIRON
	Lenexa, KS 66219		Tammy Gleason	Address:	250 monroe Ave. NW
Email To:	mjwalls@pacelabs.com	Purchase Order No.:		Pace Quote Reference:	Grand Rapids, MI 49503
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

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	AM 20 GAX*	AM 20 GX - Hydrogen	AM 21 GAX - Volatile Fatty Acides	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-71-201410	WT	G	10/14/14	0950				4	X							X		X		X	N	
2	MW-68-201410				1405				4	X							X		X		X		
3	IW-74-201410				1405				4	X							X		X		X		
4	MW-62-201410				1130				4	X							X		X		X		
5	MW-63-201410				1445				4	X							X		X		X		
6	MW-61-201410				1415				4	X							X		X		X		
7	MW-60-201410				1535				4	X							X		X		X		
8	IW-73-201410				1535				4	X							X		X		X		
9	MW-35R-201410				1610				4	X							X		X		X		
10	MW-26-201410				1635				4	X							X		X		X		
11	MW-65-201410				1608				4	X							X		X		X		
12	MW-27-201410				1545				4	X							X		X		X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
*Methane, Ethane, Ethene, Acetylene	Wendy Stonestreet	10/17/14	1115	PACE	10.20	0900	2	Y	Y	
**Dissolved Gases - Hydrogen										

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:	Justine Strempt				
SIGNATURE of SAMPLER:	DATE Signed (MM/DD/YY): 10/16/14				

*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.

Cooler Receipt Form

Client Name: Environ / Pace-KS Project: Ft. Smith, AR Lab Work Order: 13708

A. Shipping/Container Information (circle appropriate response)

Courier: (FedEx) UPS USPS Client Other:_____ Air bill Present: (Yes) No

Tracking Number: 8059 4136 1465

Custody Seal on Cooler/Box Present: (Yes) No Seals Intact: (Yes) No

Cooler/Box Packing Material: (Bubble Wrap) Absorbent Foam Other:_____

Type of Ice: (Wet) Blue None Ice Intact: (Yes) Melted

Cooler Temperature: 2°C Radiation Screened: Yes (No) Chain of Custody Present: (Yes) No

Comments:_____

B. Laboratory Assignment/Log-in (check appropriate response)

	YES	NO	N/A	Comment Reference non-Conforman
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: LY Date: 10-20-14

Project Manager Review: RL Date: 10/20/14

Microseeps/Pace Analytical Energy Services, LLC
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October 30, 2014

Mary Jane Walls
Pace Analytical Services
9608 Loiret Blvd
Lenexa, KS 66219

RE: **FT. SMITH, AR**
Microseeps Workorder: 13709

Dear Mary Walls:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, October 20, 2014. 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 10/30/2014
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 48

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LABORATORY ACCREDITATIONS & CERTIFICATIONS

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

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SAMPLE SUMMARY

Workorder: 13709 FT. SMITH, AR

Lab ID	Sample ID	Matrix	Date Collected	Date Received
137090001	MW-41-201410	Water	10/15/2014 09:10	10/20/2014 09:00
137090002	IW-76-201410	Water	10/15/2014 10:55	10/20/2014 09:00
137090003	ITMW-21-201410	Water	10/15/2014 13:50	10/20/2014 09:00
137090004	ITMW-6-201410	Water	10/15/2014 14:45	10/20/2014 09:00
137090005	MW-29-201410	Water	10/15/2014 11:55	10/20/2014 09:00
137090006	ITMW-20-201410	Water	10/15/2014 09:30	10/20/2014 09:00
137090007	MW-33-201410	Water	10/15/2014 13:25	10/20/2014 09:00
137090008	IW-77-201410	Water	10/15/2014 10:55	10/20/2014 09:00
137090009	MW-34-201410	Water	10/15/2014 09:15	10/20/2014 09:00
137090010	ITMW-1-201410	Water	10/15/2014 09:20	10/20/2014 09:00
137090011	ITMW-2-201410	Water	10/15/2014 12:50	10/20/2014 09:00
137090012	MW-22-201410	Water	10/15/2014 15:00	10/20/2014 09:00
137090013	ITMW-10-201410	Water	10/15/2014 14:40	10/20/2014 09:00
137090014	ITMW-9-201410	Water	10/15/2014 12:35	10/20/2014 09:00
137090015	ITMW-12-201410	Water	10/15/2014 16:42	10/20/2014 09:00
137090016	ITMW-14-201410	Water	10/15/2014 13:09	10/20/2014 09:00
137090017	ITMW-18-201410	Water	10/15/2014 16:13	10/20/2014 09:00
137090018	ITMW-16-201410	Water	10/15/2014 08:59	10/20/2014 09:00
137090019	MW-57-201410	Water	10/15/2014 16:00	10/20/2014 09:00
137090020	MW-58-201410	Water	10/15/2014 12:45	10/20/2014 09:00
137090021	MW-56-201410	Water	10/15/2014 15:00	10/20/2014 09:00
137090022	ITMW-7-201410	Water	10/15/2014 16:15	10/20/2014 09:00
137090023	ITMW-11-201410	Water	10/15/2014 17:15	10/20/2014 09:00
137090024	ITMW-13-201410	Water	10/15/2014 11:12	10/20/2014 09:00
137090025	ITMW-15-201410	Water	10/16/2014 08:28	10/20/2014 09:00
137090026	MW-25-201410	Water	10/16/2014 10:55	10/20/2014 09:00
137090027	ITMW-4-201410	Water	10/16/2014 08:25	10/20/2014 09:00
137090028	ITMW-19-201410	Water	10/16/2014 08:40	10/20/2014 09:00
137090029	ITMW-17-201410	Water	10/16/2014 08:55	10/20/2014 09:00
137090030	MW-38-201410	Water	10/16/2014 11:27	10/20/2014 09:00
137090031	MW-46R-201410	Water	10/16/2014 08:55	10/20/2014 09:00

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090001** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-41-201410** Date Collected: 10/15/2014 09:10

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	0.81	1			10/23/2014 17:59	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 17:59	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 17:59	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 17:59	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 17:59	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**12**	ug/l	0.10	0.042	1			10/27/2014 11:43	GT	
Ethane	**0.031**	ug/l	0.025	0.0020	1			10/27/2014 11:43	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/27/2014 11:43	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 11:43	GT	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090002** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **IW-76-201410** Date Collected: 10/15/2014 10:55

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	0.81	1			10/23/2014 18:20	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 18:20	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 18:20	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 18:20	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 18:20	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**3.9**	ug/l	0.10	0.042	1			10/27/2014 11:55	GT	
Ethane	**0.047**	ug/l	0.025	0.0020	1			10/27/2014 11:55	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/27/2014 11:55	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 11:55	GT	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090003** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **ITMW-21-201410** Date Collected: 10/15/2014 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	0.81	1			10/23/2014 18:41	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 18:41	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 18:41	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 18:41	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 18:41	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**24**	ug/l	0.10	0.042	1			10/27/2014 12:08	GT	
Ethane	**0.055**	ug/l	0.025	0.0020	1			10/27/2014 12:08	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/27/2014 12:08	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 12:08	GT	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090004** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **ITMW-6-201410** Date Collected: 10/15/2014 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	0.81	1			10/23/2014 19:02	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 19:02	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 19:02	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 19:02	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 19:02	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**1.1**	ug/l	0.10	0.042	1			10/27/2014 12:20	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/27/2014 12:20	GT	
Ethene	**0.44**	ug/l	0.025	0.0030	1			10/27/2014 12:20	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 12:20	GT	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090005** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-29-201410** Date Collected: 10/15/2014 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	0.81	1			10/23/2014 19:23	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 19:23	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 19:23	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 19:23	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 19:23	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.65**	ug/l	0.10	0.042	1			10/27/2014 12:34	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/27/2014 12:34	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/27/2014 12:34	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 12:34	GT	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090006** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **ITMW-20-201410** Date Collected: 10/15/2014 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	0.81	1			10/23/2014 19:44	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 19:44	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 19:44	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 19:44	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 19:44	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.26**	ug/l	0.10	0.042	1			10/27/2014 12:49	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/27/2014 12:49	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/27/2014 12:49	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 12:49	GT	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090007** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-33-201410** Date Collected: 10/15/2014 13:25

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	0.81	1			10/23/2014 20:05	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 20:05	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 20:05	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 20:05	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 20:05	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**0.44**	ug/l	0.10	0.042	1			10/27/2014 13:03	GT	
Ethane	**0.031**	ug/l	0.025	0.0020	1			10/27/2014 13:03	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/27/2014 13:03	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/27/2014 13:03	GT	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090008** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **IW-77-201410** Date Collected: 10/15/2014 10:55

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	0.81	1			10/23/2014 20:26	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 20:26	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 20:26	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 20:26	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 20:26	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.91**	ug/l	0.10	0.042	1			10/29/2014 11:25	GT	
Ethane	**0.066**	ug/l	0.025	0.0020	1			10/29/2014 11:25	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/29/2014 11:25	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/29/2014 11:25	GT	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090009** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-34-201410** Date Collected: 10/15/2014 09:15

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	0.81	1			10/23/2014 20:47	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/23/2014 20:47	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/23/2014 20:47	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/23/2014 20:47	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/23/2014 20:47	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**2.9**	ug/l	0.10	0.042	1			10/29/2014 11:37	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/29/2014 11:37	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/29/2014 11:37	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/29/2014 11:37	GT	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090010** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **ITMW-1-201410** Date Collected: 10/15/2014 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	0.81	1			10/24/2014 09:52	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 09:52	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 09:52	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 09:52	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 09:52	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**0.22**	ug/l	0.10	0.042	1			10/28/2014 07:46	BW	
Ethane	**0.027**	ug/l	0.025	0.0020	1			10/28/2014 07:46	BW	
Ethene	**0.12**	ug/l	0.025	0.0030	1			10/28/2014 07:46	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 07:46	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090011** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **ITMW-2-201410** Date Collected: 10/15/2014 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	0.81	1			10/24/2014 11:37	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 11:37	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 11:37	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 11:37	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 11:37	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**21**	ug/l	0.10	0.042	1			10/28/2014 07:59	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/28/2014 07:59	BW	
Ethene	**0.21**	ug/l	0.025	0.0030	1			10/28/2014 07:59	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 07:59	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090012** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-22-201410** Date Collected: 10/15/2014 15:00

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	0.81	1			10/24/2014 11:58	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 11:58	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 11:58	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 11:58	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 11:58	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**4.9**	ug/l	0.10	0.042	1			10/28/2014 08:14	BW	
Ethane	**0.037**	ug/l	0.025	0.0020	1			10/28/2014 08:14	BW	
Ethene	**0.051**	ug/l	0.025	0.0030	1			10/28/2014 08:14	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 08:14	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090013** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **ITMW-10-201410** Date Collected: 10/15/2014 14:40

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	0.81	1			10/24/2014 12:19	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 12:19	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 12:19	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 12:19	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 12:19	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**4.7**	ug/l	0.10	0.042	1			10/28/2014 08:27	BW	
Ethane	**0.056**	ug/l	0.025	0.0020	1			10/28/2014 08:27	BW	
Ethene	**0.14**	ug/l	0.025	0.0030	1			10/28/2014 08:27	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 08:27	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090014** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **ITMW-9-201410** Date Collected: 10/15/2014 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	0.81	1			10/24/2014 12:40	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 12:40	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 12:40	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 12:40	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 12:40	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**25**	ug/l	0.10	0.042	1			10/28/2014 08:42	BW	
Ethane	**0.068**	ug/l	0.025	0.0020	1			10/28/2014 08:42	BW	
Ethene	**0.12**	ug/l	0.025	0.0030	1			10/28/2014 08:42	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 08:42	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090015** Date Received: 10/20/2014 09:00 Matrix: Water
Sample ID: **ITMW-12-201410** Date Collected: 10/15/2014 16:42

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	0.81	1			10/24/2014 13:01	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 13:01	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 13:01	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 13:01	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 13:01	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**64**	ug/l	0.10	0.042	1			10/28/2014 08:56	BW	
Ethane	**2.2**	ug/l	0.025	0.0020	1			10/28/2014 08:56	BW	
Ethene	**0.041**	ug/l	0.025	0.0030	1			10/28/2014 08:56	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 08:56	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090016** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **ITMW-14-201410** Date Collected: 10/15/2014 13:09

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	0.81	1			10/24/2014 13:22	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 13:22	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 13:22	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 13:22	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 13:22	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.32**	ug/l	0.10	0.042	1			10/28/2014 09:09	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/28/2014 09:09	BW	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/28/2014 09:09	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 09:09	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090017** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **ITMW-18-201410** Date Collected: 10/15/2014 16:13

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	0.81	1			10/24/2014 13:43	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 13:43	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 13:43	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 13:43	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 13:43	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**2.0**	ug/l	0.10	0.042	1			10/28/2014 09:28	BW	
Ethane	**0.25**	ug/l	0.025	0.0020	1			10/28/2014 09:28	BW	
Ethene	**0.084**	ug/l	0.025	0.0030	1			10/28/2014 09:28	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 09:28	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090018** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **ITMW-16-201410** Date Collected: 10/15/2014 08:59

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	0.81	1			10/24/2014 14:04	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 14:04	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 14:04	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 14:04	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 14:04	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.23**	ug/l	0.10	0.042	1			10/28/2014 09:43	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/28/2014 09:43	BW	
Ethene	**0.13**	ug/l	0.025	0.0030	1			10/28/2014 09:43	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 09:43	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090019** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-57-201410** Date Collected: 10/15/2014 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	0.81	1			10/24/2014 14:25	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 14:25	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 14:25	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 14:25	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 14:25	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**2.8**	ug/l	0.10	0.042	1			10/28/2014 10:00	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/28/2014 10:00	BW	
Ethene	**0.091**	ug/l	0.025	0.0030	1			10/28/2014 10:00	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 10:00	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090020** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-58-201410** Date Collected: 10/15/2014 12:45

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	0.81	1			10/24/2014 14:46	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 14:46	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 14:46	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 14:46	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 14:46	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**36**	ug/l	0.10	0.042	1			10/28/2014 10:14	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/28/2014 10:14	BW	
Ethene	**0.026**	ug/l	0.025	0.0030	1			10/28/2014 10:14	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 10:14	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090021** Date Received: 10/20/2014 09:00 Matrix: Water
Sample ID: **MW-56-201410** Date Collected: 10/15/2014 15:00

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	0.81	1			10/24/2014 15:07	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 15:07	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 15:07	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 15:07	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 15:07	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.49**	ug/l	0.10	0.042	1			10/28/2014 10:27	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/28/2014 10:27	BW	
Ethene	**0.20**	ug/l	0.025	0.0030	1			10/28/2014 10:27	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 10:27	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090022** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **ITMW-7-201410** Date Collected: 10/15/2014 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	0.81	1			10/24/2014 15:28	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 15:28	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 15:28	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 15:28	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 15:28	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**3.0**	ug/l	0.10	0.042	1			10/28/2014 11:19	BW	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/28/2014 11:19	BW	
Ethene	**0.074**	ug/l	0.025	0.0030	1			10/28/2014 11:19	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 11:19	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090023** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **ITMW-11-201410** Date Collected: 10/15/2014 17:15

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	0.81	1			10/24/2014 15:49	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 15:49	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 15:49	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 15:49	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 15:49	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**18**	ug/l	0.10	0.042	1			10/28/2014 11:33	BW	
Ethane	**0.20**	ug/l	0.025	0.0020	1			10/28/2014 11:33	BW	
Ethene	**0.057**	ug/l	0.025	0.0030	1			10/28/2014 11:33	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 11:33	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090024** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **ITMW-13-201410** Date Collected: 10/15/2014 11:12

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	0.81	1			10/24/2014 16:10	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 16:10	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 16:10	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 16:10	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 16:10	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**16**	ug/l	0.10	0.042	1			10/28/2014 11:46	BW	
Ethane	**0.73**	ug/l	0.025	0.0020	1			10/28/2014 11:46	BW	
Ethene	**0.047**	ug/l	0.025	0.0030	1			10/28/2014 11:46	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 11:46	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090025** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **ITMW-15-201410** Date Collected: 10/16/2014 08:28

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	0.81	1			10/24/2014 16:31	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 16:31	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 16:31	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 16:31	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 16:31	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**2.8**	ug/l	0.10	0.042	1			10/28/2014 12:00	BW	
Ethane	**0.46**	ug/l	0.025	0.0020	1			10/28/2014 12:00	BW	
Ethene	**0.050**	ug/l	0.025	0.0030	1			10/28/2014 12:00	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 12:00	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090026** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-25-201410** Date Collected: 10/16/2014 10:55

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	0.81	1			10/24/2014 16:52	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 16:52	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 16:52	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 16:52	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 16:52	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**130**	ug/l	0.10	0.042	1			10/28/2014 12:16	BW	
Ethane	**23**	ug/l	0.025	0.0020	1			10/28/2014 12:16	BW	
Ethene	**0.30**	ug/l	0.025	0.0030	1			10/28/2014 12:16	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 12:16	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090027** Date Received: 10/20/2014 09:00 Matrix: Water
Sample ID: **ITMW-4-201410** Date Collected: 10/16/2014 08:25

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	0.81	1			10/24/2014 17:13	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 17:13	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 17:13	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 17:13	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 17:13	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**120**	ug/l	0.10	0.042	1			10/28/2014 12:28	BW	
Ethane	**0.16**	ug/l	0.025	0.0020	1			10/28/2014 12:28	BW	
Ethene	**0.18**	ug/l	0.025	0.0030	1			10/28/2014 12:28	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 12:28	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090028** Date Received: 10/20/2014 09:00 Matrix: Water
Sample ID: **ITMW-19-201410** Date Collected: 10/16/2014 08:40

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	0.81	1			10/24/2014 17:34	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 17:34	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 17:34	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 17:34	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 17:34	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**0.78**	ug/l	0.10	0.042	1			10/28/2014 13:07	BW	
Ethane	**0.090**	ug/l	0.025	0.0020	1			10/28/2014 13:07	BW	
Ethene	**0.10**	ug/l	0.025	0.0030	1			10/28/2014 13:07	BW	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/28/2014 13:07	BW	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090029** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **ITMW-17-201410** Date Collected: 10/16/2014 08:55

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	0.81	1			10/24/2014 17:55	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/24/2014 17:55	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/24/2014 17:55	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/24/2014 17:55	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/24/2014 17:55	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**4.8**	ug/l	0.10	0.042	1			10/29/2014 09:00	GT	
Ethane	**0.29**	ug/l	0.025	0.0020	1			10/29/2014 09:00	GT	
Ethene	**0.027**	ug/l	0.025	0.0030	1			10/29/2014 09:00	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/29/2014 09:00	GT	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090030** Date Received: 10/20/2014 09:00 Matrix: Water
Sample ID: **MW-38-201410** Date Collected: 10/16/2014 11:27

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	0.81	1			10/25/2014 10:40	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/25/2014 10:40	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/25/2014 10:40	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/25/2014 10:40	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/25/2014 10:40	BW	
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Methane	**24**	ug/l	0.10	0.042	1			10/29/2014 12:31	GT	
Ethane	**1.0**	ug/l	0.025	0.0020	1			10/29/2014 12:31	GT	
Ethene	**42**	ug/l	0.025	0.0030	1			10/29/2014 12:31	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/29/2014 12:31	GT	

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ANALYTICAL RESULTS

Workorder: 13709 FT. SMITH, AR

Lab ID: **137090031** Date Received: 10/20/2014 09:00 Matrix: Water

Sample ID: **MW-46R-201410** Date Collected: 10/16/2014 08:55

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	0.81	1			10/25/2014 11:01	BW	
Propionic Acid	**<5.0**	mg/l	5.0	0.66	1			10/25/2014 11:01	BW	
Pyruvic Acid	**<10**	mg/l	10	0.77	1			10/25/2014 11:01	BW	
Butyric Acid	**<5.0**	mg/l	5.0	0.70	1			10/25/2014 11:01	BW	
Lactic Acid	**<25**	mg/l	25	2.5	1			10/25/2014 11:01	BW	
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Methane	**20**	ug/l	0.10	0.042	1			10/29/2014 12:43	GT	
Ethane	**<0.025**	ug/l	0.025	0.0020	1			10/29/2014 12:43	GT	
Ethene	**<0.025**	ug/l	0.025	0.0030	1			10/29/2014 12:43	GT	
Acetylene	**<0.50**	ug/l	0.50	0.015	1			10/29/2014 12:43	GT	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: 13709 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: 13709 FT. SMITH, AR

QC Batch: EDON/2297 Analysis Method: AM21G

QC Batch Method: AM21G

Associated Lab Samples: 137090001, 137090002, 137090003, 137090004, 137090005, 137090006, 137090007, 137090008, 137090009

METHOD BLANK: 31104

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	<10	10	
Butyric Acid	mg/l	<5.0	5.0	
Lactic Acid	mg/l	<25	25	

LABORATORY CONTROL SAMPLE: 31105

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Acetic Acid	mg/l	100	110	108	70-130	
Propionic Acid	mg/l	100	110	107	70-130	
Pyruvic Acid	mg/l	100	90	91	70-130	
Butyric Acid	mg/l	100	100	104	70-130	
Lactic Acid	mg/l	100	100	102	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 31106 31107 Original: 137080014

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	106	107	70-130	0.94	20	
Propionic Acid	mg/l	0	100	110	110	106	108	70-130	1.9	20	
Pyruvic Acid	mg/l	0	100	87	90	87	91	70-130	4.5	20	
Butyric Acid	mg/l	0	100	100	100	104	105	70-130	0.96	20	
Lactic Acid	mg/l	2.4	100	120	110	120	112	70-130	6.9	20	

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QUALITY CONTROL DATA

Workorder: 13709 FT. SMITH, AR

QC Batch: EDON/2298 Analysis Method: AM21G

QC Batch Method: AM21G

Associated Lab Samples: 137090010, 137090011, 137090012, 137090013, 137090014, 137090015, 137090016, 137090017, 137090018, 137090019, 137090020, 137090021, 137090022, 137090023, 137090024, 137090025, 137090026, 137090027, 137090028, 137090029

METHOD BLANK: 31124

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	<10	10	
Butyric Acid	mg/l	<5.0	5.0	
Lactic Acid	mg/l	<25	25	

LABORATORY CONTROL SAMPLE: 31125

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Acetic Acid	mg/l	100	110	108	70-130	
Propionic Acid	mg/l	100	110	107	70-130	
Pyruvic Acid	mg/l	100	89	89	70-130	
Butyric Acid	mg/l	100	100	104	70-130	
Lactic Acid	mg/l	100	110	107	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 31126 31127 Original: 137090010

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	110	110	108	108	70-130	0	20	
Propionic Acid	mg/l	0	100	110	110	108	108	70-130	0	20	
Pyruvic Acid	mg/l	0	100	90	89	90	89	70-130	1.1	20	
Butyric Acid	mg/l	0	100	110	110	106	106	70-130	0	20	
Lactic Acid	mg/l	0	100	120	110	116	113	70-130	2.6	20	

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QUALITY CONTROL DATA

Workorder: 13709 FT. SMITH, AR

QC Batch: EDON/2299 Analysis Method: AM21G

QC Batch Method: AM21G

Associated Lab Samples: 137090030, 137090031

METHOD BLANK: 31147

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	<10	10	
Butyric Acid	mg/l	<5.0	5.0	
Lactic Acid	mg/l	<25	25	

LABORATORY CONTROL SAMPLE: 31148

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
EDonors						
Acetic Acid	mg/l	100	110	108	70-130	
Propionic Acid	mg/l	100	110	107	70-130	
Pyruvic Acid	mg/l	100	90	90	70-130	
Butyric Acid	mg/l	100	100	103	70-130	
Lactic Acid	mg/l	100	99	99	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 31149 31150 Original: 137550001

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	310	400	730	730	107	106	70-130	0.94	20	
Propionic Acid	mg/l	1200	400	1600	1600	101	97	70-130	4	20	
Pyruvic Acid	mg/l	27	400	380	380	88	89	70-130	1.1	20	
Butyric Acid	mg/l	1600	400	2000	2000	96	92	70-130	4.3	20	
Lactic Acid	mg/l	180	400	550	500	94	82	70-130	14	20	

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QUALITY CONTROL DATA

Workorder: 13709 FT. SMITH, AR

QC Batch: DISG/4129 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 137090001, 137090002, 137090003, 137090004, 137090005, 137090006, 137090007

METHOD BLANK: 31187

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: 31189 31191

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	780	830	105	111	80-120	5.6	20	
Ethane	ug/l	38	43	43	114	114	80-120	0	20	
Ethene	ug/l	35	40	40	113	113	80-120	0	20	
Acetylene	ug/l	33	31	31	94	94	80-120	0	20	

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QUALITY CONTROL DATA

Workorder: 13709 FT. SMITH, AR

QC Batch: DISG/4130 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 137090010, 137090011, 137090012, 137090013, 137090014, 137090015, 137090016, 137090017, 137090018, 137090019, 137090020, 137090021, 137090022, 137090023, 137090024, 137090025, 137090026, 137090027, 137090028

METHOD BLANK: 31197

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: 31198 31199

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	700	710	94	96	80-120	2.1	20	
Ethane	ug/l	38	40	41	106	109	80-120	2.8	20	
Ethene	ug/l	35	38	38	106	109	80-120	2.8	20	
Acetylene	ug/l	33	30	30	92	92	80-120	0	20	

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QUALITY CONTROL DATA

Workorder: 13709 FT. SMITH, AR

QC Batch: DISG/4133 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 137090008, 137090009, 137090029, 137090030, 137090031

METHOD BLANK: 31233

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: 31235 31237

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Methane	ug/l	750	720	800	97	108	80-120	11	20	
Ethane	ug/l	38	42	41	111	109	80-120	1.8	20	
Ethene	ug/l	35	39	38	111	108	80-120	2.7	20	
Acetylene	ug/l	33	34	33	104	101	80-120	2.9	20	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 13709 FT. SMITH, AR

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
137090001	MW-41-201410			AM21G	EDON/2297
137090002	IW-76-201410			AM21G	EDON/2297
137090003	ITMW-21-201410			AM21G	EDON/2297
137090004	ITMW-6-201410			AM21G	EDON/2297
137090005	MW-29-201410			AM21G	EDON/2297
137090006	ITMW-20-201410			AM21G	EDON/2297
137090007	MW-33-201410			AM21G	EDON/2297
137090008	IW-77-201410			AM21G	EDON/2297
137090009	MW-34-201410			AM21G	EDON/2297
137090010	ITMW-1-201410			AM21G	EDON/2298
137090011	ITMW-2-201410			AM21G	EDON/2298
137090012	MW-22-201410			AM21G	EDON/2298
137090013	ITMW-10-201410			AM21G	EDON/2298
137090014	ITMW-9-201410			AM21G	EDON/2298
137090015	ITMW-12-201410			AM21G	EDON/2298
137090016	ITMW-14-201410			AM21G	EDON/2298
137090017	ITMW-18-201410			AM21G	EDON/2298
137090018	ITMW-16-201410			AM21G	EDON/2298
137090019	MW-57-201410			AM21G	EDON/2298
137090020	MW-58-201410			AM21G	EDON/2298
137090021	MW-56-201410			AM21G	EDON/2298
137090022	ITMW-7-201410			AM21G	EDON/2298
137090023	ITMW-11-201410			AM21G	EDON/2298
137090024	ITMW-13-201410			AM21G	EDON/2298
137090025	ITMW-15-201410			AM21G	EDON/2298
137090026	MW-25-201410			AM21G	EDON/2298
137090027	ITMW-4-201410			AM21G	EDON/2298
137090028	ITMW-19-201410			AM21G	EDON/2298
137090029	ITMW-17-201410			AM21G	EDON/2298
137090030	MW-38-201410			AM21G	EDON/2299
137090031	MW-46R-201410			AM21G	EDON/2299

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 13709 FT. SMITH, AR

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
137090001	MW-41-201410			AM20GAX	DISG/4129
137090002	IW-76-201410			AM20GAX	DISG/4129
137090003	ITMW-21-201410			AM20GAX	DISG/4129
137090004	ITMW-6-201410			AM20GAX	DISG/4129
137090005	MW-29-201410			AM20GAX	DISG/4129
137090006	ITMW-20-201410			AM20GAX	DISG/4129
137090007	MW-33-201410			AM20GAX	DISG/4129
137090010	ITMW-1-201410			AM20GAX	DISG/4130
137090011	ITMW-2-201410			AM20GAX	DISG/4130
137090012	MW-22-201410			AM20GAX	DISG/4130
137090013	ITMW-10-201410			AM20GAX	DISG/4130
137090014	ITMW-9-201410			AM20GAX	DISG/4130
137090015	ITMW-12-201410			AM20GAX	DISG/4130
137090016	ITMW-14-201410			AM20GAX	DISG/4130
137090017	ITMW-18-201410			AM20GAX	DISG/4130
137090018	ITMW-16-201410			AM20GAX	DISG/4130
137090019	MW-57-201410			AM20GAX	DISG/4130
137090020	MW-58-201410			AM20GAX	DISG/4130
137090021	MW-56-201410			AM20GAX	DISG/4130
137090022	ITMW-7-201410			AM20GAX	DISG/4130
137090023	ITMW-11-201410			AM20GAX	DISG/4130
137090024	ITMW-13-201410			AM20GAX	DISG/4130
137090025	ITMW-15-201410			AM20GAX	DISG/4130
137090026	MW-25-201410			AM20GAX	DISG/4130
137090027	ITMW-4-201410			AM20GAX	DISG/4130
137090028	ITMW-19-201410			AM20GAX	DISG/4130
137090008	IW-77-201410			AM20GAX	DISG/4133
137090009	MW-34-201410			AM20GAX	DISG/4133
137090029	ITMW-17-201410			AM20GAX	DISG/4133
137090030	MW-38-201410			AM20GAX	DISG/4133
137090031	MW-46R-201410			AM20GAX	DISG/4133

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(913)599-5665

November 03, 2014

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

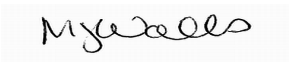
RE: Project: Ft. Smith-Microseeps 13700
Pace Project No.: 60180888

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on October 20, 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.

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-Microseeps 13700
Pace Project No.: 60180888

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60180888001	ITMW-4-201410	Water	10/13/14 15:12	10/20/14 09:00
60180888002	ITMW-9-201410	Water	10/13/14 15:40	10/20/14 09:00
60180888003	ITMW-10-201410	Water	10/13/14 16:10	10/20/14 09:00
60180888004	MW-66-201410	Water	10/14/14 08:53	10/20/14 09:00
60180888005	MW-46R-201410	Water	10/14/14 09:27	10/20/14 09:00
60180888006	MW-72-201410	Water	10/14/14 11:18	10/20/14 09:00
60180888007	MW-40-201410	Water	10/14/14 11:40	10/20/14 09:00
60180888008	IW-74-201410	Water	10/14/14 12:05	10/20/14 09:00
60180888009	IW-73-201410	Water	10/14/14 12:40	10/20/14 09:00
60180888010	MW-41-201410	Water	10/14/14 13:04	10/20/14 09:00
60180888011	IW-76-201410	Water	10/14/14 13:32	10/20/14 09:00
60180888012	IW-77-201410	Water	10/14/14 14:11	10/20/14 09:00
60180888013	IW-80-201410	Water	10/14/14 14:55	10/20/14 09:00
60180888014	MW-36-201410	Water	10/14/14 15:37	10/20/14 09:00
60180888015	MW-34-201410	Water	10/14/14 16:17	10/20/14 09:00
60180888016	MW-39-201410	Water	10/14/14 16:46	10/20/14 09:00
60180888017	MW-33-201410	Water	10/15/14 08:21	10/20/14 09:00
60180888018	MW-32-201410	Water	10/15/14 09:04	10/20/14 09:00
60180888019	MW-35R-201410	Water	10/15/14 09:32	10/20/14 09:00
60180888020	MW-65-201410	Water	10/15/14 09:55	10/20/14 09:00
60180888021	MW-67-201410	Water	10/15/14 11:14	10/20/14 09:00
60180888022	MW-62-201410	Water	10/15/14 12:10	10/20/14 09:00
60180888023	MW-69-201410	Water	10/15/14 12:50	10/20/14 09:00
60180888024	MW-71-201410	Water	10/15/14 13:20	10/20/14 09:00

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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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October 31, 2014

Mary Jane Walls
Pace Analytical Services
9608 Loiret Blvd
Lenexa, KS 66219

RE: **WHIRLPOOL - FORT SMITH, AR**
Microseeps Workorder: 13700

Dear Mary Walls:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, October 20, 2014. 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 10/31/2014 RW 11-3-14
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 35

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LABORATORY ACCREDITATIONS & CERTIFICATIONS

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

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SAMPLE SUMMARY

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID	Sample ID	Matrix	Date Collected	Date Received
137000001	ITMW-4-201410	Bubble Strip	10/13/2014 15:12	10/20/2014 09:00
137000002	ITMW-9-201410	Bubble Strip	10/13/2014 15:40	10/20/2014 09:00
137000003	ITMW-10-201410	Bubble Strip	10/13/2014 16:10	10/20/2014 09:00
137000004	MW-66-201410	Bubble Strip	10/14/2014 08:53	10/20/2014 09:00
137000005	MW-46R-201410	Bubble Strip	10/14/2014 09:27	10/20/2014 09:00
137000006	IW-72-201410	Bubble Strip	10/14/2014 11:18	10/20/2014 09:00
137000007	MW-40-201410	Bubble Strip	10/14/2014 11:40	10/20/2014 09:00
137000008	IW-74-201410	Bubble Strip	10/14/2014 12:05	10/20/2014 09:00
137000009	IW-73-201410	Bubble Strip	10/14/2014 12:40	10/20/2014 09:00
137000010	MW-41-201410	Bubble Strip	10/14/2014 13:04	10/20/2014 09:00
137000011	IW-76-201410	Bubble Strip	10/14/2014 13:32	10/20/2014 09:00
137000012	IW-77-201410	Bubble Strip	10/14/2014 14:11	10/20/2014 09:00
137000013	IW-80-201410	Bubble Strip	10/14/2014 14:55	10/20/2014 09:00
137000014	MW-36-201410	Bubble Strip	10/14/2014 15:37	10/20/2014 09:00
137000015	MW-34-201410	Bubble Strip	10/14/2014 16:17	10/20/2014 09:00
137000016	MW-39-201410	Bubble Strip	10/14/2014 16:46	10/20/2014 09:00
137000017	MW-33-201410	Bubble Strip	10/15/2014 08:21	10/20/2014 09:00
137000018	MW-32-201410	Bubble Strip	10/15/2014 09:04	10/20/2014 09:00
137000019	MW-35R-201410	Bubble Strip	10/15/2014 09:32	10/20/2014 09:00
137000020	MW-65-201410	Bubble Strip	10/15/2014 09:55	10/20/2014 09:00
137000021	MW-67-201410	Bubble Strip	10/15/2014 11:14	10/20/2014 09:00
137000022	MW-62-201410	Bubble Strip	10/15/2014 12:10	10/20/2014 09:00
137000023	RW-69-201410	Bubble Strip	10/15/2014 12:50	10/20/2014 09:00
137000024	MW-71-201410	Bubble Strip	10/15/2014 13:20	10/20/2014 09:00

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000001** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **ITMW-4-201410** Date Collected: 10/13/2014 15:12

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**6.7**	nM	0.60	0.13	1			10/21/2014 12:49	GT	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000002** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **ITMW-9-201410** Date Collected: 10/13/2014 15:40

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**4.6**	nM	0.60	0.13	1			10/21/2014 13:03	GT	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000003** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **ITMW-10-201410** Date Collected: 10/13/2014 16:10

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**5.0**	nM	0.60	0.13	1			10/21/2014 13:15	GT	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000004** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip
Sample ID: **MW-66-201410** Date Collected: 10/14/2014 08:53

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**5.3**	nM	0.60	0.13	1			10/25/2014 09:03	TD	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000005** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **MW-46R-201410** Date Collected: 10/14/2014 09:27

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**7.6**	nM	0.60	0.13	1			10/25/2014 09:16	TD	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000006** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **IW-72-201410** Date Collected: 10/14/2014 11:18

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**4.8**	nM	0.60	0.13	1			10/25/2014 09:28	TD	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000007** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **MW-40-201410** Date Collected: 10/14/2014 11:40

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**8.4**	nM	0.60	0.13	1			10/25/2014 10:35	TD	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000008** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip
Sample ID: **IW-74-201410** Date Collected: 10/14/2014 12:05

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**6.5**	nM	0.60	0.13	1			10/25/2014 10:50	TD	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000009** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **IW-73-201410** Date Collected: 10/14/2014 12:40

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**4.5**	nM	0.60	0.13	1			10/25/2014 11:02	TD	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000010** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **MW-41-201410** Date Collected: 10/14/2014 13:04

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**4.9**	nM	0.60	0.13	1			10/25/2014 11:14	TD	

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Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000011** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **IW-76-201410** Date Collected: 10/14/2014 13:32

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**340**	nM	12	2.6	20			10/28/2014 12:14	TD	

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Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000012** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **IW-77-201410** Date Collected: 10/14/2014 14:11

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			10/25/2014 11:39	TD	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000013** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **IW-80-201410** Date Collected: 10/14/2014 14:55

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**21**	nM	0.60	0.13	1			10/25/2014 11:51	TD	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000014** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **MW-36-201410** Date Collected: 10/14/2014 15:37

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**120**	nM	6.0	1.3	10			10/28/2014 12:26	TD	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000015** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **MW-34-201410** Date Collected: 10/14/2014 16:17

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**9.6**	nM	0.60	0.13	1			10/25/2014 12:16	TD	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000016** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **MW-39-201410** Date Collected: 10/14/2014 16:46

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**7.3**	nM	0.60	0.13	1			10/25/2014 12:28	TD	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000017** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip
Sample ID: **MW-33-201410** Date Collected: 10/15/2014 08:21

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**1.3**	nM	0.60	0.13	1			10/25/2014 12:41	TD	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000018** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **MW-32-201410** Date Collected: 10/15/2014 09:04

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**1.3**	nM	0.60	0.13	1			10/25/2014 14:24	TD	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000019** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip
Sample ID: **MW-35R-201410** Date Collected: 10/15/2014 09:32

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**2300**	nM	60	13	100			10/28/2014 13:03	TD	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000020** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **MW-65-201410** Date Collected: 10/15/2014 09:55

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**160**	nM	12	2.6	20			10/28/2014 12:51	TD	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000021** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **MW-67-201410** Date Collected: 10/15/2014 11:14

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**1.4**	nM	0.60	0.13	1			10/25/2014 15:01	TD	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000022** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip
Sample ID: **MW-62-201410** Date Collected: 10/15/2014 12:10

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**4.1**	nM	0.60	0.13	1			10/25/2014 15:13	TD	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000023** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **RW-69-201410** Date Collected: 10/15/2014 12:50

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**1.6**	nM	0.60	0.13	1			10/28/2014 13:16	TD	

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ANALYTICAL RESULTS

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137000024** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **MW-71-201410** Date Collected: 10/15/2014 13:20

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			10/28/2014 13:28	TD	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: 13700 WHIRLPOOL - FORT 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: 13700 WHIRLPOOL - FORT SMITH, AR

QC Batch: DISG/4109 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 137000001, 137000002, 137000003

METHOD BLANK: 31044

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Hydrogen	nM	<0.60	0.60	

LABORATORY CONTROL SAMPLE & LCSD: 31045 31046

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Hydrogen	nM	24	23	22	93	92	80-120	1.1	20	

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QUALITY CONTROL DATA

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

QC Batch: DISG/4126 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 137000004, 137000005, 137000006, 137000007, 137000008, 137000009, 137000010, 137000012, 137000013, 137000015, 137000016, 137000017

METHOD BLANK: 31172

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Hydrogen	nM	<0.60	0.60	

LABORATORY CONTROL SAMPLE & LCSD: 31174 31176

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Hydrogen	nM	24	23	22	95	92	80-120	3.2	20	

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QUALITY CONTROL DATA

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

QC Batch: DISG/4127 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 137000018, 137000021, 137000022

METHOD BLANK: 31178

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Hydrogen	nM	<0.60	0.60	

LABORATORY CONTROL SAMPLE & LCSD: 31179 31180

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Hydrogen	nM	24	24	23	97	94	80-120	3.1	20	

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QUALITY CONTROL DATA

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

QC Batch: DISG/4131 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 137000011, 137000014, 137000019, 137000020, 137000023, 137000024

METHOD BLANK: 31227

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Hydrogen	nM	<0.60	0.60	

LABORATORY CONTROL SAMPLE & LCSD: 31228 31229

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Hydrogen	nM	24	22	22	90	89	80-120	1.1	20	

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 13700 WHIRLPOOL - FORT SMITH, AR

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
137000001	ITMW-4-201410			AM20GAX	DISG/4109
137000002	ITMW-9-201410			AM20GAX	DISG/4109
137000003	ITMW-10-201410			AM20GAX	DISG/4109
137000004	MW-66-201410			AM20GAX	DISG/4126
137000005	MW-46R-201410			AM20GAX	DISG/4126
137000006	IW-72-201410			AM20GAX	DISG/4126
137000007	MW-40-201410			AM20GAX	DISG/4126
137000008	IW-74-201410			AM20GAX	DISG/4126
137000009	IW-73-201410			AM20GAX	DISG/4126
137000010	MW-41-201410			AM20GAX	DISG/4126
137000012	IW-77-201410			AM20GAX	DISG/4126
137000013	IW-80-201410			AM20GAX	DISG/4126
137000015	MW-34-201410			AM20GAX	DISG/4126
137000016	MW-39-201410			AM20GAX	DISG/4126
137000017	MW-33-201410			AM20GAX	DISG/4126
137000018	MW-32-201410			AM20GAX	DISG/4127
137000021	MW-67-201410			AM20GAX	DISG/4127
137000022	MW-62-201410			AM20GAX	DISG/4127
137000011	IW-76-201410			AM20GAX	DISG/4131
137000014	MW-36-201410			AM20GAX	DISG/4131
137000019	MW-35R-201410			AM20GAX	DISG/4131
137000020	MW-65-201410			AM20GAX	DISG/4131
137000023	RW-69-201410			AM20GAX	DISG/4131
137000024	MW-71-201410			AM20GAX	DISG/4131

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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.

13700

Page: 1 of 4

004219

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: Whirlpool - Fort Smith, AR
Project Number:

Section C Invoice Information:

Attention: Tammy Gleason
Company Name: ENVIRON
Address: 250 Monroe Ave. NW Grand Rapids, Michigan, 49503
Pace Quote Reference:
Pace Project Manager: MJ Walls
Pace Profile #: 7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

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	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 20 GX - Hydrogen*	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	ITMW-4-201410	WT	G	10/13/14	1512														X		
2	ITMW-9-201410				1540														X		
3	ITMW-10-201410				1610														X		
4	MW-66-201410	WT	G	10/14/14	0853														X		
5	MW-46R-201410				0927														X		
6	IW-72-201410				1118														X		
7	MW-40-201410				1140														X		
8	IW-74-201410				1205														X		
9	IW-73-201410				1240														X		
10	MW-41-201410				1304														X		
11	IW-76-201410				1332														X		
12	IW-77-201410				1411														X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
*Dissolved Gases - Hydrogen	Wendy Stonestreet	10/17/14	1120	PACE	10.20.14	0900	n/a	n/a	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Tamara House-Knight
SIGNATURE of SAMPLER: Tamara R. House-Knight
DATE Signed (MM/DD/YY): 10/16/14

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
www.pacelabs.com
220 William Pitt Way
Pittsburgh, PA 15238
412-826-5245

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 4

004220

13700

Microseeps

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
Email To: wstonestreet@environcorp.com	Purchase Order No.: NA	Pace Quote Reference: Grand Rapids, MI 49503
Phone: 913.553.5926 Fax:	Project Name: Whirlpool - 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 _____

Site Location STATE: _____

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: Drinking Water DW, Water WT, Waste Water WW, Product P, Soil/Solid SL, Oil OL, Wipe WP, Air AR, Tissue TS, Other OT	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	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 GX - Hydrogen*	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	IW-80-201410		WT	G	10/14/14	1455																
2	MW-36-201410					1537																
3	MW-34-201410					1617																
4	MW-39-201410					1646																
5	MW-33-201410				10/15/14	0821																
6	MW-32-201410					0904																
7	MW-35R-201410					0932																
8	MW-65-201410					0955																
9	MW-67-201410					1114																
10	MW-62-201410					1210																
11	RW-69-201410					1250																
12	MW-71-201410					1320																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
*Dissolved Gases - Hydrogen	Wendy Stonestreet	10/17/14	1120	PACE	10.20.14	0900	n/a	n/a	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Tamara House-Knight

SIGNATURE of SAMPLER: Tamara R. House-Knight DATE Signed (MM/DD/YY): 10/16/14

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.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

November 05, 2014

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

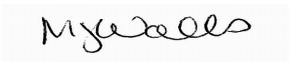
RE: Project: Ft. Smith AR-Microseeps 13701
Pace Project No.: 60180913

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on October 20, 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.

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-Microseeps 13701
Pace Project No.: 60180913

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60180913001	MW-68-201410	Water	10/15/14 13:43	10/20/14 09:00
60180913002	MW-58-201410	Water	10/15/14 14:17	10/20/14 09:00
60180913003	ITMW-7-201410	Water	10/15/14 15:09	10/20/14 09:00
60180913004	MW-29-201410	Water	10/15/14 15:42	10/20/14 09:00
60180913005	ITMW-20-201410	Water	10/15/14 16:16	10/20/14 09:00
60180913006	ITMW-6-201410	Water	10/15/14 16:48	10/20/14 09:00
60180913007	ITMW-1-201410	Water	10/15/14 17:26	10/20/14 09:00
60180913008	MW-22-201410	Water	10/15/14 17:49	10/20/14 09:00
60180913009	MW-26-201410	Water	10/16/14 07:50	10/20/14 09:00
60180913010	ITMW-21-201410	Water	10/16/14 08:18	10/20/14 09:00
60180913011	ITMW-2-201410	Water	10/16/14 08:35	10/20/14 09:00
60180913012	ITMW-16-201410	Water	10/16/14 08:46	10/20/14 09:00
60180913013	MW-28-201410	Water	10/16/14 09:05	10/20/14 09:00
60180913014	ITMW-14-201410	Water	10/16/14 09:22	10/20/14 09:00
60180913015	MW-27-201410	Water	10/16/14 09:35	10/20/14 09:00
60180913016	ITMW-13-201410	Water	10/16/14 09:44	10/20/14 09:00
60180913017	ITMW-18-201410	Water	10/16/14 10:12	10/20/14 09:00
60180913018	ITMW-12-201410	Water	10/16/14 10:41	10/20/14 09:00
60180913019	ITMW-15-201410	Water	10/16/14 10:42	10/20/14 09:00
60180913020	ITMW-19-201410	Water	10/16/14 11:13	10/20/14 09:00
60180913021	ITMW-17-201410	Water	10/16/14 11:14	10/20/14 09:00
60180913022	ITMW-11-201410	Water	10/16/14 12:01	10/20/14 09:00
60180913023	MW-38-201410	Water	10/16/14 12:33	10/20/14 09:00
60180913024	MW-25-201410	Water	10/16/14 13:07	10/20/14 09:00

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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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November 5, 2014

Mary Jane Walls
Pace Analytical Services
9608 Loiret Blvd
Lenexa, KS 66219

RE: **WHIRLPOOL - FORT SMITH, AR**
Microseeps Workorder: 13701

Dear Mary Walls:

Enclosed are the analytical results for sample(s) received by the laboratory on Monday, October 20, 2014. 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 11/05/2014 RW 11-5-14
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 35

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LABORATORY ACCREDITATIONS & CERTIFICATIONS

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

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SAMPLE SUMMARY

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID	Sample ID	Matrix	Date Collected	Date Received
137010001	MW-68-201410	Bubble Strip	10/15/2014 13:43	10/20/2014 09:00
137010002	MW-58-201410	Bubble Strip	10/15/2014 14:17	10/20/2014 09:00
137010003	ITMW-7-201410	Bubble Strip	10/15/2014 15:09	10/20/2014 09:00
137010004	MW-29-201410	Bubble Strip	10/15/2014 15:42	10/20/2014 09:00
137010005	ITMW-20-201410	Bubble Strip	10/15/2014 16:16	10/20/2014 09:00
137010006	ITMW-6-201410	Bubble Strip	10/15/2014 16:48	10/20/2014 09:00
137010007	ITMW-1-201410	Bubble Strip	10/15/2014 17:26	10/20/2014 09:00
137010008	MW-22-201410	Bubble Strip	10/15/2014 17:49	10/20/2014 09:00
137010009	MW-26-201410	Bubble Strip	10/16/2014 07:50	10/20/2014 09:00
137010010	ITMW-21-201410	Bubble Strip	10/16/2014 08:18	10/20/2014 09:00
137010011	ITMW-2-201410	Bubble Strip	10/16/2014 08:35	10/20/2014 09:00
137010012	ITMW-16-201410	Bubble Strip	10/16/2014 08:46	10/20/2014 09:00
137010013	MW-28-201410	Bubble Strip	10/16/2014 09:05	10/20/2014 09:00
137010014	ITMW-14-201410	Bubble Strip	10/16/2014 09:22	10/20/2014 09:00
137010015	MW-27-201410	Bubble Strip	10/16/2014 09:35	10/20/2014 09:00
137010016	ITMW-13-201410	Bubble Strip	10/16/2014 09:44	10/20/2014 09:00
137010017	ITMW-18-201410	Bubble Strip	10/16/2014 10:12	10/20/2014 09:00
137010018	ITMW-12-201410	Bubble Strip	10/16/2014 10:41	10/20/2014 09:00
137010019	ITMW-15-201410	Bubble Strip	10/16/2014 10:42	10/20/2014 09:00
137010020	ITMW-19-201410	Bubble Strip	10/16/2014 11:13	10/20/2014 09:00
137010021	ITMW-17-201410	Bubble Strip	10/16/2014 11:14	10/20/2014 09:00
137010022	ITMW-11-201410	Bubble Strip	10/16/2014 12:01	10/20/2014 09:00
137010023	MW-38-201410	Bubble Strip	10/16/2014 12:33	10/20/2014 09:00
137010024	MW-25-201410	Bubble Strip	10/16/2014 13:07	10/20/2014 09:00

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010001** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **MW-68-201410** Date Collected: 10/15/2014 13:43

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**1.6**	nM	0.60	0.13	1			10/28/2014 15:47	TD	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010002** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **MW-58-201410** Date Collected: 10/15/2014 14:17

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**2.6**	nM	0.60	0.13	1			10/28/2014 15:59	TD	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010003** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **ITMW-7-201410** Date Collected: 10/15/2014 15:09

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**1.6**	nM	0.60	0.13	1			10/28/2014 16:11	TD	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010004** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **MW-29-201410** Date Collected: 10/15/2014 15:42

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**1.7**	nM	0.60	0.13	1			10/28/2014 16:24	TD	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010005** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **ITMW-20-201410** Date Collected: 10/15/2014 16:16

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			10/28/2014 16:36	TD	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010006** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **ITMW-6-201410** Date Collected: 10/15/2014 16:48

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	1.7	nM	0.60	0.13	1			10/28/2014 16:49	TD	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010007** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip
Sample ID: **ITMW-1-201410** Date Collected: 10/15/2014 17:26

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Hydrogen	**5.4**	nM	0.60	0.13	1			10/28/2014 18:05	TD	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010008** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **MW-22-201410** Date Collected: 10/15/2014 17:49

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**7.0**	nM	0.60	0.13	1			10/28/2014 18:17	TD	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010009** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **MW-26-201410** Date Collected: 10/16/2014 07:50

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**1.2**	nM	0.60	0.13	1			10/28/2014 18:30	TD	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010010** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip
Sample ID: **ITMW-21-201410** Date Collected: 10/16/2014 08:18

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**2.4**	nM	0.60	0.13	1			10/28/2014 18:42	TD	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010011** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip
Sample ID: **ITMW-2-201410** Date Collected: 10/16/2014 08:35

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**4.9**	nM	0.60	0.13	1			10/28/2014 18:54	TD	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010012** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip
Sample ID: **ITMW-16-201410** Date Collected: 10/16/2014 08:46

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**1.7**	nM	0.60	0.13	1			10/28/2014 19:07	TD	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010013** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip
Sample ID: **MW-28-201410** Date Collected: 10/16/2014 09:05

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Hydrogen	5.3	nM	0.60	0.13	1			10/28/2014 19:19	TD	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010014** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **ITMW-14-201410** Date Collected: 10/16/2014 09:22

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**1.7**	nM	0.60	0.13	1			10/28/2014 19:31	TD	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010015** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip
Sample ID: **MW-27-201410** Date Collected: 10/16/2014 09:35

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**4.9**	nM	0.60	0.13	1			10/28/2014 19:44	TD	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010016** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **ITMW-13-201410** Date Collected: 10/16/2014 09:44

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			10/28/2014 19:57	TD	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010017** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip
Sample ID: **ITMW-18-201410** Date Collected: 10/16/2014 10:12

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	7.3	nM	0.60	0.13	1			10/30/2014 09:41	GT	

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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

ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010018** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **ITMW-12-201410** Date Collected: 10/16/2014 10:41

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**1.5**	nM	0.60	0.13	1			10/30/2014 09:53	GT	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010019** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip
Sample ID: **ITMW-15-201410** Date Collected: 10/16/2014 10:42

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**5.1**	nM	0.60	0.13	1			10/30/2014 10:06	GT	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010020** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **ITMW-19-201410** Date Collected: 10/16/2014 11:13

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**4.7**	nM	0.60	0.13	1			10/30/2014 10:18	GT	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: 137010021 Date Received: 10/20/2014 09:00 Matrix: Bubble Strip
Sample ID: ITMW-17-201410 Date Collected: 10/16/2014 11:14

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX		Analytical Method: AM20GAX								
Hydrogen	**3.7**	nM	0.60	0.13	1			10/30/2014 10:31	GT	

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Fax: (412) 826-3433

ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010022** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **ITMW-11-201410** Date Collected: 10/16/2014 12:01

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**4.8**	nM	0.60	0.13	1			10/30/2014 10:43	GT	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010023** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip
Sample ID: **MW-38-201410** Date Collected: 10/16/2014 12:33

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			10/30/2014 10:55	GT	

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ANALYTICAL RESULTS

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID: **137010024** Date Received: 10/20/2014 09:00 Matrix: Bubble Strip

Sample ID: **MW-25-201410** Date Collected: 10/16/2014 13:07

Parameters	Results	Units	PQL	MDL	DF	Prepared	By	Analyzed	By	Qual
RISK - MICR										
Analysis Desc: AM20GAX			Analytical Method: AM20GAX							
Hydrogen	**2700**	nM	60	13	100			11/4/2014 10:53	SL	

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ANALYTICAL RESULTS QUALIFIERS

Workorder: 13701 WHIRLPOOL - FORT 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: 13701 WHIRLPOOL - FORT SMITH, AR

QC Batch: DISG/4131 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 137010001, 137010002, 137010003, 137010004, 137010005, 137010006

METHOD BLANK: 31227

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Hydrogen	nM	<0.60	0.60	

LABORATORY CONTROL SAMPLE & LCSD: 31228 31229

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Hydrogen	nM	24	22	22	90	89	80-120	1.1	20	

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QUALITY CONTROL DATA

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

QC Batch: DISG/4132 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 137010007, 137010008, 137010009, 137010010, 137010011, 137010012, 137010013, 137010014, 137010015, 137010016

METHOD BLANK: 31230

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Hydrogen	nM	<0.60	0.60	

LABORATORY CONTROL SAMPLE & LCSD: 31231 31232

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limit	RPD	Max RPD	Qualifiers
RISK										
Hydrogen	nM	24	22	22	93	93	80-120	0	20	

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QUALITY CONTROL DATA

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

QC Batch: DISG/4136 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 137010017, 137010018, 137010019, 137010020, 137010021, 137010022, 137010023

METHOD BLANK: 31269

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Hydrogen	nM	<0.60	0.60	

LABORATORY CONTROL SAMPLE & LCSD: 31270 31271

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	93	80-120	2.1	20	

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QUALITY CONTROL DATA

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

QC Batch: DISG/4153 Analysis Method: AM20GAX

QC Batch Method: AM20GAX

Associated Lab Samples: 137010024

METHOD BLANK: 31386

Parameter	Units	Blank Result	Reporting Limit	Qualifiers
RISK				
Hydrogen	nM	<0.60	0.60	

LABORATORY CONTROL SAMPLE & LCSD: 31387 31388

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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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Workorder: 13701 WHIRLPOOL - FORT SMITH, AR

Lab ID	Sample ID	Prep Method	Prep Batch	Analysis Method	Analysis Batch
137010001	MW-68-201410			AM20GAX	DISG/4131
137010002	MW-58-201410			AM20GAX	DISG/4131
137010003	ITMW-7-201410			AM20GAX	DISG/4131
137010004	MW-29-201410			AM20GAX	DISG/4131
137010005	ITMW-20-201410			AM20GAX	DISG/4131
137010006	ITMW-6-201410			AM20GAX	DISG/4131
137010007	ITMW-1-201410			AM20GAX	DISG/4132
137010008	MW-22-201410			AM20GAX	DISG/4132
137010009	MW-26-201410			AM20GAX	DISG/4132
137010010	ITMW-21-201410			AM20GAX	DISG/4132
137010011	ITMW-2-201410			AM20GAX	DISG/4132
137010012	ITMW-16-201410			AM20GAX	DISG/4132
137010013	MW-28-201410			AM20GAX	DISG/4132
137010014	ITMW-14-201410			AM20GAX	DISG/4132
137010015	MW-27-201410			AM20GAX	DISG/4132
137010016	ITMW-13-201410			AM20GAX	DISG/4132
137010017	ITMW-18-201410			AM20GAX	DISG/4136
137010018	ITMW-12-201410			AM20GAX	DISG/4136
137010019	ITMW-15-201410			AM20GAX	DISG/4136
137010020	ITMW-19-201410			AM20GAX	DISG/4136
137010021	ITMW-17-201410			AM20GAX	DISG/4136
137010022	ITMW-11-201410			AM20GAX	DISG/4136
137010023	MW-38-201410			AM20GAX	DISG/4136
137010024	MW-25-201410			AM20GAX	DISG/4153

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412-826-5245

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

13701

Page: 3 of 4

004221

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.: N/A
Project Name: Whirlpool - Fort Smith, AR
Project Number:

Section C Invoice Information:

Attention: Tammy Gleason
Company Name: ENVIRON
Address: 250 Monroe Ave NW
Pace Quote Reference: Grand Rapids, MI 49503
Pace Project Manager: MJ Wells
Pace Profile #: 7444, line 1

REGULATORY AGENCY

NPDES GROUND WATER DRINKING WATER
UST RCRA OTHER

Site Location STATE:

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

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	Analysis Test Y/N: AM 30 ex - Hydrogen*	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-65-201410	WT	G	10/15/14	1343															
2	MW-58-201410				1417															
3	ITMW-7-201410				1509															
4	MW-29-201410				1542															
5	ITMW-20-201410				1616															
6	ITMW-6-201410				1648															
7	ITMW-1-201410				1726															
8	MW-22-201410				1749															
9	MW-26-201410			10/16/14	0750															
10	ITMW-21-201410				0818															
11	ITMW-2-201410				0835															
12	ITMW-16-201410				0846															

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
* Dissolved Gases - Hydrogen	Wendy Stonestreet	10/17/14	1120	Ladge PACE	10.20.14	0900	n/a	n/a	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Tamara Hess-Knight
SIGNATURE of SAMPLER: Tamara R. Hess-Knight
DATE Signed (MM/DD/YY): 10/16/14

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

ORIGINAL

*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-May-2007

Pace Analytical
www.pacelabs.com
Microseeps

220 William Pitt Way
Pittsburgh, PA 15238
412-826-5245

13701

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 4 of 4

004222

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: Whirlpool - Fort Smith, AR
Project Number:

Section C Invoice Information:

Attention: Tammy Gleason
Company Name: ENVIRON
Address: 250 Monroe Ave NW
Grand Rapids, MI 49503
Pace Quote Reference:
Pace Project Manager: MS Walls
Pace Profile #: 7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: _____

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 20 GX - Hydrogen *	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-28-201410	WT	G	10/16/14	0905																
2	ITMW-14-201410				0922																
3	MW-27-201410				0935																
4	ITMW-13-201410				0944																
5	ITMW-18-201410				1012																
6	ITMW-12-201410				1041																
7	ITMW-15-201410				1042																
8	ITMW-19-201410				1113																
9	ITMW-17-201410				1114																
10	ITMW-11-201410				1201																
11	MW-38-201410				1233																
12	MW-25-201410				1307																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
* Dissolved Gases - Hydrogen	Wendy Stonestreet	10/17/14	1130	[illegible] PACE	10.20	0900	n/a	n/a	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Tamara Horse-Knight
SIGNATURE of SAMPLER: Tamara N. Horse-Knight
DATE Signed (MM/DD/YY): 10/16/14

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.

F-ALL-Q-020rev.07, 15-May-2007

10515 Research Drive
Knoxville, TN 37932
Phone: (865) 573-8188
Fax: (865) 573-8133

Client: Wendy Stonestreet
Environ
7500 College Boulevard
Suite 925
Overland Park, KS 66210

Phone: 913-553-5926

Fax:

Identifier: 024LL **Date Rec:** 12/04/2014 **Report Date:** 12/08/2014

Client Project #: **Client Project Name:**

Purchase Order #:

Analysis Requested: CENSUS, Standard Bio-Trap

Reviewed By:



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MICROBIAL INSIGHTS, INC.

10515 Research Dr., Knoxville, TN 37932
Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: **Environ**
Project:

MI Project Number: **024LL**
Date Received: 12/04/2014

Sample Information

Client Sample ID:		**MW-46R-20141203**	**MW-38-20141203**	**IW-74-20141203**
Sample Date:		12/03/2014	12/03/2014	12/03/2014
Units:		cells/bead	cells/bead	cells/bead
Analyst:		RW	RW	RW

Dechlorinating Bacteria

Dehalococcoides	*DHC*	**1.22E+02**	**2.56E+04**	**3.54E+04**
tceA Reductase	TCE	<2.50E+01	<2.50E+01	<2.50E+01
BAV1 Vinyl Chloride Reductase	BVC	<2.50E+01	**1.31E+04**	**6.88E+03**
Vinyl Chloride Reductase	VCR	<2.50E+01	<2.50E+01	<2.50E+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
4th Quarter Groundwater Monitoring Event
Whirlpool Corporation
Fort Smith, Arkansas

Laboratory Sample Delivery Groups (SDGs): 60180221, 60180331, 60180441 and 60180635

Laboratory: PACE Analytical, Lenexa, Kansas

Reviewer: Wendy Stonestreet **Date Reviewed: November 11, 2014**

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 October 13, 2014 to October 16, 2014.

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 81 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.

Fifty-five (55) ground water samples, six (6) blind ground water field duplicates, three (3) matrix spike/matrix spike duplicate (MS/MSD), six (6) equipment rinsate blanks and fourteen (14) 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: 60180221				
MW-39-201410	SA	60180221001	Aqueous	X
MW-66-201410	SA	60180221002	Aqueous	X
MW-67-201410	SA	60180221003	Aqueous	X
MW-40-201410	SA	60180221004	Aqueous	X
IW-72-201410	SA	60180221005	Aqueous	X
TB-13-201410	TB	60180221006	Aqueous	X
EB-01-201410	RB	60180221007	Aqueous	X
SDG: 60180331				
MW-28-201410	SA/MS/MSD	60180331001	Aqueous	X
MW-50-201410	SA	60180331002	Aqueous	X
MW-36-201410	SA	60180331003	Aqueous	X
IW-80-201410	SA	60180331004	Aqueous	X
MW-31-201410	SA	60180331005	Aqueous	X
MW-32-201410	SA	60180331006	Aqueous	X

Field ID	Sample Type	Lab ID	Matrix	Analyses
				VOCs
RW-69-201410	SA	60180331007	Aqueous	X
MW-71-201410	SA	60180331008	Aqueous	X
MW-68-201410	SA	60180331009	Aqueous	X
IW-74-201410	SA	60180331010	Aqueous	X
MW-62-201410	SA	60180331011	Aqueous	X
MW-63-201410	SA	60180331012	Aqueous	X
MW-61-201410	SA	60180331013	Aqueous	X
MW-60-201410	SA	60180331014	Aqueous	X
IW-73-201410	SA	60180331015	Aqueous	X
MW-35R-201410	SA	60180331016	Aqueous	X
MW-26-201410	SA	60180331017	Aqueous	X
MW-65-201410	SA	60180331018	Aqueous	X
MW-27-201410	SA	60180331019	Aqueous	X
DUP-01-201410	FD	60180331020	Aqueous	X
TB-10-201410	TB	60180331021	Aqueous	X
EB-02-201410	RB	60180331022	Aqueous	X
TB-09-201410	TB	60180331023	Aqueous	X
TB-11-201410	TB	60180331024	Aqueous	X
TB-14-201410	TB	60180331025	Aqueous	X
TB-05-201410	TB	60180331026	Aqueous	X
SDG: 60180441				
MW-41-201410	SA	60180441001	Aqueous	X
IW-76201410	SA	60180441002	Aqueous	X
ITMW-21-201410	SA	60180441003	Aqueous	X
ITMW-6-201410	SA/MS/MSD	60180441004	Aqueous	X
MW-29-201410	SA	60180441005	Aqueous	X
ITMW-20-201410	SA/MS/MSD	60180441006	Aqueous	X
MW-33-201410	SA	60180441007	Aqueous	X
IW-77-201410	SA	60180441008	Aqueous	X
MW-34-201410	SA	60180441009	Aqueous	X
ITMW-1-201410	SA	60180441010	Aqueous	X
ITMW-2-201410	SA	60180441011	Aqueous	X
MW-22-201410	SA	60180441012	Aqueous	X
ITMW-10-201410	SA	60180441013	Aqueous	X
ITMW-9-201410	SA	60180441014	Aqueous	X
ITMW-12-201410	SA	60180441015	Aqueous	X
ITMW-14-201410	SA	60180441016	Aqueous	X
ITMW-18-201410	SA	60180441017	Aqueous	X
ITMW-16-201410	SA	60180441018	Aqueous	X
MW-57-201410	SA	60180441019	Aqueous	X
MW-58-201410	SA	60180441020	Aqueous	X
MW-56-201410	SA	60180441021	Aqueous	X
ITMW-7-201410	SA	60180441022	Aqueous	X
ITMW-11-201410	SA	60180441023	Aqueous	X
ITMW-13-201410	SA	60180441024	Aqueous	X
TB-03-201410	TB	60180441025	Aqueous	X
TB-16-201410	TB	60180441026	Aqueous	X

Field ID	Sample Type	Lab ID	Matrix	Analyses
				VOCs
TB-12-201410	TB	60180441027	Aqueous	X
DUP-04-201410	FD	60180441028	Aqueous	X
DUP-02-201410	FD	60180441029	Aqueous	X
TB-08-201410	TB	60180441030	Aqueous	X
TB-01-201410	TB	60180441031	Aqueous	X
EB-03-201410	RB	60180441032	Aqueous	X
TB-07-201410	TB	60180441033	Aqueous	X
SDG: 60180635				
ITMW-15-201410	SA	60180635001	Aqueous	X
MW-25-201410	SA	60180635002	Aqueous	X
ITMW-4-201410	SA	60180635003	Aqueous	X
ITMW-19-201410	SA	60180635004	Aqueous	X
ITMW-17-201410	SA	60180635005	Aqueous	X
MW-38-201410	SA	60180635006	Aqueous	X
MW-46R-201410	SA	60180635007	Aqueous	X
DUP-05-201410	FD	60180635008	Aqueous	X
EB-04-201410	RB	60180635009	Aqueous	X
DUP-06-201410	FD	60180635010	Aqueous	X
DUP-03-201410	FD	60180635011	Aqueous	X
EB-05-201410	RB	60180635012	Aqueous	X
EB-06-201410	RB	60180635013	Aqueous	X
TB-06-201410	TB	60180635014	Aqueous	X
TB-02-201410	TB	60180635015	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: 60180331:** The laboratory indicated that the laboratory control sample recoveries for two analytes were outside of laboratory control limits. See Section 10.0 for further discussion and resultant data qualification.
- **SDG: 60180441:** The laboratory indicated that matrix spike/matrix spike duplicate recoveries were outside of laboratory control limits for styrene. See Section 11.0 for further discussion and resultant data qualification.
- **SDG: 60180635:** The laboratory indicated that methylene chloride was found in an associated method blank. See Section 4.0 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 (fourteen coolers at 3.8˚C, 3.8˚C, 1.2˚C, 2.2˚C, 1.0˚C, 2.4˚C, 3.3˚C, 0.6˚C, 4.2˚C, 2.8˚C, 2.0˚C, 3.4˚C, 3.2˚C and 4.4˚C). Sample preservation requirements were met.

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 acid preserved samples.

4.0 Blank Contamination

Were any analytes detected in the associated laboratory or field blanks?

Yes. Laboratory and field blanks indicated the presence and magnitude of contamination resulting from laboratory or field activities. The following table summarizes the contamination reported in the laboratory and field blanks after accounting for method blank contamination. The discussion following the table details the data qualification if any.

SDG	Blank ID	Blank Type	Parameter	Analyte	Concentration	Units
60180221	EB-01-201410	Equipment	8260B	Benzene	0.53 J	µg/L
60180221	EB-01-201410	Equipment	8260B	Toluene	1.9	µg/L
60180331	EB-02-201410	Equipment	8260B	Toluene	1.6	µg/L
60180331	TB-11-201410	Trip	8260B	Methylene chloride	0.88 J	µg/L
60180331	TB-14-201410	Trip	8260B	Methylene chloride	0.84 J	µg/L
60180331	TB-05-201410	Trip	8260B	Methylene chloride	0.86 J	µg/L
60180441	1463836	Method	8260B	Methylene chloride	0.73 J	µg/L
60180635	1463846	Method	8260B	Methylene chloride	0.61 J	µg/L

SDG = Sample Delivery Group ug/L = micrograms per Liter

Data qualification of sample results due to blank contamination is summarized in the table below. Analytical data that were reported non-detect or at concentrations greater than five times (5X) the associated blank concentration (10X for common laboratory contaminants) did not require qualification.

SDG	Field ID	Parameter	Analyte	New RL	Qualification
60180635	MW-25-201410	8260B	Methylene chloride	5.0 µg/L	**U**
60180635	ITMW-4-201410	8260B	Methylene chloride	5.0 µg/L	**U**
60180635	ITMW-19-201410	8260B	Methylene chloride	5.0 µg/L	**U**

ID = Identification µg/L = micrograms per Liter RL = Reporting Limit

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 %)
60180331	1462551	8260B	Chloromethane	**149**	22-138
60180331	1463655	8260B	Bromoform	**125**	73-124

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.

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 (%)
60180441	ITMW-6-201410	8260B	Styrene	**38/45**	17	55-134/25
60180441	ITMW-20-201410	8260B	Styrene	**4/3**	0	55-134/25

MS = Matrix Spike MSD = Matrix Spike Duplicate RPD = Relative Percent Difference % = Percent

Data qualification of sample results due to MS/MSD recovery is summarized in the table below. 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. Qualification of data was not required.

SDG	Field ID	Parameter	Analyte	Qualification
60180441	ITMW-6-201410	8260B	Styrene	**UJ**
60180441	ITMW-20-201410	8260B	Styrene	**UJ**

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
60180331	IW-74-201410	DUP-01-201410
60180441	ITMW-12-201410	DUP-04-201410
60180441	ITMW-9-201410	DUP-02-201410
60180635	ITMW-15-201410	DUP-05-201410
60180635	MW-38-201410	DUP-06-201410
60180635	MW-46R-201410	DUP-03-201410

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. 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 (%)
60180331	IW-74-201410	DUP-01-201410	cis-1,2-Dichloroethene	3.3 J*	3.3J"	0.00
			Trichloroethene	144	143	0.70
60180441	ITMW-12-201410	DUP-04-201410	Chloroform	0.54 J*	ND	NE
			1,1-Dichloroethene	2.0 J*	1.8 J*	10.53
			cis-1,2-Dichloroethene	188	192	2.11
			trans-1,2-Dichloroethene	1.0 J*	1.1J*	9.52
			Tetrachloroethene	1.3 J*	1.2 J*	8.00
			Trichloroethene	2570	2950	13.77
			Vinyl chloride	3.5	3.7	5.56
60180441	ITMW-9-201410	DUP-02-201410	1,1-Dichloroethene	1.5 J*	1.6 J*	6.45
			cis-1,2-Dichloroethene	39.1	38.8	0.77
			Methylene chloride	0.88 J*	0.84 J*	4.65
			Trichloroethene	76.9	75.3	2.10
			Vinyl chloride	1.8 J*	1.7 J*	5.71
60180635	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
60180635	MW-201410	DUP-06-201410	Chloroform	2.3 J*	2.4 J*	4.26
			Dibromochloroethane	2.6 J*	2.4 J*	8.0
			1,1-Dichloroethane	0.98 J*	1.1 J*	11.54
			1,1-Dichloroethene	10.2	10.8	5.71
			cis-1,2-Dichloroethene	781	869	10.67
			trans-1,2-Dichloroethene	4.1 J*	2.8 J*	37.68
			Methylene chloride	21.8	22.4	2.71
			Tetrachloroethene	2.5 J*	2.5 J*	0.00
			Toluene	2.0 J*	2.0 J*	0.00
			1,1,2-Trichloroethane	0.60 J*	0.69 J*	13.95
			Trichloroethene	6750	6970	3.21
			Vinyl chloride	321	370	14.18
60180635	MW-46R-201410	DUP-03-201410	1,1-Dichloroethene	1.2 J*	1.3 J*	8.00
			cis-1,2-Dichloroethene	24.6	25.2	2.41
			Trichloroethene	410	373	9.45

ug/L = micrograms/Liter 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?

Yes

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
60180635	MW-25-201410	8260B	Methylene chloride	**U**	1
60180635	ITMW-4-201410	8260B	Methylene chloride	**U**	1
60180635	ITMW-19-201410	8260B	Methylene chloride	**U**	1
60180441	ITMW-6-201410	8260B	Styrene	**UJ**	2
60180441	ITMW-20-201410	8260B	Styrene	**UJ**	2

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 Result qualified as non-detect due to blank contamination.
2 Matrix Spike outside quality control limits.

Appendix D

Waste Manifests

Projects #: 0-0

Order #: 117674

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
ARD042756389 / D0005		See Section 14	002651799 GBF

GENERATOR

5. Generator's Name and Mailing Address
Whirlpool Corporation
6400 Jenny Lind Rd.
Fort Smith, AR 72908
Generator's Phone: 918-457-9959 ATTN

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
Effective Environmental, Inc.
PH#: 972-329-1700
State ID#: TX-87158-AR-H-138
U.S. EPA ID Number: TXD980811046

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
TM Deer Park Services LP
2525 Independence Parkway South
Deer Park, Texas 77536
State ID#: 32299
U.S. EPA ID Number: TXD000719518
Facility's Phone: 281.930.2525

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
M	1. RQ, NA3082, Hazardous waste, liquid, n.o.s. (D040, water with trichloroethylene), 9, PG III, ERG 171	01	TI	1700	G	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
01: Wash Water with D040 (PT 11141213)
EMERGENCY RESPONSE PHONE: 214-635-1500
ON CALL SUPERVISOR

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | Signature | Month | Day | Year

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

18b. Alternate Facility (or Generator) Manifest Reference Number:
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H134			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name | Signature | Month | Day | Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY





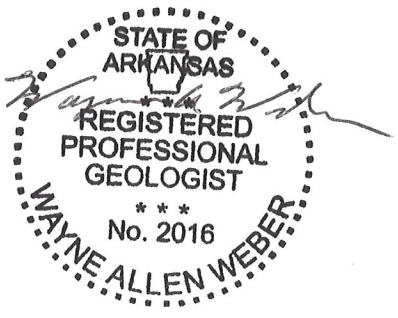
ATTACHMENT B
Fourth Quarter 2014 Soil Vapor Monitoring and Vapor Intrusion Assessment Report
Whirlpool Corporation
Fort Smith, Arkansas

Prepared for:
Whirlpool Corporation

Prepared by:
ENVIRON International Corporation

Date:
February 2015

Project Number:
34-34399A



ENVIRON

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1 Introduction

ENVIRON International Corporation (ENVIRON) has prepared this Fourth Quarter 2014 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) (ADEQ 2013).

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 Fourth Quarter 2014 Progress Report for the Site and provides an updated evaluation of the potential for vapor intrusion based on the data collected in October 2014 from groundwater monitoring wells and vapor monitoring points.

2 Soil Vapor Monitoring Point Installation and Sample Collection

The following subsections summarize the prior installation and monitoring of additional soil vapor monitoring points as well as the sample collection methods and procedures used during the October 2014 monitoring event.

2.1 Prior Installation and Monitoring of Soil Vapor Monitoring Points

Whirlpool installed four soil vapor monitoring points in May 2012 (SV-01, SV-02, SV-03 and SV-04) and collected soil vapor data from them as an additional line of evidence to complement a vapor intrusion modeling analysis of the potential for vapor intrusion from groundwater. These 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 gas sampling locations SV-01 and SV-02 were located near monitoring well MW-33, which had the highest detected concentration of TCE at the property boundary and soil gas sampling locations SV-03 and SV-04 were located near monitoring well MW-70, which had the highest detected concentration of TCE in the neighborhood where access was readily attainable. The measured concentration of TCE in shallow soil gas collected 7 feet below ground surface (bgs) (the sample depth closest to building foundation depths), was conservatively combined with 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 indicate 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 attenuation in the approximately 7 feet of silty clay soil between the soil gas sample depth and subslab depth was ignored. Accounting for such attenuation, which may be substantial (i.e. a factor of 10 or more based on observed attenuation between the deep and shallow soil gas concentrations), would result in even lower risk estimates (ENVIRON 2013).

The soil vapor data collected to date over the groundwater plume[2] in the neighborhood show that TCE concentrations volatilizing from the groundwater (vapor samples collected at least seven feet below the ground surface) are not indicative of a public health concern associated with soil 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.

The screens for soil vapor monitoring points SV-01S/SV-02D and SV-03S/SV-04D became filled with water prior to the Fourth Quarter 2013 monitoring event; Whirlpool replaced them with VP-2S/D and VP-1S/D during the First Quarter 2014 monitoring event, as described in the First Quarter 2014 Soil Vapor Monitoring/Vapor Intrusion Report[3]. During the First Quarter of 2014 soil vapor samples were successfully collected at the shallow and deep ports of VP-1; and at the deep port of VP-2 (the shallow port of VP-2 was saturated). Measured soil vapor

[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).

[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).

[3] Attachment B of the First Quarter 2014 Progress Report (ENVIRON May 2014).

concentrations from the First Quarter of 2014 indicated that potential vapor intrusion exposure risks based upon the measured soil vapor concentrations were nearly ten time less than those predicted by the modeling from groundwater, which were not predicted to result in a health concern (First Quarter 2014 Soil Vapor Monitoring/Vapor Intrusion Report).

The Final Remedial Work Plan included a soil vapor monitoring point at 1410 Jacobs Avenue. At this location, Whirlpool attempted to install a monitoring point during the First Quarter 2014 monitoring event at VP-3 and VP-4 (as shown on Figure 2). As explained in the First Quarter 2014 Soil Vapor Monitoring/Vapor Intrusion Report, the attempt at VP-3 encountered very moist soil at 3 feet bgs and water entered the borehole at 4 feet bgs. At VP-4, very moist to wet soil was encountered starting at 2.5 feet bgs. Because of the wet shallow soil, no vapor monitoring point was installed at either VP-3 or VP-4. The Final Remedial Work Plan also included vapor monitoring points near MW-56R and MW-56 (VP-5 and VP-6, respectively). VP-5 could not be installed at the planned location because multiple underground utilities were encountered in the road right-of-way. In trying to avoid underground utilities along the road right-of-way, Whirlpool requested permission from owners of nearby properties to install VP-5 and VP-6. Whirlpool has been denied access to these properties. Whirlpool is currently working with legal counsel for the private property owners north and south of Jacobs Avenue to gain access to perform additional investigation. This additional investigation will be performed in accordance with the Addendum to the Soil Vapor Monitoring Plan dated October 2, 2014 (Addendum). This additional investigation will be performed to obtain data as additional lines of evidence in determining if a vapor intrusion pathway from groundwater exists at respective properties. The proposed work in the Addendum can only be performed after access is granted by the residential property owners (through legal counsel).

2.2 Fourth Quarter 2014 Sampling Methods

Soil vapor sampling was attempted at soil vapor ports VP-1 and VP-2 (shallow and deep vapor points at each respective location) following United States Environmental Protection Agency (US EPA) and industry standard methods. Soil vapor sampling was attempted in October 2014.

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. Soil vapor sampling was attempted at the end of the two week sampling event when it had rained three of the five days prior to the attempted sampling date (which had no rain).

2.3 Fourth Quarter 2014 Activity

Soil vapor samples could not be collected during the Fourth Quarter 2014 monitoring event in October because water was present in and unable to be purged from the sampling train for the shallow port at location VP-1 and for both ports at location VP-2. No water was present in the sampling train for the deep port at location VP-1 and collection of a soil vapor sample was attempted. However, despite the use of sustained vacuum at this location, collection of a soil vapor sample was not possible. Consistent with the modifications to the sampling plan proposed

in the Second Quarter Soil Vapor Monitoring/Vapor Intrusion Report (ENVIRON 2014b) and summarized above in Section 2.2, water samples were collected from the soil vapor monitoring points where possible. Table 1 summarizes the matrices encountered at the soil vapor monitoring points and the types of samples that could be collected in October 2014 and during the prior three quarterly monitoring events.

The VOC results for the water samples collected from VP-1S and VP-2S/D are discussed in Section 3 and the analytical data reports for the samples are provided in Appendix A.

2.4 Proposed Modifications to Soil Vapor Investigation

To determine whether the water identified in vapor points is from a potential perched water-bearing zone, soil borings were installed in December 2014 in general accordance with the Offsite Shallow Groundwater Investigation Work Plan (ENVIRON 2014d). Shallow groundwater wells and additional vapor points were completed in January 2015.

Future soil vapor samples will be attempted using the additional data collection approaches described in Section 2.1 of the Addendum to the Soil Vapor Monitoring Plan (ENVIRON 2014c).

2.5 Change in Northern Property Boundary

Subsequent to the third quarter sampling event, the northern property boundary of the site was shifted from approximately 30 feet north of Ingersoll Avenue to 25 feet south of Ingersoll Avenue. Because of this change, three monitoring wells (MW-31, MW-32 and MW-33) are no longer within the Whirlpool property boundary. However, these wells are south of Ingersoll Avenue and are still appropriate for characterizing groundwater concentrations at the northern boundary of the site rather than groundwater concentrations in the neighborhood to the north of Ingersoll Avenue.

3 Results

The groundwater data from the Fourth Quarter 2014 monitoring event for monitoring wells (i.e. those with identifiers beginning with "MW-") that are in the neighborhood or adjacent to the soil vapor monitoring points are included in Table 2. Water data from soil vapor points sampled during the Fourth Quarter 2014 monitoring event are included in Table 3. The groundwater data are summarized in Table 4, which shows the maximum detected concentrations among all the groundwater monitoring wells that were sampled in the neighborhood. As discussed in Attachment A of the Fourth Quarter Progress Report (Fourth Quarter 2014 Groundwater Monitoring Report), the concentrations of VOCs in groundwater at MW-71 (adjacent to VP-1) at MW-33 (adjacent to VP-2) and overall VOC concentrations in groundwater, have not changed significantly since May 2012.

Risk estimates for potential vapor intrusion from groundwater into residences in the neighborhood were calculated using the Fourth Quarter groundwater data and 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 C. As shown in Table 4, the cumulative cancer risk and non-cancer HI based on the maximum concentrations among the October 2014 groundwater data from all the monitoring wells in the neighborhood are 2×10^{-6} and 0.4, respectively. These risk estimates are below ADEQ's risk management limits of 10^{-5} and 1, respectively.

Because soil vapor samples could not be collected, the data from the water samples collected from the shallow port of VP-1 are used to provide another line of evidence regarding the potential for vapor intrusion risks. Specifically, vapor intrusion risk estimates were calculated using the same approach used for groundwater (which is described in Section 6.5.2 of the ADEQ-approved RRMP) except the depth to water was reduced to 7 feet bgs to match the depth at which the water samples were collected. Table 5 shows the cumulative cancer risk and HI estimates for detected concentrations in shallow water at VP-1 that are approximately $1/20^{th}$ of those based on groundwater data from MW-71 (which is adjacent to VP-1). Both sets of risk estimates for these samples in the neighborhood meet ADEQ's risk management limits.

Water data from the on-site shallow port of VP-2 are also used to provide another line of evidence regarding the potential for vapor intrusion risks, conservatively assuming the water at VP-2 extends north of Ingersoll Ave and beneath residential buildings. Following the approach discussed above for water at VP-1, vapor intrusion risk estimates were calculated using the same approach used for groundwater (which is described in Section 6.5.2 of the ADEQ-approved RRMP) except the depth to water was reduced to 5 feet bgs to match the depth of the water samples at VP-2. Similar to the vapor intrusion risk estimates at VP-1 and MW-71, Table 5 shows the cumulative cancer risk and HI estimates for detected concentrations in shallow water at VP-2 are approximately $1/20^{th}$ of those based on the groundwater data from MW-33 (which is located adjacent to VP-2). Both sets of risk estimates for these samples meet ADEQ's risk management limits, under the conservative assumption that the water south of Ingersoll Ave. extends beneath the neighborhood.

The calculation of single-chemical risk estimates is included in Appendix C.

4 Summary and Conclusion

- The concentrations of VOCs in groundwater are consistent with those from the 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.
- Using VOC concentrations in water collected from groundwater monitoring wells indicate that the groundwater vapor intrusion model over-predicts potential vapor intrusion risks by at least a factor of approximately 20 relative to vapor intrusion modeling using VOC concentrations detected in shallow water collected from soil vapor monitoring ports.
- Additional data collection approaches described in Section 2.1 of the Addendum to the Soil Vapor Monitoring Plan will be employed to ensure that the objectives of the Soil Vapor Monitoring Plan continue to be met.

5 References

Arkansas Department of Environmental Quality (ADEQ). Remedial Action Decision Document (RADD) for Corrective Action. Facility Identification Number: 66-00048. December 27.

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Weather Underground. "Weather History for Fort Smith, AR." Weather Forecast & Reports. October 2014. Accessed November 26, 2014. < http://www.wunderground.com/history/airport/KFSM/2014/10/15/MonthlyHistory.html#calendar>.

Tables

TABLE 1
Summary of Matrices Encountered and Sampled at Soil Vapor Monitoring Points
Whirlpool Corporation - Fort Smith, Arkansas

Quarter of Collection	Date of Collection	In Neighborhood		South of Neighborhood	
		VP-1S	VP-1D	VP-2S	VP-2D
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.

TABLE 2
Fourth Quarter Groundwater VOC Data for Monitoring Wells in the Neighborhood and MW-33
Whirlpool Corporation - Fort Smith, Arkansas

Location	MW-33	MW-34	MW-35R	MW-36	MW-39	MW-40
Area	South of Neighborhood	In Neighborhood	In Neighborhood	In Neighborhood	In Neighborhood	In Neighborhood
ENVIRON Sample ID	MW-33-201410	MW-34-201410	MW-35R-201410	MW-36-201410	MW-39-201410	MW-40-201410
Lab Sample ID	60180441007	60180441009	60180331016	60180331003	60180221001	60180221004
Sample Date	10/15/2014	10/15/2014	10/14/2014	10/14/2014	10/13/2014	10/13/2014
Comments						
VOC						
Acetone	U (5.0)	30.4 (5.0)	48.9 (5.0)	6.4 J (5.0)	U (5.0)	U (5.0)
Bromoform	U (0.50)	1.9 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	U (2.5)	34.9 (2.5)	U (2.5)	12.1 (2.5)	U (2.5)	U (2.5)
Chloromethane	U (0.50)	6.2 J (0.50)	7.2 J (0.50)	2.9 J (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)	U (0.50)
cis-1,2-Dichloroethene	15.3 (0.50)	0.96 J (0.50)	2.6 J (0.50)	U (0.50)	U (0.50)	U (0.50)
trans-1,2-Dichloroethene	2.2 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	1290 (5.0)	47.7 (0.50)	79.2 (0.50)	U (0.50)	U (0.50)	U (0.50)
Vinyl Chloride	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 ug/L (ppb).
2 Only compounds with at least one detection are shown.

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Detection Limit.

TABLE 2
Fourth Quarter Groundwater VOC Data for Monitoring Wells in the Neighborhood and MW-33
Whirlpool Corporation - Fort Smith, Arkansas

Location	MW-41	MW-46R	MW-46R	MW-50	MW-56	MW-57	MW-58
Area	In Neighborhood	In Neighborhood	In Neighborhood	In Neighborhood	In Neighborhood	In Neighborhood	In Neighborhood
ENVIRON Sample ID	MW-41-201410	MW-46R-201410	DUP-03-201410	MW-50-201410	MW-56-201410	MW-57-201410	MW-58-201410
Lab Sample ID	60180441001	60180635007	60180635011	60180331002	60180441021	60180441019	60180441020
Sample Date	10/15/2014	10/16/2014	10/16/2014	10/14/2014	10/15/2014	10/15/2014	10/15/2014
Comments			Field Duplicate				
VOC							
Acetone	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)
Bromomethane	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Chloromethane	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	1.6 J (0.50)	1.2 J (0.50)	1.3 J (0.50)	U (0.50)	1.0 J (0.50)	0.59 J (0.50)	2.1 J (0.50)
cis-1,2-Dichloroethene	16.9 (0.50)	24.6 (0.50)	25.2 (0.50)	U (0.50)	12.1 (0.50)	4.2 J (0.50)	10.8 (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)
Trichloroethene	491 (5.0)	410 (5.0)	373 (5.0)	U (0.50)	408 (2.5)	172 (0.50)	360 (2.5)
Vinyl Chloride	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.68 J (0.50)

Notes:

1 All concentrations are presented in ug/L (ppb).
2 Only compounds with at least one detection are shown.

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Detection Limit.

TABLE 2
Fourth Quarter Groundwater VOC Data for Monitoring Wells in the Neighborhood and MW-33
Whirlpool Corporation - Fort Smith, Arkansas

Location	MW-60	MW-61	MW-62	MW-63	MW-65	MW-66	MW-67
Area	In Neighborhood	In Neighborhood	In Neighborhood	In Neighborhood	In Neighborhood	In Neighborhood	In Neighborhood
ENVIRON Sample ID	MW-60-201410	MW-61-201410	MW-62-201410	MW-63-201410	MW-65-201410	MW-66-201410	MW-67-201410
Lab Sample ID	60180331014	60180331013	60180331011	60180331012	60180331018	60180221002	60180221003
Sample Date	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/13/2014	10/13/2014
Comments							
VOC							
Acetone	U (5.0)	U (5.0)	U (5.0)	U (5.0)	45.3 (5.0)	U (5.0)	U (5.0)
Bromoform	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.9 J (0.50)	U (0.50)	U (0.50)
Bromomethane	U (2.5)	U (2.5)	U (2.5)	U (2.5)	5.2 J (2.5)	U (2.5)	U (2.5)
Chloromethane	U (0.50)	U (0.50)	U (0.50)	U (0.50)	3.9 J (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)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	0.98 J (0.50)	0.54 J (0.50)	U (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)
Trichloroethene	U (0.50)	7.9 (0.50)	U (0.50)	9.4 (0.50)	30.8 (0.50)	2.3 J (0.50)	U (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)

Notes:

1 All concentrations are presented in ug/L (ppb).
2 Only compounds with at least one detection are shown.

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Detection Limit.

TABLE 2
Fourth Quarter Groundwater VOC Data for Monitoring Wells in the Neighborhood and MW-33
Whirlpool Corporation - Fort Smith, Arkansas

Location	MW-68	MW-71	MW-96	MW-97	MW-98	MW-99
Area	In Neighborhood	In Neighborhood	In Neighborhood	In Neighborhood	In Neighborhood	In Neighborhood
ENVIRON Sample ID	MW-68-201410	MW-71-201410	MW-96-20141022	MW-97-20141022	-98-GW-2014 1029	MW-99-20141022
Lab Sample ID	60180331009	60180331008	60180994003	60180994001	60181472001	60180994002
Sample Date	10/14/2014	10/14/2014	10/22/2014	10/22/2014	10/29/2014	10/22/2014
Comments						
VOC						
Acetone	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)
Bromomethane	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Chloromethane	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	U (0.50)	1.3 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	U (0.50)	6.0 (0.50)	U (0.50)	U (0.50)	U (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)
Trichloroethene	U (0.50)	185 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Vinyl Chloride	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 ug/L (ppb).
2 Only compounds with at least one detection are shown.

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Detection Limit.

TABLE 3
Fourth Quarter Water Data from Soil Vapor Monitoring Points
Whirlpool Corporation - Fort Smith, Arkansas

Location	VP-1S	VP-2S	VP-2D
Area	South of Neighborhood	In Neighborhood	In Neighborhood
ENVIRON Sample ID	VP-1-SHALLOW-201410	VP-2-SHALLOW-201410	VP-2-DEEP-201410
Lab Sample ID	60180645003	60180645001	60180645002
Sample Date	10/15/2014	10/15/2014	10/15/2014
Comments			
VOC			
1,1-Dichloroethene	U (0.50)	0.61 J (0.50)	0.72 J (0.50)
cis-1,2-Dichloroethene	1.4 J (0.50)	5.2 (0.50)	6.3 (0.50)
trans-1,2-Dichloroethene	U (0.50)	U (0.50)	1.1 J (0.50)
Trichloroethene	8.3 (0.50)	51.2 (0.50)	46.3 (0.50)

Notes:

1 All concentrations are presented in ug/L (ppb).

2 Only compounds with at least one detection are shown.

Abbreviations:

U -- Not Detected.

J -- Estimated

( ) -- Method Detection

TABLE 4
Vapor Intrusion Risk Estimates Based on Fourth Quarter Groundwater Data in the Neighborhood
Whirlpool Corporation - Fort Smith, Arkansas

Chem Group	Chemical	CASRN	Max Detected Conc in GW in Neighborhood (mg/L)	Location of Max Detected GW Conc in Nieghborhood	Residential VI	
					Risk	HQ
VOC	Acetone	67-64-1	4.89E-02	MW-35R		3.2E-07
VOC	Bromoform	75-25-2	1.90E-03	MW-34, MW-65	2.0E-10	
VOC	Bromomethane	74-83-9	3.49E-02	MW-34		1.1E-02
VOC	Chloromethane	74-87-3	7.20E-03	MW-35R		1.3E-04
VOC	1,1-Dichloroethene	75-35-4	2.10E-03	MW-58		2.7E-05
VOC	cis-1,2-Dichloroethene	156-59-2	2.52E-02	MW-46R		
VOC	Trichloroethene	79-01-6	4.91E-01	MW-41	1.8E-06	3.8E-01
VOC	Vinyl Chloride	75-01-4	6.80E-04	MW-58	1.4E-08	2.2E-05
		Cumulative Risk and HI:			2E-06	4E-01

Note:

Only VOCs detected in monitoring wells in the nieghborhood are shown.

Detected concentrations are from samples collected from groundwater monitoring wells in the 4th Quarter of 2014.

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.

TABLE 5
Evaluation of VOCs in Water at Soil Vapor Monitoring Points
Whirlpool Corporation - Fort Smith, Arkansas

Chem Group	Chemical	CASRN	In Neighborhood				South of Neighborhood			
			VP-1S		MW-71		VP-2S		MW-33	
			Water		Groundwater		Water		Groundwater	
			Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ
VOC	1,1-Dichloroethene	75-35-4				1.7E-05		8.2E-06		
VOC	Trichloroethene	79-01-6	3.2E-08	6.7E-03	6.9E-07	1.4E-01	2.1E-07	4.3E-02	4.8E-06	9.9E-01
	Cumulative Risk and HI:		3E-08	7E-03	7E-07	1E-01	2E-07	4E-02	5E-06	1E+00

Notes:

Only VOCs detected in the 4th Quarter 2014 samples at MW-33, MW-71, VP-1S, and VP-2S 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.

Risks based on concentrations measured in water from the soil vapor ports were calculated using the same approach used for groundwater, except the depth was assumed to be the depth of the port, as discussed in Section 3 of the 4th Quarter 2014 Vapor Intrusion Report.

Figures



ENVIRON

VAPOR MONITORING POINT LOCATIONS

Whirlpool Facility - Fort Sm ith, Ark an sas

Figure 1

DRAFTED BY: KTS

DATE: 12/04/2014

PROJECT: 3433253A

Appendix A
Laboratory Analytical Data

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

October 29, 2014

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

RE: Project: FORT SMITH, AR
Pace Project No.: 60180645

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on October 17, 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.

Amended report, REV-1 on 10/29/14 to correct sample IDs. Samples 001 and 003 reversed by the lab.

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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Pace Analytical Services, Inc.
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Lenexa, KS 66219
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CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60180645

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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Lenexa, KS 66219
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SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60180645

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60180645001	**VP-2-SHALLOW-201410**	Water	10/15/14 09:25	10/17/14 11:05
60180645002	**VP-2-DEEP-201410**	Water	10/15/14 09:40	10/17/14 11:05
60180645003	**VP-1-SHALLOW-201410**	Water	10/15/14 07:25	10/17/14 11:05

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60180645

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60180645001	**VP-2-SHALLOW-201410**	EPA 5030B/8260	PRG	38
60180645002	**VP-2-DEEP-201410**	EPA 5030B/8260	PRG	38
60180645003	**VP-1-SHALLOW-201410**	EPA 5030B/8260	PRG	38

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60180645

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: October 29, 2014

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/65211

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/65266

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.: 60180645

Sample: VP-2-SHALLOW-201410 **Lab ID: 60180645001** Collected: 10/15/14 09:25 Received: 10/17/14 11:05 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		10/21/14 03:48	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 03:48	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 03:48	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 03:48	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 03:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 03:48	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 03:48	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 03:48	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 03:48	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 03:48	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 03:48	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 03:48	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 03:48	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 03:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 03:48	107-06-2	
1,1-Dichloroethene	**0.61J**	ug/L	5.0	0.50	1		10/21/14 03:48	75-35-4	
cis-1,2-Dichloroethene	**5.2**	ug/L	5.0	0.50	1		10/21/14 03:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/21/14 03:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 03:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 03:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 03:48	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 03:48	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 03:48	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 03:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 03:48	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 03:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 03:48	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 03:48	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 03:48	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 03:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 03:48	79-00-5	
Trichloroethene	**51.2**	ug/L	5.0	0.50	1		10/21/14 03:48	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/21/14 03:48	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 03:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/21/14 03:48	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		10/21/14 03:48	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		10/21/14 03:48	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 03:48		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180645

Sample: VP-2-DEEP-201410 **Lab ID: 60180645002** Collected: 10/15/14 09:40 Received: 10/17/14 11:05 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		10/21/14 06:46	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/21/14 06:46	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/21/14 06:46	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/21/14 06:46	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/21/14 06:46	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/21/14 06:46	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/21/14 06:46	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/21/14 06:46	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/21/14 06:46	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/21/14 06:46	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/21/14 06:46	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/21/14 06:46	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/21/14 06:46	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/21/14 06:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 06:46	107-06-2	
1,1-Dichloroethene	**0.72J**	ug/L	5.0	0.50	1		10/21/14 06:46	75-35-4	
cis-1,2-Dichloroethene	**6.3**	ug/L	5.0	0.50	1		10/21/14 06:46	156-59-2	
trans-1,2-Dichloroethene	**1.1J**	ug/L	5.0	0.50	1		10/21/14 06:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/21/14 06:46	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 06:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/21/14 06:46	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/21/14 06:46	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/21/14 06:46	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/21/14 06:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/21/14 06:46	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/21/14 06:46	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/21/14 06:46	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/21/14 06:46	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/21/14 06:46	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 06:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/21/14 06:46	79-00-5	
Trichloroethene	**46.3**	ug/L	5.0	0.50	1		10/21/14 06:46	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/21/14 06:46	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/21/14 06:46	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/21/14 06:46	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		10/21/14 06:46	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		10/21/14 06:46	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/21/14 06:46		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60180645

Sample: VP-1-SHALLOW-201410 **Lab ID: 60180645003** Collected: 10/15/14 07:25 Received: 10/17/14 11:05 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		10/22/14 15:32	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		10/22/14 15:32	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		10/22/14 15:32	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		10/22/14 15:32	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		10/22/14 15:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		10/22/14 15:32	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		10/22/14 15:32	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		10/22/14 15:32	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		10/22/14 15:32	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		10/22/14 15:32	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		10/22/14 15:32	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		10/22/14 15:32	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		10/22/14 15:32	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		10/22/14 15:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		10/22/14 15:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		10/22/14 15:32	75-35-4	
cis-1,2-Dichloroethene	**1.4J**	ug/L	5.0	0.50	1		10/22/14 15:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		10/22/14 15:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		10/22/14 15:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/22/14 15:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		10/22/14 15:32	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		10/22/14 15:32	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		10/22/14 15:32	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		10/22/14 15:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		10/22/14 15:32	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		10/22/14 15:32	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		10/22/14 15:32	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		10/22/14 15:32	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		10/22/14 15:32	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		10/22/14 15:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		10/22/14 15:32	79-00-5	
Trichloroethene	**8.3**	ug/L	5.0	0.50	1		10/22/14 15:32	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		10/22/14 15:32	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		10/22/14 15:32	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/22/14 15:32	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		10/22/14 15:32	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		10/22/14 15:32	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		10/22/14 15:32		

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180645

QC Batch: MSV/65211
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60180645001, 60180645002

METHOD BLANK: 1463852
Matrix: Water
Associated Lab Samples: 60180645001, 60180645002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	10/21/14 03:32	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/21/14 03:32	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/21/14 03:32	
1,1-Dichloroethane	ug/L	ND	2.4	10/21/14 03:32	
1,1-Dichloroethene	ug/L	ND	5.0	10/21/14 03:32	
1,2-Dichloroethane	ug/L	ND	5.0	10/21/14 03:32	
1,2-Dichloropropane	ug/L	ND	5.0	10/21/14 03:32	
2-Butanone (MEK)	ug/L	ND	10.0	10/21/14 03:32	
2-Hexanone	ug/L	ND	10.0	10/21/14 03:32	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/21/14 03:32	
Acetone	ug/L	ND	10.0	10/21/14 03:32	
Benzene	ug/L	ND	5.0	10/21/14 03:32	
Bromodichloromethane	ug/L	ND	5.0	10/21/14 03:32	
Bromoform	ug/L	ND	5.0	10/21/14 03:32	
Bromomethane	ug/L	ND	7.0	10/21/14 03:32	
Carbon disulfide	ug/L	ND	10.0	10/21/14 03:32	
Carbon tetrachloride	ug/L	ND	5.0	10/21/14 03:32	
Chlorobenzene	ug/L	ND	5.0	10/21/14 03:32	
Chloroethane	ug/L	ND	10.0	10/21/14 03:32	
Chloroform	ug/L	ND	5.0	10/21/14 03:32	
Chloromethane	ug/L	ND	10.0	10/21/14 03:32	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/21/14 03:32	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/21/14 03:32	
Dibromochloromethane	ug/L	ND	5.0	10/21/14 03:32	
Ethylbenzene	ug/L	ND	5.0	10/21/14 03:32	
Methylene chloride	ug/L	ND	5.0	10/21/14 03:32	
Styrene	ug/L	ND	5.0	10/21/14 03:32	
Tetrachloroethene	ug/L	ND	5.0	10/21/14 03:32	
Toluene	ug/L	ND	5.0	10/21/14 03:32	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/21/14 03:32	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/21/14 03:32	
Trichloroethene	ug/L	ND	5.0	10/21/14 03:32	
Vinyl chloride	ug/L	ND	2.0	10/21/14 03:32	
Xylene (Total)	ug/L	ND	5.0	10/21/14 03:32	
1,2-Dichloroethane-d4 (S)	%	102	80-120	10/21/14 03:32	
4-Bromofluorobenzene (S)	%	99	80-120	10/21/14 03:32	
Toluene-d8 (S)	%	100	80-120	10/21/14 03:32	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180645

LABORATORY CONTROL SAMPLE: 1463853

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.9	104	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	19.3	97	73-124	
1,1,2-Trichloroethane	ug/L	20	20.7	103	80-120	
1,1-Dichloroethane	ug/L	20	20.5	102	77-120	
1,1-Dichloroethene	ug/L	20	20.2	101	78-126	
1,2-Dichloroethane	ug/L	20	21.1	106	77-123	
1,2-Dichloropropane	ug/L	20	20.0	100	80-121	
2-Butanone (MEK)	ug/L	100	84.9	85	52-145	
2-Hexanone	ug/L	100	93.9	94	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	95.5	96	71-131	
Acetone	ug/L	100	96.5	96	32-155	
Benzene	ug/L	20	20.0	100	80-120	
Bromodichloromethane	ug/L	20	20.4	102	80-120	
Bromoform	ug/L	20	19.1	95	73-124	
Bromomethane	ug/L	20	15.8	79	31-144	
Carbon disulfide	ug/L	20	18.8	94	65-125	
Carbon tetrachloride	ug/L	20	20.0	100	78-128	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	17.9	89	55-137	
Chloroform	ug/L	20	20.8	104	79-120	
Chloromethane	ug/L	20	17.4	87	22-138	
cis-1,2-Dichloroethene	ug/L	20	19.5	98	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.7	93	80-120	
Dibromochloromethane	ug/L	20	20.1	101	80-120	
Ethylbenzene	ug/L	20	21.0	105	80-121	
Methylene chloride	ug/L	20	20.4	102	73-126	
Styrene	ug/L	20	22.6	113	80-120	
Tetrachloroethene	ug/L	20	20.2	101	80-121	
Toluene	ug/L	20	19.8	99	80-122	
trans-1,2-Dichloroethene	ug/L	20	20.5	102	79-121	
trans-1,3-Dichloropropene	ug/L	20	20.8	104	80-127	
Trichloroethene	ug/L	20	20.6	103	80-120	
Vinyl chloride	ug/L	20	16.9	85	59-120	
Xylene (Total)	ug/L	60	64.8	108	80-121	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			100	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180645

QC Batch: MSV/65266
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60180645003

METHOD BLANK: 1464986
Matrix: Water
Associated Lab Samples: 60180645003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	10/22/14 10:57	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	10/22/14 10:57	
1,1,2-Trichloroethane	ug/L	ND	5.0	10/22/14 10:57	
1,1-Dichloroethane	ug/L	ND	2.4	10/22/14 10:57	
1,1-Dichloroethene	ug/L	ND	5.0	10/22/14 10:57	
1,2-Dichloroethane	ug/L	ND	5.0	10/22/14 10:57	
1,2-Dichloropropane	ug/L	ND	5.0	10/22/14 10:57	
2-Butanone (MEK)	ug/L	ND	10.0	10/22/14 10:57	
2-Hexanone	ug/L	ND	10.0	10/22/14 10:57	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	10/22/14 10:57	
Acetone	ug/L	ND	10.0	10/22/14 10:57	
Benzene	ug/L	ND	5.0	10/22/14 10:57	
Bromodichloromethane	ug/L	ND	5.0	10/22/14 10:57	
Bromoform	ug/L	ND	5.0	10/22/14 10:57	
Bromomethane	ug/L	ND	7.0	10/22/14 10:57	
Carbon disulfide	ug/L	ND	10.0	10/22/14 10:57	
Carbon tetrachloride	ug/L	ND	5.0	10/22/14 10:57	
Chlorobenzene	ug/L	ND	5.0	10/22/14 10:57	
Chloroethane	ug/L	ND	10.0	10/22/14 10:57	
Chloroform	ug/L	ND	5.0	10/22/14 10:57	
Chloromethane	ug/L	ND	10.0	10/22/14 10:57	
cis-1,2-Dichloroethene	ug/L	ND	5.0	10/22/14 10:57	
cis-1,3-Dichloropropene	ug/L	ND	1.0	10/22/14 10:57	
Dibromochloromethane	ug/L	ND	5.0	10/22/14 10:57	
Ethylbenzene	ug/L	ND	5.0	10/22/14 10:57	
Methylene chloride	ug/L	ND	5.0	10/22/14 10:57	
Styrene	ug/L	ND	5.0	10/22/14 10:57	
Tetrachloroethene	ug/L	ND	5.0	10/22/14 10:57	
Toluene	ug/L	ND	5.0	10/22/14 10:57	
trans-1,2-Dichloroethene	ug/L	ND	5.0	10/22/14 10:57	
trans-1,3-Dichloropropene	ug/L	ND	1.0	10/22/14 10:57	
Trichloroethene	ug/L	ND	5.0	10/22/14 10:57	
Vinyl chloride	ug/L	ND	2.0	10/22/14 10:57	
Xylene (Total)	ug/L	ND	5.0	10/22/14 10:57	
1,2-Dichloroethane-d4 (S)	%	97	80-120	10/22/14 10:57	
4-Bromofluorobenzene (S)	%	96	80-120	10/22/14 10:57	
Toluene-d8 (S)	%	95	80-120	10/22/14 10:57	

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.

REPORT OF LABORATORY ANALYSIS

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Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60180645

LABORATORY CONTROL SAMPLE: 1464987

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.6	98	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	19.8	99	73-124	
1,1,2-Trichloroethane	ug/L	20	19.1	96	80-120	
1,1-Dichloroethane	ug/L	20	19.2	96	77-120	
1,1-Dichloroethene	ug/L	20	20.0	100	78-126	
1,2-Dichloroethane	ug/L	20	18.6	93	77-123	
1,2-Dichloropropane	ug/L	20	18.2	91	80-121	
2-Butanone (MEK)	ug/L	100	73.2	73	52-145	
2-Hexanone	ug/L	100	85.9	86	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	80.3	80	71-131	
Acetone	ug/L	100	80.2	80	32-155	
Benzene	ug/L	20	18.8	94	80-120	
Bromodichloromethane	ug/L	20	18.5	93	80-120	
Bromoform	ug/L	20	16.8	84	73-124	
Bromomethane	ug/L	20	20.1	100	31-144	
Carbon disulfide	ug/L	20	20.2	101	65-125	
Carbon tetrachloride	ug/L	20	18.9	95	78-128	
Chlorobenzene	ug/L	20	19.8	99	80-120	
Chloroethane	ug/L	20	19.2	96	55-137	
Chloroform	ug/L	20	19.2	96	79-120	
Chloromethane	ug/L	20	22.9	115	22-138	
cis-1,2-Dichloroethene	ug/L	20	18.5	93	80-120	
cis-1,3-Dichloropropene	ug/L	20	17.9	89	80-120	
Dibromochloromethane	ug/L	20	19.9	100	80-120	
Ethylbenzene	ug/L	20	20.2	101	80-121	
Methylene chloride	ug/L	20	18.0	90	73-126	
Styrene	ug/L	20	21.1	105	80-120	
Tetrachloroethene	ug/L	20	19.3	96	80-121	
Toluene	ug/L	20	18.7	93	80-122	
trans-1,2-Dichloroethene	ug/L	20	20.0	100	79-121	
trans-1,3-Dichloropropene	ug/L	20	20.9	105	80-127	
Trichloroethene	ug/L	20	18.5	92	80-120	
Vinyl chloride	ug/L	20	19.4	97	59-120	
Xylene (Total)	ug/L	60	62.6	104	80-121	
1,2-Dichloroethane-d4 (S)	%			95	80-120	
4-Bromofluorobenzene (S)	%			96	80-120	
Toluene-d8 (S)	%			94	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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Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60180645

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/65211

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/65266

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60180645

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180645001	**VP-2-SHALLOW-201410**	EPA 5030B/8260	MSV/65211		
60180645002	**VP-2-DEEP-201410**	EPA 5030B/8260	MSV/65211		
60180645003	**VP-1-SHALLOW-201410**	EPA 5030B/8260	MSV/65266		

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Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60180645

60180645

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-238 / T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 5.2

Temperature should be above freezing to 6°C

Date and initials of person examining contents: GW 10/17/14

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.
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	Trip blank is with other samples shipped in same cooler
Pace Trip Blank lot # (if purchased): covered		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

MJW

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: 10/17/14

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www.pacelabs.com

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:	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

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

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	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	VOCs (8260) Client List	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	VP-1-Shallow-201410	WT	G	10/15/14	0725 (0800)	—	—		3				X						X				60180645 001
2	VP-2-Deep-201410	WT	G	10/15/14	0940	—	—		3				X						X				002
3	VP-2-Shallow-201410	WT	G	10/15/14	0925	—	—		3				X						X				003
4	TB-4-201410	WT	G	10	—	—	—		2				X						X				
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.~~	Wendy Stonestreet	10/17/14	1105	Lr White Pace	10/17	1105	5.2	Y	Y	Y

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:	Wendy Stonestreet					
SIGNATURE of SAMPLER:	Wendy Stonestreet	DATE Signed (MM/DD/YY): 10/16/2014				

*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 B

Vapor Monitoring Port Field Notes and Weather History

34 Whirlpool Ft. Smith Arkansas
55°Cloudy WES Oct. 14, 2014

615 - Arrive on site
- Mike Feldings already on site. Weather is cloudy and windy with winds out of the SW at 15 to 20 mph.
- Began to get ready for the day by cleaning the bottle area. Organized coolers and took purge water and calibration water to the purge tote.

640 - Nick Z. arrived on site.

645 - Colin Smally, Lucy M, Lucy C. Tamara House-Knight, Justine & Jeff Nelson arrived on site.

700 - Had H&S meeting. Topic Slips, Trips & falls.

930 - Began calibrating equipment. See calibration log.

930 - MOB to IW-80 to set Lucy C. up on well

1000 - Returned to boiler house on site to get additional equipment.

1010 - MOB to VP-2 to purge shallow and deep points.

1020 - Shallow point purges very slow. Collected approximately 500 mL of water. Water line does not clear, although stream is intermittent.

57° Cloudy

Whirlpool, Ft Smith Arkansas WES Oct 14, 2014

1040 - Began purge on deep point. Water stream is continuous. Purged ~ 2 gallons.

1100 - MOB to VP-01

- Stopped by MW-50 to speak with Jeff Nelson about purging the wells which go dry.

1120 - Arrive at VP-01

1125 - Began purging shallow point. Shallow point has intermittent stream.

1130 - Adjusted pumping rate to higher speed. The line has a more continuous stream. As the line would not clear, purged ~ 500mL.

1150 - Began to purge deep point. Well does not produce water. Used vacuum hand pump to assess vacuum. Holds pressure. No even slight decrease on gauge.

1200 - MOB back to the on-site boiler room. Stopped at MW-31 to give Lucy M. traffic cones.

1220 - Emptied purge water and added duplicate bottles to well set bags.

1240 - MOB off-site to fill auto with gas.

Wyatt Stonecliff

36 65° Sunny

Whirlpool, Fort Smith, AR WES Oct 14, 2014

1300 - Set upon well MW-28.
- Stabilize parameters.

1405 - Collect sample at MW-28-201410 - MS/MSD

1500 - MOB to MW-27.
- Stabilize well parameters

1545 - Collect sample at MW-27-201410

1630 - MOB to the Boiler room on-site to begin packing coolers & ship samples

1645 - Began working on COCs and coolers.

1845 - ENVIRON off site

44° Sunny & Breezy

Whirlpool, Ft Smith AR. WES Oct. 15, 2014

6:15 - Wendy Stonestreet on-site, Mike Eddings already on-site.
- Calibrated equipment. See calibration log sheet.
- Assigned duplicates to sample bags.

6:45 - Colin Smalley & Nick Z. on-site.

6:50 - Lucy M., Lucy Cross, Jeff M. & Tamara House Knight on-Site

7:00 - Had Health & Safety meeting and discussed the daily activities.

7:20 - MOB to VP-1

7:25 - Arrived at vapor point. Checked deep and shallow points for water. Shallow line Collected grab sample. Collected three VOA vials before line purged to intermittent ~~X~~ stream of water and air. Sample VP-1-Shallow-201410

- Did vacuum test on deep point. Vacuum holds but no water.
- Attached Swagelok to line to begin air sampling.
- Conducted leak test with shroud.
  - Helium in shroud is 25.2%.
  - Helium in line 0%
  - Hooked up summa after vacuum testing connections on Summa. All passed.

Wendy Stonestreet

38 60° Breazy & Sunny

Whirlpool, Fort Smith, AR WES Oct 15, 2015

8:30 - Opened Summa cannister. -29" Hg
Summa ID = SC01803
Regulator Flow ID = OA00959.
- Cleaned up at location

8 45 - MOB to VP-2

8 50 - Arrived at Whirlpool north gate. Spoke to Tamara H.K. concerning Vapor point sampling.

9:00 - Proceeded to VP-2
- Checked shallow point for water.
- Water in line.

915 - Began purge.

925 - Collected grab sample from shallow point VP-2-Shallow-201410. Purged approximately 1L when intermittent stream appeared.

930 - Began purging deep point at VP-2.

940 - Took sample at VP-2-Deep-201410. Well does not purge dry. Continuous flow.

1000 - Packed up at well and mob to boiler room.
- Organized samples and put MS/MSDs in correct cooler
- Talked to Lucy C. about parameters at ITMW-1. ORP is different than last event

1100 - MOB to ITMW-9. Tubing is missing from well. Did not have correct length of tubing to reach the bottom of the well.

62° Breazy & Sunny

Whirlpool, Fort Smith, AR WBS Oct, 15, 2014

1105 - MOB off-site to get tubing from Tamara House - Knight.

1115 - Checked MW-62 for Tamara to see if it contained tubing.

1125 - Stopped by boiler room to collect hook to fish out old tubing in well if it has slipped towards the bottom.

1130 - Tried to fish out tubing. Cannot see tubing or feel it.

1140 - Replaced tubing in well. Appears tubing has been removed as new tubing easily can be inserted to the correct depth.

1145 - Began purge. Battery dead on pump
- Replace pump with pump which contains charge

1200 - Began purge.

1235 - Well stabilized, collect sample ITMW-9-20141O & DUP-2-20141O

1400 - MOB to ITMW-10
- Set up at well

1440 - Collect Sample ITMW-10-20141O

1550 - MOB to Boiler room to begin daily bottle coordination.
- Began filling out COC's and preparing coolers

Wesley Ballard

40 61° Clear

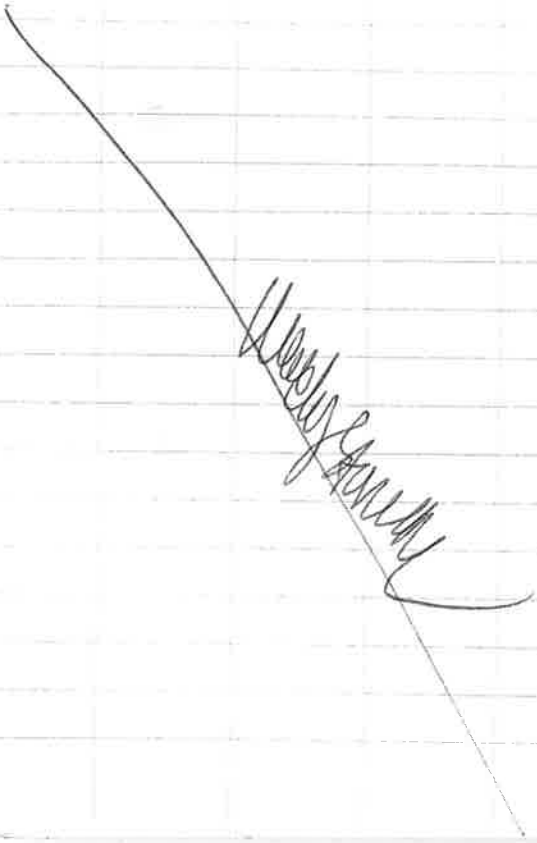
Whirlpool, Fort Smith WES Oct 15, 2014

- for shippment.

1800 - Courier came to pick up Coolers for delivery to PACE.

1845 - Left site to MOB to Vapor point VP-01. Summa Cannister gauge read -26.5 Hg. Turned valve off and removed cannister. There was some moisture in the line.

1900 - Left site.



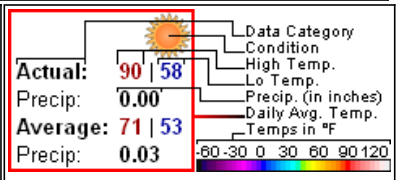
« Previous Month | « 2013 | **October 2014** | 2015 » | Next Month »

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Actual: 89 | 65 Precip: 0.00 Average: 80 | 56 Precip: 0.13	2 Actual: 88 | 64 Precip: 0.82 Average: 79 | 55 Precip: 0.13	3 Actual: 73 | 47 Precip: 0.00 Average: 79 | 55 Precip: 0.13	4 Actual: 71 | 42 Precip: 0.00 Average: 79 | 55 Precip: 0.14
5 Actual: 79 | 49 Precip: T Average: 78 | 54 Precip: 0.13	6 Actual: 81 | 57 Precip: 1.26 Average: 78 | 54 Precip: 0.14	7 Actual: 88 | 61 Precip: 0.00 Average: 78 | 54 Precip: 0.13	8 Actual: 85 | 69 Precip: 0.00 Average: 77 | 53 Precip: 0.13	9 Actual: 87 | 66 Precip: 0.00 Average: 77 | 53 Precip: 0.13	10 Actual: 77 | 63 Precip: 2.17 Average: 77 | 53 Precip: 0.13	11 Actual: 64 | 58 Precip: 1.27 Average: 76 | 52 Precip: 0.13
12 Actual: 70 | 56 Precip: 0.00 Average: 76 | 52 Precip: 0.14	13 Actual: 71 | 57 Precip: 2.04 Average: 76 | 52 Precip: 0.13	14 Actual: 71 | 50 Precip: T Average: 76 | 51 Precip: 0.14	15 Actual: 74 | 46 Precip: 0.00 Average: 75 | 51 Precip: 0.14	16 Actual: 84 | 44 Precip: 0.00 Average: 75 | 51 Precip: 0.14	17 Actual: 84 | 54 Precip: 0.00 Average: 75 | 50 Precip: 0.15	18 Actual: 74 | 51 Precip: 0.00 Average: 74 | 50 Precip: 0.15
19 Actual: 72 | 48 Precip: 0.00 Average: 74 | 50 Precip: 0.15	20 Actual: 74 | 53 Precip: 0.06 Average: 74 | 49 Precip: 0.15	21 Actual: 81 | 56 Precip: 0.00 Average: 73 | 49 Precip: 0.14	22 Actual: 76 | 54 Precip: 0.00 Average: 73 | 49 Precip: 0.16	23 Actual: 68 | 54 Precip: 0.00 Average: 73 | 49 Precip: 0.14	24 Actual: 78 | 52 Precip: 0.00 Average: 72 | 48 Precip: 0.14	25 Actual: 87 | 55 Precip: 0.00 Average: 72 | 48 Precip: 0.14
26 Actual: 87 | 57 Precip: 0.00 Average: 72 | 48 Precip: 0.15	27 Actual: 83 | 61 Precip: 0.00 Average: 71 | 47 Precip: 0.14	28 Actual: 73 | 53 Precip: 0.28 Average: 71 | 47 Precip: 0.14	29 Actual: 73 | 44 Precip: 0.00 Average: 71 | 47 Precip: 0.15	30 Actual: 75 | 44 Precip: 0.00 Average: 70 | 46 Precip: 0.14	31 Actual: 62 | 38 Precip: 0.00 Average: 70 | 46 Precip: 0.14	

Month Precipitation - Actual month total: **7.90** Normal month total: **4.32**

Calendar Key

Sunny Clear; Mostly Cloudy Partly Sunny; Mostly Sunny Partly Cloudy; Cloudy; Rain; Snow; Hail Flurries; Thunderstorms; Hazy Fog; Sleet; '?' denotes 'chance of'; Unknown



Powered by Weather Underground, Inc.

Appendix C

Risk Calculations and Input Parameters

Contents:

C.1 Toxicity Values
C.2 Physical and Chemical Properties

C.3 Soil Moisture Profile for Residential Building (Slab-on-Grade) for Groundwater Risk Calculations
C.4 Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater
C.5 Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater in Wells in the Neighborhood
C.6 Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-71
C.7 Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-33

C.8 Soil Moisture Profile for Residential Building (Slab-on-Grade) at Soil Vapor Monitoring Point VP-1
C.9 Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Water at VP-1
C.10 Cancer Risk and Hazard Index Calculations for Intrusion into a Residential Building (Slab-on-Grade) from Water at VP-1

C.11 Soil Moisture Profile for Residential Building (Slab-on-Grade) at Soil Vapor Monitoring Point VP-2
C.12 Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Water at VP-2
C.13 Cancer Risk and Hazard Index Calculations for Intrusion into a Residential Building (Slab-on-Grade) from Water at VP-2

Attachment C.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	Note	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	Chloromethane	74-87-3	D	1		N						9.0E-02	1,000	1	
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	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.

126 Provisional Peer Reviewed Toxicity Values for Superfund (PPRTV) Database.

129 ATSDR. 2013. Minimal Risk Levels. March.

Notes:

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.

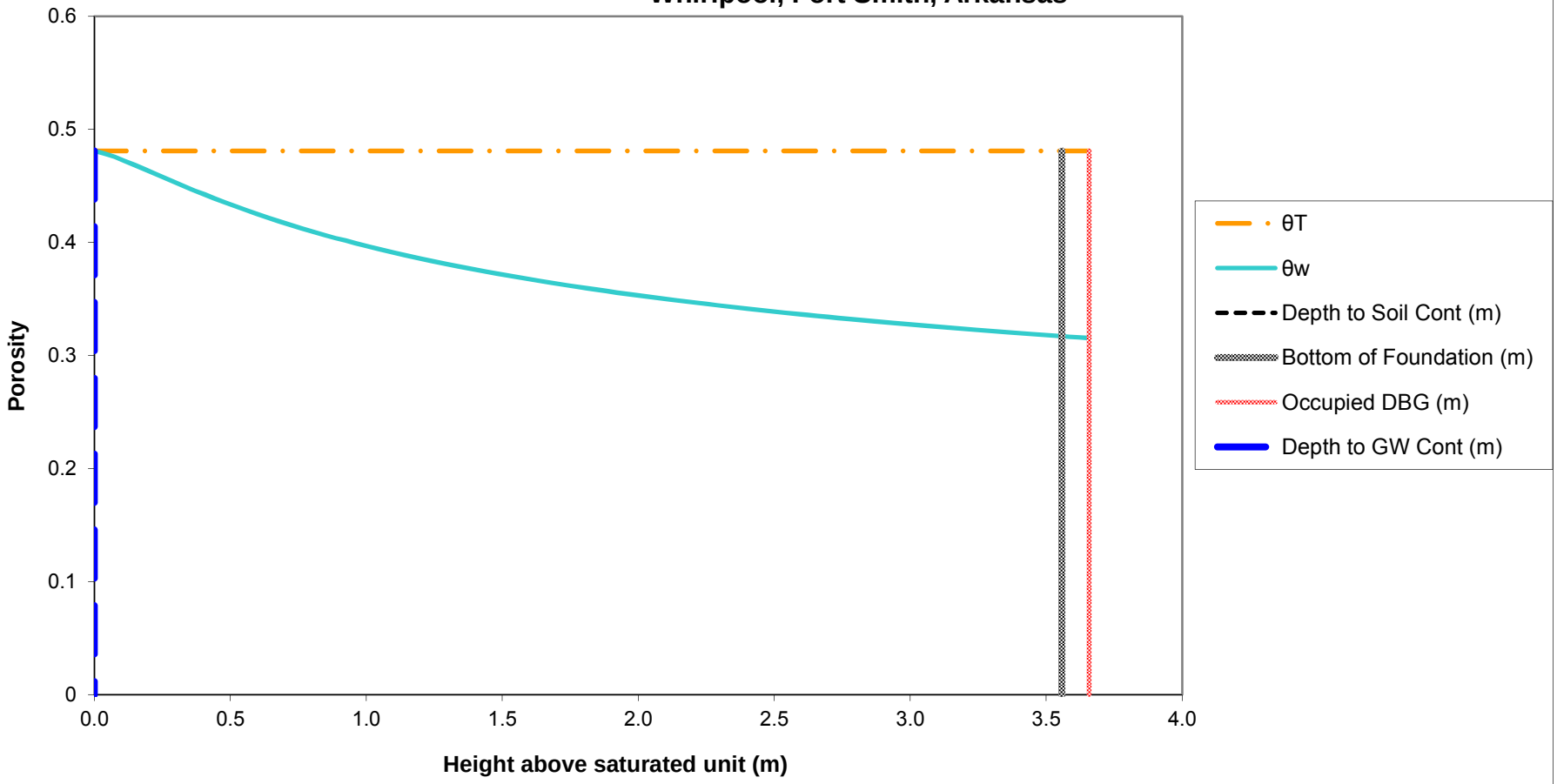
111 Value as published is an MRL in the indicated reference.

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 C.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	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-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	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.										

Appendix C.3: Soil Moisture Profile for Residential Building (Slab on Grade) for Groundwater Risk Calculations
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 C.4: Normalized Indoor Air Concentration in a Residential Building (Slab on Grade) due to Vapor Intrusion from Groundwater
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	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	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	$kg/m-s^2$	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 C.5: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab on Grade) from Groundwater in Wells 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	4.89E-02	1.04E-05					3.1E+01	3.2E-07
VOC	Bromoform	75-25-2	B2	N	1.90E-03	4.42E-07	1.1E-03		2.0E-10			
VOC	Bromomethane	74-83-9	ID	N	3.49E-02	5.54E-05					5.0E-03	1.1E-02
VOC	Chloromethane	74-87-3	D	N	7.20E-03	1.18E-05					9.0E-02	1.3E-04
VOC	1,1-Dichloroethene	75-35-4	C	N	2.10E-03	5.65E-06					2.0E-01	2.7E-05
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	2.52E-02	3.09E-05						
VOC	Trichloroethene	79-01-6	HC	Y	4.91E-01	7.88E-04	4.1E-03	0.244	1.8E-06		2.0E-03	3.8E-01
VOC	Vinyl Chloride	75-01-4	A	N	6.80E-04	2.24E-06	4.4E-03		1.4E-08		1.0E-01	2.2E-05
							Cumulative Risk:		2E-06		**HI:**	4E-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 4th Quarter 2014 groundwater samples from wells in the neighborhood 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.												

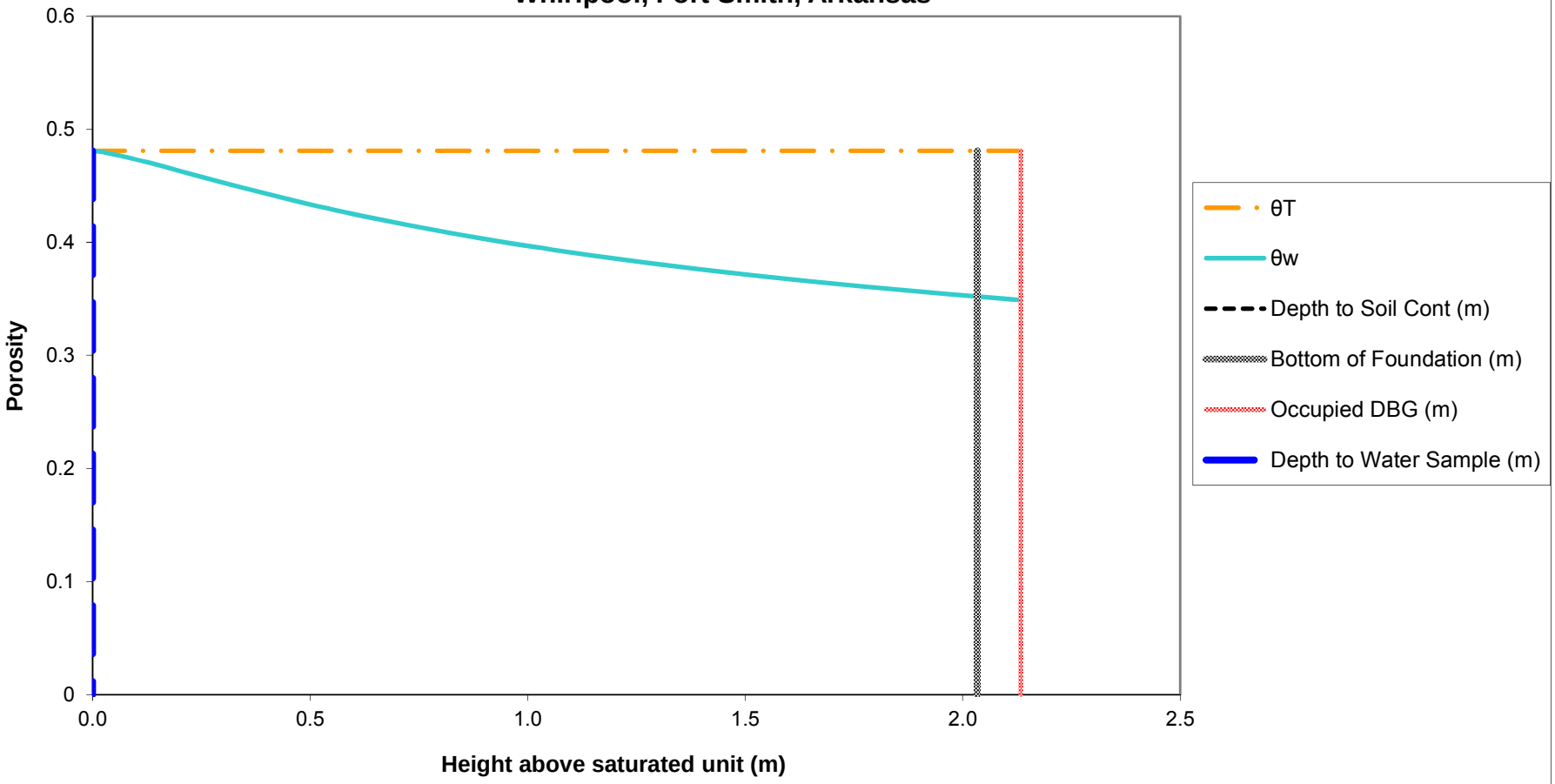
Attachment C.6: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab on Grade) from Groundwater at MW-71 Whirlpool, Fort Smith, Arkansas

							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	1.30E-03	3.50E-06					2.0E-01	1.7E-05
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	6.00E-03	7.35E-06						
VOC	Trichloroethene	79-01-6	HC	Y	1.85E-01	2.97E-04	4.1E-03	0.244	6.9E-07		2.0E-03	1.4E-01
							Cumulative Risk:		7E-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 4th Quarter 2014 groundwater sample at MW-71 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 C.7: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab on Grade) from Groundwater at MW-33 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	1.53E-02	1.87E-05						
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	2.20E-03	3.93E-06						
VOC	Trichloroethene	79-01-6	HC	Y	1.29E+00	2.07E-03	4.1E-03	0.244	4.8E-06		2.0E-03	9.9E-01
							Cumulative Risk:		5E-06		**HI:**	1E+00
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 4th Quarter 2014 groundwater sample at MW-33 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.												

Appendix C.8: Soil Moisture Profile for Residential Building (Slab on Grade) at Soil Vapor Monitoring Point VP-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.

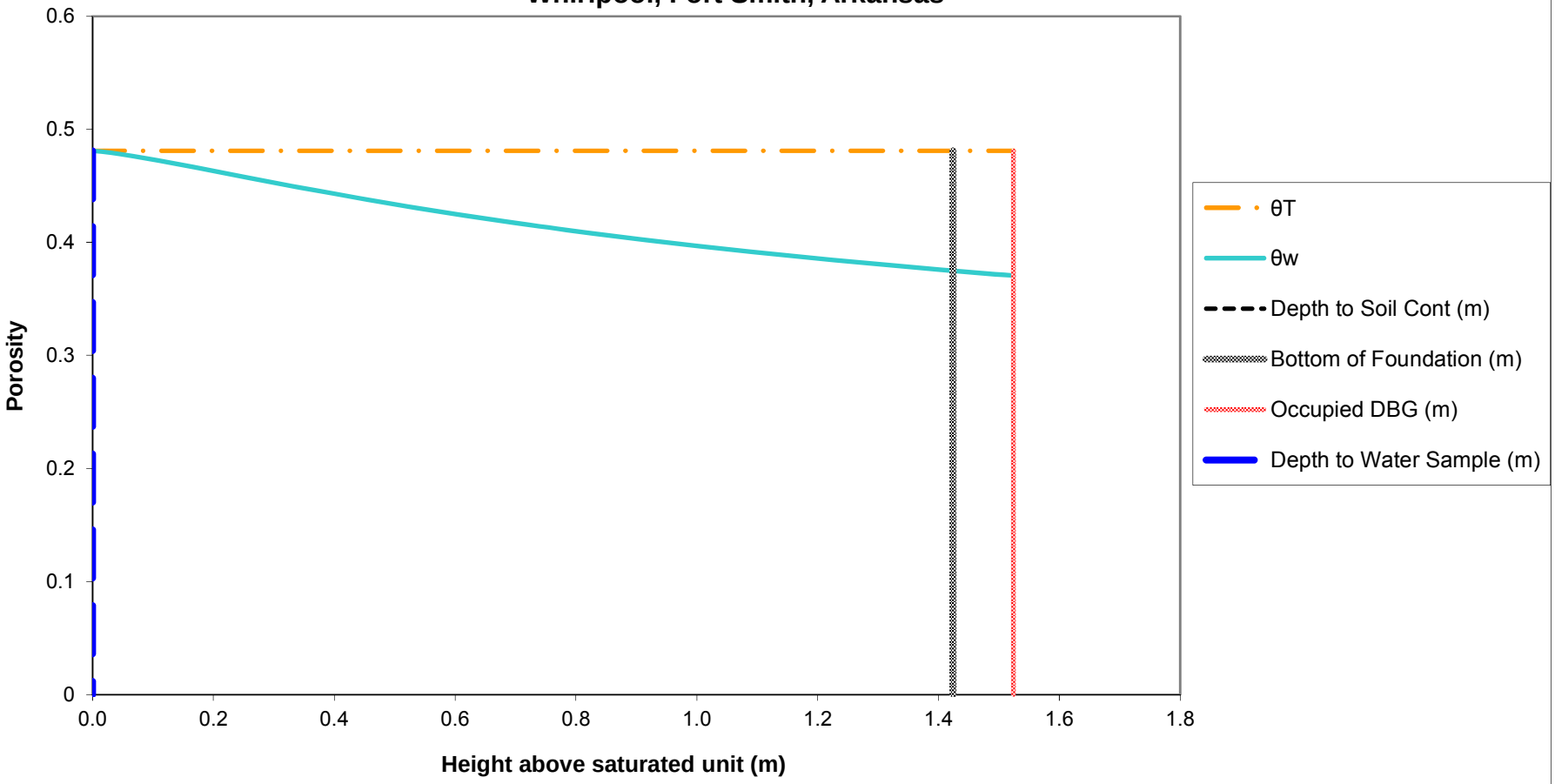
Attachment C.9: Normalized Indoor Air Concentration in a Residential Building (Slab on Grade)
due to Vapor Intrusion from Water at VP-1
Whirlpool, Fort Smith, Arkansas

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	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	9.89E-02	6.10E-04	4.15E-03	2.73E-03	1.13E-05	1.34E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.06E-01	3.13E-04	2.13E-03	2.73E-03	5.82E-06	1.68E-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	0.014							
	van Genuchten N	unitless	N	3.177							
	van Genuchten M	unitless	M	0.685							
	Relative air permeability	unitless	k_{rg}	0.991							
	Permeability to vapor	cm^2	k_v	9.82E-08							
	Distance from building foundation to source	m	L_{T-gw}	2.03							
	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 C.10: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab on Grade) from Water at VP-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	cis-1,2-Dichloroethene	156-59-2	ID	N	1.40E-03	1.88E-06						
VOC	Trichloroethene	79-01-6	HC	Y	8.30E-03	1.39E-05	4.1E-03	0.244	3.2E-08		2.0E-03	6.7E-03
							Cumulative Risk:		3E-08		**HI:**	7E-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 4th Quarter 2014 water sample at VP-1S 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.												

Appendix C.11: Soil Moisture Profile for Residential Building (Slab on Grade) at Soil Vapor Monitoring Point VP-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 C.12: Normalized Indoor Air Concentration in a Residential Building (Slab on Grade) due to Vapor Intrusion from Water at VP-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	1,1-Dichloroethene	75-35-4	7.78E-01	8.99E-05	8.10E-01	1.15E-01	1.30E-04	1.27E-03	2.73E-03	3.46E-06	2.80E-03
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	9.37E-02	4.63E-04	4.50E-03	2.73E-03	1.23E-05	1.46E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.01E-01	2.28E-04	2.21E-03	2.73E-03	6.05E-06	1.74E-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	0.062							
	Air-filled porosity	L/L-soil	θ_a	0.313							
	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	0.029							
	van Genuchten N	unitless	N	3.177							
	van Genuchten M	unitless	M	0.685							
	Relative air permeability	unitless	k_{rg}	0.977							
	Permeability to vapor	cm^2	k_v	9.69E-08							
	Distance from building foundation to source	m	L_{T-gw}	1.42							
	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 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 C.13: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab on Grade) from Water at VP-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	1,1-Dichloroethene	75-35-4	C	N	6.10E-04	1.71E-06					2.0E-01	8.2E-06
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	5.20E-03	7.58E-06						
VOC	Trichloroethene	79-01-6	HC	Y	5.12E-02	8.93E-05	4.1E-03	0.244	2.1E-07		2.0E-03	4.3E-02
							Cumulative Risk:		2E-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 4th Quarter 2014 water sample at VP-2S 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 C
Third Oxidant Injection Summary Report
Whirlpool Corporation
Fort Smith, Arkansas

Prepared for:
Whirlpool Corporation

Prepared by:
ENVIRON International Corporation

Date:
February 2015

Project Number:
34-34399A



ENVIRON

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1 Introduction

The third injection event for the in-situ chemical oxidation (ISCO) component of the final remedy defined by the Remedial Action Decision Document (RADD) dated December 27, 2013, for the Whirlpool site in Fort Smith, Arkansas, was completed October 28 through November 3, 2014. These activities were outlined in the document: Supplement to the February 2014 Final Remedy Work Plan, Area 1 Work Plan, Whirlpool Corporation, Fort Smith, ENVIRON International Corporation (ENVIRON) September 2014. During this event, base activated sodium persulfate (BASP) and Modified Fenton's reagent (hydrogen peroxide and chelated iron) (MFR) were introduced into the contaminated groundwater bearing zone in Area 1 (Figure 1).

The BASP and MFR process generates sulfate radicals, hydroxyl radicals and superoxide radicals that promote enhanced desorption and degradation of the constituents of concern (COCs), primarily trichloroethene (TCE) and its degradation products. The end products of the reaction are carbon dioxide, sulfate, oxygen and water.

The Arkansas Department of Environmental Quality (ADEQ) reviewed the Inventory Requirements for "Authorized By Rule" Class V Wells, Whirlpool Corporation, Fort Smith, Arkansas, prepared by ENVIRON dated October 16, 2014. ADEQ determined that the described injection activities would be "authorized by rule" as described in 40 CFR 144.84 and summarized in a letter dated October 28, 2014.

In-Situ Oxidative Technologies, Inc. (ISOTEC) of Lawrenceville, New Jersey, provided materials, equipment and personnel needed to introduce the reagents into the subsurface at the selected locations and assisted ENVIRON personnel in monitoring the progress of the injection event. This report summarizes the activities performed during the injection event and the data collected prior to, during and after oxidant injection.

During this third ISCO event, 12,200 gallons of BASP and 3,200 gallons of MFR were injected into 41 injection wells and 36 temporary direct push injection points. The sum of the TCE concentrations in the injection area exhibited decreasing concentrations comparing baseline conditions to conditions 30 days after injection as the total TCE concentration decreased from approximately 944,213 micrograms per liter (µg/L) to approximately 431,793 µg/L approximately 30 days following injection (~50% decrease).

2 Well Installation

2.1 Monitoring Well Installation

Installation of five additional monitoring wells to supplement the current Area 1 monitoring wells for ISCO monitoring was completed September 29 through October 3 (MW-92 through MW-95) and October 10, 2014 (MW-172). The new monitoring wells are shown on Figure 1. The drilling and installation of injection wells was conducted by Able Environmental Drilling of Yukon, Oklahoma, a licensed Arkansas well contractor. The wells were installed using hollow stem auger drilling techniques.

The monitoring well screened intervals were installed across the gravelly portion of the Basal Transmissive Zone and into the top of the shale from approximately 28 to 35 feet below ground surface (bgs). Each monitoring well was constructed with a 10 foot length of 2 inch diameter 0.01 inch slot PVC screen and 2 inch diameter, solid flush threaded schedule 40 PVC riser pipe to the surface. A 20/40 grade sand pack was installed in the well annulus around the PVC screen to approximately 2 feet above the top of the screen followed by 2 feet of annular seal consisting of hydrated bentonite chips above the top of the sand pack. The remainder of the annular space was pressure grouted with a bentonite/cement grout installed with a tremie pipe from the bottom of the open well annulus to the surface. All monitoring wells were completed at the surface with a traffic-rated, flush-mount protective cover installed within a concrete apron. Soils were logged by an ENVIRON geologist for United States Geological Survey (USGS) classification and soil samples were collected for analysis via Method 8260. One soil sample was collected from every five foot depth interval (i.e. 0-5 feet, 5-10 feet, 10-15 feet, etc.) The actual sample depth within each interval was selected based on field screening results (e.g. photoionization detector readings and visual observation). Soil boring and well construction logs for each well are provided in Appendix A. The lithology encountered at each well was generally consistent with that encountered in prior nearby borings.

Each of the monitoring wells was surveyed by a licensed Arkansas surveyor to determine the coordinates of the well casing and elevation of the top of casing and ground surface.

All drill tooling was decontaminated between borings using high pressure municipal water and/or with municipal water and a low phosphate detergent wash followed by a municipal water rinse. Decontamination water was collected and containerized in labeled 350 gallon plastic totes and/or 55 gallon steel drums and staged on the site for future disposal. Cuttings generated during drilling were containerized in labeled steel drums and staged at central locations on the facility for future disposal. The disposal manifests for the soil cuttings are included as Appendix B.

2.2 Injection Well Installation

Forty additional permanent ISCO injection wells were constructed on approximate 25 foot grid spacing in Area 1 and the linear drainage feature (supplemental interim measure). The additional injection wells were installed September 30 through October 16 (IW-132 through IW-171). The new permanent injection wells are included on Figure 1. The drilling and installation of

injection wells was conducted by Able Environmental Drilling of Yukon, Oklahoma, a licensed Arkansas well contractor. The wells were installed using hollow stem auger drilling techniques.

The injection wells were installed to depths targeting the gravelly portion of the Basal Transmissive Zone. Injection wells were installed to an approximate total depth ranging from 25 to 30 feet bgs. Each was constructed with a 5 foot length of 2 inch diameter 0.01 inch slot PVC screen and 2 inch diameter, solid flush threaded schedule 40 PVC riser pipe to the surface. A 20/40 grade sand pack was installed in the well annulus around the PVC screen to approximately 2 feet above the top of the screen followed by 2 feet of annular seal consisting of hydrated bentonite chips above the top of the sand pack. The remainder of the annular space was pressure grouted with a bentonite/cement grout installed with a tremie pipe from the bottom of the open well annulus to the surface. All wells were completed at the surface with a traffic-rated, flush-mount protective cover installed within a concrete apron. Soils were logged by an ENVIRON geologist for USGS classification. Soil boring and well construction logs for each well are provided in Appendix A. The lithology encountered at each well was generally consistent with that encountered in prior nearby borings.

Each of the injection wells was surveyed by a licensed Arkansas surveyor to determine the coordinates of the well casing and elevation of the top of casing and ground surface.

Thirty-six temporary injection points (IP-3-01 through IP-3-36) were installed on an approximate 25 foot grid spacing by Walker-Hill Environmental, a licensed Arkansas well contractor, using direct push (Geoprobe) equipment during injection activities. The direct push drill string utilized a specialized stainless steel laser cut screen assembly designed by ISOTEC specifically for oxidant injection. The five foot injection screen was advanced to depth targeting the gravelly portion of the Basal Transmissive Zone estimated to be 25 to 30 feet bgs in Area 1.

All drill tooling was decontaminated between borings using high pressure municipal water and/or with municipal water and a low phosphate detergent wash followed by a municipal water rinse. Decontamination water was collected and containerized in labeled 350 gallon plastic totes and/or 55 gallon steel drums and staged on the site for future disposal. Cuttings generated during drilling were containerized in labeled steel drums and staged at central locations on the facility for future disposal. The disposal manifests for the investigation derived waste (IDW) are in Appendix B.

2.3 Well Development

Following installation, the new monitoring and injection wells were surged with a bailer assembly or pump and then purged to remove fine material that may be in the sand pack and well screen. A minimum of approximately five measured casing volumes of water were purged from each well during development. All development water generated was containerized in labeled totes for disposal. The disposal manifests for the development water are in Appendix B.

3 Injection Activities

3.1 Mobilization and Reagent Preparation

Equipment transported to the site by common carrier and local equipment rental providers included miscellaneous equipment such as hoses, pumps, drums, tanks, mixers, generator, compressor, etc. Materials transported to the site by specialized carriers included sodium persulfate, sodium hydroxide solution, hydrogen peroxide solution and proprietary catalysts and stabilizers. Water used during the injection event was obtained from an active municipal water line within the Whirlpool Boiler Building. A temporary chemical staging/preparation area was constructed within Area 1. All liquid chemicals were staged within the secondary containment unit. Reagents were mixed together in small 55 gallon high density polyethylene (HDPE) drums or approximately 250 gallon totes immediately prior to injection. Material safety data sheets (MSDSs) for the reagents are provided in Appendix C. As a precautionary safety measure, a fire extinguisher and emergency eye-wash station were staged close to the chemical preparation area. Safety procedures outlined in the site specific Health and Safety Plan were followed during reagent preparation.

3.2 Reagent Injection

The BASP and MFR solution was delivered into the subsurface using pneumatic diaphragm pumps. During injection the instantaneous flow rate and pressure at the wellhead was monitored and recorded at routine intervals. The following is a generalized summary of the injection activities in Area 1:

- **Western Portion of Area 1 (vicinity of MW-25) and Linear Drainage Feature.** Injected a total of 3,200 gallons of MFR solution into temporary injection points (IP-3-01 through IP-3-16) October 28 through November 1, 2014 (Figure 1 and Table D-2, Appendix D).
- **Area 1.** Injected a total of 12,200 gallons of BASP solution into 41 permanent injection wells (IW-129 and IW-133 through IW-171) and 20 temporary injection points (IP-3-17 through IP-3-36) October 30 through November 3, 2014 (Figure 1 and Table D-1, Appendix D).

4 Monitoring

4.1 Baseline

Baseline monitoring was conducted at newly installed monitoring wells (MW-92 through MW-95 and MW-172) and new injection wells (IW-132 IW-135, IW-141, IW-143, IW-147, IW-152, IW-153, IW-155, IW-157 and IW-169) the week of October 19, 2014. Additional wells providing baseline data; Area 1 wells sampled the week of September 7, 2014, 90 days following the second ISCO injection event (IW-127, MW-85 and MW-86) and monitoring wells included in the current quarterly groundwater monitoring program (ITMW-11, ITMW-12, ITMW-15, ITMW-17, ITMW-18, ITMW 19 and MW-38) the week of October 12, 2014. The depth to water was recorded and low flow sampling methodology was used to monitor and collect temperature, conductivity, dissolved oxygen (DO), pH and oxidation-reduction potential (ORP) readings. Following stabilization groundwater samples were collected from each injection well and submitted to Pace Analytical Services, Inc. for volatile organic compound (VOC) analysis by EPA Method 8260.

4.2 Injection

As indicated above, flow rate, volume and injection pressure at the injection point well head were monitored and recorded during oxidant solution injection. During injection, data was collected periodically from wells in each area and certain wells adjacent to the injection areas including water levels, temperature, conductivity, DO, pH, ORP peroxide and sodium persulfate. Sodium persulfate was measured using CHEMetrics' persulfate field test kit that employs the ferric thiocyanate method. Sodium persulfate tests were performed after elevated pH or conductivity readings were observed that indicate the presence of BASP in the samples. Peroxide samples were analyzed (HACH H202 test kit 0.2-10 milligrams per liter (mg/L) model HYP-1. Cat. No 22917-00) when decreases in pH or elevated DO readings indicating the presence of peroxide were observed in a well. Grab groundwater samples for field water quality parameters and sodium persulfate concentrations were collected using disposable bailers or peristaltic pump.

4.3 Post Injection Monitoring

Post injection monitoring for field parameters peroxide and sodium persulfate concentrations was conducted on November 4, 2014 (one day following the end of the injection event) and December 3-5, 2014, approximately 30 days following the end of the injection event.

The 30 day sampling event included sampling for VOCs using EPA Method 5030B/8260. Residual, high concentrations of sodium persulfate within a groundwater monitoring sample may lead to inaccuracy in the laboratory measurement of contaminant concentrations. Accordingly, for monitoring wells with sodium persulfate levels in excess of 100 mg/L the ENVIRON sampling team used “Total Confidence™ Oxidant Stabilization Kits” from FMC Environmental Solutions. The stabilization kit allows for the addition of an oxidant neutralization chemical, ascorbic acid, to the groundwater samples during collection in the field, ensuring that the contaminant concentrations in groundwater samples are representative of conditions in the aquifer (i.e. the sample is stabilized to preclude further oxidation in the sample container prior to laboratory analysis).

5 Results

Laboratory analytical results are summarized in Tables 1A through 1D and laboratory analytical reports are found in Appendix E. Field measured parameters are summarized in Table 2.

5.1 Monitoring Well Soil Samples

Five additional monitoring wells (MW-92 through MW-95 and MW-172) were installed in September/October 2014 to supplement existing Area 1 ISCO monitoring wells. One soil sample was collected from every five foot depth interval (i.e. 0-5 feet, 5-10 feet, 10-15 feet, etc.) during well installation. As summarized in Table 1D, Except at MW-92, TCE concentrations in soil increased with depth at each well and were greatest within the saturated zone. Two Vadose Zone soil samples exceeded the RADD Remedial Action Level (RAL) of 0.129 milligrams per kilograms (mg/kg) at MW-92 (0.364 mg/kg) and MW-172 (0.288 mg/kg) both collected at 14 feet bgs. All other samples exceeding the RAL were collected from saturated zone soil (generally at depths between 20 and 30 feet bgs). These results are generally consistent with prior soil sample results collected in the vicinity of Area 1 outside of the linear drainage feature.

In addition to the samples collected for analysis of VOCs, undisturbed soil samples were collected from the boring for MW-92, MW-93 and MW-172 using Shelby tubes. The samples were submitted to Terracon of Oklahoma City, Oklahoma, for analysis of grain size, moisture content, dry density, porosity and total organic content. Terracon also determined the Unified Soil Classification System (USCS) classification based on the grain size analysis. The laboratory USCS classifications were consistent with the field classification for fine-grained soils. The laboratory grain size analysis and the resulting USCS classification for courser grained soils included greater sand (predominately fine grained sand) content and lesser amounts of gravel than were identified in the field. Similar to the boring log descriptions, the geotechnical data suggests the soil samples collected from the basal Transmissive Zone are poorly sorted (i.e. well graded), which in comparison to clean, well sorted gravels and sands, are less permeable due to smaller silt, clay and fine sand grains filling the openings between the coarser sand and gravel grains. The porosity, dry density and total organic content were within typical ranges for the identified soil types. This data is consistent with prior information regarding soil conditions at the site.

5.2 Potentiometric Surface

During the injection period most wells within the immediate area of the injection activity for that day exhibited brief potentiometric level increases ranging from a few inches to a foot or more that then dissipated within a day or so. The largest potentiometric increase of 2.4 feet occurred at MW-25, November 2 to November 3, during injection in several wells in the immediate area over this same time.

Over time, potentiometric surface levels rose from quarterly and baseline monitoring conducted October 15-17 and October 23-25, 2014, through completion of the third injection event on November 3, 2014. This trend extends to MW-24 and MW-95 which are located near Area 1 but at a distance in excess of 100 feet from the injection area. Potentiometric levels in these wells increased 0.79 feet and 0.76 feet, respectively, from baseline monitoring through completion of injection activities indicating that potentiometric levels where increasing over a broader area not

affected by the injection activities. A similar increase in potentiometric surface occurred in most of the Area 1 wells monitored (Table 2, Summary of Water Quality Parameters and Persulfate Concentrations). The trend in potentiometric levels from November 4 to December 4, at 30 day monitoring, indicates the potentiometric surface decreased to levels observed prior to injection.

5.3 Field Water Quality Parameters

Conductivity, pH, DO and ORP are influenced by the injection of BASP and MFR solution into the subsurface. Injection of the BASP solution increases pH (more basic) while injection of MFR reduces the pH increasing acidity. Shifts in pH, elevated conductivity, DO and ORP were most closely correlated with measurable levels of sodium persulfate in BASP injection areas and in MFR injection areas (Table 2).

Observed changes in water quality parameters from baseline values through the injection period are as follows:

- The most notable decreases in pH occurred at MW-25 and MW-86 following MFR injection. The decrease correlated with detection of hydrogen peroxide in both wells. Levels of pH recovered then increased to above baseline levels as persulfate concentrations increased in both wells.
- Observed values for DO increased greater than two-fold in several wells where MFR injections occurred (MW-25, MW-85, MW-86, MW-172, ITMW-1 and ITMW 19).
- The results for ORP monitoring are difficult to interpret as several wells indicated elevated ORP at baseline with ORP levels both increasing and decreasing over the injection period.
- Increased specific conductivity levels correlated with detection of persulfate at higher concentrations of 1,000 mg/L or more. Wells where specific conductivity increased by 50% or more were MW-25, MW-92, MW-172, ITMW-11, ITMW-12, ITMW-15 and ITMW-19.

Observed changes in water quality parameters from post injection monitoring on November 4 to 30 days later are as follows:

- The most notable decreases in pH occurred at MW-25 and MW-92. At MW-25, pH decreased from near neutral to strongly acidic as persulfate decreased over 10 times and dissolved oxygen remained elevated beyond normal scale. The results would appear to be associated with the MFR injection. At MW-92, the pH decrease is from strongly basic to neutral and corresponds with the decrease in specific conductivity and DO.
- Observed values for DO decreased at many wells irrespective of increasing or decreasing persulfate concentrations. The DO levels are elevated off-scale in several of the injection wells.
- The results for ORP monitoring did not strongly correlate with persulfate levels.
- Increased specific conductivity levels greater than 50% occurred at MW-38, MW-85, MW-86, ITMW-12, ITMW-15 and ITMW-18. All of these locations corresponded to elevated or increasing levels of elevated persulfate.

5.4 Persulfate Concentrations

At the end of the injection on November 4, a persulfate concentration greater than 1% of the concentration of persulfate in the BASP solution placed in the injection points (approximately 1,200 mg/L) was measured in seven monitoring wells in the injection area (MW-25, MW-86, MW-92, MW-172, ITMW-11, ITMW-15 and ITMW-19

Persulfate concentrations 30 days following injection increased by a factor of 10 times at wells MW-38, MW-85, MW-93, ITMW-12 and ITMW-18. The result for MW-93 does not have a corresponding change in water quality data and the well is located outside the area of expected influence. The remainder of these wells indicates the persulfate is reaching a larger area with time.

After 30 days, monitoring wells where the concentration of persulfate is 1,200 mg/L or more include MW-86, MW-85, MW-172, ITMW-12, ITMW-15, ITMW-18 and ITMW-19.

The persulfate concentrations remain well in excess of 1200 mg/L in the tested injection wells but persulfate levels decreased over the 30 days since injection.

5.5 Peroxide Concentrations

During injection activities, the highest level of peroxide was detected in MW-25. This well was approximately 10 feet from temporary injection point 1. Lower levels of peroxide were detected in MW-85, MW-86, MW-172, ITMW-17 and injection wells IW-132, IW-142, IW-150, IW-155 and IW-159. Peroxide was detected during post injection monitoring on November 4 in MW-25, MW-85, MW-86, MW-172 and ITMW-17. Peroxide levels were not monitored 30 days following injection because MFR is very reactive and has a short residence time in-situ.

5.6 VOC Concentrations

Table 3A presents a comparison of baseline (September and October 2014) and 30-day monitoring results (December 2014) for 21 wells (15 monitoring wells and six injection wells) in Area 1. The post injection 30 day monitoring results indicate TCE concentration decreases in the injection wells ranged from 54% to 100% and ranged from 6% to 99% in monitoring wells (TCE concentrations increased in five monitoring wells). Concentration increases exceeding 10% occurred at MW-85 and MW-86 and ITMW-17. The sum of TCE concentrations decreased from approximately 944,213 µg/L in September/October 2014 to approximately 431,793 µg/L in December 2014 approximately 30 days following injection (~50% decrease).

MW-85 and MW-86 are located near the former linear drainage feature where the highest concentrations of TCE in groundwater have historically been measured. Table 3B presents historic data from May 2014 (prior to the second injection event for these two wells and MW-25) through December 2014. While TCE concentrations increased at MW-85 and MW-86 increased following the third injection event, the sum of TCE concentrations decreased from approximately 553,470 µg/L in May 2014 to approximately 199,320 µg/L in December 2014 (~60% decrease). The increase in concentrations is likely associated with MFR reactions resulting in desorption of TCE out of the soil matrix and into the groundwater. ITMW-17 is located at the northern extent of Area 1 near the northern extent of the area expected to be influenced by the third injection

event. Additionally, the TCE concentration at ITMW-17 of 4,630 µg/L in December 2014 is representative of the range of TCE concentrations measured at ITMW-17 in 2012 and 2013 (3,500 to 5,600 µg/L).

In addition to progress monitoring for the third ISCO injection in Area 1, monitoring of the initial and second ISCO injections in the supplemental neck area and Area 2 and Area 3 was also performed in Fourth Quarter 2014. Table 3C 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 to 572 µg/L in October 2014 (~55% reduction). Similarly Table 3D 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 1,736 µg/L in October 2014 (~55% reduction).

6 Summary

The third 2014 oxidant injection event (BASP and MFR) occurred at the Whirlpool facility in Fort Smith, Arkansas, October 28 through November 3, 2014. During this event 12,200 gallons of BASP and 3,200 gallons of MFR were injected into 41 injection wells and 36 temporary direct push injection points located in Area 1. Key observations based on the monitoring data include the following:

- Water levels, field water quality parameters and persulfate concentrations indicate that the influence of the oxidant was measured in wells located in the injection areas and up to 15 feet from the injection areas (MW-38 and ITMW-17).
- During injection activities, the highest level of peroxide was detected in MW-25. This well was approximately ten feet from temporary injection point 1. Lower levels of peroxide were detected in MW-85, MW-86, MW-172, ITMW-17 and injection wells IW-132, IW-142, IW-150, IW-155 and IW-159.
- Measurable levels of persulfate increased 30 days after injection by a factor of 10x at wells MW-38, MW-85, ITMW-12 and ITMW-18. The increase of persulfate in these wells indicates the persulfate is reaching a larger area with time.
- After 30 days, monitoring wells where the concentration of persulfate was 1,200 mg/L or more included: MW-86, MW-85, MW-172, ITMW-12, ITMW-15, ITMW-18 and ITMW-19.
- 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 944,000 µg/L prior to the third injection event in September and October to approximately 432,000 µg/L in December, roughly 30 days following injection (~50% decrease). Notable decreases in TCE concentrations were observed at MW-25 where the TCE concentration was reduced from 59,800 µg/L to 2,620 µg/L (96% reduction); at ITMW-15 where the TCE concentration was reduced from 1,490 µg/L to 63 µg/L (96% reduction); ITMW-19 where the TCE concentration was reduced from 12,800 µg/L to 33.5 µg/L (99.7% reduction); and, at IW-152 where the TCE concentration was reduced from 17,600 µg/L to < 0.5 µg/L (99% reduction).
- TCE concentrations at MW-85 and MW-86 increased following injection and these increases may be the result of desorption of TCE following MFR (TCE concentration at MW-86 is still 68% less than when it was first sampled in May 2014).
- Subsequent to the second ISCO injection, 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 572 µg/L roughly five months following injection for an approximate 55% decrease.
- Subsequent to the second ISCO injection, 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 1,736 µg/L roughly five months following injection for an approximate 55% decrease.
- The success of the ISCO injection efforts are anticipated to be further evident after receipt and assessment of the first quarter 2015 groundwater monitoring data.

Tables

TABLE 1A
SUMMARY OF CERTAIN RADD MONITORING WELL WATER ANALYTICAL RESULTS (OCTOBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	ITMW-11	ITMW-12	ITMW-15	ITMW-17	ITMW-18	ITMW-19	MW-38
ENVIRON Sample ID		ITMW-11-201410	ITMW-12-201410	ITMW-15-201410	ITMW-17-201410	ITMW-18-201410	ITMW-19-201410	MW-38-201410
Lab Sample ID(s)		137010022, 041LJ046, 137090023, 60180441023	137010018, 041LJ029, 137090015, 60180441015	137010019, 041LJ048, 137090025, 60180635001	137010021, 041LJ052, 137090029, 60180635005	137010017, 041LJ031, 137090017, 60180441017	137010020, 041LJ051, 137090028, 60180635004	137010023, 041LJ053, 137090030, 60180635006
Sample Date		10/15/2014	10/15/2014	10/16/2014	10/16/2014	10/15/2014	10/16/2014	10/16/2014
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Volatile Organic Compounds								
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (5.0)	11.8 (5.0)	U (5.0)	U (5.0)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.51 J (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)
Bromomethane	7.0	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)
Chlorobenzene	100	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)
Chloroform	80	0.52 J (0.50)	0.54 J (0.50)	U (0.50)	0.81 J (0.50)	2.2 J (0.50)	3.7 J (0.50)	2.3 J (0.50)
Chloromethane	190	U (0.50)	U (0.50)	U (0.50)	U (0.50)	5.0 J (0.50)	U (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.5 J (0.50)	U (0.50)	2.6 J (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.5 J (0.50)	U (0.50)	0.98 J (0.50)
1,2-Dichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	0.71 J (0.50)	2.0 J (0.50)	3.4 J (0.50)	5.8 (0.50)	U (0.50)	19.9 (0.50)	10.2 (0.50)
cis-1,2-Dichloroethene	70	70.4 (0.50)	188 (12.5)	63.0 (0.50)	70.5 (0.50)	68.5 (0.50)	76.7 (0.50)	781 (50.0)
trans-1,2-Dichloroethene	100	0.54 J (0.50)	1.0 J (0.50)	U (0.50)	U (0.50)	13.9 (0.50)	1.1 J (0.50)	4.1 J (0.50)
Methylene Chloride	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.59 J (0.50)	U (0.50)	21.8 (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.76 J (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5.0	0.94 J (0.50)	1.3 J (0.50)	U (0.50)	0.82 J (0.50)	1.5 J (0.50)	2.7 J (0.50)	2.5 J (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.0 J (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)
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.58 J (0.50)	0.92 J (0.50)	0.60 J (0.50)
Trichloroethene	5.0	2050 (50.0)	2570 (12.5)	1490 (5.0)	3510 (25.0)	3540 (50.0)	12800 (50.0)	6750 (50.0)
Vinyl Chloride	2.0	3.5 (0.50)	3.5 (0.50)	2.0 (0.50)	3.2 (0.50)	U (0.50)	1.9 J (0.50)	321 (50.0)

Notes:

1 All concentrations are presented in ug/L.

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.

Abbreviations:

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 1B
SUMMARY OF ISCO MONITORING WELL WATER ANALYTICAL RESULTS (OCTOBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	IW-132	IW-135	IW-141	IW-143	IW-147	IW-152	IW-153	IW-155
ENVIRON Sample ID		IW-132-20141023	IW-135-20141023	IW-141-20141023	IW-143-20141023	IW-147-20141023	IW-152-20141022	IW-153-20141023	IW-155-20141023
Lab Sample ID		60181134004	60181134008	60181119001	60181134002	60181134001	60181035002	60181134006	60181134005
Sample Date		10/23/2014	10/23/2014	10/23/2014	10/23/2014	10/23/2014	10/22/2014	10/23/2014	10/23/2014
Volatile Organic Compounds									
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (5.0)	51.3 (5.0)	U (5.0)	U (5.0)	U (5.0)
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)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	0.73 J (0.50)	0.65 J (0.50)	U (0.50)	U (0.50)	U (0.50)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	10.2 (5.0)	U (5.0)	U (5.0)	U (5.0)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	3.4 J (0.50)	U (0.50)	2.3 J (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	1.3 J (0.50)	1.8 J (0.50)	11.3 (0.50)	1.8 J (0.50)	26.8 (0.50)	5.1 (0.50)	U (0.50)	3.5 J (0.50)
Chloromethane	190	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	55.0 (0.50)	2.6 J (0.50)	57.3 (0.50)	5.5 (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	2.4 J (0.50)	U (0.50)	4.5 (0.50)	3.8 (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5.0	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	7.0	0.60 J (0.50)	4.8 J (0.50)	143 (0.50)	10.3 (0.50)	U (1000)	169 J (100)	1.0 J (0.50)	22.3 (0.50)
cis-1,2-Dichloroethene	70	3.5 J (0.50)	43.3 (0.50)	U (1000)	44.8 (0.50)	1640 J (1000)	224 J (100)	85.3 (0.50)	36.4 (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	1.6 J (0.50)	0.71 J (0.50)	U (1000)	1.9 J (0.50)	0.66 J (0.50)	1.8 J (0.50)
Ethyl Benzene	700	U (0.50)	U (0.50)	0.84 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Methylene Chloride	5.0	U (0.50)	0.58 J (0.50)	4.0 J (0.50)	1.4 J (0.50)	8.7 (0.50)	12.2 (0.50)	U (0.50)	0.80 J (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	0.57 J (0.50)	U (0.50)	37.3 (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5.0	U (0.50)	0.71 J (0.50)	55.7 (0.50)	2.5 J (0.50)	57.8 (0.50)	6.1 (0.50)	U (0.50)	4.0 J (0.50)
Toluene	1000	U (0.50)	U (0.50)	12.4 (0.50)	U (0.50)	6.9 (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	139 (0.50)	U (0.50)	U (1000)	U (0.50)	U (0.50)	18.8 (0.50)
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	5.5 (0.50)	0.57 J (0.50)	5.8 (0.50)	1.4 J (0.50)	U (0.50)	0.57 J (0.50)
Trichloroethene	5.0	714 (10.0)	3840 (50.0)	368000 (1000)	13100 (100)	199000 (1000)	17600 (100)	293 (2.5)	14600 (100)
Vinyl Chloride	2.0	U (0.50)	2.0 (0.50)	82.6 (0.50)	2.5 (0.50)	U (1000)	8.2 (0.50)	12.3 (0.50)	5.8 (0.50)
Xylenes (total)	10000	U (1.5)	U (1.5)	3.9 J (1.5)	U (1.5)	U (1.5)	U (1.5)	U (1.5)	U (1.5)

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 RALs 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

ENVIRON

TABLE 1B
SUMMARY OF ISCO MONITORING WELL WATER ANALYTICAL RESULTS (OCTOBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	IW-157	IW-169	MW-25	MW-92	MW-93	MW-94	MW-95	MW-172
ENVIRON Sample ID		IW-157-20141023	IW-169-20141022	MW-25-20141024	MW-92-20141022	MW-93-20141022	MW-94-20141022	MW-95-20141022	MW-172-20141022
Lab Sample ID		60181134003	60181035001	60181245001	60181032004	60181032003	60181032005	60181032002	60181032001
Sample Date		10/23/2014	10/22/2014	10/24/2014	10/22/2014	10/22/2014	10/22/2014	10/22/2014	10/22/2014
Volatile Organic Compounds									
Acetone	12000	U (5.0)	U (5.0)	18.0 (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Bromodichloromethane	80	0.55 J (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)	0.77 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.52 J (0.50)
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)
Carbon Tetrachloride	5	1.5 J (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	9.2 (0.50)	U (0.50)	3.3 J (0.50)	U (0.50)	5.1 (0.50)	4.2 J (0.50)	8.2 (0.50)	1.7 J (0.50)
Chloromethane	190	U (0.50)	U (0.50)	1.5 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.52 J (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	13.7 (0.50)	U (0.50)	6.4 (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	1.1 J (0.50)	U (0.50)	2.5 (0.50)	U (0.50)	U (0.50)	2.8 (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5.0	U (0.50)	U (0.50)	1.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	87.7 (0.50)	1.1 J (0.50)	U (0.50)	4.6 J (0.50)	32.6 (0.50)	131 (0.50)	38.6 (0.50)	3.5 J (0.50)
cis-1,2-Dichloroethene	70	712 J (500)	1.7 J (0.50)	2650 J (500)	16.0 (0.50)	145 (0.50)	309 J (250)	151 (0.50)	21.4 (0.50)
trans-1,2-Dichloroethene	100	19.3 (0.50)	U (0.50)	704 J (500)	U (0.50)	1.4 J (0.50)	1.8 J (0.50)	1.0 J (0.50)	U (0.50)
Ethyl Benzene	700	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	5.0	3.4 J (0.50)	U (0.50)	1.8 J (0.50)	U (0.50)	3.3 J (0.50)	0.59 J (0.50)	3.5 J (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	1.7 (0.50)	U (0.50)	48.4 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5.0	35.3 (0.50)	U (0.50)	13.5 (0.50)	U (0.50)	6.6 (0.50)	1.6 J (0.50)	6.9 (0.50)	0.59 J (0.50)
Toluene	1000	0.70 J (0.50)	U (0.50)	1.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	60.8 (0.50)	U (0.50)	12.9 (0.50)	0.83 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5.0	2.9 J (0.50)	U (0.50)	1.1 J (0.50)	U (0.50)	1.5 J (0.50)	0.60 J (0.50)	2.0 J (0.50)	U (0.50)
Trichloroethene	5.0	74200 (500)	163 (2.5)	59800 (500)	2160 (12.5)	18200 (100)	11100 (250)	22300 (100)	3010 (12.5)
Vinyl Chloride	2.0	195 (0.50)	U (0.50)	0.66 J (0.50)	7.2 (0.50)	5.0 (0.50)	2.5 (0.50)	25.7 (0.50)	2.4 (0.50)
Xylenes (total)	10000	U (1.5)	U (1.5)	U (1.5)	U (1.5)	U (1.5)	U (1.5)	U (1.5)	U (1.5)

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 RALs 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

ENVIRON

TABLE 1C
SUMMARY OF ISCO MONITORING WELL WATER ANALYTICAL RESULTS (DECEMBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	ITMW-11	ITMW-12	ITMW-15	ITMW-17	ITMW-18	ITMW-19	IW-127
ENVIRON Sample ID		ITMW-11-20141204	ITMW-12-20141204	ITMW-15-20141205	ITMW-17-20141205	ITMW-18-20141204	ITMW-19-20141205	IW-127-20141204
Lab Sample ID		60183996007	60183996015	60183996008	60183996010	60183996004	60183996016	60183996005
Sample Method								
Sample Date		12/04/2014	12/04/2014	12/05/2014	12/05/2014	12/04/2014	12/05/2014	12/04/2014
Volatile Organic Compounds								
Acetone	12000	U (5.0)	8.4 J (5.0)	81.3 (5.0)	6.1 J (5.0)	17.9 (5.0)	U (5.0)	22.2 (5.0)
Benzene	5.0	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)
Bromomethane	7.0	U (2.5)	6.5 J (2.5)	14.2 (2.5)	U (2.5)	4.5 J (2.5)	U (2.5)	11.8 (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)
Carbon Tetrachloride	5	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)
Chloroform	80	0.65 J (0.50)	0.72 J (0.50)	U (0.50)	1.4 J (0.50)	2.7 J (0.50)	U (0.50)	0.67 J (0.50)
Chloromethane	190	U (0.50)	2.2 J (0.50)	15.8 (0.50)	U (0.50)	3.1 J (0.50)	U (0.50)	2.4 J (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)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.2 J (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	U (0.50)	U (0.50)	U (0.50)	7.3 (0.50)	1.2 J (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	70	55.0 (0.50)	51.1 (0.50)	U (0.50)	210 J (25.0)	74.3 (0.50)	U (0.50)	7.2 (0.50)
trans-1,2-Dichloroethene	100	1.5 J (0.50)	6.8 (0.50)	U (0.50)	25.9 (0.50)	13.3 (0.50)	U (0.50)	1.1 J (0.50)
Methylene Chloride	5.0	1.2 J (0.50)	0.95 J (0.50)	U (0.50)	0.70 J (0.50)	0.52 J (0.50)	U (0.50)	0.91 J (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.96 J (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5.0	0.85 J (0.50)	0.60 J (0.50)	U (0.50)	1.5 J (0.50)	1.8 J (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)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	0.73 J (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)	U (0.50)	0.70 J (0.50)	U (0.50)	U (0.50)
Trichloroethene	5.0	1530 (25.0)	468 (12.5)	63.0 (0.50)	4630 (25.0)	3690 (50.0)	33.5 (0.50)	182 (0.50)
Vinyl Chloride	2.0	6.4 (0.50)	0.88 J (0.50)	U (0.50)	7.7 (0.50)	U (0.50)	U (0.50)	U (0.50)

Notes:

1 All concentrations are presented in ug/L (ppb).

2 Only compounds with at least one detection are shown.

3 Concentrations that exceed the RALs per ADEQ RADD Issued 2013 are double underlined.

Abbreviations:

U Not Detected.

J Estimated Concentration.

E Exceeds Calibration Range.

( ) Method Detection Limit.

RADD: Remedial Action Decision Document

ADEQ: Arkansas Department of Environmental Quality

ENVIRON

TABLE 1C
SUMMARY OF ISCO MONITORING WELL WATER ANALYTICAL RESULTS (DECEMBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	IW-141	IW-147	IW-152	IW-153	IW-157	MW-25	MW-38
ENVIRON Sample ID		IW-141-20141205	IW-147-20141205	IW-152-20141204	IW-153-20141204	IW-157-20141205	MW-25-20141205	MW-38-20141204
Lab Sample ID		60183996021	60183996011	60183996022	60183996002	60183996017	60183996018	60183996006
Sample Method								
Sample Date		12/05/2014	12/05/2014	12/04/2014	12/04/2014	12/05/2014	12/05/2014	12/04/2014
Volatile Organic Compounds								
Acetone	12000	83.3 (5.0)	141 (5.0)	U (5.0)	28.8 (5.0)	53.4 (5.0)	170 (5.0)	U (5.0)
Benzene	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.0 J (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)
Bromomethane	7.0	U (2.5)	2.6 J (2.5)	U (2.5)	3.1 J (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	4900	11.9 (5.0)	19.0 (5.0)	U (5.0)	U (5.0)	183 (5.0)	25.6 (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)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	18.8 (0.50)	71.5 (0.50)	U (0.50)	U (0.50)	10.3 (0.50)	4.0 J (0.50)	0.58 J (0.50)
Chloromethane	190	6.7 J (0.50)	4.1 J (0.50)	U (0.50)	6.7 J (0.50)	0.62 J (0.50)	0.95 J (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	64.3 (0.50)	U (0.50)	U (0.50)	U (0.50)	2.6 J (0.50)	1.2 J (0.50)
1,1-Dichloroethane	2.4	1.7 J (0.50)	4.4 (0.50)	U (0.50)	U (0.50)	1.1 J (0.50)	1.5 J (0.50)	U (0.50)
1,1-Dichloroethene	7.0	6.1 (0.50)	62.8 (0.50)	U (0.50)	U (0.50)	27.4 (0.50)	U (0.50)	14.7 (0.50)
cis-1,2-Dichloroethene	70	232 E (0.50)	1420 J (1000)	U (0.50)	U (0.50)	391 E (0.50)	31.5 (0.50)	697 (50.0)
trans-1,2-Dichloroethene	100	8.1 (0.50)	80.1 (0.50)	U (0.50)	U (0.50)	17.1 (0.50)	5.3 (0.50)	9.7 (0.50)
Methylene Chloride	5.0	51.5 (0.50)	39.8 (0.50)	U (0.50)	U (0.50)	8.0 (0.50)	2.7 J (0.50)	1.1 J (0.50)
1,1,2,2-Tetrachloroethane	0.066	8.2 (0.50)	26.8 (0.50)	U (0.50)	U (0.50)	3.1 (0.50)	50.2 (0.50)	U (0.50)
Tetrachloroethene	5.0	22.7 (0.50)	62.7 (0.50)	U (0.50)	U (0.50)	10.6 (0.50)	2.6 J (0.50)	1.1 J (0.50)
Toluene	1000	0.61 J (0.50)	2.1 J (0.50)	U (0.50)	U (0.50)	0.58 J (0.50)	U (0.50)	0.84 J (0.50)
1,1,1-Trichloroethane	200	101 (0.50)	359 E (0.50)	U (0.50)	U (0.50)	48.5 (0.50)	4.7 J (0.50)	U (0.50)
1,1,2-Trichloroethane	5.0	0.60 J (0.50)	0.55 J (0.50)	U (0.50)	U (0.50)	U (0.50)	0.87 J (0.50)	U (0.50)
Trichloroethene	5.0	46300 (1000)	91600 (1000)	U (0.50)	1.6 J (0.50)	31700 (500)	2620 J (500)	3190 (50.0)
Vinyl Chloride	2.0	31.0 (0.50)	176 (0.50)	U (0.50)	U (0.50)	66.8 (0.50)	2.1 (0.50)	193 (0.50)

Notes:

1 All concentrations are presented in ug/L (ppb).

2 Only compounds with at least one detection are shown.

3 Concentrations that exceed the RALs per ADEQ RADD Issued 2013 are double underlined.

Abbreviations:

U Not Detected.

J Estimated Concentration.

E Exceeds Calibration Range.

( ) Method Detection Limit.

RADD: Remedial Action Decision Document

ADEQ: Arkansas Department of Environmental Quality

ENVIRON

TABLE 1C
SUMMARY OF ISCO MONITORING WELL WATER ANALYTICAL RESULTS (DECEMBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	MW-85	MW-86	MW-92	MW-93	MW-94	MW-95	MW-172
ENVIRON Sample ID		MW-85-20141205	MW-86-20141205	MW-92-20141204	MW-93-20141204	MW-94-20141204	MW-95-20141204	MW-172-20141205
Lab Sample ID		60183996019	60183996012	60183996001	60183996003	60183996013	60183996014	60183996009
Sample Method								
Sample Date		12/05/2014	12/05/2014	12/04/2014	12/04/2014	12/04/2014	12/04/2014	12/05/2014
Volatile Organic Compounds								
Acetone	12000	55.5 (5.0)	399 (5.0)	6.0 J (5.0)	U (5.0)	U (5.0)	U (5.0)	22.2 (5.0)
Benzene	5.0	0.62 J (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)	0.70 J (0.50)	0.63 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7.0	18.3 (2.5)	4.8 J (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	12.7 (2.5)
2-Butanone	4900	10.8 (5.0)	143 (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Carbon Tetrachloride	5	U (0.50)	14.4 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	1.2 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	31.8 (0.50)	4060 J (1000)	0.62 J (0.50)	7.7 (0.50)	3.3 J (0.50)	7.5 (0.50)	4.0 J (0.50)
Chloromethane	190	11.2 (0.50)	17.2 (0.50)	0.68 J (0.50)	U (0.50)	U (0.50)	U (0.50)	1.8 J (0.50)
Dibromochloromethane	80	22.5 (0.50)	45.7 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.9 J (0.50)
1,1-Dichloroethane	2.4	2.0 J (0.50)	44.2 (0.50)	U (0.50)	U (0.50)	2.9 (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	6.5 (0.50)	295 E (0.50)	3.1 J (0.50)	22.6 (0.50)	130 (0.50)	38.7 (0.50)	U (0.50)
cis-1,2-Dichloroethene	70	280 (25.0)	290 E (0.50)	23.4 (0.50)	85.7 (0.50)	250 J (125)	159 (0.50)	15.6 (0.50)
trans-1,2-Dichloroethene	100	51.6 (0.50)	47.7 (0.50)	1.8 J (0.50)	1.2 J (0.50)	2.3 J (0.50)	1.5 J (0.50)	2.6 J (0.50)
Methylene Chloride	5.0	146 (0.50)	50.5 (0.50)	U (0.50)	3.2 J (0.50)	0.63 J (0.50)	3.8 J (0.50)	1.7 J (0.50)
1,1,2,2-Tetrachloroethane	0.066	109 (0.50)	1710 J (1000)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.3 (0.50)
Tetrachloroethene	5.0	22.0 (0.50)	44.0 (0.50)	0.80 J (0.50)	3.5 J (0.50)	2.7 J (0.50)	6.3 (0.50)	1.7 J (0.50)
Toluene	1000	U (0.50)	10.4 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	250 J (25.0)	1310 J (1000)	3.6 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5.0	2.3 J (0.50)	10.7 (0.50)	U (0.50)	1.2 J (0.50)	0.67 J (0.50)	2.0 J (0.50)	0.69 J (0.50)
Trichloroethene	5.0	27700 (250)	169000 (1000)	2200 (12.5)	14600 (100)	9570 (125)	20900 (100)	1810 (12.5)
Vinyl Chloride	2.0	7.7 (0.50)	24.7 (0.50)	10.3 (0.50)	2.5 (0.50)	3.0 (0.50)	29.9 (0.50)	1.3 J (0.50)

Notes:

1 All concentrations are presented in ug/L (ppb).
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs per ADEQ RADD Issued 2013 are double underlined.

Abbreviations:

U Not Detected.
J Estimated Concentration.
E Exceeds Calibration Range.
( ) Method Detection Limit.
RADD: Remedial Action Decision Document
ADEQ: Arkansas Department of Environmental Quality

ENVIRON

TABLE 1D
SUMMARY OF ISCO MONITORING WELL SOIL ANALYTICAL RESULTS (SEPTEMBER/OCTOBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location		MW-92	MW-92	MW-92	MW-92
ENVIRON Sample ID	Remedial Action Levels per ADEQ RADD Issued December 2013	MW-92-SL-4FT-20140929	MW-92-SL-7FT-20140929	MW-92-SL-14FT-20140929	MW-92-SL-20FT-20140929
Lab Sample ID		60179053001	60179053002	60179053003	60179053004
Collection Depth (ft bgs)		4	7	14	20
Sample Method					
Sample Date		09/29/2014	09/29/2014	09/29/2014	09/29/2014
Comments					
Volatile Organic Compounds					
Acetone	NE	U (0.01)	U (0.01)	U (0.01)	U (0.01)
Bromoform	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Carbon Disulfide	NE	0.0074 (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)
1,1-Dichloroethene	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
cis-1,2-Dichloroethene	NE	U (0.0025)	0.0023 J (0.0025)	U (0.0025)	U (0.0025)
2-Hexanone	NE	U (0.01)	U (0.01)	U (0.01)	U (0.01)
Methylene Chloride	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Trichloroethene	0.129	U (0.0025)	U (0.0025)	0.364 (0.0025)	U (0.0025)
Vinyl Chloride	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)

Notes:

1 All concentrations are presented in mg/kg (ppm).
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.

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of
mg/kg = miligram per kilogram
NE -- Not Established.

TABLE 1D
SUMMARY OF ISCO MONITORING WELL SOIL ANALYTICAL RESULTS (SEPTEMBER/OCTOBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	MW-92	MW-93	MW-93	MW-93
ENVIRON Sample ID		MW-92-SL-24FT-20140929	MW-93-SL-5FT-20141002	MW-93-SL-7FT-20141002	MW-93-SL-10FT-20141002
Lab Sample ID		60179053005	60179430001	60179430002	60179430003
Collection Depth (ft bgs)		24	5	7	10
Sample Method					
Sample Date		09/29/2014	10/02/2014	10/02/2014	10/02/2014
Comments					
Volatile Organic Compounds					
Acetone	NE	U (0.01)	0.0136 J (0.01)	U (0.01)	U (0.01)
Bromoform	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Carbon Disulfide	NE	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)
1,1-Dichloroethene	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
cis-1,2-Dichloroethene	NE	U (0.0025)	U (0.0025)	0.0046 J (0.0025)	0.0048 J (0.0025)
2-Hexanone	NE	U (0.01)	U (0.01)	U (0.01)	U (0.01)
Methylene Chloride	NE	0.0024 J (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Trichloroethene	0.129	0.0334 (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Vinyl Chloride	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)

Notes:

1 All concentrations are presented in mg/kg (ppm).
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.

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of
mg/kg = miligram per kilogram
NE -- Not Established.

TABLE 1D
SUMMARY OF ISCO MONITORING WELL SOIL ANALYTICAL RESULTS (SEPTEMBER/OCTOBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	MW-93	MW-93	MW-93	MW-93
ENVIRON Sample ID		MW-93-SL-19FT-20141002	MW-93-SL-23FT-20141002	MW-93-SL-26FT-20141002	MW-93-SL-34.5FT-20141002
Lab Sample ID		60179430004	60179430005	60179430006	60179430007
Collection Depth (ft bgs)		19	23	26	34.5
Sample Method					
Sample Date		10/02/2014	10/02/2014	10/02/2014	10/02/2014
Comments					
Volatile Organic Compounds					
Acetone	NE	0.0118 J (0.01)	U (0.01)	0.0126 J (0.01)	0.0114 J (0.01)
Bromoform	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Carbon Disulfide	NE	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)
1,1-Dichloroethene	NE	U (0.0025)	0.0042 J (0.0025)	0.0037 J (0.0025)	U (0.0025)
cis-1,2-Dichloroethene	NE	U (0.0025)	0.0155 (0.0025)	0.0168 (0.0025)	U (0.0025)
2-Hexanone	NE	U (0.01)	U (0.01)	U (0.01)	U (0.01)
Methylene Chloride	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Trichloroethene	0.129	0.0204 (0.0025)	3.98 (0.0025)	3.25 (0.0025)	0.343 (0.0025)
Vinyl Chloride	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)

Notes:

1 All concentrations are presented in mg/kg (ppm).
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.

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of
mg/kg = miligram per kilogram
NE -- Not Established.

TABLE 1D
SUMMARY OF ISCO MONITORING WELL SOIL ANALYTICAL RESULTS (SEPTEMBER/OCTOBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	MW-94	MW-94	MW-94	MW-94
ENVIRON Sample ID		MW-94-SL-5FT-20141002	MW-94-SL-10FT-20141002	MW-94-SL-15FT-20141002	MW-94-SL-19FT-20141002
Lab Sample ID		60179430008	60179430009	60179430010	60179430011
Collection Depth (ft bgs)		5	10	15	19
Sample Method					
Sample Date		10/02/2014	10/02/2014	10/02/2014	10/02/2014
Comments					
Volatile Organic Compounds					
Acetone	NE	0.0207 (0.01)	0.025 (0.01)	U (0.01)	0.0106 J (0.01)
Bromoform	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Carbon Disulfide	NE	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)
1,1-Dichloroethene	NE	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)
2-Hexanone	NE	U (0.01)	U (0.01)	U (0.01)	U (0.01)
Methylene Chloride	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Trichloroethene	0.129	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Vinyl Chloride	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)

Notes:

1 All concentrations are presented in mg/kg (ppm).
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.

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of
mg/kg = miligram per kilogram
NE -- Not Established.

TABLE 1D
SUMMARY OF ISCO MONITORING WELL SOIL ANALYTICAL RESULTS (SEPTEMBER/OCTOBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	MW-94	MW-94	MW-94	MW-95
ENVIRON Sample ID		MW-94-SL-24FT-20141002	MW-94-SL-30FT-20141002	MW-94-SL-33FT-20141002	MW-95-SL-5FT-20141003
Lab Sample ID		60179430012	60179430013	60179430014	60179517001
Collection Depth (ft bgs)		24	30	33	5
Sample Method					
Sample Date		10/02/2014	10/02/2014	10/02/2014	10/03/2014
Comments					
Volatile Organic Compounds					
Acetone	NE	U (0.01)	U (0.01)	U (0.01)	0.0114 J (0.01)
Bromoform	NE	U (0.0025)	U (0.0025)	U (0.0025)	0.0061 (0.0025)
Carbon Disulfide	NE	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)	0.0072 (0.0025)
1,1-Dichloroethene	NE	U (0.0025)	0.0278 (0.0025)	0.0025 J (0.0025)	U (0.0025)
cis-1,2-Dichloroethene	NE	0.0108 (0.0025)	0.0502 (0.0025)	0.0505 (0.0025)	U (0.0025)
2-Hexanone	NE	U (0.01)	U (0.01)	U (0.01)	0.059 (0.01)
Methylene Chloride	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Trichloroethene	0.129	0.144 (0.0025)	2.17 (0.0025)	0.814 (0.0025)	U (0.0025)
Vinyl Chloride	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)

Notes:

1 All concentrations are presented in mg/kg (ppm).
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.

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of
mg/kg = miligram per kilogram
NE -- Not Established.

TABLE 1D
SUMMARY OF ISCO MONITORING WELL SOIL ANALYTICAL RESULTS (SEPTEMBER/OCTOBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	MW-95	MW-95	MW-95	MW-95
ENVIRON Sample ID		MW-95-SL-7FT-20141003	MW-95-SL-14FT-20141003	MW-95-SL-20FT-20141003	MW-95-SL-25FT-20141003
Lab Sample ID		60179517002	60179517003	60179517004	60179517005
Collection Depth (ft bgs)		7	14	20	25
Sample Method					
Sample Date		10/03/2014	10/03/2014	10/03/2014	10/03/2014
Comments					
Volatile Organic Compounds					
Acetone	NE	0.0164 J (0.01)	U (0.01)	U (0.01)	U (0.01)
Bromoform	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Carbon Disulfide	NE	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)
1,1-Dichloroethene	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
cis-1,2-Dichloroethene	NE	0.0185 (0.0025)	0.0504 (0.0025)	0.0187 (0.0025)	0.0041 J (0.0025)
2-Hexanone	NE	U (0.01)	U (0.01)	U (0.01)	U (0.01)
Methylene Chloride	NE	U (0.0025)	U (0.0025)	U (0.0025)	0.0027 (0.0025)
Trichloroethene	0.129	0.0189 (0.0025)	0.0872 (0.0025)	0.0503 (0.0025)	0.971 (0.0025)
Vinyl Chloride	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)

Notes:

1 All concentrations are presented in mg/kg (ppm).
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.

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of
mg/kg = miligram per kilogram
NE -- Not Established.

TABLE 1D
SUMMARY OF ISCO MONITORING WELL SOIL ANALYTICAL RESULTS (SEPTEMBER/OCTOBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	MW-95	MW-95	MW-172	MW-172
ENVIRON Sample ID		MW-95-SL-28FT-20141003	MW-95-SL-33FT-20141003	MW-172-SL-4FT-20141010	MW-172-SL-9.5FT-20141010
Lab Sample ID		60179517006	60179517007	60180133001	60180133002
Collection Depth (ft bgs)		28	33	4	9.5
Sample Method					
Sample Date		10/03/2014	10/03/2014	10/10/2014	10/10/2014
Comments					
Volatile Organic Compounds					
Acetone	NE	0.0116 J (0.01)	U (0.01)	0.0123 J (0.01)	0.0586 (0.01)
Bromoform	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Carbon Disulfide	NE	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)
1,1-Dichloroethene	NE	0.0055 (0.0025)	0.0069 (0.0025)	U (0.0025)	U (0.0025)
cis-1,2-Dichloroethene	NE	0.0268 (0.0025)	0.0224 (0.0025)	0.01 (0.0025)	U (0.0025)
2-Hexanone	NE	U (0.01)	U (0.01)	U (0.01)	U (0.01)
Methylene Chloride	NE	0.0041 (0.0025)	0.003 (0.0025)	U (0.0025)	U (0.0025)
Trichloroethene	0.129	4.02 (0.0025)	4.92 (0.0025)	U (0.0025)	0.0068 (0.0025)
Vinyl Chloride	NE	0.0039 J (0.0025)	0.0031 J (0.0025)	U (0.0025)	U (0.0025)

Notes:

1 All concentrations are presented in mg/kg (ppm).
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.

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of
mg/kg = miligram per kilogram
NE -- Not Established.

TABLE 1D
SUMMARY OF ISCO MONITORING WELL SOIL ANALYTICAL RESULTS (SEPTEMBER/OCTOBER 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued December 2013	MW-172	MW-172	MW-172	MW-172
ENVIRON Sample ID		MW-172-SL-14FT-20141010	MW-172-SL-18FT-20141010	MW-172-SL-24FT-20141010	MW-172-SL-27FT-20141010
Lab Sample ID		60180133003	60180133004	60180133005	60180133006
Collection Depth (ft bgs)		14	18	24	27
Sample Method					
Sample Date		10/10/2014	10/10/2014	10/10/2014	10/10/2014
Comments					
Volatile Organic Compounds					
Acetone	NE	U (0.01)	U (0.01)	0.01 J (0.01)	0.0115 J (0.01)
Bromoform	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Carbon Disulfide	NE	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)
1,1-Dichloroethene	NE	0.0041 J (0.0025)	0.0046 J (0.0025)	0.0066 (0.0025)	0.0061 (0.0025)
cis-1,2-Dichloroethene	NE	0.0026 J (0.0025)	0.0106 (0.0025)	0.0138 (0.0025)	0.0043 (0.0025)
2-Hexanone	NE	U (0.01)	U (0.01)	U (0.01)	U (0.01)
Methylene Chloride	NE	U (0.0025)	U (0.0025)	U (0.0025)	U (0.0025)
Trichloroethene	0.129	0.288 (0.0025)	2.49 (0.0025)	2.76 (0.0025)	3.04 (0.0025)
Vinyl Chloride	NE	U (0.0025)	U (0.0025)	0.0031 J (0.0025)	U (0.0025)

Notes:

1 All concentrations are presented in mg/kg (ppm).
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.

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of
mg/kg = miligram per kilogram
NE -- Not Established.

TABLE 2
SUMMARY OF WATER QUALITY PARAMETERS AND PERSULFATE CONCENTRATIONS (AREA 1)
OCTOBER - DECEMBER 2014 (THIRD 2014 INJECTION EVENT)
Whirlpool Facility - Fort Smith, Arkansas

Well	Time - Time Stamp	Level/Depth TOC (feet)	Groundwater Elevation (feet)	Temperature (°C)	Conductivity (uS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Sodium Persulfate (mg/L)	H2O2 (µg/L)	
MW-24	10/23/2014 10:25	12.19	464.09	22.27	2986	0.18	4.1	441.6	1400	--	
MW-24	11/3/2014 13:59	11.4	464.88	22.03	1383	2.39	5.46	336.5	70	--	
MW-24	11/4/2014 12:51	11.4	464.88	20.58	3147	2.27	3.7	485.6	2800	--	*
MW-24	12/3/2014 0:00	12.31	463.97								
MW-25	5/15/2014 10:30	13.65	463.11	17.11	1290	1.45	4.88	320.1		--	
MW-25	6/6/2014 8:18	12.57	464.19	19.67	31946	26.7	12.06	267.9	35000	--	
MW-25	6/11/2014 7:01	12.58	464.18	18.64	17429	20.47	6.73	298.6	14000	--	
MW-25	7/9/2014 8:00	12.75	464.01	20.69	7014	8.04	5.87	188.7	14700	--	
MW-25	9/11/2014 19:49	12.89	463.87	21.96	3302	4.71	5.53	339	1680	--	
MW-25	10/16/2014 10:08	12.44	464.32	21.62	2571	1.42	5.26	539.8	2100	--	
MW-25	10/24/2014 10:45	12.56	464.2	21.48	1759	1.04	5.09	262.3		--	
MW-25	10/30/2014 16:49	11.71	465.05	22.49	2370	27.25	2.93	495.1		1000	
MW-25	11/2/2014 8:17	12.01	464.75	18.45	3145	29.29	2.51	538.9	1900	1000	
MW-25	11/3/2014 14:43	9.64	467.12	20.91	5157	21.32	6.33	272.6	2100	1000	
MW-25	11/4/2014 13:30	11.85	464.91	19.91	5311	19.49	5.96	296.9	5600	1000	*
MW-25	12/5/2014 10:13	12.75	464.01	16.24	3999	83.89	2.34	529.3	210	---	
MW-37	11/4/2014 14:13	8.57	464.86	21.32	762	1	7	176.2	0	--	*
MW-38	10/16/2014 11:25	10.18	464.26	22.27	1069	4.21	6.79	89.2		--	
MW-38	11/1/2014 16:20	8.27	466.17	22.58	416	1.14	7.51	5.7	3.5	--	
MW-38	11/3/2014 13:40	8.59	465.85	22.83	460	1.07	7.18	75.3	0	--	
MW-38	11/4/2014 12:32	8.61	465.83	21.77	493	1.09	7.19	261.2	49	--	*
MW-38	12/4/2014 16:03	10.38	464.06	18.86	872	0.32	6.6	210.1	140	--	
MW-85	5/29/2014 16:38	10.35	464.06	20.1	1074	0.11	5.05	-147.3		--	
MW-85	6/6/2014 8:25	9.97	464.44	19.73	1979	15.71	4.64	296.7	1400	--	
MW-85	6/11/2014 7:10	10.11	464.3	18.85	1727	13.78	4.76	304.1	1260	--	
MW-85	7/8/2014 17:40	10.25	464.16	22.79	1378	4.38	4.71	-49	630	--	
MW-85	9/11/2014 18:50	10.58	463.83	21.64	1432	3.1	11.81	78	420	--	
MW-85	10/30/2014 16:52	9.39	465.02	20.95	1327	17.87	4.89	424		0	
MW-85	11/1/2014 8:46	9.89	464.52	19.28	1380	20.55	4.99	275.5		0.2	
MW-85	11/2/2014 7:59	9.67	464.74	17.8	1584	10.75	5.1	303.6	140	0.8	
MW-85	11/3/2014 14:52	8.82	465.59	21.27	1391	14.7	5.37	320	210	3	
MW-85	11/4/2014 13:32	9.58	464.83	20.01	1550	14.26	5.06	316.2	560	1	*
MW-85	12/5/2014 11:21	10.39	464.02	19.11	12651	10.21	5.84	300.4	14000	--	
MW-86	5/29/2014 17:33	9.17	464.02	21.81	1578	0.28	5.55	-182.7		--	
MW-86	6/6/2014 8:12	4.93	468.26	20.18	43076	24.27	2.52	605.2	35000	--	
MW-86	6/11/2014 6:53	8.29	464.9	19.15	14758	22.36	2.41	524	4200	--	
MW-86	7/8/2014 17:25	9.24	463.95	26.75	29373	0.52	2.42	654	28000	--	
MW-86	9/11/2014 20:15	11.5	461.69	22.19	12862	5.79	11.07	594.6	2800	--	
MW-86	10/30/2014 16:45	8.24	464.95	22.04	4223	30.51	5.24	291.6		0	
MW-86	11/1/2014 8:56	8.44	464.75	20.06	5177	30.67	4.44	365		2	
MW-86	11/2/2014 8:11	8.49	464.7	17.56	5746	25.96	3.99	445.7	1900	3	
MW-86	11/3/2014 14:48	7.26	465.93	21.75	6160	23.37	6.03	276.9	4200	1	
MW-86	11/4/2014 13:37	8.47	464.72	20.9	7157	20.54	7.73	268.8	6300	9	
MW-86	12/5/2014 11:56	9.22	463.97	18.93	13462	10.43	5.92	289.1	7000	--	
MW-92	10/30/2014 16:27	8.61	465.13	21.04	1455	22.53	6.33	212.5		0	
MW-92	11/1/2014 8:40	9.08	464.66	19.38	1358	15.21	5.41	273.7		0	
MW-92	11/3/2014 14:08	8.51	465.23	20.65	3375	12.53	11.2	175.4	2100	0	
MW-92	11/4/2014 12:58	8.81	464.93	20.23	3347	8.99	11.08	239.6	4200	--	*
MW-92	12/4/2014 8:57	9.71	464.03	14.68	1896	1.33	6.17	215.5	420	--	
MW-93	10/22/2014 2:53	13.78	464.03	21.3	1099	1.16	5.21	254.5		--	
MW-93	11/3/2014 14:14	12.85	464.96	20.77	935	1.89	6.96	252.5	0	--	
MW-93	11/4/2014 13:07	13.02	464.79	20.11	933	1.62	6.17	291.6	2.1	--	*
MW-93	12/4/2014 11:57	13.86	463.95	19.04	831	0.45	5.65	257.1	420	--	
MW-94	10/22/2014 14:15	14.03	463.83	21.23	583	0.75	5.8	133.9	0	--	
MW-94	11/3/2014 14:14	13.19	464.67	21.14	495	0.88	7.29	212.7	0	--	
MW-94	11/4/2014 13:14	13.27	464.59	20.01	498	1.1	6.22	270.3	0	--	*
MW-94	12/4/2014 11:31	14.14	463.72	18.85	578	6.65	5.83	83.5	0	--	
MW-95	10/22/2014 15:17	13.73	463.9	22.09	1081	1.84	5.78	156.5	0	--	
MW-95	11/3/2014 14:35	12.82	464.81	21.32	950	1.4	6.34	244.8	0	--	
MW-95	11/4/2014 13:20	12.97	464.66	20.81	946	1.36	5.82	272.5	0	--	*
MW-95	12/4/2014 13:45	13.77	463.86	20.53	1098	3.83	5.71	102.7	0	--	

ENVIRON

TABLE 2
SUMMARY OF WATER QUALITY PARAMETERS AND PERSULFATE CONCENTRATIONS (AREA 1)
OCTOBER - DECEMBER 2014 (THIRD 2014 INJECTION EVENT)
Whirlpool Facility - Fort Smith, Arkansas

Well	Time - Time Stamp	Level/Depth TOC (feet)	Groundwater Elevation (feet)	Temperature (°C)	Conductivity (uS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Sodium Persulfate (mg/L)	H2O2 (µg/L)	
MW-172	10/22/2014 16:26	8.75	464.19	23.7	1189	0.21	5.28	274.7	0	--	
MW-172	10/30/2014 15:03	7.82	465.12	22.46	963	15.7	5.6	341.6		0	
MW-172	11/1/2014 9:02	8.34	464.6	20.33	1012	16.61	5.31	366.8		0.4	
MW-172	11/1/2014 15:55	7.44	465.5	22.4	1018	12.07	7.28	239.4	7	--	
MW-172	11/3/2014 13:28	8.04	464.9	17.5	600	9.02	11.15	147	420	4	
MW-172	11/4/2014 12:15	8.07	464.87	21.63	3237	6.27	5.95	423.3	6300	11	*
MW-172	12/5/2014 8:24	8.75	464.19	17.85	2968	1.76	5.39	337.5	6300	--	
ITMW-11	10/15/2014 15:11	9.69	464.25	24.52	236	0.27	5.83	121		--	
ITMW-11	11/1/2014 16:25	8.8	465.14	21.97	521	1.84	7.38	121.8	630	--	
ITMW-11	11/3/2014 13:48	9.09	464.85	21.72	3766	1.07	6.45	311.3	12600	--	
ITMW-11	11/4/2014 12:37	9.07	464.87	20.71	5175	5.33	6.2	374.5	16800	--	*
ITMW-11	12/4/2014 16:44	9.86	464.08	17.54	358	0.31	6.17	262	560	--	
ITMW-12	10/15/2014 16:36	12.56	464.3	23.01	247	0.83	5.99	116.3	0	--	
ITMW-12	11/1/2014 15:37	11.68	465.18	23.05	737	2.85	6.74	199.7	210	--	
ITMW-12	11/3/2014 1:07	11.95	464.91	21.25	890	3.98	6.54	252		560	
ITMW-12	11/4/2014 11:54	11.93	464.93	22.01	582	72.2	6.15	258	280	--	*
ITMW-12	12/4/2014 14:50	12.76	464.1	19.17	2776	3.09	8.63	148.3	1400	--	
ITMW-15	10/16/2014 8:25	10.09	464.22	18.23	840	2.99	7.04	138.2		--	
ITMW-15	11/1/2014 16:15	9.14	465.17	22.13	1301	4.74	7.24	231.2	1680	--	
ITMW-15	11/3/2014 13:37	9.52	464.79	22.51	7468	2.73	6.68	355.8	14700	--	
ITMW-15	11/4/2014 12:29	9.51	464.8	23.15	3617	6.48	6.8	343.3	10500	--	*
ITMW-15	12/5/2014 7:35	10.17	464.14	19.29	18628	7.97	6.37	400	3200	--	
ITMW-16	10/15/2014 8:50	14.45	464.31	19.76	216	6.6	7.03	92.7		--	
ITMW-16	11/1/2014 16:34	13.62	465.14	21.44	168	3.74	8.18	128.1	0	--	
ITMW-16	11/3/2014 13:55	13.84	464.92	21.76	186	2.98	8.18	178.8	0	--	
ITMW-16	11/4/2014 12:43	13.84	464.92	21.2	180	2.34	7.43	287.3	1.4	--	*
ITMW-16	12/3/2014 0:00	14.72	464.04								
ITMW-17	10/16/2014 8:51	13.7	464.26	18.31	908	0.28	5.03	307.4		--	
ITMW-17	10/30/2014 15:02	12.83	465.13	22.74	955	24.37	5.82	333.1		0	
ITMW-17	11/1/2014 16:03	12.58	465.38	21.72	967	20.73	6.39	266.2	0	--	
ITMW-17	11/3/2014 13:32	13.1	464.86	22.46	965	23.31	6.32	273.4	70	0	
ITMW-17	11/4/2014 12:22	13.09	464.87	20.6	1287	8.95	5.84	330	280	0.8	*
ITMW-17	12/5/2014 9:43	13.83	464.13	19.58	1392	10.68	5.46	282.3	280	--	
ITMW-18	10/15/2014 16:10	9.52	464.38	21.53	1989	2.15	5.71	237.6		--	
ITMW-18	11/1/2014 15:52	8.42	465.48	20.65	932	4	6.33	379.7	560	--	
ITMW-18	11/3/2014 13:14	8.82	465.08	21.53	315	4.42	6.35	244.5	70	--	
ITMW-18	11/4/2014 12:01	8.85	465.05	20.19	894	2.68	6.05	271.8	560	--	*
ITMW-18	12/4/2014 13:19	9.69	464.21	17.86	2052	0.31	6.03	254.7	1400	--	
ITMW-19	10/16/2014 8:35	12.06	464.27	18.64	1029	0.31	6.32	184.2		--	
ITMW-19	10/30/2014 15:11	10.73	465.6	20.89	1074	18.35	6.05	338.3		0	
ITMW-19	11/1/2014 15:58	10.85	465.48	20.42	24060	13.11	12.75	140.8	14000	--	
ITMW-19	11/3/2014 13:24	11.44	464.89	20.22	51788	3.27	13.02	210.6	>35000	--	
ITMW-19	11/4/2014 12:08	11.47	464.86	19.73	52405	3.29	13.03	228.9	>35000	INT	*
ITMW-19	12/5/2014 8:00	12.26	464.07	16.96	38653	52.29	15.58	357.7	21000	--	
IW-127	12/4/2014 14:29	9.62	463.99	18.58	8945	0.22	10.38	216.3	12600	--	
IW-132	10/23/2014 14:03	11.36	464.13	21.95	1261	0.57	5.41	261.7	0	--	
IW-132	11/1/2014 9:39	10.98	464.51	19.9	1142	3.57	5.35	298.9		0.4	
IW-140	10/31/2014 14:37	9.17	465.01	20.33	929	5.31	5.45	247		1	
IW-141	10/23/2014 16:57	9.21	464.15	22.73	1465	0.32	5.91	36.6		--	
IW-141	10/30/2014 16:58	8.36	465	21.77	11.63	2.02	5.53	348.3		0	
IW-141	10/31/2014 16:07	7.56	465.8	21.35	1222	5.31	5.81	237		0.8	
IW-141	11/1/2014 9:25	8.86	464.5	20.45	1212	5.34	5.66	322.2		0.6	
IW-141	11/4/2014 13:40	8.67	464.69	21.52	25569	3.33	12.82	143.2	17500	INT	*
IW-141	12/5/2014 12:56	9.45	463.91	19.27	14082	1.63	12.55	164.2	22400	--	
IW-142	10/31/2014 16:21	6.82	466.13	22.57	1181	25.45	6.12	233		0.2	
IW-147	10/23/2014 15:15	8.96	464.17	22.52	1958	2.74	5.36	140.3		--	
IW-147	11/4/2014 13:53	8.42	464.71	20.63	34955	13.38	12.92	172.3	21000	INT	*
IW-147	12/5/2014 11:02	9.06	464.07	19.2	12754	4.92	12	90.2	2800	--	
IW-148	11/1/2014 9:47	8.77	464.37	20.28	1270	28.45	5.5	312.4		0	
IW-150	10/31/2014 16:50	7.14	465.98	21.01	1007	12.7	5.35	275.9		0.8	
IW-150	11/1/2014 9:07	8.69	464.43	21.06	1012	17.08	5.37	340.4		0.4	
IW-152	10/22/2014 16:43	9.12	464.12	23.31	829	1	5.63	143.7	0	--	
IW-152	11/4/2014 13:59	8.8	464.44	21.39	61899	9.17	13.05	267.2	35000	INT	*
IW-152	12/4/2014 16:18	9.55	463.69	19.96	50174	90.95	13.12	264.3	21000	--	

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TABLE 2
SUMMARY OF WATER QUALITY PARAMETERS AND PERSULFATE CONCENTRATIONS (AREA 1)
OCTOBER - DECEMBER 2014 (THIRD 2014 INJECTION EVENT)
Whirlpool Facility - Fort Smith, Arkansas

Well	Time - Time Stamp	Level/Depth TOC (feet)	Groundwater Elevation (feet)	Temperature (°C)	Conductivity (uS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Sodium Persulfate (mg/L)	H2O2 (µg/L)	
IW-153	12/4/2014 9:09	9.09	463.91	17.21	22999	1.78	12.65	133.3.	24500	--	
IW-155	10/23/2014 13:02	9.39	463.89	22.42	1391	0.83	5.22	272.1	0	--	
IW-155	10/31/2014 15:18	8	465.28	21.28	1533	27.75	5.22	274.6		2	
IW-157	10/23/2014 11:49	9.37	464.01	21.31	1262	0.54	5.19	334.6	0	--	
IW-157	11/1/2014 9:20	8.95	464.43	19.93	1023	10.22	5.26	338.7		0	
IW-157	11/4/2014 14:05	8.73	464.65	20.68	15940	6.26	12.71	121.6	14000	INT	*
IW-157	12/5/2014 9:00	9.44	463.94	17.81	7729	65.43	12.28	311.3	4200	--	
IW-159	10/31/2014 16:40	7.38	465.71	20.65	938	11.36	5.4	257.2		0.6	
IW-163	11/1/2014 8:35	9.3	464.48	19.36	1504	11.47	5.11	266.7		0	
IW-165	10/30/2014 15:17	8.3	464.93	20.5	1094	11.59	5.38	347.9		0	
IW-165	11/1/2014 9:13	8.81	464.42	19.04	1101	10.57	5.17	333.8		0	
IW-168	10/31/2014 3:42	8.11	465.29	21.02	1066	14.17	5.47	272.7		0	

Notes:

*DTW measured earlier in the day prior to measurement of geochemical parameters.
INT - Matrix interference prevented accurate peroxide measurements
Baseline Monitoring 10-22 through 10-24-14

Injection Start	Injection Stop
10/28/2014	11/3/2014

ENVIRON

TABLE 3A
SUMMARY OF TCE CONCENTRATIONS (AREA 1)
SEPTEMBER - DECEMBER 2014
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
Percent Reduction	82.2%	87%	54%	100%	99%	57%	96%	52.7%	-375.9%	-31.0%	-2%	20%

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

ENVIRON

TABLE 3A
SUMMARY OF TCE CONCENTRATIONS (AREA 1)
SEPTEMBER - DECEMBER 2014
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
Percent Reduction	14%	6%	40%	25.4%	81.8%	95.8%	-31.9%	-4.2%	99.7%	54.3%

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

ENVIRON

TABLE 3B
SUMMARY OF TCE CONCENTRATIONS (AREA1/MW-25)
MAY - DECEMBER 2014
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
Percent Reduction	85.8%	-1306.1%	68.3%	64.0%

Notes:

nm = not measured

µg/L = micrograms per liter

TABLE 3C
SUMMARY OF TCE CONCENTRATIONS (SUPPLEMENTAL NECK AREA)
MAY - OCTOBER 2014
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	
Percent Reduction	72.7%	-728.9%	58.5%	55.3%	99.7%	55.9%

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

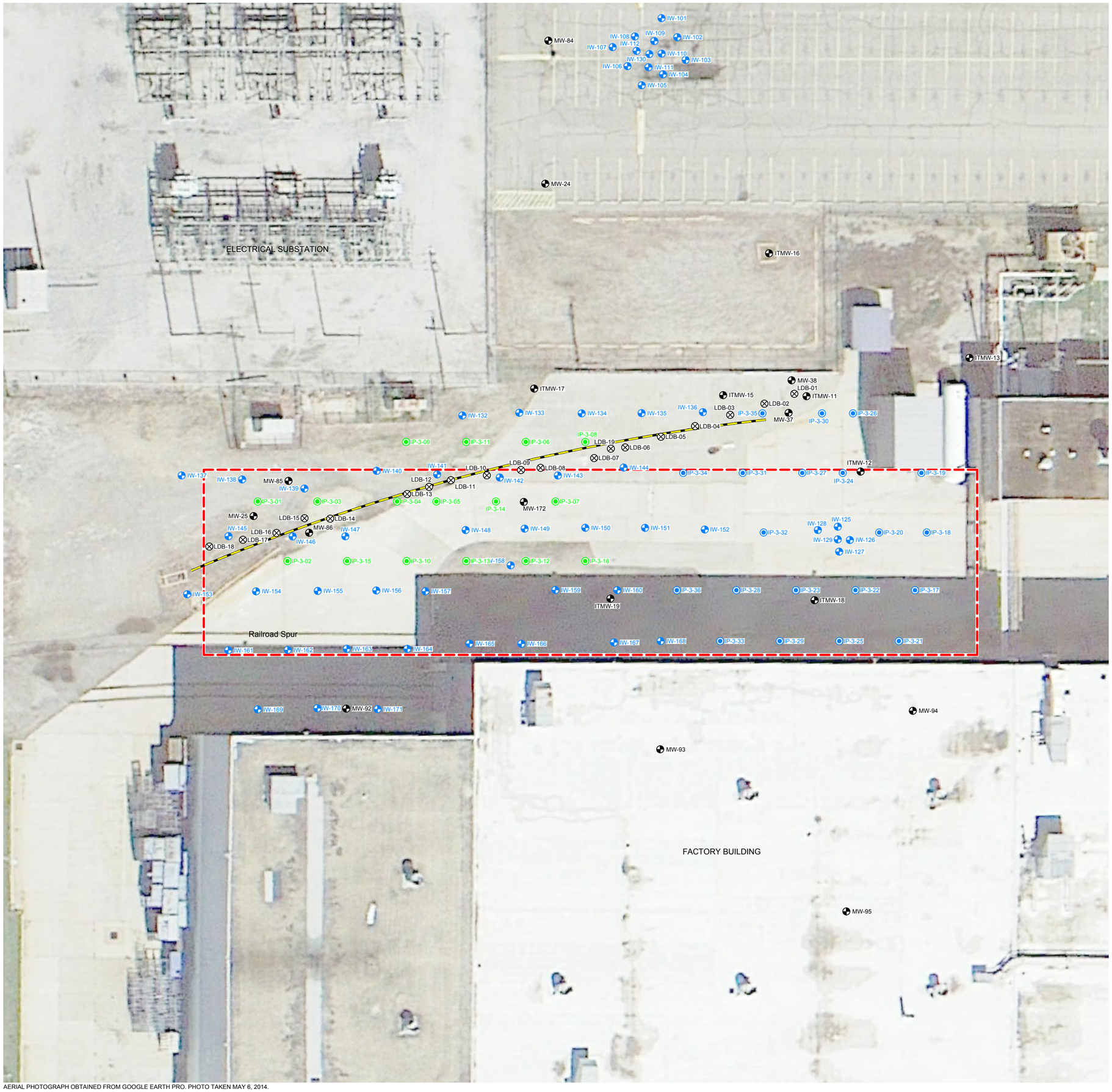
TABLE 3D
SUMMARY OF TCE CONCENTRATIONS (AREAS 2 AND 3)
MAY - OCTOBER 2014
Whirlpool Facility - Fort Smith, Arkansas

	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	0.5U	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	0.5U	30.8	11.8	
10/23/2014	nm	nm	nm	554	nm	nm	nm	nm	nm	nm	nm	
Percent Reduction	29.6%	9.6%	82.5%	62.1%	84.5%	75.4%	-139.7%	56.7%	-	84.2%	51.2%	55.1%

Notes:
nm = not measured

ENVIRON

Figures



AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO. PHOTO TAKEN MAY 6, 2014.

N

LEGEND

- EXTENT OF AREA 1
- FORMER LINEAR DRAINAGE FEATURE
- MONITORING WELLS
- INJECTION WELLS
- TEMPORARY INJECTION POINTS (BASP)
- LARGE DIAMETER BORINGS
- TEMPORARY INJECTION POINTS (MFR)

0 15 30 60

APPROXIMATE SCALE (FT)

INJECTION LOCATION MAP

AREA 1 DETAIL
WHIRLPOOL FACILITY
FORT SMITH, ARKANSAS

ENVIRON

FIGURE 1

DRAFTED BY: CKL | DATE: 12/26/14 | 3433233A

L:\Loop Project Files\00_CAD FILES\34\NMRS_Whirlpool Ft. Smith LitSup 3433233A\2014-12\2-1_Injection Location Map.dwg

Appendix A

Monitoring Well Boring Logs and Well Construction Diagrams

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-132	Date(s): **10/8/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **475.87 amsl** / TOC Elevation: **475.49 amsl**
Sampling Method: **Soil Cuttings**	North: **369039.91** / East: **590834.96**
Well Construction:	Borehole Dia.: **8.25 inches** / Total Depth: **28.0 feet**
Blank Casing: Sch 40 PVC 2 Inch — 0 FT to 23 FT	Project Number: **3434446A**
Screen: Sch. 40 0.10 PVC — 23 FT to 28 FT	Project Name: **Whirlpool Corporation**
Annular Fill: Cement Grout — 0 FT to 19 FT; Bentonite — 19 FT to 21 FT; Sand — 21 FT to 28 FT	Remarks:

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
475						CL	GRAVEL FILL CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, SLIGHTLY MOIST		Flush Mount
470	5								
465	10						CLAY, RED BROWN, VERY SILTY, SLIGHTLY SANDY, FINE GRAIN, SLIGHTLY MOIST		
460	15								
455	20					SC	SAND, BROWN, FINE TO MEDIUM GRAIN, SILTY, SLIGHTLY CLAYEY, SATURATED		
450	25					GC	GRAVEL, BROWN, FINE TO MEDIUM GRAIN, SANDY, FINE TO MEDIUM GRAIN, SOME COARSE GRAVEL, SILTY, SATURATED		

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-133	Date(s): **10/8/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **474.90 amsl** / TOC Elevation: **474.54 amsl**
Sampling Method: **Soil Cuttings**	North: **369039.39** / East: **590858.87**
Well Construction:	Borehole Dia.: **8.25 inches** / Total Depth: **28.0 feet**
Blank Casing: Sch 40 PVC 2 Inch — 0 FT to 23 FT	Project Number: **3434446A**
Screen: Sch. 40 0.10 PVC — 23 FT to 28 FT	Project Name: **Whirlpool Corporation**
Annular Fill: Cement Grout — 0 FT to 19 FT; Bentonite — 19 FT to 21 FT; Sand — 21 FT to 28 FT	Remarks:

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction (Flush Mount)
							GRAVEL		
						CL	CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, SLIGHTLY MOIST		
470	5								
465	10			1			CLAY, RED BROWN, VERY SILTY, SLIGHTLY SANDY, FINE GRAIN, SLIGHTLY MOIST		
460	15			0.6					
455	20					GC	GRAVEL, BROWN, FINE TO MEDIUM GRAIN, SILTY, CLAYEY, SATURATED		
450	25					CL	CLAY, RED BROWN, VERY SANDY, FINE TO MEDIUM GRAIN, SOME GRAVEL, VERY MOIST		

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-134	Date(s): **10/7/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **474.52 amsl** / TOC Elevation: **474.22 amsl**
Sampling Method: **HSA Continuous Sampler**	North: **369037.30** / East: **590884.99**
Well Construction:	Borehole Dia.: **8.25 inches** / Total Depth: **28.0 feet**
Blank Casing: Sch 40 PVC 2 Inch — 0 FT to 23 FT	Project Number: **3434446A**
Screen: Sch. 40 0.10 PVC — 23 FT to 28 FT	Project Name: **Whirlpool Corporation**
Annular Fill: Cement Grout — 0 FT to 19 FT; Bentonite — 19 FT to 21 FT; Sand — 21 FT to 28 FT	Remarks:

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							CONCRETE		Flush Mount
							GRAVEL FILL		
						CL	CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, SLIGHTLY MOIST		
470	5	3		35.5					
				76.6					
		5		169.1					
465	10						CLAY, RED BROWN AND GRAY, VERY SILTY, SLIGHTLY SANDY, FINE GRAIN, SLIGHTLY MOIST		
				292.8					
		5		277.9					
460	15								
				140					
		5		102.9					
455	20					SC	SAND, BROWN, FINE TO COARSE GRAIN, SILTY, SLIGHTLY CLAYEY, SATURATED		
				55.8					
						GC	GRAVEL, BROWN, FINE TO MEDIUM GRAIN, SANDY, SILTY, CLAYEY, SATURATED		
		2							
450	25								
				426					
						CL	CLAY, RED BROWN, VERY SANDY, FINE TO MEDIUM GRAIN, SOME GRAVEL, VERY SILTY, VERY MOIST		
445		5							

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-135	Date(s): **10/7/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **474.27 amsl** / TOC Elevation: **473.89 amsl**
Sampling Method: **Soil Cuttings**	North: **369035.64** / East: **590910.08**
Borehole Dia.: **8.25 inches**	Total Depth: **28.0 feet**
Project Number: **3434446A**	
Project Name: **Whirlpool Corporation**	
Remarks:	

Well Construction:

Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 23 FT
Screen:	Sch. 40 0.10 PVC	23 FT to 28 FT
Annular Fill:	Cement Grout	0 FT to 19 FT
	Bentonite	19 FT to 21 FT
	Sand	21 FT to 28 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
470	0						CONCRETE		Flush Mount
							GRAVEL FILL		
						CL	CLAY, RED BROWN, SLIGHTLY CLAYEY, SLIGHTLY SANDY, FINE GRAIN, MOIST		
	5								
465									
	10								
460				2320					
	15					MH	SILT, RED BROWN AND GRAY, SLIGHTLY CLAYEY, SLIGHTLY SANDY, FINE GRAIN, MOIST, SATURATED AT 22' BGS		
455									
	20			999.5					
450						GC	GRAVEL, BROWN, FINE TO COARSE GRAIN, VERY SILTY, VERY CLAYEY, MOIST		
	25						GRAVEL, BROWN, FINE TO COARSE GRAIN, SLIGHTLY SANDY, SILTY, CLAYEY, SATURATED		
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-136		Date(s): **10/7/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **K. Stonestreet**	
Contractor: **Able Environmental**		Purpose: **Injection Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **474.18 amsl**	TOC Elevation: **473.82 amsl**
Sampling Method: **HSA Continuous Sampler**		North: **369034.26**	East: **590935.79**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **28.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 23 FT	Project Number: **3434446A**	
Screen: Sch. 40 0.10 PVC	23 FT to 28 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout Bentonite Sand	0 FT to 19 FT 19 FT to 21 FT 21 FT to 28 FT	Remarks:	

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							CONCRETE		Flush Mount
				15000		CL	GRAVEL FILL CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, SLIGHTLY MOIST		
470	5	3		15000					
465	10	5		15000					
460	15	5		15000					
				4774		MH	SILT, RED BROWN AND GRAY, SLIGHTLY CLAYEY, SLIGHTLY SANDY, FINE GRAIN, MOIST, SATURATED AT 22' BGS		
455	20	5		1292					
				102.8					
450	25	5		78.8		GC	GRAVEL, BROWN, FINE TO COARSE GRAIN, VERY SILTY, VERY CLAYEY, VERY MOIST GRAVEL, BROWN, SILTY, CLAYEY, SATURATED		
		3		233.7		CL	CLAY, RED BROWN, SLIGHTLY SILTY, SANDY, FINE GRAIN, VERY MOIST		
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-137	Date(s): **10/9/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **K. Stonestreet**	Checked By:
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **475.83 amsl** / TOC Elevation: **475.47 amsl**
Sampling Method: **HSA Continuous Sampler**	North: **369023.06** / East: **590715.65**
Borehole Dia.: **8.25 inches**	Total Depth: **30.0 feet**
Project Number: **3434446A**	
Project Name: **Whirlpool Corporation**	
Remarks:	

Well Construction:

Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 25 FT
Screen:	Sch. 40 0.10 PVC	25 FT to 30 FT
Annular Fill:	Cement Grout	0 FT to 21 FT
	Bentonite	21 FT to 23 FT
	Sand	23 FT to 30 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
475							GRAVEL FILL AND CONCRETE DEBRIS, CLAY, RED BROWN MOTTLING, DAMP		Flush Mount
		5		0		CL	SILTY CLAY, RED BROWN, HARD		
	5								
470				0.2					
		5		0.2			SILTY CLAY, RED BROWN AND GRAY, DAMP, SILT AT 9-10' BGS		
	10								
465				0.2			SILTY CLAY, RED BROWN, DRY		
		5		0.2			SILTY CLAY, RED BROWN, GRAY SILT MOTTLING, PLASTIC, DRY		
	15								
460				0.2			SILTY CLAY, RED BROWN, GRAY MOTTLING, HARD, DRY		
		5		0.1					
	20								
455				0.2			SILTY CLAY, RED BROWN, GRAY MOTTLING, HARD, DRY, CRUMBLES		
		5		0.3					
	25								
450				0.2			SILTY CLAY AS ABOVE, MOIST, INCREASING SAND AND SMALL ANGULAR GRAVEL		
		5				GC	SAND AND GRAVEL, SUBANGULAR, SOME RED BROWN CLAY, WET		

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-138	Date(s): **10/9/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **K. Stonestreet**	Checked By:
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **475.52 amsl** / TOC Elevation: **475.45 amsl**
Sampling Method: **Soil Cuttings**	North: **369019.60** / East: **590740.88**
Borehole Dia.: **8.25 inches**	Total Depth: **30.0 feet**
Project Number: **3434446A**	
Project Name: **Whirlpool Corporation**	
Remarks:	

Well Construction:

Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 25 FT
Screen:	Sch. 40 0.10 PVC	25 FT to 30 FT
Annular Fill:	Cement Grout	0 FT to 21 FT
	Bentonite	21 FT to 23 FT
	Sand	23 FT to 30 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
475							CLAY FILL, BROWN, WITH GRAVEL AND CONCRETE DEBRIS		Flush Mount
						CL	SILTY CLAY, BROWN, SOFT, DAMP		
470	5						SILTY CLAY, RED BROWN		
465	10								
460	15								
455	20								
						GC	SAND AND GRAVEL, BROWN, FINE GRAIN, SUBANGULAR, UP TO 2"		
450	25						SAND AND GRAVEL AS ABOVE, INCREASING CLAY WITH DEPTH		

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-139	Date(s): **10/9/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **K. Stonestreet**	Checked By:
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **474.41 amsl** / TOC Elevation: **473.81 amsl**
Sampling Method: **HSA Continuous Sampler**	North: **369013.97** / East: **590766.66**
Borehole Dia.: **8.25 inches**	Total Depth: **28.0 feet**
Project Number: **3434446A**	
Project Name: **Whirlpool Corporation**	
Remarks:	

Well Construction:

Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 23 FT
Screen:	Sch. 40 0.10 PVC	23 FT to 28 FT
Annular Fill:	Cement Grout	0 FT to 19 FT
	Bentonite	19 FT to 21 FT
	Sand	21 FT to 28 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
470	0	5		332.5		CL	CLAY, WITH FINE SAND, DRY, CRUMBLES		Flush Mount
				373.3			CLAY, RED BROWN, DECREASING SAND AND SILTY WITH DEPTH		
	5			716.4			CLAY AS ABOVE, WITH SMALL ANGULAR SAND		
465		5		179.6			CLAY, RED BROWN, HARD, PLASTIC		
	10			1300					
460		5		2213					
	15			3955			SILTY CLAY, RED BROWN, DRY		
455		5		852.9					
	20			229.9			SILTY CLAY, RED BROWN, INCREASING GRAY SILT WITH DEPTH		
450		5		310.7					
	25								
445		3		>15000		GC	SAND AND GRAVEL, COARSE GRAIN, ANGULAR, STRONG SOLVENT ODOR		

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-140		Date(s): **10/10/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **K. Stonestreet**		Checked By:	
Contractor: **Able Environmental**		Purpose: **Injection Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **474.58 amsl**	TOC Elevation: **474.18 amsl**
Sampling Method: **Soil Cuttings**		North: **369019.27**	East: **590797.46**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **28.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 23 FT	Project Number: **3434446A**	
Screen: Sch. 40 0.10 PVC	23 FT to 28 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout Bentonite Sand	0 FT to 19 FT 19 FT to 21 FT 21 FT to 28 FT	Remarks:	

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
470	5					CL	CLAY, WITH FINE SAND, DRY		Flush Mount
							CLAY, RED BROWN, DECREASING SAND WITH DEPTH		
							CLAY, RED BROWN, WITH SAND, COARSE GRAIN, ANGULAR		
465	10						CLAY AS ABOVE, HARD, PLASTIC		
460	15						SILTY CLAY, RED BROWN, DRY, INCREASING GRAY SILT WITH DEPTH		
455	20								
450	25					GC	SAND AND GRAVEL, COARSE GRAIN, ANGULAR, STRONG SOLVENT ODOR		
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-141	Date(s): **10/14/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **473.70 amsl** / TOC Elevation: **473.36 amsl**
Sampling Method: **Soil Cuttings**	North: **369015.98** / East: **590822.69**
Borehole Dia.: **8.25 inches**	Total Depth: **27.0 feet**
Project Number: **3434446A**	
Project Name: **Whirlpool Corporation**	
Remarks:	

Well Construction:

Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 22 FT
Screen:	Sch. 40 0.10 PVC	22 FT to 27 FT
Annular Fill:	Cement Grout	0 FT to 18 FT
	Bentonite	18 FT to 20 FT
	Sand	20 FT to 27 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							GRAVEL FILL		Flush Mount
470	5					CL	CLAY, RED BROWN, FIRM, SLIGHTLY SILTY, SLIGHTLY MOIST		
465	10								
460	15						CLAY, RED BROWN, SILTY, SLIGHTLY FIRM, SLIGHTLY MOIST		
455	20								
450	25					GC	GRAVEL, BROWN, FINE TO MEDIUM GRAIN, SAND, FINE TO COARSE GRAIN, VERY SILTY, CLAYEY, SATURATED		
445									

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-142	Date(s): **10/15/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **473.20 amsl** / TOC Elevation: **472.95 amsl**
Sampling Method: **HSA Continuous Sampler**	North: **369012.86** / East: **590848.79**
Well Construction:	Borehole Dia.: **8.25 inches** / Total Depth: **25.0 feet**
Blank Casing: Sch 40 PVC 2 Inch — 0 FT to 20 FT	Project Number: **3434446A**
Screen: Sch. 40 0.10 PVC — 20 FT to 25 FT	Project Name: **Whirlpool Corporation**
Annular Fill: Cement Grout — 0 FT to 16 FT; Bentonite — 16 FT to 18 FT; Sand — 18 FT to 25 FT	Remarks:

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							CONCRETE		Flush Mount
							GRAVEL FILL		
470	0	5		89		CL	CLAY, RED BROWN, SILTY, FIRM, SLIGHTLY MOIST		
	5			160.5					
465		5		354.6					
	10						CLAY, RED BROWN, VERY SILTY, SLIGHTLY SANDY, FINE GRAIN, SLIGHTLY MOIST		
				6930					
460		5		>15000					
	15								
				4578					
455		5		914.8			CLAY, RED BROWN, VERY SILTY, SANDY, SATURATED		
	20					GC	GRAVEL, BROWN, FINE TO COARSE GRAIN, SAND, FINE TO MEDIUM GRAIN, SLIGHTLY SILTY, SLIGHTLY CLAYEY		
				66.5					
450		5		220			GRAVEL, BROWN, FINE TO COARSE GRAIN, SAND, FINE TO MEDIUM GRAIN, VERY SILTY, CLAYEY		
	25								
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-143	Date(s): **10/15/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **473.30 amsl** / TOC Elevation: **473.03 amsl**
Sampling Method: **Soil Cuttings**	North: **369012.01** / East: **590873.18**
Borehole Dia.: **8.25 inches**	Total Depth: **25.0 feet**
Project Number: **3434446A**	
Project Name: **Whirlpool Corporation**	
Remarks:	

Well Construction:

Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 20 FT
Screen:	Sch. 40 0.10 PVC	20 FT to 25 FT
Annular Fill:	Cement Grout	0 FT to 16 FT
	Bentonite	16 FT to 18 FT
	Sand	18 FT to 25 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							CONCRETE		Flush Mount
							GRAVEL FILL		
470						CL	CLAY, RED BROWN, SILTY, FIRM, SLIGHTLY MOIST		
	5								
465									
	10						CLAY, RED BROWN, VERY SILTY, SLIGHTLY SANDY, FINE GRAIN, SLIGHTLY MOIST		
460									
	15								
455									
	20					GC	GRAVEL, BROWN, FINE TO COARSE GRAIN, SAND, FINE TO MEDIUM GRAIN, SILTY, SLIGHTLY CLAYEY, SATURATED		
450									
	25						GRAVEL, BROWN, FINE TO COARSE GRAIN, SAND, FINE TO MEDIUM GRAIN, VERY SILTY, VERY CLAYEY, SATURATED		
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-144	Date(s): **10/15/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **473.29 amsl** / TOC Elevation: **473.04 amsl**
Sampling Method: **HSA Continuous Sampler**	North: **369013.39** / East: **590900.97**
Well Construction:	Borehole Dia.: **8.25 inches** / Total Depth: **25.0 feet**
Blank Casing: Sch 40 PVC 2 Inch — 0 FT to 20 FT	Project Number: **3434446A**
Screen: Sch. 40 0.10 PVC — 20 FT to 25 FT	Project Name: **Whirlpool Corporation**
Annular Fill: Cement Grout — 0 FT to 16 FT; Bentonite — 16 FT to 18 FT; Sand — 18 FT to 25 FT	Remarks:

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							CONCRETE		Flush Mount
							GRAVEL FILL		
470		5		7263		CL	CLAY, RED BROWN, FIRM, VERY STIFF, SLIGHTLY MOIST		
	5			4214					
465		5		2764					
	10			1658			CLAY, RED BROWN, VERY SILTY, SANDY, FINE GRAIN, SOFT, SATURATED AT 19' BGS		
460		5		969					
	15			174.3					
455		5		210.6					
	20			63.6		GC	GRAVEL, BROWN, FINE TO COARSE GRAIN, SAND, FINE TO MEDIUM GRAIN, SILTY, CLAYEY, SATURATED		
450		3					GRAVEL, BROWN, FINE TO COARSE GRAIN, SAND, FINE TO MEDIUM GRAIN, VERY SILTY, VERY CLAYEY, SATURATED		
	25								
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-145		Date(s): **10/9/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **K. Stonestreet**	
Contractor: **Able Environmental**		Purpose: **Injection Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **474.33 amsl**	TOC Elevation: **474.02 amsl**
Sampling Method: **HSA Continuous Sampler**		North: **368996.25**	East: **590733.48**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **30.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 25 FT	Project Number: **3434446A**	
Screen: Sch. 40 0.10 PVC	25 FT to 30 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout Bentonite Sand	0 FT to 21 FT 21 FT to 23 FT 23 FT to 30 FT	Remarks:	

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
				6			GRAVEL FILL CLAY FILL, DARK GRAY		Flush Mount
470	5	5		69.6		CL	CLAY, RED BROWN, VERY FIRM, SLIGHTLY SILTY, SOME GRAVEL, FINE GRAIN, SLIGHTLY MOIST		
				1410					
465	10	5		10216					
				>15000					
460	15	5		>15000			CLAY, RED BROWN, VERY SILTY, FIRM, SLIGHTLY MOIST		
				3244					
455	20	5		3253					
				213.5					
450	25	5		280.9		GC	GRAVEL, BROWN, FINE TO COARSE GRAIN, SAND, FINE TO COARSE GRAIN, SILTY, CLAYEY, SATURATED		
				234.1					
445		5					SHALE		

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-146	Date(s): **10/9/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **473.43 amsl** / TOC Elevation: **472.93 amsl**
Sampling Method: **Soil Cuttings**	North: **368994.29** / East: **590760.35**
Borehole Dia.: **8.25 inches**	Total Depth: **28.0 feet**
Project Number: **3434446A**	
Project Name: **Whirlpool Corporation**	
Remarks:	

Well Construction:

Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 23 FT
Screen:	Sch. 40 0.10 PVC	23 FT to 28 FT
Annular Fill:	Cement Grout	0 FT to 19 FT
	Bentonite	19 FT to 21 FT
	Sand	21 FT to 28 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
470	0					CL	GRAVEL FILL CLAY, RED BROWN, VERY FIRM, SLIGHTLY SILTY, SLIGHTLY MOIST		Flush Mount
465	5								
460	10						CLAY, RED BROWN, VERY SILTY, FIRM TO SOFT, MOIST		
455	15								
450	20								
445	25			2911		GC	GRAVEL, BROWN, FINE TO COARSE GRAIN, SANDY, FINE TO MEDIUM GRAIN, SILTY, CLAYEY		

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-147		Date(s): **10/13/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **K. Stonestreet**	
Contractor: **Able Environmental**		Purpose: **Injection Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **473.30 amsl**	TOC Elevation: **473.13 amsl**
Sampling Method: **HSA Continuous Sampler**		North: **368992.77**	East: **590782.42**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **25.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 20 FT	Project Number: **3434446A**	
Screen: Sch. 40 0.10 PVC	20 FT to 25 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout Bentonite Sand	0 FT to 16 FT 16 FT to 18 FT 18 FT to 25 FT	Remarks:	

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description	Water Level	Well Construction
				55.9		CONCRETE CLAY FILL, DARK GRAY, FIRM		Flush Mount
470		5		94	CL	CLAY, RED BROWN AND GRAY, VERY SILTY, SLIGHTLY MOIST		
	5					CLAY, RED BROWN, FIRM, SLIGHTLY SILTY, SLIGHTLY MOIST		
				60.4				
465		5		290.8				
	10							
				3305				
460		5		3760				
	15							
				>15000		CLAY, RED BROWN, SILTY, SLIGHTLY FIRM, SLIGHTLY MOIST		
455		5		11675				
	20					CLAY, RED BROWN, VERY SILTY, SANDY, FINE GRAIN, SLIGHTLY MOIST		
					GC	GRAVEL, BROWN, FINE TO COARSE GRAIN, SAND, FINE TO MEDIUM GRAIN, SILTY, SLIGHTLY CLAYEY, SATURATED		
				2037				
450		5		941.9				
	25					GRAVEL, BROWN, FINE TO COARSE GRAIN, SAND, FINE TO MEDIUM GRAIN, VERY SILTY, VERY CLAYEY, SATURATED		
445								

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-148	Date(s): **10/13/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **473.42 amsl** / TOC Elevation: **473.14 amsl**
Sampling Method: **Soil Cuttings**	North: **368991.86** / East: **590832.97**
Borehole Dia.: **8.25 inches**	Total Depth: **25.0 feet**
Project Number: **3434446A**	
Project Name: **Whirlpool Corporation**	
Remarks:	

Well Construction:

Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 20 FT
Screen:	Sch. 40 0.10 PVC	20 FT to 25 FT
Annular Fill:	Cement Grout	0 FT to 16 FT
	Bentonite	16 FT to 18 FT
	Sand	18 FT to 25 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							CONCRETE		Flush Mount
470	0					CL	CLAY, RED BROWN, FIRM, SLIGHTLY SILTY, SLIGHTLY MOIST		
	5								
465									
	10								
460									
	15						CLAY, RED BROWN, SILTY, SLIGHTLY SANDY, FINE GRAIN, SOFT, SLIGHTLY MOIST		
455									
	20					GC	GRAVEL, BROWN, FINE TO COARSE GRAIN, SAND, FINE TO MEDIUM GRAIN, CLAYEY, SLIGHTLY SILTY, SATURATED		
450									
	25						GRAVEL, BROWN, FINE TO COARSE GRAIN, SAND, FINE TO MEDIUM GRAIN, VERY SILTY, VERY CLAYEY, SATURATED		
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

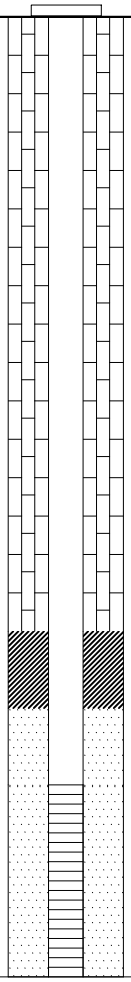
Site ID: IW-149	Date(s): **10/14/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **473.34 amsl** / TOC Elevation: **473.11 amsl**
Sampling Method: **HSA Continuous Sampler**	North: **368990.71** / East: **590857.72**
Well Construction:	Borehole Dia.: **8.25 inches** / Total Depth: **25.0 feet**
Blank Casing: Sch 40 PVC 2 Inch — 0 FT to 20 FT	Project Number: **3434446A**
Screen: Sch. 40 0.10 PVC — 20 FT to 25 FT	Project Name: **Whirlpool Corporation**
Annular Fill: Cement Grout — 0 FT to 16 FT; Bentonite — 16 FT to 18 FT; Sand — 18 FT to 25 FT	Remarks:

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
				0.4		CONCRETE
					CL	CLAY, DARK GRAY, FIRM, SLIGHTLY SILTY
470		5		1.1		CLAY, RED BROWN, FIRM, SILTY, SLIGHTLY MOIST
	5			1.8		
465		5		1.6		
	10			3.1		
460		5		22.6		CLAY, RED BROWN, VERY SILTY, SANDY, FINE GRAIN, SOFT, SLIGHTLY MOIST
	15			58.2		
455		5		136.2		CLAY, RED BROWN, VERY SILTY, VERY SANDY, FINE GRAIN, VERY SOFT, SATURATED
	20			18.8	SC	SAND, RED BROWN, FINE TO COARSE GRAIN, GRAVEL, FINE TO MEDIUM GRAIN, SILTY, SLIGHTLY CLAYEY, SATURATED
450		5		68.5	GC	GRAVEL, RED BROWN, FINE TO MEDIUM GRAIN, VERY SANDY, FINE TO MEDIUM GRAIN, VERY SILTY, VERY CLAYEY, SATURATED
	25					
445						

Water Level

Well Construction

Flush Mount



Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-150	Date(s): **10/14/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **473.37 amsl** / TOC Elevation: **473.12 amsl**
Sampling Method: **Soil Cuttings**	North: **368989.30** / East: **590883.15**
Borehole Dia.: **8.25 inches**	Total Depth: **25.0 feet**
Project Number: **3434446A**	
Project Name: **Whirlpool Corporation**	
Remarks:	

Well Construction:

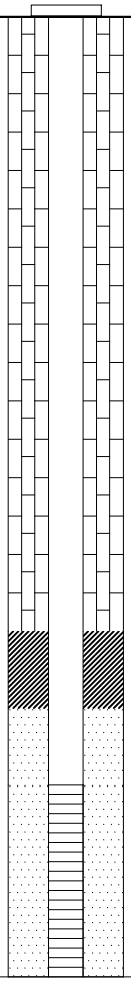
Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 20 FT
Screen:	Sch. 40 0.10 PVC	20 FT to 25 FT
Annular Fill:	Cement Grout	0 FT to 16 FT
	Bentonite	16 FT to 18 FT
	Sand	18 FT to 25 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description
							CONCRETE
						CL	CLAY, RED BROWN, FIRM, SILTY, SLIGHTLY MOIST
470							
	5						
465							
	10						
460							
	15						CLAY, RED BROWN, VERY SILTY, SANDY, FINE GRAIN, SOFT, SLIGHTLY MOIST
455							CLAY, RED BROWN, VERY SILTY, VERY SANDY, FINE GRAIN, VERY SOFT, SATURATED
	20					SC	SAND, BROWN, FINE TO COARSE GRAIN, GRAVEL, FINE TO MEDIUM GRAIN, SILTY, SLIGHTLY CLAYEY, SATURATED
450						GC	GRAVEL, BROWN, FINE TO MEDIUM GRAIN, VERY SANDY, FINE TO MEDIUM GRAIN, VERY SILTY, VERY CLAYEY, SATURATED
	25						
445							

Water Level

Well Construction

Flush Mount



Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-151	Date(s): **10/14/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **473.45 amsl** / TOC Elevation: **473.22 amsl**
Sampling Method: **HSA Continuous Sampler**	North: **368987.52** / East: **590908.17**
Well Construction:	Borehole Dia.: **8.25 inches** / Total Depth: **25.0 feet**
Blank Casing: Sch 40 PVC 2 Inch — 0 FT to 20 FT	Project Number: **3434446A**
Screen: Sch. 40 0.10 PVC — 20 FT to 25 FT	Project Name: **Whirlpool Corporation**
Annular Fill: Cement Grout — 0 FT to 16 FT; Bentonite — 16 FT to 18 FT; Sand — 18 FT to 25 FT	Remarks:

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
						CONCRETE
		3		4.1	CL	CLAY, RED BROWN, VERY FIRM, SLIGHTLY SILTY, SLIGHTLY MOIST
470	5					
		5		4.9		
465	10			4		
		5		3.5		
460	15			5.2		CLAY, RED BROWN, VERY SILTY, FIRM, SLIGHTLY MOIST
		5		56.9		
455	20			193.9	MH	SILT, RED BROWN, CLAYEY, SOFT, SATURATED
		2		213.8	GC	GRAVEL, BROWN, FINE TO COARSE, SANDY, FINE TO MEDIUM GRAIN, SILTY, CLAYEY, SATURATED
450	25					
445						

Water Level

Well Construction

Flush Mount

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-152	Date(s): **10/14/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **473.49 amsl** / TOC Elevation: **473.24 amsl**
Sampling Method: **Soil Cuttings**	North: **368985.06** / East: **590933.13**
Borehole Dia.: **8.25 inches**	Total Depth: **25.0 feet**
Project Number: **3434446A**	
Project Name: **Whirlpool Corporation**	
Remarks:	

Well Construction:

Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 20 FT
Screen:	Sch. 40 0.10 PVC	20 FT to 25 FT
Annular Fill:	Cement Grout	0 FT to 16 FT
	Bentonite	16 FT to 18 FT
	Sand	18 FT to 25 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
470	0						CONCRETE		Flush Mount
						CL	CLAY, RED BROWN, VERY FIRM, SLIGHTLY SILTY, SLIGHTLY MOIST		
	5								
465									
	10								
460							CLAY, RED BROWN, VERY SILTY, FIRM, SLIGHTLY MOIST		
	15								
455							CLAY, RED BROWN, VERY SILTY, SOFT, SATURATED		
	20								
450						GC	GRAVEL, BROWN, FINE TO COARSE GRAIN, SANDY, FINE TO MEDIUM GRAIN, VERY SILTY, CLAYEY, SATURATED		
	25								
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-153	Date(s): **10/9/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **473.36 amsl** / TOC Elevation: **473.00 amsl**
Sampling Method: **Soil Cuttings**	North: **368973.16** / East: **590714.50**
Borehole Dia.: **8.25 inches**	Total Depth: **28.0 feet**
Project Number: **3434446A**	
Project Name: **Whirlpool Corporation**	
Remarks:	

Well Construction:

Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 23 FT
Screen:	Sch. 40 0.10 PVC	23 FT to 28 FT
Annular Fill:	Cement Grout	0 FT to 19 FT
	Bentonite	19 FT to 21 FT
	Sand	21 FT to 28 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							CONCRETE		Flush Mount
							CLAY FILL, DARK GRAY, VERY FIRM, MOIST		
						CL	RED BROWN, VERY FIRM, SLIGHTLY SILTY, SLIGHTLY MOIST		
470	5								
465	10								
460	15								
455	20								
450	25					GC	GRAVEL, BROWN, FINE TO COARSE, SILTY, CLAYEY, SATURATED		
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-154		Date(s): **10/9/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **K. Stonestreet**	
Contractor: **Able Environmental**		Purpose: **Injection Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **473.43 amsl**	TOC Elevation: **473.11 amsl**
Sampling Method: **HSA Continuous Sampler**		North: **368972.35**	East: **590743.41**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **28.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 23 FT	Project Number: **3434446A**	
Screen: Sch. 40 0.10 PVC	23 FT to 28 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 19 FT	Remarks:	
Bentonite	19 FT to 21 FT		
Sand	21 FT to 28 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
				0.2			CONCRETE GRAVEL FILL CLAY FILL, DARK GRAY, VERY FIRM, MOIST		Flush Mount
470		5		0.2		CL	CLAY, RED BROWN, VERY FIRM, SLIGHTLY SILTY, MOIST		
	5			0.1					
465		5		0.2		SC	SAND, BROWN, FINE TO COARSE GRAIN, VERY SILTY, CLAYEY, SLIGHTLY MOIST		
	10					CL	CLAY,RED BROWN, VERY FIRM, SLIGHTLY SILTY, SLIGHTLY MOIST CLAY, RED BROWN, VERY SILTY, SOFT, SLIGHTLY MOIST		
				0.1					
460		5		0.2					
	15			0.1					
455		3		0.1					
	20			4.5					
450		5		10.7		MH	SILT, GRAY, SLIGHTLY CLAYEY, FIRM, SLIGHTLY MOIST		
	25					GC	GRAVEL, RED BROWN, FINE TO COARSE GRAIN, SANDY, FINE TO MEDIUM GRAIN, SILTY, CLAYEY, MOIST		
		3		3.3					
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-155		Date(s): **10/8/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **K. Stonestreet**	
Contractor: **Able Environmental**		Purpose: **Injection Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **473.51 amsl**	TOC Elevation: **473.28 amsl**
Sampling Method: **Soil Cuttings**		North: **368970.72**	East: **590769.26**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **25.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 20 FT	Project Number: **3434446A**	
Screen: Sch. 40 0.10 PVC	20 FT to 25 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 16 FT	Remarks:	
Bentonite	16 FT to 18 FT		
Sand	18 FT to 25 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							CONCRETE		Flush Mount
							GRAVEL FILL		
470	0					CL	CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, SLIGHTLY MOIST		
	5								
465									
	10								
460									
	15								
455									
	20					GC	GRAVEL, BROWN, FINE TO COARSE GRAIN, SAND, FINE TO MEDIUM GRAIN, SLIGHTLY SILTY, SLIGHTLY CLAYEY, INCREASING SILT AND CLAY WITH DEPTH		
450									
	25								
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-156		Date(s): **10/8/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **K. Stonestreet**	
Contractor: **Able Environmental**		Purpose: **Injection Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **473.66 amsl**	TOC Elevation: **473.36 amsl**
Sampling Method: **HSA Continuous Sampler**		North: **368969.19**	East: **590793.79**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **25.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 20 FT	Project Number: **3434446A**	
Screen: Sch. 40 0.10 PVC	20 FT to 25 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout Bentonite Sand	0 FT to 16 FT 16 FT to 18 FT 18 FT to 25 FT	Remarks:	

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
				0.8			CONCRETE GRAVEL FILL CLAY FILL, GRAY, VERY FIRM, MOIST		Flush Mount
470		5		0.7		CL	CLAY, RED BROWN, SLIGHTLY SILTY, FIRM, SLIGHTLY MOIST		
	5			1.0					
465		5		1.3					
	10			3.1					
460		5		8.0					
	15			180.6					
455		5		988.4			CLAY, RED BROWN AND GRAY, VERY SILTY, SLIGHTLY SANDY, SATURATED		
	20			2016		GC	GRAVEL, BROWN, FINE TO MEDIUM GRAIN, SANDY, FINE TO MEDIUM GRAIN, SLIGHTLY SILTY, SLIGHTLY CLAYEY, SATURATED		
450		5		214.8			GRAVEL, BROWN, FINE TO MEDIUM GRAIN, SANDY, SILTY, CLAYEY, SATURATED		
	25								
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-157	Date(s): **10/8/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **473.62 amsl** / TOC Elevation: **473.38 amsl**
Sampling Method: **Soil Cuttings**	North: **368967.42** / East: **590814.33**
Borehole Dia.: **8.25 inches**	Total Depth: **25.0 feet**
Project Number: **3434446A**	
Project Name: **Whirlpool Corporation**	
Remarks:	

Well Construction:

Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 20 FT
Screen:	Sch. 40 0.10 PVC	20 FT to 25 FT
Annular Fill:	Cement Grout	0 FT to 16 FT
	Bentonite	16 FT to 18 FT
	Sand	18 FT to 25 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							CONCRETE		Flush Mount
							GRAVEL FILL		
							CLAY FILL, DARK GRAY, VERY STIFF, MOIST		
470									
	5					CL	CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, SLIGHTLY MOIST		
465									
	10								
							CLAY, RED BROWN AND GRAY, SILTY, SLIGHTLY SANDY, FINE GRAIN, SLIGHTLY MOIST		
460									
	15								
455						GC	GRAVEL, BROWN, FINE TO MEDIUM GRAIN, SANDY, FINE TO MEDIUM GRAIN, SOME COARSE GRAVEL, SATURATED		
	20								
							GRAVEL, BROWN, FINE TO MEDIUM GRAIN, SANDY, FINE TO MEDIUM GRAIN, VERY SILTY, CLAYEY, SATURATED		
450									
	25								
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-158	Date(s): **10/16/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **473.59 amsl** / TOC Elevation: **473.22 amsl**
Sampling Method: **Soil Cuttings**	North: **368975.76** / East: **590850.79**
Borehole Dia.: **8.25 inches**	Total Depth: **25.0 feet**
Project Number: **3434446A**	
Project Name: **Whirlpool Corporation**	
Remarks:	

Well Construction:

Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 20 FT
Screen:	Sch. 40 0.10 PVC	20 FT to 25 FT
Annular Fill:	Cement Grout	0 FT to 16 FT
	Bentonite	16 FT to 18 FT
	Sand	18 FT to 25 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							GRAVEL FILL		Flush Mount
470	5					CL	CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, SLIGHTLY MOIST		
465	10						CLAY, RED BROWN AND GRAY, SILTY, SLIGHTLY SANDY, FINE GRAIN, SLIGHTLY MOIST		
460	15								
455	20					GC	GRAVEL, BROWN, FINE TO MEDIUM GRAIN, SANDY, FINE TO MEDIUM GRAIN, SOME COARSE GRAVEL, SILTY, CLAYEY, SATURATED		
450	25						GRAVEL, BROWN, FINE TO MEDIUM GRAIN, SANDY, FINE TO MEDIUM GRAIN, VERY SILTY, CLAYEY, SATURATED		
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-159		Date(s): **10/16/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **K. Stonestreet**	
Contractor: **Able Environmental**		Purpose: **Injection Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **473.67 amsl**	TOC Elevation: **473.09 amsl**
Sampling Method: **Soil Cuttings**		North: **368964.14**	East: **590868.79**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **25.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 20 FT	Project Number: **3434446A**	
Screen: Sch. 40 0.10 PVC	20 FT to 25 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout Bentonite Sand	0 FT to 16 FT 16 FT to 18 FT 18 FT to 25 FT	Remarks:	

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							GRAVEL FILL		Flush Mount
470	5					CL	CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, SLIGHTLY MOIST		
465	10								
460	15						CLAY, RED BROWN, SILTY, FIRM, SLIGHTLY MOIST		
455	20					GC	GRAVEL, BROWN, FINE TO MEDIUM GRAIN, SAND, FINE TO MEDIUM GRAIN, SILTY, CLAYEY, SATURATED		
450	25						GRAVEL, BROWN, FINE TO MEDIUM GRAIN, SAND, FINE TO MEDIUM GRAIN, VERY SILTY, CLAYEY, SATURATED		
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-160	Date(s): **10/1/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **473.80 amsl** / TOC Elevation: **473.54 amsl**
Sampling Method: **HSA Continuous Sampler**	North: **368962.23** / East: **590894.70**
Well Construction:	Borehole Dia.: **8.25 inches** / Total Depth: **25.0 feet**
Blank Casing: Sch 40 PVC 2 Inch — 0 FT to 20 FT	Project Number: **3434446A**
Screen: Sch. 40 0.10 PVC — 20 FT to 25 FT	Project Name: **Whirlpool Corporation**
Annular Fill: Cement Grout — 0 FT to 16 FT; Bentonite — 16 FT to 18 FT; Sand — 18 FT to 25 FT	Remarks:

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							GRAVEL FILL		Flush Mount
470	5					CL	CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, MOIST, SOME GRAVEL, MEDIUM TO COARSE		
465	10								
460	15					SC	SAND, RED BROWN AND GRAY, FINE GRAIN, VERY SILTY, SLIGHTLY CLAYEY, VERY MOIST		
455	20								
450	25						SAND, BROWN, FINE TO COARSE GRAIN, VERY CLAYEY, VERY SILTY, GRAVEL, FINE TO MEDIUM GRAIN		
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-161	Date(s): **10/9/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **K. Stonestreet**	Checked By:
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **473.83 amsl** / TOC Elevation: **473.49 amsl**
Sampling Method: **Soil Cuttings**	North: **368948.52** / East: **590730.02**
Borehole Dia.: **8.25 inches**	Total Depth: **25.0 feet**
Project Number: **3434446A**	
Project Name: **Whirlpool Corporation**	
Remarks:	

Well Construction:

Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 20 FT
Screen:	Sch. 40 0.10 PVC	20 FT to 25 FT
Annular Fill:	Cement Grout	0 FT to 16 FT
	Bentonite	16 FT to 18 FT
	Sand	18 FT to 25 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
470	0			0			CONCRETE		Flush Mount
							GRAVEL FILL		
						MH	CLAYEY SILT, RED BROWN		
						CL	CLAY, RED BROWN, SLIGHTLY SILTY, MOIST		
465	5								
460	10								
455	15								
450	20					GC	GRAVEL, BROWN, SAND, FINE GRAIN, SLIGHTLY SILTY, INCREASING CLAY WITH DEPTH		
445	25								

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-162		Date(s): **10/8/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **K. Stonestreet**	
Contractor: **Able Environmental**		Purpose: **Injection Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **473.89 amsl**	TOC Elevation: **473.39 amsl**
Sampling Method: **HSA Continuous Sampler**		North: **368946.88**	East: **590754.97**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **25.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 20 FT	Project Number: **3434446A**	
Screen: Sch. 40 0.10 PVC	20 FT to 25 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout Bentonite Sand	0 FT to 16 FT 16 FT to 18 FT 18 FT to 25 FT	Remarks:	

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction (Flush Mount)
				0.3			CONCRETE GRAVEL FILL		
						CL	CLAY, GRAY, VERY FIRM, MOIST		
470	5	5					CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, MOIST		
				0.6					
						SC	SAND, BROWN, FINE TO COARSE GRAIN, VERY SILTY, CLAYEY, SATURATED		
465	10	5		0.8		CL	CLAY, RED BROWN, VERY FIRM, SLIGHTLY SILTY, SLIGHTLY MOIST		
				0.5					
460	15	5		0.4					
				0.7			CLAY, RED BROWN, SILTY, SLIGHTLY SANDY, MOIST, SATURATED AT 21' BGS		
455	20	5		0.9					
				1.9					
450	25	5		21.1		GC	GRAVEL, BROWN, FINE TO COARSE, SANDY, FINE TO MEDIUM GRAIN, SLIGHTLY SILTY, SLIGHTLY CLAYEY, SATURATED GRAVEL, BROWN, FINE TO COARSE GRAIN, SANDY, FINE TO MEDIUM GRAIN, VERY SILTY, CLAYEY		
445									

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-163		Date(s): **10/8/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **K. Stonestreet**	
Contractor: **Able Environmental**		Purpose: **Injection Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **474.00 amsl**	TOC Elevation: **473.78 amsl**
Sampling Method: **Soil Cuttings**		North: **368945.62**	East: **590779.72**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **25.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 20 FT	Project Number: **3434446A**	
Screen: Sch. 40 0.10 PVC	20 FT to 25 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 16 FT	Remarks:	
Bentonite	16 FT to 18 FT		
Sand	18 FT to 25 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							CONCRETE		Flush Mount
							GRAVEL FILL		
							CLAY FILL, DARK GRAY, VERY STIFF, MOIST		
470	5					CL	CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, SLIGHTLY MOIST		
465	10								
							CLAY, RED BROWN AND GRAY, SILTY, SLIGHTLY SANDY, FINE GRAIN, SLIGHTLY MOIST		
460	15								
455	20					GC	GRAVEL, BROWN, FINE TO MEDIUM GRAIN, SANDY, FINE TO MEDIUM GRAIN, SILTY, SLIGHTLY CLAYEY, SOME COARSE GRAVEL, SATURATED		
							GRAVEL, BROWN, FINE TO MEDIUM GRAIN, SANDY, FINE TO MEDIUM GRAIN, VERY SILTY, CLAYEY, SATURATED		
450	25								
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-164		Date(s): **10/8/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **K. Stonestreet**	
Contractor: **Able Environmental**		Purpose: **Injection Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **474.06 amsl**	TOC Elevation: **473.77 amsl**
Sampling Method: **HSA Continuous Sampler**		North: **368943.85**	East: **590805.07**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **25.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 20 FT	Project Number: **3434446A**	
Screen: Sch. 40 0.10 PVC	20 FT to 25 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 16 FT	Remarks:	
Bentonite	16 FT to 18 FT		
Sand	18 FT to 25 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
				0.5			CONCRETE		Flush Mount
							GRAVEL FILL		
							CLAY FILL, DARK GRAY, VERY STIFF, MOIST		
470		5		0.3		CL	CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM		
	5			0.5					
		5		0.7					
465	10								
				0.7					
							CLAY, RED BROWN AND GRAY, SILTY, SLIGHTLY SANDY, FINE GRAIN, SLIGHTLY MOIST		
		5		4.8					
460	15								
				139.5					
		5		245.5		GC	GRAVEL, BROWN, FINE TO MEDIUM GRAIN, SANDY, FINE TO MEDIUM GRAIN, SOME COARSE GRAVEL		
455	20								
							GRAVEL, BROWN, FINE TO MEDIUM GRAIN, SANDY, FINE TO MEDIUM GRAIN, VERY SILTY, CLAYEY, SATURATED		
		3							
450	25								
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-165	Date(s): **10/1/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **473.469 amsl** / TOC Elevation: **473.23 amsl**
Sampling Method: **Soil Cuttings**	North: **368944.20** / East: **590831.24**
Borehole Dia.: **8.25 inches**	Total Depth: **25.0 feet**
Project Number: **3434446A**	
Project Name: **Whirlpool Corporation**	
Remarks:	

Well Construction:

Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 20 FT
Screen:	Sch. 40 0.10 PVC	20 FT to 25 FT
Annular Fill:	Cement Grout	0 FT to 16 FT
	Bentonite	16 FT to 18 FT
	Sand	18 FT to 25 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
470	0						GRAVEL FILL/RAIL ROAD BED		Flush Mount
							CLAY FILL, GRAY, VERY FIRM		
	5					CL	CLAY, RED BROWN, SOME GRAVEL, SLIGHTLY SILTY, VERY FIRM, SLIGHTLY MOIST		
465									
	10						CLAY, RED BROWN AND GRAY, VERY SILTY, SLIGHTLY SANDY, FINE GRAIN, SLIGHTLY MOIST, WATER SEAM AT 16' BGS AND 18' BGS		
460									
	15								
455									
	20					GC	GRAVEL, BROWN, FINE TO COARSE GRAIN, SILTY, SLIGHTLY CLAYEY, SLIGHTLY SANDY		
450									
	25								
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-166		Date(s): **10/1/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **K. Stonestreet**	
Contractor: **Able Environmental**		Purpose: **Injection Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **473.451 amsl**	TOC Elevation: **473.28 amsl**
Sampling Method: **Soil Cuttings**		North: **368942.60**	East: **590852.99**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **25.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 20 FT	Project Number: **3434446A**	
Screen: Sch. 40 0.10 PVC	20 FT to 25 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout Bentonite Sand	0 FT to 16 FT 16 FT to 18 FT 18 FT to 25 FT	Remarks:	

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
470	0						GRAVEL FILL/RAIL ROAD BED		Flush Mount
							CLAY FILL, GRAY, VERY FIRM		
	5					CL	CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, SLIGHTLY MOIST, SOME GRAVEL		
465									
	10						CLAY, RED BROWN AND GRAY, VERY SILTY, SLIGHTLY SANDY, FINE GRAIN, SLIGHTLY MOIST		
460									
	15								
455									
	20					GC	GRAVEL, BROWN, FINE TO COARSE GRAIN, SILTY, CLAYEY, SLIGHTLY SANDY		
450									
	25								
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-167		Date(s): **10/1/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **K. Stonestreet**	
Contractor: **Able Environmental**		Purpose: **Injection Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **473.646 amsl**	TOC Elevation: **473.27 amsl**
Sampling Method: **Soil Cuttings**		North: **368940.48**	East: **590891.77**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **27.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 20 FT	Project Number: **3434446A**	
Screen: Sch. 40 0.10 PVC	20 FT to 25 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout Bentonite Sand	0 FT to 16 FT 16 FT to 18 FT 18 FT to 27 FT	Remarks:	

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							GRAVEL FILL/RAIL ROAD BED		Flush Mount
470	5					CL	CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, SLIGHTLY MOIST, SOME GRAVEL, MEDIUM TO COARSE GRAIN		
465	10								
460	15						CLAY, RED BROWN AND GRAY, VERY SILTY, SLIGHTLY SANDY, FINE GRAIN, SLIGHTLY MOIST		
455	20					SC	SAND, RED BROWN, FINE GRAIN, VERY SILTY, CLAYEY, VERY MOIST (SATURATED)		
							SAND, BROWN, FINE TO COARSE GRAIN, SILTY, SLIGHTLY CLAYEY, SATURATED		
450							SAND, BROWN TO RED BROWN, FINE GRAIN, VERY SILTY, SLIGHTLY CLAYEY, SATURATED		
	25					GC	GRAVEL, BROWN, VERY CLAYEY, VERY SILTY, SLIGHTLY MOIST		
						SC	SAND, RED BROWN, FINE GRAIN, VERY CLAYEY, VERY SILTY, SOME GRAVEL, SLIGHTLY MOIST		
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 12/9/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-168		Date(s): **10/1/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **K. Stonestreet**	
Contractor: **Able Environmental**		Purpose: **Injection Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **473.675 amsl**	TOC Elevation: **473.40 amsl**
Sampling Method: **Soil Cuttings**		North: **368939.66**	East: **590911.37**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **25.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 20 FT	Project Number: **3434446A**	
Screen: Sch. 40 0.10 PVC	20 FT to 25 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout Bentonite Sand	0 FT to 16 FT 16 FT to 18 FT 18 FT to 25 FT	Remarks:	

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							GRAVEL FILL/RAIL ROAD BED		Flush Mount
470	5					CL	CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, SOME GRAVEL, MEDIUM TO COARSE GRAIN		
465	10								
460	15						CLAY, RED BROWN AND GRAY, VERY SILTY, SLIGHTLY SANDY, FINE GRAIN, SLIGHTLY MOIST		
455	20					SC	SAND, RED BROWN, FINE GRAIN, VERY SILTY, CLAYEY, VERY MOIST (SATURATED)		
							SAND, BROWN, FINE TO COARSE GRAIN, SILTY, SLIGHTLY CLAYEY, SATURATED		
450	25						SAND, RED BROWN, FINE GRAIN, VERY SILTY, SLIGHTLY CLAYEY, SATURATED		
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-169		Date(s): **9/30/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **K. Stonestreet**	
Contractor: **Able Environmental**		Purpose: **Injection Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **473.935 amsl**	TOC Elevation: **473.70 amsl**
Sampling Method: **Soil Cuttings**		North: **368922.88**	East: **590740.66**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **26.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 21 FT	Project Number: **3434446A**	
Screen: Sch. 40 0.10 PVC	21 FT to 26 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout Bentonite Sand	0 FT to 17 FT 17 FT to 19 FT 19 FT to 26 FT	Remarks:	

Elevation (ft)	Depth (ft)	Material Description	USCS Code
	0	CONCRETE	
		CLAY, GRAY, VERY SILTY, MOIST	CL
470	5	CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, STIFF	
465	10	CLAY, RED BROWN AND GRAY, VERY SILTY, FIRM, SLIGHTLY MOIST	
460	15	CLAY, RED BROWN AND GRAY, VERY SILTY	
455	20		
		GRAVEL, BROWN, SILTY, CLAYEY, FINE TO COARSE GRAIN, INCREASING SILT AND CLAY WITH DEPTH	GC
450	25		
445			

Well Construction: Flush Mount

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 12/9/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-170	Date(s): **9/30/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **473.937 amsl** / TOC Elevation: **473.43 amsl**
Sampling Method: **Soil Cuttings**	North: **368921.60** / East: **590765.64**
Borehole Dia.: **8.25 inches**	Total Depth: **26.0 feet**
Project Number: **3434446A**	
Project Name: **Whirlpool Corporation**	
Remarks:	

Well Construction:

Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 19 FT
Screen:	Sch. 40 0.10 PVC	21 FT to 26 FT
Annular Fill:	Cement Grout	0 FT to 17 FT
	Bentonite	17 FT to 19 FT
	Sand	19 FT to 26 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							CONCRETE		Flush Mount
						CL	CLAY, BROWN, VERY SILTY, MOIST		
470	5						CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM		
465	10						CLAY, RED BROWN, SILTY, SLIGHTLY FIRM		
460	15						CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, STIFF		
455	20						CLAY, RED BROWN AND GRAY, VERY SILTY, VERY SOFT, SLIGHTLY MOIST		
450	25					GC	GRAVEL, BROWN, FINE TO COARSE GRAIN, SLIGHTLY SILTY, SLIGHTLY CLAYEY, INCREASING SILT WITH DEPTH		
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: IW-171	Date(s): **9/30/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	Checked By: **K. Stonestreet**
Contractor: **Able Environmental**	Purpose: **Injection Well**
Drilling Method: **Hollow Stem Auger**	GS Elevation: **474.00 amsl** / TOC Elevation: **473.54 amsl**
Sampling Method: **Soil Cuttings**	North: **368919.50** / East: **590790.83**
Borehole Dia.: **8.25 inches**	Total Depth: **26.0 feet**
Project Number: **3434446A**	
Project Name: **Whirlpool Corporation**	
Remarks:	

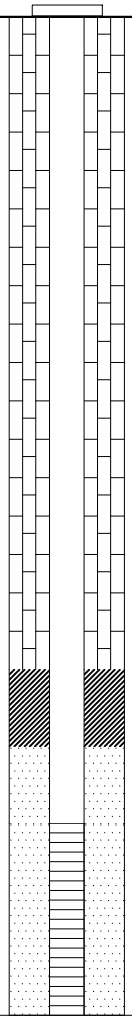
Well Construction:

Blank Casing:	Sch 40 PVC 2 Inch	0 FT to 21 FT
Screen:	Sch. 40 0.10 PVC	21 FT to 26 FT
Annular Fill:	Cement Grout	0 FT to 17 FT
	Bentonite	17 FT to 19 FT
	Sand	19 FT to 26 FT

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description
							CONCRETE
						CL	CLAY, GRAY AND BROWN, VERY SILTY, MOIST
470	5						CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM
465	10						CLAY, RED BROWN, SILTY, SLIGHTLY FIRM, SLIGHTLY MOIST
460	15						CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM
455	20						CLAY, RED BROWN AND GRAY, VERY SILTY, VERY SOFT, SLIGHTLY MOIST
450	25					GC	GRAVEL, BROWN, FINE TO COARSE GRAIN, SILTY, INCREASING SILT WITH DEPTH
445							

Water Level

Well Construction
Flush Mount



Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: MW-172		Date(s): **10/10/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **W. Weber**	
Contractor: **Able Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **473.44 ft amsl**	TOC Elevation: **472.94 ft amsl**
Sampling Method: **HSA Continuous Sampler**		North: **369001.92**	East: **590858.17**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **28.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 18 FT	Project Number: **3433244A**	
Screen: Sch. 40 0.10 PVC	18 FT to 28 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout Bentonite Sand	0 FT to 14 FT 14 FT to 16 FT 16 FT to 28 FT	Remarks: ST = Shelby tube collection location for geotechnical analysis. Logs modified from field notes to incorporate geotechnical results	

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							CONCRETE		Flush Mount
							GRAVEL FILL		
						CL	CLAY, RED BROWN, FIRM, SLIGHTLY SILTY, SLIGHTLY MOIST		
470		5	MW-172 (4)	0.4					
	5			0.3					
		5							
465			MW-172 (9.5)	5.8					
	10						CLAY, RED BROWN, VERY SILTY, FIRM TO SOFT, SLIGHTLY MOIST		
				4.1					
		5							
460			MW-172 (14)	9.7					
	15						CLAY, RED BROWN, VERY SILTY, SLIGHTLY SANDY, FINE GRAIN, SATURATED		
				126.1					
		3	MW-172 (18)						
455									
			MW-172 (20)						
	20		ST(20-22)			SC-SM	SAND, BROWN, FINE TO COARSE GRAIN, SILTY, SLIGHTLY CLAYEY, TRACE GRAVEL, FINE GRAIN,SATURATED		
				105.9					
		5				SM	SAND, BROWN, FINE TO COARSE GRAIN, SILTY, GRAVEL, FINE GRAIN, SLIGHTLY CLAYEY, SATURATED		
450				61					
			MW-172 (25)						
	25	3	ST(25-27)						
				148.3					
							SHALE		
445									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 2/11/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: MW-92		Date(s): **9/29/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **W. Weber**	
Contractor: **Able Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **473.92 ft amsl**	TOC Elevation: **473.74 ft amsl**
Sampling Method: **HSA Continuous Sampler**		North: **368920.63**	East: **590777.74**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **30.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 20 FT	Project Number: **3433244A**	
Screen: Sch. 40 0.10 PVC	20 FT to 30 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout Bentonite Sand	0 FT to 16.5 FT 16.5 FT to 18.5 FT 18.5 FT to 30 FT	Remarks: ST = Shelby tube collection location for geotechnical analysis. Logs modified from field notes to incorporate geotechnical results	

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							CONCRETE		Flush Mount
						CL	CLAY, GRAY, VERY SILTY, MOIST		
		5	MW-92 (4)	0.9					
470	5						CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, STIFF		
			MW-92 (7)	0					
		5	MW-92 (8)						
				0.1			CLAY, RED BROWN, SILTY, SANDY, FINE GRAIN, SLIGHTLY FIRM		
465	10		ST(8-10)						
				0					
		5							
			MW-92 (14)	0.1					
460			MW-92 (15)				CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, STIFF		
	15			2.2					
			ST(15-17)						
		5					CLAY, RED BROWN AND GRAY, VERY SILTY, VERY SOFT, SLIGHTLY MOIST		
455				13.9					
	20		MW-92 (20)						
		3				SC	SAND, BROWN, CLAYEY, SILTY, GRAVEL, MEDIUM TO COARSE GRAIN, SATURATED		
			MW-92 (24)	12.2					
450			MW-92 (25)						
	25		ST(25-26)						
				13.7		GC	GRAVEL, BROWN, SLIGHTLY SILTY, SLIGHTLY CLAYEY, VERY COARSE GRAIN		
		5							
445				0.1			GRAVEL, RED BROWN, SLIGHTLY SILTY, SOFT, VERY MOIST		
							SHALE		

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 2/11/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: MW-93		Date(s): **10/2/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **W. Weber**	
Contractor: **Able Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **478.03 ft amsl**	TOC Elevation: **477.81 ft amsl**
Sampling Method: **HSA Continuous Sampler**		North: **368894.37**	East: **590908.03**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **35.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 25 FT	Project Number: **3433244A**	
Screen: Sch. 40 0.10 PVC	25 FT to 35 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout Bentonite Sand	0 FT to 21 FT 21 FT to 23 FT 23 FT to 35 FT	Remarks: ST = Shelby tube collection location for geotechnical analysis. Logs modified from field notes to incorporate geotechnical results	

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							CONCRETE		Flush Mount
475		5	MW-93 (5)	0			SAND FILL, DARK BROWN, FINE TO MEDIUM GRAIN, VERY SILTY		
	5		MW-93 (7)	0		CL	CLAY, RED BROWN AND GRAY, SLIGHTLY SILTY, VERY FIRM, SOME GRAVEL		
470		2.5		0					
	10		MW-93 (10)	0					
465		5		0					
	15			0.2					
460		5	MW-93 (19)	3.4			CLAY, RED BROWN AND GRAY, VERY SILTY, SOFT, SLIGHTLY MOIST		
	20		MW-93 (20) ST(20-22)	93.3		SC-SM	SAND, RED BROWN, FINE GRAIN, SILTY, SLIGHTLY CLAYEY, SATURATED		
455		5	MW-93 (23)	211.8		CL	CLAY, RED BROWN AND GRAY, VERY SILTY, CLAYEY, MOIST, SOME GRAVEL		
	25		MW-93 (25) ST(25-27)	147		SM	SAND, BROWN, FINE GRAIN, SILTY, TRACE GRAVEL, FINE TO MEDIUM GRAIN, SATURATED		
450		2.5				GC	GRAVEL, BROWN, FINE TO COARSE GRAIN, VERY SILTY, VERY CLAYEY, SANDY, FINE TO COARSE GRAIN, SATURATED		

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 2/11/15

ENVIRON

2118 North Tyler Road Building A, Wichita, KS 67212

Site ID: MW-93
Project Name: **Whirlpool Corporation**
Project Number: **3433244A**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
445		5	MW-93 (34.5)	96.4		GC			
						SC-SM	SAND, RED BROWN, FINE TO MEDIUM GRAIN, GRAVEL, COARSE GRAIN, SATURATED		
	35						SHALE		
440									
	40								
435									
	45								
430									
	50								
425									
	55								
420									
	60								
415									
	65								
410									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 2/11/15

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: MW-94		Date(s): **10/2/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **K. Stonestreet**	
Contractor: **Able Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **478.04 amsl**	TOC Elevation: **477.86 amsl**
Sampling Method: **HSA Continuous Sampler**		North: **368903.07**	East: **591014.94**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **35.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 25 FT	Project Number: **3434446A**	
Screen: Sch. 40 0.10 PVC	25 FT to 35 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout Bentonite Sand	0 FT to 21 FT 21 FT to 23 FT 23 FT to 35 FT	Remarks:	

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							CONCRETE		Flush Mount
							SAND FILL, DARK BROWN, FINE GRAIN, VERY SILTY		
475		5		0.7					
	5		MW-94(5)			CL	CLAY, RED BROWN AND GRAY, SLIGHTLY SILTY, SOME GRAVEL, VERY FIRM, SLIGHTLY MOIST		
470		4		0.1					
	10		MW-94(10)	0					
465		5		0					
	15		MW-94(15)	0			CLAY, RED BROWN AND GRAY, SILTY, SLIGHTLY CLAYEY, FIRM		
460		5	MW-94(19)	0					
	20			0.5			CLAY, RED BROWN AND GRAY, VERY SILTY, SLIGHTLY CLAYEY, VERY MOIST		
455		5	MW-94(24)	3.9		ML	SILT, RED BROWN, SLIGHTLY SANDY, SLIGHTLY CLAYEY, SATURATED		
	25					CL	CLAY, RED BROWN, VERY SILTY, CLAYEY, SOME GRAVEL, MOIST		
				10.9			CLAY, RED BROWN, VERY SILTY, VERY SANDY, SATURATED		
450		5		71.1		SC	SAND, BROWN, FINE TO MEDIUM GRAIN, SILTY, CLAYEY, SOME GRAVEL, SATURATED		

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: MW-94

Project Name: **Whirlpool Corporation**

Project Number: **3434446A**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
445	35	5	MW-94(30)	9.5		SC			
			MW-94(33)	39.9		CL	CLAY, RED BROWN AND BROWN, SLIGHTLY SILTY, SLIGHTLY SANDY, SOME GRAVEL, SLIGHTLY MOIST		
							SHALE		
440	40								
435	45								
430	50								
425	55								
420	60								
415	65								
410									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: MW-95		Date(s): **10/3/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **K. Stonestreet**	
Contractor: **Able Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **478.02 amsl**	TOC Elevation: **477.63 amsl**
Sampling Method: **HSA Continuous Sampler**		North: **368821.04**	East: **590981.22**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **35.0 feet**
Blank Casing: Sch 40 PVC 2 Inch	0 FT to 25 FT	Project Number: **3434446A**	
Screen: Sch. 40 0.10 PVC	25 FT to 35 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout Bentonite Sand	0 FT to 21 FT 21 FT to 23 FT 23 FT to 35 FT	Remarks:	

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							CONCRETE		Flush Mount
							SAND FILL, DARK BROWN, FINE TO MEDIUM GRAIN, VERY SILTY		
475		2.5							
	5		MW-95(5)			CL	CLAY, RED BROWN, VERY SILTY, SLIGHTLY SANDY, SOME GRAVEL, SLIGHTLY FIRM		
			MW-95(7)						
470		2.5							
	10								
465		5	MW-95(14)				CLAY, RED BROWN, SLIGHTLY SILTY, VERY FIRM, SLIGHTLY MOIST		
	15								
460		5					CLAY, RED BROWN, VERY SILTY, SOFT, SLIGHTLY MOIST		
	20		MW-95(20)						
455		5							
	25		MW-95(25)			SC	SAND, RED BROWN, GRAVEL, FINE TO MEDIUM GRAIN, VERY SILTY, SATURATED		
450		3	MW-95(28)				SAND, RED BROWN, FINE GRAIN, VERY SILTY, SLIGHTLY CLAYEY, SATURATED		

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: MW-95

Project Name: **Whirlpool Corporation**

Project Number: **3434446A**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
445		5	MW-95(33)				SAND, BROWN, FINE GRAIN, GRAVEL, FINE TO MEDIUM GRAIN, VERY SILTY, VERY CLAYEY, SLIGHTLY MOIST		
	35						SHALE		
440									
	40								
435									
	45								
430									
	50								
425									
	55								
420									
	60								
415									
	65								
410									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS.GPJ; 10/31/14

Appendix B
Waste Disposal Records

American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

Non-Hazardous Waste Manifest

469549

1021

Generator

Generator's Name: Whirlpool corp

Mailing Address: 6400 Jenny Lake Rd

Ft Smith AR

City State Zip

Point of Generation Address: SAME

City State Zip

Contact: Ken Duckworth

Name Phone

Manifest Job No. soil MN233WPC01

Bill to Name: ERS

Address: 1105 North 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
Soil Borings		Roll off #3		
RA				

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.

Ken Duckworth — Generator Authorized Agent Name

[signature] — Signature

10-17-14 — Shipment Date

Transporter

Transporter Name: ERS

Address: 1105 North Peoria

City, State Zip: Tulsa OK

Driver Name (Print): Rick Albertson

Tag No. 656 State: OK

USDOT No. 875510

I hereby certify that the above material was picked up at the generator site listed above.

x [signature] — Driver Signature

10-28-14 — Ship Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

x [signature] — Driver Signature

10-28-14 — 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.

[signature] — Name of Authorized Agent

[signature] — Signature

10-28-14 — Receipt Date

White – Destination Retention • Yellow – Return to Bill to • Pink – Transporter Retain • Goldenrod – Generator Retain

AMERICAN ENVIRON. LANDFILL
A.E.L.
1420 W. 35TH ST., SUITE B
TULSA, OK. 74107-3814

Weighed: Laura King
Deposit: Micki King
BILL TO: 233
ERS

Vehicle ID: 233-1021
Reference:
Generator: WHIRLPOOL CORP
Street: 6400 JENNG LANE RD
City/State: FT SMITH AR
PO#: MN233WPC01

DATE IN: 10/28/2014 TIME IN: 13:05:42
DATE OUT: 10/28/2014 TIME OUT: 13:26:30

INBOUND TICKET Number: 01-469549

SCALE 1 GROSS WT.	65480	LB
SCALE 2 TARE WT.	33860	LB
NET WEIGHT	31620	LB

American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

Non-Hazardous Waste Manifest

1171869 RB337736 1021

Generator

Generator's Name: Whirlpool corp

Mailing Address: 6400 Jenny Lake Rd

Ft Smith AR

City State Zip

Point of Generation Address: same

City State Zip

Contact: Ken Duckworth 918-532-5555

Name Phone

Manifest Job No. soil 111N233WPC01

Bill to Name: ERS

Address: 1105 North Peoria

Tulsa ok

City State Zip

Contact: Ken Duckworth 918 832-5866

Name Phone

Common Name of Waste Material	Container No.	Container Type	Total Quantity	Unit
Soil Boring 5		Rolloff		
		By #RB337736		
		RB337736		

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.

Ken Duckworth — Generator Authorized Agent Name

Signature

Nov 1st 2014 — Shipment Date

Transporter

Transporter Name: ERS

Address: 1105 North Peoria

City, State Zip: Tulsa OK 74145

Driver Name (Print): Jim Alvarado

Tag No. ~~856~~ 5619 State: ok

USDOT No. 975516

I hereby certify that the above material was picked up at the generator site listed above.

Driver Signature

Nov 1st 2014 — Ship Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature

11-1-2014 — 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

11-1-14 — Receipt Date

White – Destination Retention • Yellow – Return to Bill to • Pink – Transporter Retain • Goldenrod – Generator Retain

AMERICAN ENVIRON. LANDFILL
A.E.L.
1420 W. 35TH ST., SUITE B
TULSA, OK. 74107-3814

Weighed: Laura King
Deposit: Micki King
BILL TO: 233
ERS

Vehicle ID: 233-1021
Reference:
Generator: MNFST WHIRLPOOL CORP
Street: 6400 JENNY LANE RD
City/State: FT SMITH AR
PO#: MN233WPC01

DATE IN: 11/05/2014 TIME IN: 13:58:02
DATE OUT: 11/05/2014 TIME OUT: 14:25:22

INBOUND TICKET Number: 01-471069

SCALE 1 GROSS WT.	63400	LB
SCALE 2 TARE WT.	34200	LB
NET WEIGHT	29200	LB

American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

Non-Hazardous Waste Manifest

4/16/16

RB37733RT

1021

Generator

Generator's Name: Whirlpool Corp

Mailing Address: 6400 Jenny Lane Rd

Ft Smith Ark.
City State Zip

Point of Generation Address: Same

City State Zip

Contact: Ken Duckworth
Name Phone

Manifest Job No. Soil 11IN233WPC01

Bill to Name: ERS

Address: 1105 North Peoria

Tulsa OK
City State Zip

Contact: Ken Duckworth 918-832-8888
Name Phone

Common Name of Waste Material	Container No.	Container Type	Total Quantity	Unit
Soil Borings		Rolloff Box # RB37670 RB37733RT		

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.

Ken Duckworth — Generator Authorized Agent Name

Signature

Nov 1st 2014 — Shipment Date

Transporter

Transporter Name: ERS

Address: 1105 North Peoria

City, State Zip: Tulsa OK

Driver Name (Print): (Ralph)

Tag No. ~~456~~ 18580 State: OK

USDOT No. 575510

I hereby certify that the above material was picked up at the generator site listed above.

Driver Signature

Nov 1 2014 — Ship Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature

Nov 1st 2014 — 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

11-5-14 — Receipt Date

White – Destination Retention • Yellow – Return to Bill to • Pink – Transporter Retain • Goldenrod – Generator Retain

AMERICAN ENVIRON. LANDFILL
A.E.L.
1420 W. 35TH ST., SUITE B
TULSA, OK. 74107-3814

Weighed: Laura King
Deposit: Micki King
BILL TO: 233
ERS

Vehicle ID: 233-1021
Reference:
Generator: MNFST WHIRLPOOL CORP
Street: 6400 JENNY LANE RD
City/State: FT SMITH AR
PO#: MN233WPC01

DATE IN: 11/05/2014 TIME IN: 10:16:32
DATE OUT: 11/05/2014 TIME OUT: 10:58:48

INBOUND TICKET Number: 01-470976

SCALE 1 GROSS WT.	50560	LB
SCALE 2 TARE WT.	34920	LB
NET WEIGHT	15640	LB

American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

Non-Hazardous Waste Manifest

1671 G1650 FNG 1021

Generator

Generator's Name: Whirlpool Corp

Mailing Address: 2300 Highway Line Rd

Ft Smith

City State Zip

Point of Generation Address: Same

City State Zip

Contact: Ken Duckworth 918-832-5558

Name Phone

Manifest Job No.

Bill to Name:

Address:

City State Zip

Contact: Ken Duckworth 832-

Name Phone

Common Name of Waste Material	Container No.	Container Type	Total Quantity	Unit
Soil Borings		Rolloff		
		Box # RB 2	670 Lt	

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.

Generator Authorized Agent Name | Signature | Shipment Date: 11-2-2014

Transporter

Transporter Name: ERS

Address: 1104 North Peoria

City, State Zip: Tulsa OK 74148

Driver Name (Print):

Tag No. 156 State: OK

USDOT No.

I hereby certify that the above material was picked up at the generator site listed above.

Driver Signature | Ship Date: 11-2-2014

I hereby certify that the above named material was delivered without incident to the destination listed below.

Driver Signature | Delivery Date: 11614

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 | Receipt Date: 11614

White – Destination Retention • Yellow – Return to Bill to • Pink – Transporter Retain • Goldenrod – Generator Retain

AMERICAN ENVIRON. LANDFILL
A.E.L.
1420 W. 35TH ST., SUITE B
TULSA, OK. 74107-3814

Weighed: Micki King
BILL TO: 233
ERS

Vehicle ID: 233-1021
Reference:
Generator: MNFST WHIRLPOOL
Street: 6400 JENNY LANE
City/State: FT SMITH

DATE IN: 11/06/2014 TIME IN: 10:08:32
DATE OUT: 11/06/2014 TIME OUT: 10:08:32

INBOUND TICKET Number: 01-471186

MANUAL GROSS WT.	51680	LB
MANUAL TARE WT.	34020	LB
NET WEIGHT	17660	LB

Projects #: 0-0

Order #: 117674

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
ARD042756389 / D0005		See Section 14	002651799 GBF

GENERATOR

5. Generator's Name and Mailing Address
Whirlpool Corporation
6400 Jenny Lind Rd.
Fort Smith, AR 72908
Generator's Phone: 918-457-9959 ATTN

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name
Effective Environmental, Inc.
PH#: 972-329-1700
State ID#: TX-87158-AR-H-138
U.S. EPA ID Number: TXD980811046

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
TM Deer Park Services LP
2525 Independence Parkway South
Deer Park, Texas 77536
State ID#: 32299
U.S. EPA ID Number: TXD000719518
Facility's Phone: 281.930.2525

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
M	1. RQ, NA3082, Hazardous waste, liquid, n.o.s. (D040, water with trichloroethylene), 9, PG III, ERG 171	01	TI	1700	G	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
01: Wash Water with D040 (PT 11141213)
EMERGENCY RESPONSE PHONE: 214-635-1500
ON CALL SUPERVISOR

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name | Signature | Month | Day | Year

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name | Signature | Month | Day | Year

Transporter 2 Printed/Typed Name | Signature | Month | Day | Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

18b. Alternate Facility (or Generator) Manifest Reference Number:
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator) | Month | Day | Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H134			

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name | Signature | Month | Day | Year

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

GENERATOR'S INITIAL COPY

Project #: 0-0 Order #: 117674

Straight Bill of Lading-Short Form-Original-Not Negotiable - Effective Environmental, Dallas 972-329-1200

NAME OF CARRIER:	CARRIER NUMBER:	Pickup DATE/TIME:	ZONE:
Effective Environmental, Inc. - TXD980811046	TX-87158-AR-H-136	12/30/2014	OD41

PICK UP MATERIAL

FROM: SHIPPER (ORIGIN)
Whirlpool Corporation (1009089)
6400 Jenny Lind Rd
Fort Smith, AR 72908

918-437-9999 ATTN: `

MAPSCO: PO #:

DELIVERING CARRIER:
Effective Environmental, Inc.

TO: CONSIGNEE
TM Deer Park Services LP
2525 Independence Parkway South
Deer Park, Texas 77536

Site Address:
,

*** PICKUP ITEMS ***

# PACKAGES	+HM	KIND OF PACKAGE, DESCRIPTION OF ARTICLES, SPECIAL MARKS AND EXCEPTIONS	
1 TT	☑	11141213 - Wash Water with D040	P2F___ P3F___ MDF___ SDF___ ND___
(5000G)		RQ, NA3082, Hazardous waste, liquid, n.o.s. (D040, water with trichloroethylene), 9, PG III, ERG 171	

PO #:

********** 24 HOUR EMERGENCY CONTACT **********
972-329-1200

PICK UP TIME	DELIVERY TIME	PORTAL-TO-PORTAL TIME
IN: OUT:	IN: OUT:	OUT: IN:

NOTES:

PLACARDS SUPPLIED: ☐ YES ☐ NO DRIVER SIGNATURE: ☐ C.O.D. FEE: ☐ Prepaid ☐ Collect

REMIT C.O.D. TO : Effective Environmental, Inc. - Dallas C.O.D. Amt $: **Total Charges $:**

Shipper: I understand that this is both a shipping and receiving document. As shipper/generator, I hereby declare that the contents of this consignment are fully and accurately described above by proper shipping name and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport by highway according to international and national government regulations, including applicable state regulations. If this shipment contains used oil or antifreeze related products this document will be considered a Non Hazardous Special Waste Manifest. I, as generator/shipper, hereby certify to the best of my knowledge, this company facility does not generate waste that would require submittal of a Special Waste Disposal Form. Additionally, upon generating such waste, I will notify Effective Environmental, Inc. and submit all forms. Furthermore, the material is not designated a hazardous waste by USEPA or applicable state agency pursuant to RCRA nor does it contain PCB's regulated by TSCA, 40CFR 761. As receiving agent, I hereby declare that the contents of this delivery have been received in apparent good order unless otherwise stated. Finally, I and/or my company have agreed to compensate Effective Environmental, Inc according to the rates established by quotation or other written communication. Failure to satisfy this expectation can result in the return of materials accepted for disposal or the retrieval of products delivered.

Shipper Signature: X Date: X 12/30/14

Destination Facility Owner or Operator: Certification of receipt of materials covered by this Bill of Lading except as otherwise noted.

Consignee Signature:_____ Date:_____

LAND DISPOSAL RESTRICTION NOTIFICATION FORM

For Wastes Subject to the Treatment Standards Found in 40 CFR 268

Order No: 117674

Generator Name: Whirlpool Corporation

Manifest No: 002651799GBF

WMDS	WW / NWW	EPA Waste Codes / Underlying Hazardous Constituents	LDR Code
11141213	/ X	D040 /	E

LDR CODES

A. **Restricted Waste Meets Treatment Standards (40 CFR 268.7(a) (3))**
The restricted waste identified above meets the treatment standards in 40 CFR 268.40 or Alternative LDR treatment standards for contaminated soil 40 CFR 268.49 and can be landfill disposed without further treatment. I have attached all supporting analytical data, where available.
I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

B. **Restricted Waste Treated To Treatment Standards (40 CFR 268.7(b) (l) and 268.7 (b) (2))**
The treatment residue, or extract of such residue, or the restricted waste identified above has been tested to assure that the treatment residues or extract meet all applicable treatment standards in 40 CFR 268.40 and/or performance standards in 40 CFR 268.45. I have attached all supporting analytical data, where available.
I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR Part 268 Subpart D. I believe that the information I submitted is true, accurate and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

C. **Restricted Waste With Technology Based Treatment Standards (40 CFR 268.7(b) (4))**
I certify under penalty of law that I personally have examined and am familiar with the treatment technology and operation of the treatment process used to support this certification and that based on my inquiry of those individuals immediately responsible for obtaining this information. I believe that the treatment process has been operated and maintained properly so as to comply with the treatment standards specified in 40 CFR 268.40, without impermissible dilution of the prohibited waste. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

D. **Restricted Waste Decharacterized But Requires Treatment For UHC (40 CFR 268.9)**
I certify under penalty of law that the waste has been treated in accordance with the requirements of 40 CFR 268.40 to remove the hazardous characteristic. This decharacterized waste contains Underlying Hazardous Constituents (UHC) that require further treatment to meet the universal treatment standards. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

E. **Restricted Waste Subject To Treatment (40 CFR 268.7(a) (2))**
The restricted waste identified above must be treated to the applicable treatment standards in 40 CFR 268.40, or treated to comply with applicable prohibitions set forth in Part 268.32 or RCRA Section 3004(d). I have attached all supporting analytical data, where available.

F. **Hazardous Debris Subject To Treatment (40 CFR 268.45)**
This hazardous debris identified above must be treated to the alternative treatment standards in 40 CFR 268.45.

G. **Restricted Waste Subject To A Variance or Extension (40 CFR 268.7(a) (4))**
This restricted waste identified above is subject to a case by case exemption under 40 CFR 268.5, an exemption under 40 CFR 268.6 or a nationwide capacity variance under Subpart C of 40 CFR 268, and is not prohibited from land disposal. LDR prohibitions become effective on _____(date) for this restricted waste. The corresponding treatment standard(s) are promulgated in 40 CFR 268.40. I have attached all supporting analytical data, where available.

H. **Restricted Waste Managed In A "Lab Pack" (40 CFR 268.7(a) (9))**
I certify under penalty of law that I personally have examined and am familiar with the waste and that the lab pack contains only waste that have been excluded under appendix IV to 40 CFR Part 268 and that this lab pack will be sent to a combustion facility in compliance with the alternative treatment standards for lab packs at 40 CFR 268.42(c). I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.

I certify and warrant that the information that appears on this form, and appended documents, is true and correct. I have correctly indicated how my waste is to be managed in accordance with 40 CFR 268. My certification is based on personal examination of the information submitted, or is based on my inquiries of those individuals responsible for obtaining the information.

Authorized Signature X _____ **Title** 12/30/14 **Date** Tech

Controlled Document

For Internal Use Only

Appendix C
Reagent Material Safety Data Sheets

MATERIAL SAFETY DATA SHEETS

Please note that all Material Safety Data Sheets provided for ISOTEC^{SM} reagents are for pure components in dry form. Prior to in-situ injection, ISOTEC^{SM} catalyst reagent is prepared by diluting these dry components in excess of water, typically by a factor of 50-100 (by weight). Therefore, the properties and effects described in the Material Safety Data Sheets are significantly lower for each component. For hydrogen peroxide, 35% to 50% concentration is typically diluted in water by a factor of 2-7 (by weight).

MSDS # 6368
Brenntag Northeast

kemira

MATERIAL SAFETY DATA SHEET

HYDROGEN PEROXIDE (20 to 60%)

KEM001 Revised March 2010

CHEMICAL PRODUCT/COMPANY IDENTIFICATION

Material Identification

Formula : H_2O_2
Molecular Weight : 34.02

Trade Names and Synonyms

Standard grade hydrogen peroxide aqueous solutions: 30SG, 35SG, 50SG
Kemi-Pure™ food grade hydrogen peroxide aqueous solutions: 30FG, 35FG, 50FG

Product Use Bleaching Agent
Oxidizing Agent

Standard Grade:
- certified by NSF to meet NSF/ANSI Standard 60 requirement for drinking water treatment
- most suitable grade for industrial bleaching; water, effluent and soil treatments; and general oxidation reactions
- Kosher-certified (COR 721)

Kemi-Pure™
- meets Food Chemical Codex requirements food-related applications
- NSF and Kosher-certified

Company Identification

MANUFACTURER/DISTRIBUTOR

Kemira Chemicals Canada Inc.
1380 County Road 2
P.O. Box 615
Maitland, Ontario K0E 1P0

PHONE NUMBERS

Product Information:	1-800-263-5902
Transportation Emergency Response:	1-800-567-7455 (24 HOURS)
Product/Medical Emergency:	1-800-303-4338 (24 HOURS)

NOTICE FROM KEMIRA: The information on this material Safety Data Sheet relates only to the specific material designated herein and does not relate to use in combination with any other material or in any process.

IMPORTANT: While Brenntag believes that the information contained herein to be accurate, Brenntag makes no representation or warranty, express, implied or otherwise regarding and assumes no liability for the accuracy or completeness of the information.
The Buyer assumes all responsibility for using and handling the Product in accordance with applicable federal, state, and local regulations.
This MSDS shall not in any way limit or preclude the operation and effect of any of the provisions of Brenntag's terms and conditions of sale.

kemira

COMPOSITION/INFORMATION ON INGREDIENTS

COMPONENTS

Material	CAS Number	%
Hydrogen Peroxide	7722-84-1	20-60
Water	7732-18-5	80-40

HAZARDS IDENTIFICATION

Potential Health Effects

Hydrogen peroxide may cause severe irritation or burns of the skin, eyes and mucous membranes. Splashes in the eye can cause severe eye damage with ulceration of the cornea and may cause irreversible eye damage, including blindness. Skin exposure can result in bleaching of the skin and hair.

Inhalation of concentrated vapors can cause irritation of the nose and throat with chest discomfort, cough, difficulty in breathing and shortness of breath.

Ingestion can cause irritation of the upper gastrointestinal tract with pain and distention of the stomach and esophagus due to liberation oxygen.

Gross overexposure by ingestion may be fatal.

Human Health Effects:

Skin contact with aqueous solutions of less than 50% may cause irritation with discomfort or rash. Higher or prolonged exposure may result in skin burns or ulceration. Evidence suggests that skin permeation can occur in amounts capable of producing systemic toxicity. Effects of eye contact with aqueous solutions of less than 5% may include eye irritation with discomfort, tearing, or blurring of vision. Higher or prolonged exposure may result in eye corrosion with corneal or conjunctival ulceration. Contact with aqueous concentrations of greater than 10% may result in eye corrosion with corneal or conjunctival ulceration with possible irreversible eye damage, including blindness.

Overexposure by inhalation may cause irritation of the upper respiratory passages or nonspecific discomfort such as nausea, headache, or weakness. Higher inhalation exposures may lead to temporary lung irritation effects with cough, discomfort, difficulty breathing, or shortness of breath; or fatality from gross overexposure. Ingestion may cause irritation of the gastrointestinal tract with upper abdominal pain, "heartburn", nausea, vomiting, and diarrhea. "Coffee grounds" vomitus and black tarry stools may occur as a result of gastrointestinal tract bleeding. Additional effects from overexposure include red blood cell destruction, or gas embolism.

As a consequence of the potential of serious injury through misuse of hydrogen peroxide, by direct human consumption, Health Canada has directed that hydrogen peroxide (≥ 35%) be classified as (acutely) Toxic under its WHMIS program for occupational health hazard awareness.

When used as colonic lavage, hydrogen peroxide has caused gas embolism and gangrene of the intestine at concentrations down to 0.75%. Gross overexposure by ingestion may be fatal.

IMPORTANT: While Brenntag believes that the information contained herein to be accurate, Brenntag makes no representation or warranty, express, implied or otherwise regarding and assumes no liability for the accuracy or completeness of the information.
The Buyer assumes all responsibility for using and handling the Product in accordance with applicable federal, state, and local regulations.
This MSDS shall not in any way limit or preclude the operation and effect of any of the provisions of Brenntag's terms and conditions of sale.

Individuals with preexisting diseases of the skin, eyes, or lungs may have increased susceptibility to the toxicity of excessive exposures.

Carcinogenicity Information

None of the components present in this material at concentrations equal to or greater than 0.1% are listed by IARC, NTP, OSHA or ACGIH as a carcinogen.

FIRST AID MEASURES

First Aid

INHALATION

If inhaled, immediately remove to fresh air. If not breathing, give artificial respiration. If breathing is difficult, give oxygen. Call a physician.

SKIN CONTACT

In case of contact, immediately flush skin with plenty of water for at least 15 minutes while removing contaminated clothing and shoes. Call a physician. Wash contaminated clothing and shoes promptly and thoroughly.

EYE CONTACT

In case of contact, immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

INGESTION

If swallowed, do not induce vomiting. Give large quantities of water. Never give anything by mouth to an unconscious person. Call a physician.

Notes to Physicians:

If swallowed, large amounts of oxygen may be released quickly. The distention of the stomach or esophagus may be injurious. Insertion of a gastric tube may be advisable.

FIRE FIGHTING MEASURES

Flammable Properties

Will not burn, but decomposition, which may be caused by heat or contamination will release oxygen which will increase the explosive limit range and burning rate of flammable vapors.

IMPORTANT: While Brenntag believes that the information contained herein to be accurate, Brenntag makes no representation or warranty, express, implied or otherwise regarding and assumes no liability for the accuracy or completeness of the information.
The Buyer assumes all responsibility for using and handling the Product in accordance with applicable federal, state, and local regulations.
This MSDS shall not in any way limit or preclude the operation and effect of any of the provisions of Brenntag's terms and conditions of sale.

Fire and Explosion Hazards:

Strong oxidizer. Contact with clothing or combustibles may cause fire. Effect may be delayed. Contact with organic liquids or vapors may cause immediate fire or explosion, especially if heated. Under certain circumstances, detonation may be delayed. Oxygen release from hydrogen peroxide may force organic or hydrogen vapors into an explosive range. Follow appropriate National Fire Protection Association (NFPA) codes.

Flash Point: Not Applicable....non-flammable

Upper and Lower Flammability Limits: Not Applicable....non-flammable

Auto-Ignition Temperature: Not Applicable....non-flammable

Explosion Data
- sensitivity to mechanical impact: Not Applicable
- sensitivity to static discharge: Not Applicable

Extinguishing Media

Use only water.

Fire Fighting Instructions

Flood with water. Cool tank/container with water spray.

Wear full protective clothing (rubber suit and boots) including chemical splash goggles or hood and self-contained breathing apparatus.

ACCIDENTAL RELEASE MEASURES

Safeguards (Personnel)

NOTE: Review FIRE FIGHTING MEASURES and HANDLING (PERSONNEL) sections before proceeding with clean-up. Use appropriate PERSONAL PROTECTIVE EQUIPMENT during clean-up.

Accidental Release Measures

Comply with Federal, State and local regulations on reporting releases of wastes. Hold in a diked area until hydrogen peroxide decomposes. May be destroyed with sodium metabisulfite or sodium sulfite (1.9 lbs. SO_2 equivalent per lb. of peroxide) after diluting to 5-10%. Develop acceptable disposal plan in conjunction with necessary regulatory authorities. Disposal method may include dilution to non-impact concentration and drainage to appropriate chemical sewer or waste treatment system.

The Extremely Hazardous Substance List Reportable Quantity for >52% Hydrogen Peroxide is 1 lb.

IMPORTANT: While Brenntag believes that the information contained herein to be accurate, Brenntag makes no representation or warranty, express, implied or otherwise regarding and assumes no liability for the accuracy or completeness of the information.
The Buyer assumes all responsibility for using and handling the Product in accordance with applicable federal, state, and local regulations.
This MSDS shall not in any way limit or preclude the operation and effect of any of the provisions of Brenntag's terms and conditions of sale.

HANDLING AND STORAGE
(ACCIDENTAL RELEASE MEASURES – Continued)

If Hydrogen Peroxide (20 to 60%) is spilled and not recovered, or is recovered as a waste for treatment or disposal, the CERCLA Reportable Quantity is 100 lbs. (release of an Unlisted Hazardous Waste characteristic of ignitibility). Combustible materials exposed to hydrogen peroxide should be immediately submerged in or rinsed with large amounts of water to ensure that all hydrogen peroxide is removed. Residual hydrogen peroxide that is allowed to dry (upon evaporation hydrogen peroxide can concentrate) on organic materials such as paper, fabrics, cotton, leather, wood or other combustibles can cause the material to ignite and result in a fire.

Handling (Personnel)

Use extreme care when attempting any reactions because of fire and explosion potential (immediate or delayed). Conduct all initial experiments on a small scale and protect personnel with adequate shielding as the reactions are unpredictable and may be delayed, and may be affected by impurities, contaminants, temperature, etc. Do not get in eyes. Do not taste or swallow. Avoid contact with skin and clothing. Wash thoroughly after handling. Avoid contact with flammable or combustible materials. Avoid contamination from any source including metals, dust, and organic materials. Never use pressure to empty drums; container is not a pressure vessel. In the event of an accident where large volumes of hydrogen peroxide might come into contact with external fires or with incompatible chemicals, a one-half mile area from the incident should be evacuated.

Storage

Store in a properly vented container or in approved bulk storage facilities. Do not block vent; Do not store on wooden pallets. Do not store where contact with incompatible materials could occur, even with a spill. (See "Hazardous Reactivity".) have water source available for diluting. Do not add any other product to container. Never return used or unused peroxide to container, instead dilute with plenty of water and discard. Rinse empty containers thoroughly with clean water before discarding. (See "Waste Disposal".)

EXPOSURE CONTROLS/PERSONAL PROTECTION

Engineering Controls

Use sufficient ventilation to keep employee exposure below recommended exposure limits.

Personal Protective Equipment

EYE/FACE PROTECTION

Wear coverall chemical splash goggles. In addition, where the possibility exists for eye or face contact due to splashing or spraying of material, wear chemical splash goggles/full-length face shield combination.

RESPIRATORS

Where there is a potential for airborne exposure in excess of applicable limits, wear NIOSH/MSHA approved respiratory protection.

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(EXPOSURE CONTROL/PERSONAL PROTECTION – Continued)

PROTECTIVE CLOTHING

Where there is potential for skin contact, have available and wear as appropriate: impervious gloves, apron, pants, jacket, hood, and boots; or totally encapsulating chemical suit with breathing air supply. Permeation data supplied by vendors indicate that impervious materials such as natural rubber, natural rubber plus neoprene, nitrile, or polyvinylchloride afford adequate protection.

Do not wear leather gloves or leather shoes (uppers or soles) because they can ignite following contact with peroxide. Cotton clothing can also ignite. This effect may be within minutes, or delayed. Clothing fires and skin damage occur less quickly with 50% or lower hydrogen peroxide than with 70% material, but adequate personal protection is essential for all industrial concentrations. Protective skin creams offer no protection from hydrogen peroxide and should not be used. Completely submerge hydrogen peroxide contaminated clothing or other materials in water prior to drying. Residual hydrogen peroxide, if allowed to dry on materials such as paper, fabrics cotton, leather, wood or other combustibles can cause the material to ignite and result in a fire.

Exposure guidelines

Applicable Exposure Limits

HYDROGEN PEROXIDE

PEL (OSHA)	:	1 ppm, 1.4 mg/m3 (90%) - 8 Hr TWA
TLV (ACGIH)	:	1 ppm, 1.4 mg/m3, 8 Hr. TWA, A3

PHYSICAL AND CHEMICAL PROPERTIES

Physical Data

Evaporation Rate	:	>1
Vapor Density	:	Not Available
Solubility in Water	:	100 wt%
Solubility in Fat	:	Not Applicable
pH	:	<3
Form	:	Clear liquid
Color	:	Colorless
Odor	:	Slightly pungent, irritating
Odor Threshold	:	Not Available

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Properties	Hydrogen Peroxide Concentration, wt%				
	20	30	35	50	60
Boiling Point @ 1 atm, 760 mmHg °C	103	105	108	114	119
°F	217	220	226	237	246
Melting Point °C	-14.6	-25.0	-33.0	-52.2	-55.5
°F	5.7	-13.0	-27.4	-62.0	-67.9
Specific Gravity gm @ 25°C (77°F)	1.07	1.11	1.13	1.19	1.24
Vapor Pressure mmHg @ 25°C (77°F)	20.6	19.0	17.4	13.5	10.7

STABILITY AND REACTIVITY

Chemical Stability

Unstable with heat or contamination; liberation of oxygen gas may result in dangerous pressures. (See "Decomposition", below.)

Incompatibility with Other Materials

Incompatible with most flammables/combustibles (see "Fire and Explosion Hazards") as well as cyanides, nitric acid, potassium permanganate, and many other oxidizing and reducing agents. Mixtures with both organics and some acids may be especially reactive.

Decomposition

Contamination or heat may cause self-accelerating exothermic decomposition with oxygen gas and steam release that can cause dangerous pressures. May react dangerously with rust, dust, dirt, iron, copper, heavy metals or their salts (such as mercuric oxide or chloride), alkalis, and with organic materials (especially vinyl monomers).

Polymerization

Polymerization will not occur.

TOXICOLOGICAL INFORMATION

Animal Data

Inhalation 4-hour LC50: >0.2 ppm in rats (50% H_2O_2)
Skin absorption LD50 : >2000 mg/kg in rabbits (35% H_2O_2)
Oral LD50 : 1232 mg/kg in rats (35% H_2O_2)
805 mg/kg in rats (70% H_2O_2)

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(TOXICOLOGICAL INFORMATION – Continued)

At aqueous concentrations of less than 50% hydrogen peroxide skin irritation occurs, but at greater concentrations hydrogen peroxide is corrosive to the skin. Concentrations less than 5% in aqueous solutions are eye irritants; solutions between 5% and 10% range from severe eye irritants to being corrosive; concentrations greater than 10% are corrosive to the eye. The compound is not a skin sensitizer in animals.

Repeated inhalation exposures produced nasal discharge, bleached hair, and respiratory tract congestion with some deaths occurring in rats and mice exposed to concentrations greater than 67 ppm. Dogs exposed by inhalation to 7 ppm for 6 months had lung and skin irritation.

The effects from single high oral doses include convulsions. Repeated administration of the compound in the diet of animals resulted in growth inhibition, reduced weight gain, abnormal liver function, ulcers, and discoloration of the stomach lining with swelling. Long-term administration to mice in the drinking water resulted in gastric erosions and duodenal hyperplasia.

One study by skin application suggested no carcinogenic activity. Results of an ingestion study with mice suggested that hydrogen peroxide might be carcinogenic. However, the FDA and other organizations have reviewed this study and concluded there is insufficient evidence that hydrogen peroxide is carcinogenic. An unpublished, long-term study with rats revealed no evidence of carcinogenicity. Female rats treated with 10% hydrogen peroxide produced offspring of lower body weight and some structural abnormalities, but these changes were attributed to maternal toxicity. Hydrogen peroxide produced genetic damage to bacterial and mamalian cells in culture, but one study in animals indicated it did not produce genetic damage. Limited tests in animals demonstrate no reproductive toxicity.

ECOLOGICAL INFORMATION

Ecotoxicological Information

Aquatic Toxicity

96-hour LC50, catfish: 37.4 mg/L

DISPOSAL CONSIDERATIONS

Waste Disposal

Comply with Federal, State, and local regulations. If approved, may be diluted and drained to a municipal sewer or waste treatment plant. May be diluted and drained through a scrap metal pit (iron, copper, etc.) to reduce peroxide concentration. Hydrogen peroxide may be an RCRA regulated hazardous waste upon disposal due to the oxidizing characteristic under the ignitability category.

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TRANSPORTATION INFORMATION

Shipping Information - U.S.A.

DOT(49CFR)/IMO

Proper Shipping Name	:	Hydrogen Peroxide, aqueous solutions
Hazard Class	:	5.1
UN No.	:	2014
DOT/IMO Label	:	OXIDIZER, CORROSIVE
Subsidiary Hazard Class	:	8
Packing Group	:	II

Shipping Containers: Tank Railcars.
Tank Trailers.

ISO (Sea) Tanks.

Drums | - not handled directly by Kemira
Bottles |

Shipping Information - Canada

TDG Act

Proper Shipping Name	:	Hydrogen Peroxide Aqueous Solutions
Class	:	5.1 (8)
Packing Group	:	II
UN #	:	2014

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TMC CHEMICALS, INCORPORATED

P.O. BOX 5430 *PHONE: 973-560-1400*
PARSIPPANY, NJ 07054 *FAX: 973-560-0400*

MATERIAL SAFETY DATA SHEET

SECTION 1 - MATERIAL IDENTIFICATION

PRODUCT NAME	ISOTEC[SM] Catalyst Series 4260 Component-A Powder Mix

ISOTEC[SM] is a registered service mark of In-Situ Oxidative Technologies, Inc.

MANUFACTURER	TMC Chemicals, Inc. P.O. Box 5430 Parsippany, NJ 07054
EMERGENCY TELEPHONE NUMBER(S)	(973) 560-1400 (Northern NJ) (609) 275-8500 (Southern NJ)
DATE PREPARED:	January 1996 (Revised, 1/04)
C.A.S. CHEMICAL NAME	Not Applicable (Mixture)
SYNONYMS	None
CHEMICAL FAMILY	Not Applicable
EMPIRICAL FORMULA	MIXT
INTENDED USE	Catalyst

Catalyst is a mixture that has been tested as a whole in determining hazards

SECTION 2 - INGREDIENTS

CAS Number and Chemical Name	%	OSHA ACGIH PEL/TLV-TWA ppm - mg/M^3	ACGIH STEL-TWA ppm - mg/M^3
Catalyst is a trade secret	100	OSHA = None NIOSH = 1 mg/m^3	Oral LD50 Not Evaluated (1510 mg/m^3 Rat)

Catalyst is not listed as a known or suspect carcinogen by NTP or IARC

SECTION 3 - HEALTH HAZARDS

EMERGENCY OVERVIEW

Applicable properties are relevant to the mixture as a whole when certain proprietary ingredients present at their highest concentrations. Please note that the effects are normally lower for a typical mixture with smaller concentrations of these ingredients present.

ROUTES OF EXPOSURE

Inhalation, Skin Contact, Ingestion

EXPOSURE STANDARDS

See Section 2 for exposure standards on ingredients

HEALTH HAZARDS

May irritate eyes, skin and mucous membranes; harmful if inhaled or swallowed

TARGET ORGANS

Eyes, respiratory tract

SIGNS AND SYMPTOMS OF EXPOSURE (Acute and Chronic effects)

Irritant to mucous membranes and upper respiratory tract; may cause eye and skin irritation, stomach ache, breathing difficulty

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

None known

IRRITATION EFFECTS DATA

Not Evaluated

ACUTE TOXICITY EFFECTS DATA

Oral LD50 - Not Evaluated (1510 mg/m^3 Rat)
Dermal LD50 - Not Evaluated

OTHER ACUTE EFFECTS

Not Evaluated

CHRONIC/SUBCHRONIC DATA

Not Evaluated

MATERIAL SAFETY DATA SHEET

SECTION 4 - FIRST AID

EYE CONTACT

Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

SKIN CONTACT

Wash affected area immediately with soap and water.

INHALATION

In case of inhalation or suspected inhalation, move patient at once to fresh air and call a physician. Keep patient absolutely quiet. If breathing has stopped or is labored, give assisted respiration (e.g., mouth-to-mouth). Supplemental oxygen may be indicated.

INGESTION

If swallowed, call a physician immediately. Induce vomiting or remove stomach contents by gastric suction only as directed by medical personnel. Wash mouth with plenty of water. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE AND EXPLOSION DATA

CHARACTERISTICS:

Flash Point	None
Upper Explosive Limit (UEL)	Not Applicable
Lower Explosive Limit (LEL)	Not Applicable
Autoignition Temperature	Not Applicable
Flash Point Method(s)	None
Unusual Fire & Explosion Hazards	None
Fire Hazard Classification (OSHA/NFPA)	None

EXTINGUISHING MEDIA

In case of fire, flood with water.

SPECIAL FIRE FIGHTING PROCEDURES

Firefighters should wear butyl rubber boots, gloves, body suit and self-containing breathing apparatus. Use water spray to cool all affected containers. Avoid skin contact. Contain runoff water in dikes. Prevent stream contamination. Expended liquids from fire fighting should be diverted to an active sanitary sewer line.

UNUSUAL FIRE AND EXPLOSION HAZARDS

May emit sulfur oxide vapors under burning conditions. See Section 6 for hazardous combustion products.

MATERIAL SAFETY DATA SHEET

SECTION 6 - REACTIVITY DATA

CHEMICAL STABILITY

Stable

INCOMPATIBILITIES

Avoid mixing powder with strong oxidizing agents and alkalies

CONDITIONS TO AVOID

Contact with combustible materials, heat

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

Sulfur oxide vapors, such as SO_2 and SO_3

HAZARDOUS POLYMERIZATON

Will not occur

NFPA Reactivity Rating

None

SECTION 7 - SPILL, LEAK AND WASTE DISPOSAL INFORMATION

CLEAN-UP PROCEDURES

Sweep up and repackage or place in receptacle for future disposal.

OTHER EMERGENCY ADVISE

Avoid eye and skin contact. Wear protective clothing including gloves, safety goggles, breathing mask and coveralls when handling. Stored materials should be placed in a dry and reasonably temperature area, preferably below 75^{o}F.

WASTE DISPOSAL

Remove to properly designated landfill. Observe all federal, state and local environmental regulations.

ENVIRONMENTAL EFFECTS

Data not yet available

SECTION 8 - PERSONAL PROTECTION/EXPOSURE CONTROLS

EYE PROTECTION

Splash proof goggles.

HAND PROTECTION

Impermeable gloves made of Nitrile or rubber.

RESPIRATORY PROTECTION

Wear appropriate NIOSH/MSHA-approved full-face respirator with HEPA cartridges for protection against excessive particulate matter/ dust

PROTECTIVE CLOTHING

Long sleeved clothing (e.g. cotton coveralls or Tyvek). Do not wear short trousers

ENGINEERING CONTROLS

Avoid drafts that may disperse material beyond the work area. Use light water spray for dust suppression

WORK AND HYGIENIC PRACTICES

Provide readily accessible eye wash stations. Wash at the end of each work shift and before eating, smoking or using the toilet

SECTION 9 - STORAGE AND HANDLING

STORAGE

Keep container tightly closed and dry. Keep in a cool place. Do not store next to strong oxidizers (e.g. hydrogen peroxide). Store approximately 10 feet away from oxidizers.

HANDLING

Do not inhale. Avoid contact with skin and eyes.

OTHER PRECAUTIONS:

Carefully read instructions before handling this material. Be sure that all engineering and personal protective equipment is in working order.

MATERIAL SAFETY DATA SHEET

SECTION 10 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM	Powder
COLOR	Light Green
ODOR	None

TYPICAL PHYSICAL DATA

pH (10% aqueous)	3.5-3.9
VAPOR PRESSURE (mm Hg)	0
VAPOR DENSITY (Air = 1)	Not Applicable
BOILING POINT	Decomposition at 300^{o}C
FREEZING/MELTING POINT	Not Applicable
SOLUBILITY IN WATER	57% by weight @ 158^{o}
SPECIFIC GRAVITY (Water = 1)	1.899 @ 14^{o}/ 8^{o}C
EVAPORATION RATE (Butylacetate = 1)	Non Volatile
VISCOSITY (CPS)	Not Evaluated

SECTION 11 - TRANSPORTATION INFORMATION

UN No.	None Allocated
DOT SHIPPING NAME	No Data
IMO SHIPPING NAME	No Data
LATA SHIPPING NAME	No Data

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TMC CHEMICALS, INCORPORATED
P.O. BOX 5430 *PHONE: 973-560-1400*
PARSIPPANY, NJ 07054 *FAX: 973-560-0400*

MATERIAL SAFETY DATA SHEET

SECTION 1 - MATERIAL IDENTIFICATION

PRODUCT NAME	ISOTEC[SM] Catalyst-4260 Chelopolychempremox-B-2

ISOTEC is a registered servicemark of In-Situ Oxidative Technologies, Inc.

MANUFACTURER	TMC Chemicals, Inc. P.O. Box 5430 Parsippany, NJ 07054
EMERGENCY TELEPHONE NUMBER(S)	(973) 560-1400 (Northern NJ) (609) 275-8500 (Southern NJ)
DATE PREPARED:	January 1996 (revised, 3/06)
C.A.S. CHEMICAL NAME	Mixture
SYNONYMS	None
CHEMICAL FAMILY	Not Applicable
EMPIRICAL FORMULA	MIXT
INTENDED USE	Catalyst

SECTION 2 - INGREDIENTS

CAS Number and Chemical Name	%	OSHA ACGIH PEL/TLV-TWA ppm - mg/M^3	ACGIH STEL-TWA ppm - mg/M^3
Catalyst is a trade secret	100	Not established	Not established

This product is not listed as a known or suspect carcinogen by NTP or IARC

MATERIAL SAFETY DATA SHEET

SECTION 3 - HEALTH HAZARDS

EMERGENCY OVERVIEW

Applicable properties are relevant to the mixture as a whole when certain proprietary ingredients present at their highest concentrations. Please note that the effects are normally lower for a typical mixture with smaller concentrations of these ingredients present.

ROUTES OF EXPOSURE

Inhalation, Skin Contact, Ingestion

EXPOSURE STANDARDS

See Section 2 for exposure standards on ingredients

HEALTH HAZARDS

Eye and skin irritant, may be harmful if inhaled or swallowed

TARGET ORGANS

Kidney, Ureter, Bladder

SIGNS AND SYMPTOMS OF EXPOSURE (Acute and Chronic effects)

Irritant to mucous membranes and upper respiratory tract; may cause eye or skin irritation

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

None Reported

IRRITATION EFFECTS DATA

Not Evaluated

ACUTE TOXICITY EFFECTS DATA

Oral LD50 - Not Evaluated (2150 mg/kg Rat)
Dermal LD50 - Not Evaluated

OTHER ACUTE EFFECTS

Not Evaluated

CHRONIC/SUBCHRONIC DATA

Not Evaluated

SECTION 4 - FIRST AID

EYE CONTACT

Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

SKIN CONTACT

Wash affected area immediately with soap and water.

INHALATION

In case of inhalation or suspected inhalation, move patient at once to fresh air and call a physician. Keep patient absolutely quiet. If breathing has stopped or is labored, give assisted respiration (e.g., mouth-to-mouth). Supplemental oxygen may be indicated.

INGESTION

If swallowed, call a physician immediately. Induce vomiting or remove stomach contents by gastric suction only as directed by medical personnel. Wash mouth with plenty of water. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE AND EXPLOSION DATA

CHARACTERISTICS:

Flash Point	Not Evaluated
Upper Explosive Limit (UEL)	Not Applicable
Lower Explosive Limit (LEL)	Not Applicable
Autoignition Temperature	Not Evaluated
Flash Point Method(s)	Not Specified
Fire Hazard Classification (OSHA/NFPA)	None

EXTINGUISHING MEDIA

In case of fire, flood with water.

SPECIAL FIRE FIGHTING PROCEDURES

Firefighters should wear butyl rubber boots, gloves, body suit and self containing breathing apparatus. Use water spray to cool all affected containers. Avoid skin contact. Contain runoff water in dikes. Prevent stream contamination. Expended liquids from fire fighting should be diverted to an active sanitary sewer line.

UNUSUAL FIRE AND EXPLOSION HAZARDS

May emit oxides of carbon, nitrogen, and sulfur under burning conditions.

MATERIAL SAFETY DATA SHEET

SECTION 6 - REACTIVITY DATA

CHEMICAL STABILITY

Stable

INCOMPATIBILITIES

Strong Oxidizing Agents. Do not mix with pure oxidizing agents

CONDITIONS TO AVOID

Contact with combustible materials, heat

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

Oxides of carbon, nitrogen and sulfur.

HAZARDOUS POLYMERIZATON

Will not occur

NFPA Reactivity Rating

None

SECTION 7 - SPILL, LEAK AND WASTE DISPOSAL INFORMATION

CLEAN-UP PROCEDURES

Do not mix combustible substances (e.g., sawdust) with spilled material. Do not raise dust while sweeping.

OTHER EMERGENCY ADVISE

Avoid eye and skin contact. Wear protective clothing.

WASTE DISPOSAL

Sweep up, place in a bag and hold for waste disposal. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state and local environmental regulations.

ENVIRONMENTAL EFFECTS

Data not yet available

SECTION 8 - PERSONAL PROTECTION/EXPOSURE CONTROLS

EYE PROTECTION

Splash-proof goggles.

HAND PROTECTION

Impermeable gloves made of Nitrile or rubber.

RESPIRATORY PROTECTION

Wear appropriate NIOSH/MSHA-approved full-face respirator with HEPA cartridges for protection against particulate matter/ dust.

PROTECTIVE CLOTHING

Long sleeved clothing such as cotton coveralls or Tyvek.

ENGINEERING CONTROLS

Avoid drafts that may disperse material beyond the work area. Use light water spray for dust suppression.

WORK AND HYGIENIC PRACTICES

Provide readily accessible eyewash stations. Wash at the end of each work shift and before eating, smoking or using the toilet.

SECTION 9 - STORAGE AND HANDLING

STORAGE

Keep container tightly closed and dry. Keep in a cool place. Do not store near strong oxidizers (e.g. hydrogen peroxide). Store at least 10 feet away.

HANDLING

Do not inhale. Avoid contact with skin and eyes.

OTHER PRECAUTIONS:

Carefully read instructions before handling this material. Be sure that all engineering and personal protective equipment is in working order.

MATERIAL SAFETY DATA SHEET

SECTION 10 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM	Powder
COLOR	White
ODOR	None

TYPICAL PHYSICAL DATA

pH (10% aqueous solution)	~ 5
VAPOR PRESSURE (mm Hg)	Non-Volatile
VAPOR DENSITY (Air = 1)	Non-Volatile
BOILING POINT	Not Applicable
FREEZING/MELTING POINT	~ 240^{o}C
SOLUBILITY IN WATER	Soluble
SPECIFIC GRAVITY (Water = 1)	Not Evaluated
EVAPORATION RATE (Butylacetate = 1)	Non-Volatile
VISCOSITY (CPS)	Not Evaluated

SECTION 11 - TRANSPORTATION INFORMATION

UN No.	None Allocated
DOT SHIPPING NAME	No Data
IMO SHIPPING NAME	No Data
LATA SHIPPING NAME	No Data

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MATERIAL SAFETY DATA SHEET

SECTION 1 - MATERIAL IDENTIFICATION

PRODUCT NAME	ISOTEC[SM] Catalyst-4260 Chelopolychempremox-B-4

ISOTEC is a registered servicemark of In-Situ Oxidative Technologies, Inc.

MANUFACTURER	TMC Chemicals, Inc. P.O. Box 5430 Parsippany, NJ 07054
EMERGENCY TELEPHONE NUMBER(S)	(973) 560-1400 (Northern NJ) (609) 275-8500 (Southern NJ)
DATE PREPARED:	January 1996 (revised, 3/06)
C.A.S. CHEMICAL NAME	Mixture
SYNONYMS	None
CHEMICAL FAMILY	Not Applicable
EMPIRICAL FORMULA	MIXT
INTENDED USE	Catalyst

SECTION 2 - INGREDIENTS

CAS Number and Chemical Name	%	OSHA ACGIH PEL/TLV-TWA ppm - mg/M^3	ACGIH STEL-TWA ppm - mg/M^3
Catalyst is a trade secret	100	Not established	Not established

This product is not listed as a known or suspect carcinogen by NTP or IARC

MATERIAL SAFETY DATA SHEET

SECTION 3 - HEALTH HAZARDS

EMERGENCY OVERVIEW

Applicable properties are relevant to the mixture as a whole when certain proprietary ingredients present at their highest concentrations. Please note that the effects are normally lower for a typical mixture with smaller concentrations of these ingredients present.

ROUTES OF EXPOSURE

Inhalation, Skin Contact, Ingestion

EXPOSURE STANDARDS

See Section 2 for exposure standards on ingredients

HEALTH HAZARDS

Eye and skin irritant, may be harmful if inhaled or swallowed

TARGET ORGANS

Kidney, Ureter, Bladder

SIGNS AND SYMPTOMS OF EXPOSURE (Acute and Chronic effects)

Irritant to mucous membranes and upper respiratory tract; may cause eye or skin irritation

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

None Reported

IRRITATION EFFECTS DATA

Not Evaluated

ACUTE TOXICITY EFFECTS DATA

Oral LD50 - Not Evaluated (1000-2000 mg/kg Rat)
Dermal LD50 - Not Evaluated

OTHER ACUTE EFFECTS

Not Evaluated

CHRONIC/SUBCHRONIC DATA

Not Evaluated

SECTION 4 - FIRST AID

EYE CONTACT

Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. Call a physician.

SKIN CONTACT

Wash affected area immediately with soap and water.

INHALATION

In case of inhalation or suspected inhalation, move patient at once to fresh air and call a physician. Keep patient absolutely quiet. If breathing has stopped or is labored, give assisted respiration (e.g., mouth-to-mouth). Supplemental oxygen may be indicated.

INGESTION

If swallowed, call a physician immediately. Induce vomiting or remove stomach contents by gastric suction only as directed by medical personnel. Wash mouth with plenty of water. Never give anything by mouth to an unconscious person.

SECTION 5 - FIRE AND EXPLOSION DATA

CHARACTERISTICS:

Flash Point	Not Evaluated
Upper Explosive Limit (UEL)	Not Applicable
Lower Explosive Limit (LEL)	Not Applicable
Autoignition Temperature	Not Evaluated
Flash Point Method(s)	Not Specified
Fire Hazard Classification (OSHA/NFPA)	None

EXTINGUISHING MEDIA

In case of fire, flood with water.

SPECIAL FIRE FIGHTING PROCEDURES

Firefighters should wear butyl rubber boots, gloves, body suit and self containing breathing apparatus. Use water spray to cool all affected containers. Avoid skin contact. Contain runoff water in dikes. Prevent stream contamination. Expended liquids from fire fighting should be diverted to an active sanitary sewer line.

UNUSUAL FIRE AND EXPLOSION HAZARDS

May emit oxides of carbon, nitrogen, and sulfur under burning conditions.

MATERIAL SAFETY DATA SHEET

SECTION 6 - REACTIVITY DATA

CHEMICAL STABILITY

Stable

INCOMPATIBILITIES

Strong Oxidizing Agents. Do not mix with pure oxidizing agents

CONDITIONS TO AVOID

Contact with combustible materials, heat

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

Oxides of carbon, nitrogen and sulfur.

HAZARDOUS POLYMERIZATON

Will not occur

NFPA Reactivity Rating

None

SECTION 7 - SPILL, LEAK AND WASTE DISPOSAL INFORMATION

CLEAN-UP PROCEDURES

Do not mix combustible substances (e.g., sawdust) with spilled material. Do not raise dust while sweeping.

OTHER EMERGENCY ADVISE

Avoid eye and skin contact. Wear protective clothing.

WASTE DISPOSAL

Sweep up, place in a bag and hold for waste disposal. Dissolve or mix the material with a combustible solvent and burn in a chemical incinerator equipped with an afterburner and scrubber. Observe all federal, state and local environmental regulations.

ENVIRONMENTAL EFFECTS

Data not yet available

SECTION 8 - PERSONAL PROTECTION/EXPOSURE CONTROLS

EYE PROTECTION

Splash-proof goggles.

HAND PROTECTION

Impermeable gloves made of Nitrile or rubber.

RESPIRATORY PROTECTION

Wear appropriate NIOSH/MSHA-approved full-face respirator with HEPA cartridges for protection against particulate matter/ dust.

PROTECTIVE CLOTHING

Long sleeved clothing such as cotton coveralls or Tyvek.

ENGINEERING CONTROLS

Avoid drafts that may disperse material beyond the work area. Use light water spray for dust suppression.

WORK AND HYGIENIC PRACTICES

Provide readily accessible eyewash stations. Wash at the end of each work shift and before eating, smoking or using the toilet.

SECTION 9 - STORAGE AND HANDLING

STORAGE

Keep container tightly closed and dry. Keep in a cool place. Do not store near strong oxidizers (e.g. hydrogen peroxide). Store at least 10 feet away.

HANDLING

Do not inhale. Avoid contact with skin and eyes.

OTHER PRECAUTIONS:

Carefully read instructions before handling this material. Be sure that all engineering and personal protective equipment is in working order.

MATERIAL SAFETY DATA SHEET

SECTION 10 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM	Powder
COLOR	White
ODOR	None

TYPICAL PHYSICAL DATA

pH (10% aqueous solution)	~ 11
VAPOR PRESSURE (mm Hg)	Non-Volatile
VAPOR DENSITY (Air = 1)	Non-Volatile
BOILING POINT	Not Applicable
FREEZING/MELTING POINT	~ 300^{o}C
SOLUBILITY IN WATER	Soluble
SPECIFIC GRAVITY (Water = 1)	Not Evaluated
EVAPORATION RATE (Butylacetate = 1)	Non-Volatile
VISCOSITY (CPS)	Not Evaluated

SECTION 11 - TRANSPORTATION INFORMATION

UN No.	None Allocated
DOT SHIPPING NAME	No Data
IMO SHIPPING NAME	No Data
LATA SHIPPING NAME	No Data

The information set forth above is based upon information which TMC Chemicals, Inc. believes to be accurate. No warranty, express or implied, is intended. The information is provided solely for your information and consideration and TMC Chemical, Inc. assumes no legal responsibility for use or reliance thereon.

TMC CHEMICALS, INCORPORATED
P.O. BOX 5430 *PHONE: 973-560-1400*
PARSIPPANY, NJ 07054 *FAX: 973-560-0400*

MATERIAL SAFETY DATA SHEET

SECTION 1 - MATERIAL IDENTIFICATION

PRODUCT NAME	ISOTEC[SM] Stabilizer 0875

ISOTEC is a registered servicemark of In-Situ Oxidative Technologies, Inc.

MANUFACTURER	TMC Chemical, Inc. P.O. Box 5430 Parsippany, NJ 07054
EMERGENCY TELEPHONE NUMBER(S)	(973) 560-1400 (Northern NJ) (609) 275-8500 (Southern NJ)
DATE PREPARED:	JANUARY 1996 (Revised, 8/00)
C.A.S. CHEMICAL NAME	Not Applicable (Mixture)
SYNONYMS	None
CHEMICAL FAMILY	Not Applicable
EMPIRICAL FORMULA	MIXT
INTENDED USE	Stabilizing Agent

SECTION 2 - INGREDIENTS

CAS Number and Chemical Name	%	OSHA ACGIH PEL/TLV-TWA ppm - mg/M^3	ACGIH STEL-TWA ppm - mg/M^3
Stabilizer is a trade secret	100	Not stablished	Not established

This product is not listed as a known or suspect carcinogen by NTP or IARC

SECTION 3 - HEALTH HAZARDS

EMERGENCY OVERVIEW

ROUTES OF EXPOSURE

Inhalation, Skin Contact, Ingestion

EXPOSURE STANDARDS

No exposure standards have been established

HEALTH HAZARDS

Amount of respirable dust is low in the product; however, it may cause skin or eye irritation upon prolonged exposure. May be harmful if swallowed.

TARGET ORGANS

Skin and mucous membranes

SIGNS AND SYMPTOMS OF EXPOSURE (Acute and Chronic effects)

No published data on skin absorption, contact, inhalation or ingestion. Human industrial experience has shown no significant inhalation hazard nor skin irritation for low level long term exposure. May be a moderate irritant to unirrigated eyes and mildly irritating after irrigating eyes following overexposure.

MEDICAL CONDITIONS GENERALLY AGGRAVATED BY EXPOSURE

None reported

IRRITATION EFFECTS DATA

No Data

ACUTE TOXICITY EFFECTS DATA

Oral LD50 - No Data
Dermal LD50 - No Data

OTHER ACUTE EFFECTS

No Data

CHRONIC/SUBCHRONIC DATA

No Data

MATERIAL SAFETY DATA SHEET

SECTION 4 - FIRST AID

EYE CONTACT

Hold eyelids apart and immediately flush eyes with plenty of water for at least 15 minutes. If irritation occurs and persists, call a physician.

SKIN CONTACT

Wash affected area immediately with soap and water.

INHALATION

In case of inhalation or suspected inhalation, move patient at once to fresh air.

INGESTION

Rinse mouth and dilute stomach contents with water or, preferably, with milk. Large doses may cause nausea, vomiting and diarrhea. Systematic oral toxicity is extremely rare and has consisted of acidosis and hypocalcemic tetany.

SECTION 5 - FIRE AND EXPLOSION DATA

CHARACTERISTICS:

Flash Point	None
Upper Explosive Limit (UEL)	None
Lower Explosive Limit (LEL)	None
Autoignition Temperature	No Data
Flash Point Method(s)	Not Applicable
Fire Hazard Classification (OSHA/NFPA)	None

EXTINGUISHING MEDIA

Product is noncombustible.

SPECIAL FIRE FIGHTING PROCEDURES

Not Applicable

UNUSUAL FIRE AND EXPLOSION HAZARDS

None

MATERIAL SAFETY DATA SHEET

SECTION 6 - REACTIVITY DATA

CHEMICAL STABILITY

Stable

INCOMPATIBILITIES

None

CONDITIONS TO AVOID

None

HAZARDOUS COMBUSTION OR DECOMPOSITION PRODUCTS

None

HAZARDOUS POLYMERIZATON

Will not occur

NFPA Reactivity Rating

None

SECTION 7 - SPILL, LEAK AND WASTE DISPOSAL INFORMATION

CLEAN-UP PROCEDURES

Material should be swept up for salvage or disposal.

OTHER EMERGENCY ADVISE

Avoid eye and skin contact. Wear appropriate protective clothing.

WASTE DISPOSAL

This product does not present a danger or hazard for disposal. May be disposed of in a properly designated landfill if needed.

ENVIRONMENTAL EFFECTS

Aquatic Toxicity unknown

SECTION 8 - PERSONAL PROTECTION/EXPOSURE CONTROLS

EYE PROTECTION

Wear chemical goggles when airborne dust is anticipated.

HAND PROTECTION

Impermeable gloves.

RESPIRATORY PROTECTION

Wear appropriate NIOSH/MSHA-approved respirator for dust protection if release of the product into the work area is expected.

PROTECTIVE CLOTHING

Long sleeved clothing to reduce exposed skin area.

ENGINEERING CONTROLS

Avoid drafts that may disperse material beyond the work area.

WORK AND HYGIENIC PRACTICES

Provide readily accessible eye wash stations. Wash at the end of each work shift and before eating, smoking or using the toilet.

SECTION 9 - STORAGE AND HANDLING

STORAGE

Keep container tightly closed and dry. Keep in a cool place.

HANDLING

Do not inhale. Avoid contact with skin and eyes.

OTHER PRECAUTIONS:

Carefully read instructions before handling this material. Be sure that all engineering and personal protective equipment is in working order.

MATERIAL SAFETY DATA SHEET

SECTION 10 - PHYSICAL AND CHEMICAL PROPERTIES

PHYSICAL FORM	Solid
COLOR	White
ODOR	None

TYPICAL PHYSICAL DATA

pH (1% solution)	4.6
VAPOR PRESSURE (mm Hg)	Non-Volatile
VAPOR DENSITY (Air = 1)	Non-Volatile
BOILING POINT	Not Applicable
FREEZING/MELTING POINT	253^{o} C
SOLUBILITY IN WATER	20% by weight @ 25^{o}C
SPECIFIC GRAVITY (Water = 1)	1.2
EVAPORATION RATE (Butylacetate = 1)	Non-Volatile
VISCOSITY (CPS)	No Data

SECTION 11 - TRANSPORTATION INFORMATION

UN No. 1481

DOT SHIPPING NAME	No Data
IMO SHIPPING NAME	No Data
LATA SHIPPING NAME	No Data

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MATERIAL SAFETY DATA SHEET

Klozur® CR

MSDS Ref. No.: F18-44-9
Date Approved: 01/03/2008
Revision No.: 1

This document has been prepared to meet the requirements of the U.S. OSHA Hazard Communication Standard, 29 CFR 1910.1200 and Canada's Workplace Hazardous Materials Information System (WHMIS) requirements.

1. PRODUCT AND COMPANY IDENTIFICATION

PRODUCT NAME: Klozur® CR

GENERAL USE: For chemical oxidation and aerobic bioremediation, petroleum hydrocarbon remediation, creosote remediation and partially halogenated hydrocarbon remediation.

MANUFACTURER

FMC CORPORATION
FMC Peroxygens
1735 Market Street
Philadelphia, PA 19103
(215) 299-6000 (General Information)
msdsinfo@fmc.com (Email - General Information)

EMERGENCY TELEPHONE NUMBERS

(303) 595-9048 (Medical - U.S. - Call Collect)

For leak, fire, spill, or accident emergencies, call:
(800) 424-9300 (CHEMTREC - U.S.A. & Canada)

2. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW:

- Odorless, off-white fine granular solid (may have separation or noticeable two-tone appearance).
- Oxidizer.
- Contact with combustibles may cause fire.
- Under fire conditions product may decompose releasing oxygen that intensifies fire.
- Decomposes in storage under conditions of moisture (water/water vapor) and/or excessive heat causing release of oxides of sulfur and oxygen that supports combustion. Decomposition could form a high temperature melt. See Section 10 ("Stability and Reactivity").
- Deluge container with water at safe distance or in protected area.
- May be severely irritating to the eyes.
- May be harmful if swallowed.

POTENTIAL HEALTH EFFECTS: Airborne dust may be irritating to eyes, nose, lungs, throat and skin upon contact. Exposure to high levels of dust may cause difficulty in breathing in sensitive persons.

3. COMPOSITION / INFORMATION ON INGREDIENTS

Chemical Name	CAS#	Wt.%	EC No.	EC Class
Proprietary Mixture			None	Not classified

COMMENTS: FMC is withholding the specific chemical identity under provision of the OSHA Hazard Communication Rule Trade Secrets (1910.1200(i)(1)). The specific chemical identity will be made available to health professionals in accordance with 29 CFR 1910.1200(i) (1) (2) (3) (4). This Material Safety Data Sheet provides information for employee training and hazard identification.

4. FIRST AID MEASURES

EYES: Immediately flush with water for at least 15 minutes, lifting the upper and lower eyelids intermittently. See a medical doctor or ophthalmologist immediately.

SKIN: Wash with plenty of soap and water. Get medical attention if irritation occurs and persists.

INGESTION: Rinse mouth with water. Dilute by giving 1 or 2 glasses of water. Do not induce vomiting. Never give anything by mouth to an unconscious person. See a medical doctor immediately.

INHALATION: Remove to fresh air. If breathing difficulty or discomfort occurs and persists, obtain medical attention.

NOTES TO MEDICAL DOCTOR: Direct contact with the eyes may have serious consequences; therefore, direct contact with eyes should be avoided. Contaminated external surfaces should be flooded with water, and direct eye contact deserves ophthalmologic evaluation. If ingested, gastrointestinal irritation but not caustic burns are to be expected; dilution with water indicated as may be gastric evacuation via emesis or lavage if large doses or severe irritation is evident.

5. FIRE FIGHTING MEASURES

EXTINGUISHING MEDIA: Deluge with plenty of water.

FIRE / EXPLOSION HAZARDS: Product is non-combustible. Under fire conditions, may decompose and release oxygen gas, which may intensify fire. Presence of water accelerates decomposition. Mixtures with polysulfide polymers may ignite.

FIRE FIGHTING PROCEDURES: Use flooding quantities of water. Use water spray to keep fire exposed containers cool. Do not use carbon dioxide or other gas filled fire extinguishers; they will have no effect on decomposition. Wear full protective clothing and self-contained breathing apparatus.

FLAMMABLE LIMITS: Non-combustible

SENSITIVITY TO IMPACT: Oxidizable materials can be ignited by grinding and may become explosive.

SENSITIVITY TO STATIC DISCHARGE: Not available

---

6. ACCIDENTAL RELEASE MEASURES

RELEASE NOTES: Confine and collect spill, put into an approved DOT container (do not return to original container) and isolate for disposal. Isolated material should be monitored for signs of decomposition (fuming / smoking). If spilled material is wet, dissolve with large quantities of water and dispose as a hazardous waste. Runoff to sewer may create fire or explosion hazard (do not flush powdered material into sewer). Dispose of wastes according to the method outlined in Section 13, "Disposal Considerations".

---

7. HANDLING AND STORAGE

HANDLING: Avoid contact by using personal protective equipment. Use respiratory protective equipment when release of airborne dust is expected. If compounded with organics or combustible materials be sure to exclude moisture. Use clean plastic or stainless steel scoops only.

STORAGE: Keep dry (reacts with moisture). Use first in, first out storage system. Store unopened in a cool, clean, dry place away from point sources of heat (e.g. steam pipes, radiant heaters, hot air vents or welding sparks). Keep container tightly closed when not in use. Avoid contamination of opened product. Avoid contact with reducing agents. In case of fire or decomposition (fuming / smoking) deluge with plenty of water to control decomposition. Fore storage, refer to NFPA Bulletin 430 on storage of liquid and solid oxidizing materials.

COMMENTS: VENTILATION: Provide mechanical general and/or local exhaust ventilation to prevent release of dust into work environment. Spills should be collected into suitable containers to prevent dispersion into the air. If ventilation is inadequate or not available, use dust respirator and eye protection.

8. EXPOSURE CONTROLS / PERSONAL PROTECTION

EXPOSURE LIMITS

Chemical Name	ACGIH	OSHA	Supplier
Proprietary Ingredient	5 mg/m^3 (TWA)	5 mg/m^3 (TWA)	5 mg/m^3 (TWA)
Proprietary Ingredient	0.1 mg/m^3 (TWA)		

ENGINEERING CONTROLS: Provide mechanical local exhaust ventilation to prevent release of dust into the work area. If release is expected use respiratory protection. Remove contaminated clothing immediately and wash before reuse.

PERSONAL PROTECTIVE EQUIPMENT

EYES AND FACE: Use cup type chemical goggles. Full face shield may be used.

RESPIRATORY: Use approved dust respirator with full face piece.

PROTECTIVE CLOTHING: Long sleeve shirt, impervious apron or clothing. Rubber or neoprene footwear.

GLOVES: Rubber or neoprene gloves. Thoroughly wash the outside of gloves with soap and water prior to removal. Inspect regularly for leaks.

9. PHYSICAL AND CHEMICAL PROPERTIES

ODOR:	Odorless
APPEARANCE:	Off-white fine granular solid
AUTOIGNITION TEMPERATURE:	Non-combustible
BOILING POINT:	No data available
COEFFICIENT OF OIL / WATER:	Not available
DENSITY / WEIGHT PER VOLUME:	(Bulk) 51.8 lbs/ft³ (loose)
EVAPORATION RATE:	Not applicable (Butyl Acetate = 1)
FLASH POINT:	Not applicable
MELTING POINT:	Decomposes on heating (About 275ºC)
OXIDIZING PROPERTIES:	Oxidizer
PERCENT VOLATILE:	Not applicable

pH:	11.2 slurry (1% solution)
SOLUBILITY IN WATER:	Sparingly soluble
SPECIFIC GRAVITY:	1 - 1.19 (5% to 30% slurries)
VAPOR DENSITY:	Not applicable (Air = 1)
VAPOR PRESSURE:	Not applicable

10. STABILITY AND REACTIVITY

CONDITIONS TO AVOID:	Heat (decomposes at 275ºC), moisture, reducing agents. Grinding with organics.
STABILITY:	Stable (decomposition could occur when exposed to heat or moisture)
POLYMERIZATION:	Will not occur
INCOMPATIBLE MATERIALS:	Grinding mixtures with organics (oxidizable materials can be ignited by grinding and may become explosive); heavy metals. Grinding mixtures with organics (oxidizable materials can be ignited by grinding and may become explosive); heavy metals. Acids, alkalis, halides (fluorides, chlorides, bromides and iodides), combustible materials, most metals and heavy metals, oxidizable materials, other oxidizers, reducing agents, cleaners, and organic or carbon containing compounds. Contact with incompatible materials can result in a material decomposition or other uncontrolled reactions.
HAZARDOUS DECOMPOSITION PRODUCTS:	Oxygen that supports combustion and oxides of sulfur, nitrogen, and calcium hydroxide.

COMMENTS: PRECAUTIONARY STATEMENT: Use of persulfates in chemical reactions requires appropriate precautions and design considerations for pressure and thermal relief. Decomposing persulfates will evolve large volumes of gas and/or vapor, can accelerate exponentially with heat generation, and create significant and hazardous pressures if contained and not properly controlled or mitigated. Use with alcohols in the presence of water has been demonstrated to generate conditions that require rigorous adherence to process safety methods and standards to prevent escalation to an uncontrolled reaction.

11. TOXICOLOGICAL INFORMATION

EYE EFFECTS: No data available for the formulation.
Proprietary Component: Severely irritating to unwashed eyes; minimally irritating to washed eyes (rabbit) [FMC Ref. I88-1053]
Proprietary Component: Non-irritating (rabbit) [FMC Ref. ICG/T-79.029]

SKIN EFFECTS: No data available for the formulation.
Proprietary Component: Non-irritating (rabbit) [FMC Ref. I88-1054]
Proprietary Component: Non-irritating (rabbit) [FMC Ref. ICG/T-79.029]

DERMAL LD_{50}: No data available for the formulation.
Proprietary Component: > 10 g/kg (rat) [FMC Ref. ICG/T-79.026 and 79.029]

ORAL LD_{50}: No data available for the formulation.
Proprietary Component: > 5 g/kg (rat) [FMC Ref. I88-1052]
Proprietary Component: 895 mg/kg (rat) [FMC Ref. ICG/T-79.029]

INHALATION LC_{50}: No data available for the formulation.
Proprietary Component: > 17 mg/l (1 h) (rat) [FMC Ref. ICG/T-79.026]
Proprietary Component: 5.1 mg/l (rat) [FMC Ref. I95-2017]

SENSITIZATION: No data available for the formulation.
Proprietary Component: (Skin) May be sensitizing to allergic persons. [FMC Ref. ICG/T-79.029]

TARGET ORGANS: Eyes, skin, respiratory passages

ACUTE EFFECTS FROM OVEREXPOSURE: May be harmful if swallowed. Direct contact with the eyes may have serious consequences; therefore, direct contact with eyes should be avoided. Airborne dusts may be irritating to the nose, throat and lungs, causing wheezing and/or shortness of breath. Dusts may also be irritating to eyes and skin upon contact; therefore, flooding of exposed areas with water is suggested.

CHRONIC EFFECTS FROM OVEREXPOSURE: No data available for the product. Sensitive persons may develop dermatitis and asthma. One of the proprietary components was fed to groups of male and female rats at 0, 300 and 3,000 ppm in the diet for 13 weeks, followed by 5,000 ppm for 5 weeks. Microscopic examination of tissues revealed some injury to the gastrointestinal tract at the highest dose (3,000 ppm) only. This effect is not unexpected for an oxidizer at high concentrations.

CARCINOGENICITY:

NTP:	Not listed
IARC:	Not listed
OSHA:	Not listed
OTHER:	Not Listed (ACGIH)

12. ECOLOGICAL INFORMATION

ENVIRONMENTAL DATA: Biodegradability does not apply to inorganic substances. As indicated by chemical properties oxygen is released into the environment.

ECOTOXICOLOGICAL INFORMATION: No data available for the formulation.

Proprietary Component

Bluegill sunfish, 96-hour LC_{50} = 771 mg/L [FMC Study I92-1250]
Rainbow trout, 96-hour LC_{50} = 163 mg/L [FMC Study I92-1251]
Daphnia, 48-hour LC_{50} = 133 mg/L [FMC Study I92-1252]
Grass shrimp, 96-hour LC_{50} = 519 mg/L [FMC Study I92-1253]

13. DISPOSAL CONSIDERATIONS

DISPOSAL METHOD: Dissolve in water to allow the release of oxygen and dispose via a treatment system in accordance with governmental agencies regulations. Contact appropriate regulatory agency prior to disposal.

14. TRANSPORT INFORMATION

U.S. DEPARTMENT OF TRANSPORTATION (DOT)

PROPER SHIPPING NAME:	Oxidizing solid, n.o.s. (sodium persulfate, calcium peroxide)
PRIMARY HAZARD CLASS / DIVISION:	5.1 (Oxidizer)
UN/NA NUMBER:	UN 1479
PACKING GROUP:	II
LABEL(S):	5.1 (Oxidizer)
PLACARD(S):	5.1 (Oxidizer)
MARKING(S):	Oxidizing solid, n.o.s. (sodium persulfate, calcium peroxide), UN1479
ADDITIONAL INFORMATION:	Hazardous Substance/RQ: Not applicable 49 STCC Number: 4918733 This material is shipped in 45 lb. polyethylene pail with vented screw-on lid (approx 5.5 gallon)

INTERNATIONAL MARITIME DANGEROUS GOODS (IMDG)

PROPER SHIPPING NAME:	Oxidizing solid, n.o.s. (sodium persulfate, calcium peroxide)

INTERNATIONAL CIVIL AVIATION ORGANIZATION (ICAO) / INTERNATIONAL AIR TRANSPORT ASSOCIATION (IATA)

PROPER SHIPPING NAME:	Oxidizing solid, n.o.s. (sodium persulfate,

	calcium peroxide)
ADDITIONAL INFORMATION:	Combination packaging is recommended for air transport.

OTHER INFORMATION:

Place spilled product in suitable container and wash residue with plenty of water.
See Section 6 (Accidental Release Measures) above for additional instructions.

---

15. REGULATORY INFORMATION

UNITED STATES

SARA TITLE III (SUPERFUND AMENDMENTS AND REAUTHORIZATION ACT)

SECTION 311 HAZARD CATEGORIES (40 CFR 370):
Fire Hazard, Immediate (Acute) Health Hazard

SECTION 312 THRESHOLD PLANNING QUANTITY (40 CFR 370):
The Threshold Planning Quantity (TPQ) for this product, if treated as a mixture, is 10,000 lbs; however, this product contains the following ingredients with a TPQ of less than 10,000 lbs.:
None

SECTION 313 REPORTABLE INGREDIENTS (40 CFR 372):
Not listed

CERCLA (COMPREHENSIVE ENVIRONMENTAL RESPONSE COMPENSATION AND LIABILITY ACT)

CERCLA DESIGNATION & REPORTABLE QUANTITIES (RQ) (40 CFR 302.4):
Proprietary component: Unlisted, RQ = 100 lbs., Ignitability

TSCA (TOXIC SUBSTANCE CONTROL ACT)

TSCA INVENTORY STATUS (40 CFR 710):
Listed

RESOURCE CONSERVATION AND RECOVERY ACT (RCRA)
RCRA IDENTIFICATION OF HAZARDOUS WASTE (40 CFR 261):
Waste Number: D001

CANADA

WHMIS (WORKPLACE HAZARDOUS MATERIALS INFORMATION SYSTEM):

This product has been classified in accordance with the hazard criteria of the Controlled Products Regulations and the MSDS contains all the information required by the Controlled Products Regulations.

Hazard Classification / Division: C
D2B
D2A
E

Domestic Substance List: Listed (all components)

INTERNATIONAL LISTINGS

Proprietary Component
Australia (AICS): Listed
China: Listed
Japan (ENCS): (1)-190
Korea: KE-04597
Philippines (PICCS): Listed

Proprietary Component
Australia (AICS): Listed
China: Listed
Japan (ENCS): (1)-181
Korea: KE-04518
Philippines (PICCS): Listed

Proprietary Component
Australia (AICS): Listed
China: Listed
Japan (ENCS): (1)-1131
Korea: KE-12369
Philippines (PICCS): Listed

16. OTHER INFORMATION

HMIS

Health	2
Flammability	0
Physical Hazard	1
Personal Protection (PPE)	J

Protection = J (Safety goggles, gloves, apron & combination dust & vapor respirator)

HMIS = Hazardous Materials Identification System

Degree of Hazard Code:
4 = Severe
3 = Serious
2 = Moderate
1 = Slight
0 = Minimal

NFPA

Health	2
Flammability	0
Reactivity	1
Special	OX

SPECIAL = OX (Oxidizer)

NFPA = National Fire Protection Association

Degree of Hazard Code:
4 = Extreme
3 = High
2 = Moderate
1 = Slight
0 = Insignificant

REVISION SUMMARY:
New MSDS.

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Olin CHLOR ALKALI PRODUCTS

MATERIAL SAFETY DATA

Sodium Hydroxide Solution, 50%

SECTION 1 – CHEMICAL PRODUCT AND COMPANY IDENTIFICATION

Δ

Manufacturer's name and address:	**Supplier's name and address:**
Olin Corporation – Chlor Alkali Products Division	**Olin Canada, ULC d/b/a Olin Chlor Alkali Products**
CLEVELAND, TN OFFICE	**MONTREAL, QC OFFICE**
490 Stuart Road NE Cleveland, TN 37312-4918 U.S. • (423) 336-4850	2020 University, Suite 2190 Montreal, Quebec H3A 2A5 Canada • (514) 397-6100

Product Name: Sodium Hydroxide Solution, 50%

CAS#: 1310-73-2 **Preparation date (M/D/Y):** 10/02/08
MSDS Code: NaOH(50)-E **Revision date (M/D/Y):** 02/08/11

Synonyms: Caustic soda liquid 50%, Soda lye, Lye, Liquid Caustic, Sodium Hydrate

Product Use: Neutralizing agent, industrial cleaner, pulping and bleaching, soap manufacturing

Emergency Contacts (24 hr.)

FOR INFORMATION REGARDING ON SITE CHEMICAL EMERGENCIES INVOLVING A SPILL OR LEAK, CALL

Δ

Canada: 1-800-567-7455
U.S.: 1-800-424-9300 – CHEMTREC

SECTION 2 – COMPOSITION / INFORMATION ON INGREDIENTS

	Hazardous Ingredient(s)	% (w/w)	ACGIH	CAS NO.
Δ	Sodium Hydroxide	49 – 52	2 mg/m^3 (TLV-C)	1310-73-2

SECTION 3 – HAZARD IDENTIFICATION

Emergency Overview: Odorless, clear, non-volatile liquid. EXTREMELY CORROSIVE! Causes severe burns on contact. Can cause blindness, permanent scarring and death. Aerosols can cause lung injury – effects may be delayed. Highly reactive. Can react violently with water and numerous commonly encountered materials, generating enough heat to ignite nearby combustible materials. Contact with many organic and inorganic chemicals may cause fire or explosion. Reacts with some metals to liberate hydrogen gas, which can form explosive mixtures with air. Will not burn. Harmful to aquatic life. Read the entire MSDS for a more thorough evaluation of the hazards.

Potential Health Effects:

Δ **Routes of exposure:** Inhalation, skin contact, eye contact and ingestion.

Inhalation: Sodium hydroxide does not readily form a vapor and inhalation exposure is likely to occur as an aerosol. Due to its corrosive nature, sodium hydroxide aerosols could cause pulmonary edema (severe, life-threatening lung injury). The development of pulmonary edema may be delayed up to 48 hours after exposure. The early symptoms of pulmonary edema include shortness of breath and tightness in the chest.

Skin Contact: EXTREMELY CORROSIVE! Sodium hydroxide is capable of causing severe burns with deep ulceration and permanent scarring. It can penetrate to deeper layers of skin and corrosion will continue until removed. The severity of injury depends on the concentration (solutions) and the duration of exposure. Burns may not be immediately painful; onset of pain may be delayed minutes to hours. Several human studies and case reports describe the corrosive effects of sodium hydroxide. A 4% solution of sodium hydroxide, applied to a volunteer's arm for 15 to 180 minutes, caused damage which progressed from destruction of cells of the hard outer layer of the skin within 15 minutes to total destruction of all layers of the skin in 60 minutes. Solutions as weak as 0.12% have damaged healthy skin within 1 hour.

Eye Contact: EXTREMELY CORROSIVE! The severity of injury increases with the concentration, the duration of exposure, and the speed of penetration into the eye. Damage can range from severe irritation and mild scarring to blistering, disintegration, ulceration, severe scarring and clouding. Conditions, which affect vision such as glaucoma and cataracts, are possible late developments. In severe cases, there is progressive ulceration and clouding of eye tissue which may lead to permanent blindness.

Ingestion: EXTREMELY CORROSIVE! Severe pain; burning of the mouth, throat and esophagus; vomiting; diarrhea; collapse and possible death may result.

Chronic Effects: SKIN: Repeated or prolonged skin contact would be expected to cause drying, cracking, and inflammation of the skin (dermatitis).

Existing Medical Conditions Possibly Aggravated by Exposure: Asthma, bronchitis, emphysema and other lung diseases and chronic nose, sinus or throat conditions. Skin irritation may be aggravated in individuals with existing skin disorders.

Carcinogenicity: Sodium hydroxide is not classified as a carcinogen by ACGIH (American Conference of Governmental Industrial Hygienists) or IARC (International Agency for Research on Cancer), not regulated as a carcinogen by OSHA (Occupational Safety and Health Administration), and not listed as a carcinogen by NTP (National Toxicology Program).

Δ **Other important hazards:** Refer to TOXICOLOGICAL INFORMATION (Section 11) for additional information.

SECTION 4 – FIRST AID MEASURES

General: If you feel unwell, IMMEDIATELY seek medical advice (show this document).

Inhalation: Move victim to fresh air. If breathing is difficult, oxygen may be beneficial if administered by trained personnel, preferably on a doctor's advice. Give artificial respiration ONLY if breathing has stopped. Do not use mouth-to-mouth method if victim ingested or inhaled the substance: induce artificial respiration with the aid of a pocket mask equipped with a one-way valve or other proper respiratory medical device. Give Cardiopulmonary Resuscitation (CPR) only if there is no pulse AND no breathing. Obtain medical attention IMMEDIATELY. Symptoms of pulmonary edema can be delayed up to 48 hours after exposure.

Skin Contact: Immediately flush skin with lukewarm water for at least 20 minutes, and up to 60 minutes if necessary. Under lukewarm water remove contaminated clothing, jewelry, and shoes. If irritation persists, repeat flushing. Obtain medical attention immediately. Discard contaminated clothing and shoes in a manner which limits further exposure.

Eye Contact: Immediately flush eyes with lukewarm water for at least 20 minutes, and up to 60 minutes if necessary. Hold eyelids open during flushing. If irritation persists, repeat flushing. Obtain medical attention IMMEDIATELY. Do not transport victim until the recommended flushing period is completed unless flushing can be continued during transport.

Ingestion: DO NOT INDUCE VOMITING. If victim is alert and not convulsing, rinse mouth and give as much water as possible to dilute material (8 to 10 oz. or 240 to 300 mL). If spontaneous vomiting occurs, have victim lean forward with head down, rinse mouth and administer more water. IMMEDIATELY transport victim to an emergency facility.

SECTION 5 – FIRE FIGHTING MEASURES

Flammability	Not applicable. Not combustible (does not burn).
Flash Point (method)	Not applicable.
Flammable Limits (Lower)	Not applicable
Flammable Limits (Upper)	Not applicable
Auto Ignition Temperature	Not applicable
Combustion and Thermal Decomposition Products	Sodium oxide fumes
Rate of Burning	Not applicable
Explosive Power	Not applicable
Sensitivity to Mechanical Impact	Not sensitive ; stable material
Sensitivity to Static Charge	Not applicable

Fire and Explosion Hazards: Sodium hydroxide will not burn or support combustion. The reaction of sodium hydroxide with water and a number of commonly encountered materials (see Section 10) can generate sufficient heat to ignite nearby combustible materials. Sodium hydroxide can react with metals, such as aluminum, tin and zinc, to form flammable hydrogen gas.

Extinguishing Media: Use extinguishing media suitable for the surrounding fire. If water is used, care should be taken, since it can generate heat and cause spattering if applied directly to sodium hydroxide.

Special Information: Evacuate area and fight fire from a safe distance or a protected location. Approach fire from upwind. If possible, isolate materials not involved in the fire and protect personnel. Move containers from fire area if it can be done without risk.

Water can be used with extreme caution to extinguish a fire in an area where sodium hydroxide is stored. The water must not come into contact with the sodium hydroxide. Water can be used in flooding quantities as a spray or fog to keep fire-exposed containers cool and absorb heat. At high temperatures, fuming may occur, giving off a strong, corrosive gas. Do not enter without wearing specialized protective equipment suitable for the situation.

Evacuation: If tank or tank truck involved in a fire, ISOLATE and consider evacuation of one-half (1/2) mile (800 meters) in all directions.

Fire Fighting Protective Equipment: Firefighter's normal protective clothing (Bunker Gear) will not provide adequate protection. Chemical resistant clothing (e.g. chemical splash suit) and positive pressure self-contained breathing apparatus (MSHA/NIOSH approved or equivalent) may be necessary.

NOTE: Also see "Section 10 - Stability and Reactivity"

SECTION 6 – ACCIDENTAL RELEASE MEASURES

Spills, Leaks, or Releases:

- Restrict access to area until completion of clean up. Ensure trained personnel conduct clean up. Ventilate area.
- Wear adequate personal protective equipment (See Section 8). Do not touch spilled material.
- Prevent entry into sewers or waterways.
- Land spill of sodium hydroxide: Solutions should be contained by diking with inert material, such as sand or earth. Solutions can be recovered or carefully diluted with water and cautiously neutralized with acids such as acetic acid or hydrochloric acid.
- Water spill: Neutralize with dilute acid.
- Comply with Federal, Provincial/State and local regulations on reporting releases.

Deactivating Chemicals: Weak acid solutions (acetic, hydrochloric or sulfuric acid).

Waste Disposal Methods: Dispose of waste material at an approved waste treatment/disposal facility, in accordance with applicable regulations. Do not dispose of waste with normal garbage or to sewer systems.

Note - Clean-up material may be a RCRA Hazardous Waste on disposal.
- Spills are subject to CERCLA reporting requirements: RQ = 1000 lbs. (454 kg).

SECTION 7 – HANDLING AND STORAGE

Precautions: EXTREMELY CORROSIVE! Have emergency equipment (for fires, spills, leaks, etc.) readily available. Ensure all containers are labeled. Wear appropriate Personal Protection Equipment *(Refer to Section 8)*. People working with this chemical should be properly trained regarding its hazards and its safe use.

Handling Procedures and Equipment: Use smallest possible amounts in designated areas with adequate ventilation. Keep containers closed when not in use. Empty containers may contain hazardous residues. Avoid generating mists. Transfer solutions using equipment, which is corrosion-resistant. Cautiously, transfer into sturdy containers made of compatible materials. Never return contaminated material to its original container. Considerable heat is generated when diluted with water. Proper handling procedures must be followed to prevent vigorous boiling, splattering or violent eruption of the diluted solution. Never add water to a sodium hydroxide solution. **ALWAYS ADD SODIUM HYDROXIDE TO WATER** and provide agitation. When mixing with water, stir small amounts in slowly. Use cold water to prevent excessive heat generation.

Storage Requirements: Store in a cool, dry, well-ventilated area. Keep containers tightly closed when not in use and when empty. Protect from damage. Store away from incompatible materials such as strong acids, nitroaromatic, nitroparaffinic or organohalogen compounds. See Section 10 for Incompatibles. Use corrosion-resistant structural materials and lighting and ventilation systems in the storage area. Containers made of nickel alloys are preferred. Steel containers are acceptable if temperatures are not elevated. Nickel is the preferred metal for handling this product. Plastics or plastic-lined steel, or FRP tanks of Derakane vinyl ester resin may be suitable. Container contents may develop pressure after prolonged storage. Drums may need to be vented. Trained personnel should only perform venting.

Storage Temperature: Avoid freezing. Do not expose sealed containers to temperatures above 40ºC (104ºF).

SECTION 8 – EXPOSURE CONTROLS / PERSONAL PROTECTION

PREVENTIVE MEASURES

Recommendations listed in this section indicate the type of equipment which will provide protection against over exposure to this product. Conditions of use, adequacy of engineering or other control measures, and actual exposures will dictate the need for specific protective devices at your workplace.

Engineering Controls: Local exhaust ventilation should be applied wherever there is an incidence of point source emissions or dispersion of regulated contaminants in the work area. Ventilation control of the contaminant as close to its point of generation is both the most economical and safest method to minimize personnel exposure to airborne contaminants. The most effective measures are the total enclosure of processes and the mechanization of handling procedures to prevent all personal contact.

PERSONAL PROTECTIVE EQUIPMENT

Maintain eye wash fountain and quick-drench facilities in work area. Detailed requirements for personal protective equipment should be established on a site-specific basis.

Eye Protection: Wear full face-shield and chemical safety goggles when there is potential for contact.

Skin Protection: Wear appropriate personal protective clothing to prevent skin contact.

Guidelines for sodium hydroxide solutions, 30-70%:

RECOMMENDED (resistance to breakthrough longer than 8 hours): Butyl rubber; natural rubber, neoprene rubber, nitrile rubber, polyethylene, polyvinyl chloride, Teflon™, Viton™, Saranex™, 4H™, Barricade™, CPF 3™, Responder™, Trellchem HPS™, Tychem 10000™.

NOT RECOMMENDED for use (resistance to breakthrough less than 1 hour): Polyvinyl alcohol.

Respiratory Protection:
Up to 10 mg/m^3: Supplied Air Respirator (SAR) operated in a continuous-flow mode, eye protection needed; or full face-piece respirator with high-efficiency particulate filter(s); or powered air-purifying respirator with dust and mist filter(s), eye protection needed; or full face-piece Self-Contained Breathing Apparatus (SCBA); or full face-piece SAR.

Emergency or Planned Entry into Unknown Concentrations or IDLH Conditions: Positive pressure, full face-piece SAR; or positive pressure, full face-piece SAR with an auxiliary positive pressure SAR.

ESCAPE: Full face-piece respirator with high-efficiency particulate filter(s); or escape-type SCBA.

EXPOSURE GUIDELINES

PRODUCT: Sodium hydroxide:

	ACGIH Ceiling Exposure Limit (TLV-C)	2 mg/m^3
Δ	OSHA PEL-TWA	2 mg/m^3
	NIOSH IDLH	10 mg/m^3
	NIOSH REL:	C 2 mg/m^3

SECTION 9 – PHYSICAL AND CHEMICAL PROPERTIES

Alternate Name(s)	Caustic soda liquid 50%, Soda lye, Lye, Liquid Caustic, Sodium Hydrate
Chemical Name	Sodium hydroxide
Chemical Family	Alkali hydroxide
Molecular Formula	NaOH
Molecular Weight	40.01
Δ **Physical State and Appearance**	Clear-to-slightly turbid liquid
Odor	Odorless
pH	14.0 (Aqueous solution: 5%)
Vapor Pressure	0.2 kPa (1.5 mm Hg) at 20 ºC (68˚F) (50% solution)
Vapor Density (Air = 1)	Not applicable
Boiling Point	140 ºC (284 ºF) (50% solution)
Freezing Point	12 ºC (53.6 ºF) (50% solution)
Solubility (Water)	Soluble in all proportions
Specific Gravity	1.53 (50% solution) 15.5 ºC (60°F)
Evaporation Rate	Not applicable
Viscosity (cp):	78.3 at 20 ºC (68˚F)
Bulk Density (lbs/cu ft):	95.5
Coefficient of Oil/Water Distribution	Essentially zero

SECTION 10 – STABILITY AND REACTIVITY

Chemical Stability: Stable at room temperature.

Hazardous Decomposition Products: Thermal decomposition: sodium oxide fumes

Conditions to Avoid: Water. Keep away from incompatibles.

Incompatibility with other Substances: Sodium hydroxide reacts vigorously, violently or explosively with many organic and inorganic chemicals, such as strong acids, nitroaromatic, nitroparaffin and organohalogen compounds, glycols and organic peroxides. Reacts violently with water generating significant heat and dangerously spattering corrosive sodium hydroxide. Violently polymerizes acetaldehyde, acrolein or acrylonitrile. Produces flammable and explosive hydrogen gas if it reacts with sodium tetrahydroborate or certain metals such as aluminum, tin, or zinc. Can form spontaneously flammable chemicals upon contact with 1,2- dichloroethylene, trichloroethylene or tetrachloroethane. Can produce carbon monoxide upon contact with solutions of sugars, such as fructose, lactose and maltose.

Corrosivity to Metals: Corrosive to aluminum, tin, zinc, copper, and most alloys in which they are present including brass and bronze. Corrosive to steel at elevated temperatures above 40°C(104ºF).

Stability and Reactivity Comments: Slowly attacks glass at room temperature.

Hazardous Polymerization: Will not occur. However, it can induce hazardous polymerization of acetaldehyde, acrolein, and acrylonitrile.

SECTION 11 – TOXICOLOGICAL INFORMATION

For more toxicological information, refer to Section 3.

TOXICOLOGICAL DATA:

Toxicological Data: Sodium hydroxide

Toxicity data: LDLo - Lowest published lethal dose oral rabbit 500 mg /kg ; LD_{50} intraperitoneal mouse 40 mg/kg

Irritation data: Standard Draize Tests: 500 mg/24 hour(s) skin-rabbit severe; 400 µg eyes-rabbit mild; 1 percent eyes-rabbit severe;

Mutagenicity: There is no evidence of mutagenic potential.

Reproductive Effects: No information is available.

Teratogenicity and Fetotoxicity: No information is available.

Synergistic Materials: No information is available.

Skin and Respiratory Sensitization: No information is available.

Irritancy: Strong eye and skin irritant.

SECTION 12 – ECOLOGICAL INFORMATION

Ecotoxicological Information:

LC_{100} Cyprinus Carpio 180 ppm/24 hr @ 25°C (77°F)
TLm mosquito fish 125 ppm/96 hr (fresh water);
TLm Bluegill 99 mg/L/48 hr (tap water)

Persistence and Degradation: Degrades readily by reacting with natural carbon dioxide in the air. Does not bioaccumulate.

SECTION 13 – DISPOSAL CONSIDERATIONS

Review federal, state and local government requirements prior to disposal.

Do not dispose of waste with normal garbage, or to sewer systems.

Whatever cannot be saved for recovery or recycling, including containers, should be managed in an appropriate and approved waste disposal facility. Processing, use or contamination of this product may change the waste management options.

RCRA: Test waste material for corrosivity, D002, prior to disposal.

SECTION 14 – TRANSPORT INFORMATION

	TDG	DOT
Shipping Name	SODIUM HYDROXIDE, SOLUTION	Sodium hydroxide, solution
Hazard Class/Division	8	8
Identification No.	UN1824	UN1824
Packing Group:	II	II
Reportable Quantity	Not Applicable	RQ: 1000 lbs. (454 kg)
ERAP	NONE	Not Applicable

Δ **IATA/ICAO Shipping Description:** UN1824, Sodium hydroxide solution, Class 8, PG II is accepted for air transport.

Δ **For Chemical Emergencies in Transportation Requiring Activation of Olin 24 Hour Emergency Response Plan Call:**
U.S. 1-800-424-9300 – Chemtrec
Canada 1-800-567-7455

SECTION 15 – REGULATORY INFORMATION

Δ **CANADIAN INFORMATION:**

This product has been classified in accordance with the hazard criteria of the CPR (Controlled Products Regulations) and this MSDS (Material Safety Data Sheet) contains all the information required by the CPR.

Controlled Products Regulations (WHMIS) Classification:
E: Corrosive Material

CEPA / Canadian Domestic Substances List (DSL): Y

WHMIS Ingredient Disclosure List: Meets criteria for disclosure at 1% or greater.

Δ **USA INFORMATION:**

OSHA Classification: Hazardous by definition of Hazard Communication Standard (29 CFR 1910.1200)

SARA Regulations sections 313 and 40 CFR 372: N

SARA Hazard Categories, SARA SECTIONS 311/312 (40 CFR 370.2):
ACUTE: Y
CHRONIC: N
FIRE: N
REACTIVE: Y
SUDDEN RELEASE: N
OSHA PROCESS SAFETY (29 CFR 1910.119): N

CERCLA SECTION 103 (40 CFR 302.4): Y

Reportable Quantity (RQ) under CERCLA: 1000 lbs. (454 kg)

TSCA Inventory Status: Y

This product does not contain nor is it manufactured with ozone depleting substances.

Δ **EUROPEAN ECONOMIC COMMUNITY (EEC) INFORMATION:**

EINECS Number: 215-185-5

CALIFORNIA PROP 65 COMPONENTS:
This product is not listed, but it may contain elements known to the State of California to cause cancer or reproductive toxicity as listed under Proposition 65 State Drinking Water and Toxic Enforcement Act. For additional information, contact Olin Technical Services (800-299-6546)

SECTION 16 – OTHER INFORMATION

Δ **The information contained herein is offered only as a guide to the handling of this specific material and has been prepared in good faith by technically knowledgeable personnel. It is not intended to be all-inclusive and the manner and conditions of use and handling may involve other and additional considerations. No warranty of any kind is given or implied and Olin will not be liable for any damages, losses, injuries or consequential damages that may result from the use of or reliance on any information contained herein. This Material Safety Data Sheet is valid for three years.**

Revision Indicators:
Δ In the left margin indicates a revision or addition of information since the previous issue.

National Fire Protection Association (NFPA) Rating
Hazardous Materials Identification System (HMIS) Rating

Δ

	NFPA	HMIS
HEALTH	3	3
FIRE	0	0
REACTIVITY / INSTABILITY	1	1
SPECIAL HAZARDS	N/Ap	N/Ap

4 = Extreme/Severe
3 = High/Serious
2 = Moderate
1 = Slight
0 = Minimum
~~W~~ = Water Reactive
OX = Oxidizer
* = Chronic health hazard

Δ **REFERENCES:**

1. Chemlist, STN Database, Chemical Abstract Service, 1999
2. "CHEMINFO", CCOHS, Canadian Centre for Occupational Health and Safety, Hamilton, Ontario, Canada, (2008).
3. DOSE, Royal Society of Chemistry, Aug 27, 1999.
4. HSDB- Hazardous Substances Data Bank, CCOHS, 2008.
5. RTECS-Registry of Toxic Effects of Chemical Substances, On-line search, Canadian Centre for Occupational Health and Safety RTECS database, Doris V. Sweet, Ed., National Institute for Occupational Safety and Health, U.S. Dept. of Health and Human Services, Cincinnati, Entry Update/ August 2007.
6. "2008 Threshold Limit Values and Biological Exposure Indices", American Conference of Government Industrial Hygienists, 2008.
7. Merck, 11th Edition, 1989

Δ **LEGEND:**

ACGIH - American Conference of Governmental Industrial Hygienists
AFFF - Aqueous Film Forming Foam
AIHA - American Industrial Hygiene Association
CAS # - Chemical Abstracts Service Registry Number
CERCLA - Comprehensive Environmental Response, Compensation, and Liability Act
CFR - Code of Federal Regulations
DOT - Department of Transportation
EINECS - European Inventory of Existing Chemical Substances
EPA - Environmental Protection Agency
ERAP - Emergency Response Assistance Plan
IATA - International Air Transportation Association
ICAO - International Civil Aviation Organization
FRP - Fiberglass Reinforced Plastic
HMIS - Hazardous Materials Identification System
IARC - International Agency for Research on Cancer
IDLH - Immediately Dangerous to Life and Health
LC50 - The concentration of material in air expected to kill 50% of a group of test animals
LD_{50} - Lethal Dose expected to kill 50% of a group of test animals
MSHA - Mine Safety and Health Administration
N/Ap - Not Applicable
N/Av - Not Available
NFPA - National Fire Protection Association
NIOSH - National Institute for Occupational Safety and Health
NTP - National Toxicology Program
OSHA - Occupational Safety & Health Administration
PEL - Permissible Exposure Limit
PVC - Polyvinyl chloride
RCRA - Resource Conservation and Recovery Act
SARA - Superfund Amendments and Reauthorization Act of the U.S. EPA
STEL - Short Term Exposure Limit
TDG - Transportation of Dangerous Goods Act/Regulations
TLV - Threshold Limit Value
TSCA - Toxic Substances Control Act
TWA - Time Weighted Average
WEEL - Workplace Environmental Exposure Level
WHMIS - Workplace Hazardous Materials Identification System

Appendix D
Injection Logs

TABLE D-1
BASP INJECTION LOG
Third 2014 Injection Event (Oct/Nov)
Whirlpool Facility
Fort Smith, Arkansas

Injection Point ID	Screen Depth Interval (feet)	Injection Date	BASP Injection Time (mins)	BASP Volume (gal)	Average BASP Flow Rate (gal/min)	Well Head Pressure (psi)
IP-17	20-25	10/30/2014	136	200	1.47	10
IP-18	20-25		166	200	1.20	10
IP-19	20-25		118	200	1.69	14
IP-20	20-25		100	200	2.00	16
IP-21	20-25		156	200	1.28	30
IP-22	20-25		114	200	1.75	24
IP-23	20-25	10/31/2014	86	200	2.33	20-22
IP-24	20-25		65	200	3.08	10-12
IP-25	20-25		88	200	2.27	20-24
IP-26	21-26		122	200	1.64	40-50
IP-27	20-25		83	200	2.41	20-22
IP-28	20-25		90	200	2.22	12-14
IP-29	20-25		97	200	2.06	20-22
IP-30	20-25		111	200	1.80	18-20
IP-31	20-25		67	200	2.99	28-30
IW-129	20-25		50	200	4.00	26-29
IW-135	20-25		80	200	2.50	18-20
IW-136	20-25		67	200	2.99	10-12
IW-151	20-25		75	200	2.67	10-12
IW-152	20-25		127	200	1.57	8-10
IW-160	20-25		78	200	2.56	18-20
IW-166	20-25		92	200	2.17	10-12
IW-167	20-25		100	200	2.00	0-6
IW-168	20-25		106	200	1.89	10
IP-32	20-25	11/1/14	99	200	2.02	12-14
IP-33	20-25		78	200	2.56	20-22
IP-34	20-25		68	200	2.94	20-22
IP-35	21-26		80	200	2.50	20-22
IP-36	20-25		110	200	1.82	14-20
IW-133	20-25		55	200	3.64	18-20
IW-134	20-25		140	200	1.43	14-16
IW-141	20-25		97	200	2.06	18-20
IW-142	20-25		56	200	3.57	0-6
IW-143	20-25		119	200	1.68	10-12
IW-144	20-25		84	200	2.38	12-14
IW-148	20-25		66	200	3.03	10-12
IW-149	20-25		85	200	2.35	8-10
IW-150	20-25		93	200	2.15	14-16
IW-157	20-25		101	200	1.98	10-12
IW-158	20-25		73	200	2.74	0-6
IW-159	20-25		94	200	2.13	10-12
IW-164	20-25		56	200	3.57	18-20
IW-165	20-25		73	200	2.74	8-10
IW-132	20-25	11/2/14	105	200	1.90	0-6
IW-139	20-25		95	200	2.11	18-20
IW-140	20-25		87	200	2.30	0-6
IW-155	20-25		110	200	1.82	0-6
IW-156	20-25		105	200	1.90	0-6
IW-161	20-25		100	200	2.00	10-12
IW-162	20-25		110	200	1.82	10-14
IW-163	20-25		60	200	3.33	0-6
IW-170	20-25		114	200	1.75	10-14
IW-171	20-25		87	200	2.30	18-20
IW-137	20-25	11/3/14	135	200	1.48	36-38
IW-138	20-25		76	200	2.63	10-12
IW-145	20-25		189	200	1.06	30-32
IW-146	20-25		120	200	1.67	34-36
IW-147	20-25		63	200	3.17	10-12
IW-153	20-25		134	200	1.49	30-36
IW-154	20-25		68	200	2.94	8-10
IW-169	20-25		76	200	2.63	10-12
Event Total			**5835**	**12200**	**2.26**	

Notes:
BASP = Base activated sodium persulfate solution (~12%)
Gal = Gallons
Gal/Min = Gallons per minute
Mins = Minutes
GPM = Gallons per minute
PSI = Pounds per square inch

TABLE D-2
MFR INJECTION LOG
Third 2014 Injection Event (Oct/Nov)
Whirlpool Facility
Fort Smith, Arkansas

Injection Point ID	Screen Depth Interval (ft)	Injection Date	H2O2 Injection Time (mins)	H2O2 Volume (gal)	Catalyst Injection Time (mins)	Catalyst Volume (gal)	H2O2 Flow Rate (gal/min)	Catalyst Flow Rate (gal/min)	Well Head Pressure (psi)
IP-01	21-26	10/28/2014	20	20	61	60	1.00	0.98	30-40
IP-02	21-26		172	140	54	60	0.81	1.11	20
IP-03	21-26		164	140	37	60	0.85	1.62	30-40
IP-04	21-26		28	20	35	60	0.71	1.71	22-28
IP-05	21-26		20	10	63	60	0.50	0.95	10
IP-06	21-26		-	--	16	30	--	1.88	--
IP-01	21-26	10/29/2014	86	120	--	--	1.40	--	25
IP-04	21-26		38	120	--	--	3.16	--	10-20
IP-05	21-26		273	130	--	--	0.48	--	24
IP-06	21-26		79	140	10	30	1.77	3.00	12
IP-07	19-24		74	140	29	60	1.89	2.07	20-30
IP-08	21-26		76	140	27	60	1.84	2.22	14
IP-09	22-27		131	140	72	60	1.07	0.83	20-30
IP-10	20-25		173	140	34	60	0.81	1.76	10-20
IP-11	21-26		131	140	26	60	1.07	2.31	30-35
IP-12	20-25		74	140	20	60	1.89	3.00	30-40
IP-13	20-25		78	100	47	60	1.28	1.28	20-22
IP-14	20-25		29	70	39	60	2.41	1.54	20-30
IP-15	20-25	10/30/2014	--	--	20	60	--	3.00	24
IP-16	20-25		--	--	63	60	--	0.95	10-12
IP-13	20-25	10/31/2014	60	40	--	--	0.67	--	20
IP-14	20-25		60	40	--	--	0.67	--	30
IP-15	20-25		232	140	--	--	0.60	--	24
IP-16	20-25		178	140	--	--	0.79	--	20
IP-14	20-25	11/1/2014	30	30	--	--	1.00	--	18-20
Area 1				**2240**		**960**	**1.21**	**1.78**	

Total MFR (gal)	**3200**

Notes:

H2O2 = Oxidizer is 10% Stabilized Hydrogen Peroxide
Catalyst is ISOTEC series Cat-4260 chelated iron complex
Persulfate = sodium persulfate solution (~18%)
Gal = Gallons
Gal/Min = Gallons per minute
Mins = Minutes
GPM = Gallons per minute
PSI = Pounds per square inch

Appendix E
Laboratory Analytical Reports

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

December 11, 2014

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

RE: Project: Fort Smith, AR
Pace Project No.: 60183996

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on December 06, 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.

Amended report, REV-1 to add E flag data to samples 011, 012, 017, and 021.

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

CERTIFICATIONS

Project: Fort Smith, AR
Pace Project No.: 60183996

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.: 60183996

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60183996001	MW-92-20141204	Water	12/04/14 09:30	12/06/14 08:15
60183996002	IW-153-20141204	Water	12/04/14 11:27	12/06/14 08:15
60183996003	MW-93-20141204	Water	12/04/14 12:42	12/06/14 08:15
60183996004	ITMW-18-20141204	Water	12/04/14 14:17	12/06/14 08:15
60183996005	IW-127-20141204	Water	12/04/14 15:38	12/06/14 08:15
60183996006	MW-38-20141204	Water	12/04/14 16:35	12/06/14 08:15
60183996007	ITMW-11-20141204	Water	12/04/14 17:50	12/06/14 08:15
60183996008	ITMW-15-20141205	Water	12/05/14 08:10	12/06/14 08:15
60183996009	MW-172-20141205	Water	12/05/14 09:25	12/06/14 08:15
60183996010	ITMW-17-20141205	Water	12/05/14 10:40	12/06/14 08:15
60183996011	IW-147-20141205	Water	12/05/14 11:40	12/06/14 08:15
60183996012	MW-86-20141205	Water	12/05/14 12:48	12/06/14 08:15
60183996013	MW-94-20141204	Water	12/04/14 13:00	12/06/14 08:15
60183996014	MW-95-20141204	Water	12/04/14 14:16	12/06/14 08:15
60183996015	ITMW-12-20141204	Water	12/04/14 15:52	12/06/14 08:15
60183996016	ITMW-19-20141205	Water	12/05/14 08:33	12/06/14 08:15
60183996017	IW-157-20141205	Water	12/05/14 09:45	12/06/14 08:15
60183996018	MW-25-20141205	Water	12/05/14 11:04	12/06/14 08:15
60183996019	MW-85-20141205	Water	12/05/14 12:45	12/06/14 08:15
60183996020	TRIP BLANK-20141204	Water	12/04/14 12:00	12/06/14 08:15
60183996021	MW-141-20141205	Water	12/05/14 14:00	12/06/14 08:15
60183996022	IW-152-20141204	Water	12/04/14 17:34	12/06/14 08:15

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SAMPLE ANALYTE COUNT

Project: Fort Smith, AR
Pace Project No.: 60183996

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60183996001	MW-92-20141204	EPA 5030B/8260	PRG	38
60183996002	IW-153-20141204	EPA 5030B/8260	PRG	38
60183996003	MW-93-20141204	EPA 5030B/8260	PRG	38
60183996004	ITMW-18-20141204	EPA 5030B/8260	PRG	38
60183996005	IW-127-20141204	EPA 5030B/8260	PRG	38
60183996006	MW-38-20141204	EPA 5030B/8260	PRG	38
60183996007	ITMW-11-20141204	EPA 5030B/8260	PRG	38
60183996008	ITMW-15-20141205	EPA 5030B/8260	PRG	38
60183996009	MW-172-20141205	EPA 5030B/8260	PRG	38
60183996010	ITMW-17-20141205	EPA 5030B/8260	PRG	38
60183996011	IW-147-20141205	EPA 5030B/8260	PRG	38
60183996012	MW-86-20141205	EPA 5030B/8260	PRG	36
60183996013	MW-94-20141204	EPA 5030B/8260	PRG	38
60183996014	MW-95-20141204	EPA 5030B/8260	PRG	38
60183996015	ITMW-12-20141204	EPA 5030B/8260	PRG	38
60183996016	ITMW-19-20141205	EPA 5030B/8260	PRG	38
60183996017	IW-157-20141205	EPA 5030B/8260	PRG	38
60183996018	MW-25-20141205	EPA 5030B/8260	PRG	38
60183996019	MW-85-20141205	EPA 5030B/8260	PRG	38
60183996020	TRIP BLANK-20141204	EPA 5030B/8260	PRG	38
60183996021	MW-141-20141205	EPA 5030B/8260	PRG	38
60183996022	IW-152-20141204	EPA 5030B/8260	PRG	38

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PROJECT NARRATIVE

Project: Fort Smith, AR
Pace Project No.: 60183996

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: December 11, 2014

General Information:
22 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/66255
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/66256
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/66260
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/66261
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/66280
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: Fort Smith, AR
Pace Project No.: 60183996

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: December 11, 2014

Analyte Comments:

QC Batch: MSV/66255

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- IW-147-20141205 (Lab ID: 60183996011)
  - 1,1,1-Trichloroethane
  - cis-1,2-Dichloroethene
  - Trichloroethene
- IW-157-20141205 (Lab ID: 60183996017)
  - cis-1,2-Dichloroethene
  - Trichloroethene
- MW-141-20141205 (Lab ID: 60183996021)
  - cis-1,2-Dichloroethene
  - Trichloroethene
- MW-86-20141205 (Lab ID: 60183996012)
  - 1,1-Dichloroethene
  - 1,1,1-Trichloroethane
  - 1,1,2,2-Tetrachloroethane
  - cis-1,2-Dichloroethene
  - Chloroform
  - Trichloroethene

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.: 60183996

Sample: MW-92-20141204 **Lab ID: 60183996001** Collected: 12/04/14 09:30 Received: 12/06/14 08:15 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		12/08/14 08:53	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 08:53	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 08:53	75-27-4	
Bromoform	**0.63J**	ug/L	5.0	0.50	1		12/08/14 08:53	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 08:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 08:53	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 08:53	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 08:53	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 08:53	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 08:53	75-00-3	
Chloroform	**0.62J**	ug/L	5.0	0.50	1		12/08/14 08:53	67-66-3	
Chloromethane	**0.68J**	ug/L	10.0	0.50	1		12/08/14 08:53	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 08:53	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 08:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 08:53	107-06-2	
1,1-Dichloroethene	**3.1J**	ug/L	5.0	0.50	1		12/08/14 08:53	75-35-4	
cis-1,2-Dichloroethene	**23.4**	ug/L	5.0	0.50	1		12/08/14 08:53	156-59-2	
trans-1,2-Dichloroethene	**1.8J**	ug/L	5.0	0.50	1		12/08/14 08:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 08:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 08:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 08:53	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 08:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 08:53	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		12/08/14 08:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 08:53	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 08:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 08:53	79-34-5	
Tetrachloroethene	**0.80J**	ug/L	5.0	0.50	1		12/08/14 08:53	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 08:53	108-88-3	
1,1,1-Trichloroethane	**3.6J**	ug/L	5.0	0.50	1		12/08/14 08:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 08:53	79-00-5	
Trichloroethene	**2200**	ug/L	125	12.5	25		12/08/14 10:19	79-01-6	
Vinyl chloride	**10.3**	ug/L	2.0	0.50	1		12/08/14 08:53	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 08:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	88-111		1		12/08/14 08:53	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	82-119		1		12/08/14 08:53	17060-07-0	
Toluene-d8 (S)	98	%	91-107		1		12/08/14 08:53	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 08:53		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: IW-153-20141204 **Lab ID: 60183996002** Collected: 12/04/14 11:27 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**28.8**	ug/L	10.0	5.0	1		12/08/14 12:53	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 12:53	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 12:53	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 12:53	75-25-2	
Bromomethane	**3.1J**	ug/L	7.0	2.5	1		12/08/14 12:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 12:53	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 12:53	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 12:53	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 12:53	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 12:53	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		12/08/14 12:53	67-66-3	
Chloromethane	**6.7J**	ug/L	10.0	0.50	1		12/08/14 12:53	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 12:53	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 12:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 12:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 12:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 12:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 12:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 12:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 12:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 12:53	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 12:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 12:53	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		12/08/14 12:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 12:53	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 12:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 12:53	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		12/08/14 12:53	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 12:53	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 12:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 12:53	79-00-5	
Trichloroethene	**1.6J**	ug/L	5.0	0.50	1		12/08/14 16:28	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		12/08/14 12:53	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 12:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	88-111		1		12/08/14 12:53	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	82-119		1		12/08/14 12:53	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 12:53	2037-26-5	
Preservation pH	**8.0**		0.10	0.10	1		12/08/14 12:53		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: MW-93-20141204 **Lab ID: 60183996003** Collected: 12/04/14 12:42 Received: 12/06/14 08:15 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		12/08/14 11:01	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 11:01	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 11:01	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 11:01	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 11:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 11:01	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 11:01	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 11:01	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 11:01	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 11:01	75-00-3	
Chloroform	**7.7**	ug/L	5.0	0.50	1		12/08/14 11:01	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		12/08/14 11:01	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 11:01	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 11:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 11:01	107-06-2	
1,1-Dichloroethene	**22.6**	ug/L	5.0	0.50	1		12/08/14 11:01	75-35-4	
cis-1,2-Dichloroethene	**85.7**	ug/L	5.0	0.50	1		12/08/14 11:01	156-59-2	
trans-1,2-Dichloroethene	**1.2J**	ug/L	5.0	0.50	1		12/08/14 11:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 11:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 11:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 11:01	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 11:01	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 11:01	591-78-6	
Methylene chloride	**3.2J**	ug/L	5.0	0.50	1		12/08/14 11:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 11:01	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 11:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 11:01	79-34-5	
Tetrachloroethene	**3.5J**	ug/L	5.0	0.50	1		12/08/14 11:01	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 11:01	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 11:01	71-55-6	
1,1,2-Trichloroethane	**1.2J**	ug/L	5.0	0.50	1		12/08/14 11:01	79-00-5	
Trichloroethene	**14600**	ug/L	1000	100	200		12/08/14 10:49	79-01-6	
Vinyl chloride	**2.5**	ug/L	2.0	0.50	1		12/08/14 11:01	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 11:01	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	88-111		1		12/08/14 11:01	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	82-119		1		12/08/14 11:01	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 11:01	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 11:01		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: ITMW-18-20141204 **Lab ID: 60183996004** Collected: 12/04/14 14:17 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**17.9**	ug/L	10.0	5.0	1		12/08/14 10:29	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 10:29	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 10:29	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 10:29	75-25-2	
Bromomethane	**4.5J**	ug/L	7.0	2.5	1		12/08/14 10:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 10:29	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 10:29	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 10:29	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 10:29	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 10:29	75-00-3	
Chloroform	**2.7J**	ug/L	5.0	0.50	1		12/08/14 10:29	67-66-3	
Chloromethane	**3.1J**	ug/L	10.0	0.50	1		12/08/14 10:29	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 10:29	124-48-1	
1,1-Dichloroethane	**2.2J**	ug/L	2.4	0.50	1		12/08/14 10:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 10:29	107-06-2	
1,1-Dichloroethene	**1.2J**	ug/L	5.0	0.50	1		12/08/14 10:29	75-35-4	
cis-1,2-Dichloroethene	**74.3**	ug/L	5.0	0.50	1		12/08/14 10:29	156-59-2	
trans-1,2-Dichloroethene	**13.3**	ug/L	5.0	0.50	1		12/08/14 10:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 10:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 10:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 10:29	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 10:29	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 10:29	591-78-6	
Methylene chloride	**0.52J**	ug/L	5.0	0.50	1		12/08/14 10:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 10:29	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 10:29	100-42-5	
1,1,2,2-Tetrachloroethane	**0.96J**	ug/L	1.0	0.50	1		12/08/14 10:29	79-34-5	
Tetrachloroethene	**1.8J**	ug/L	5.0	0.50	1		12/08/14 10:29	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 10:29	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 10:29	71-55-6	
1,1,2-Trichloroethane	**0.70J**	ug/L	5.0	0.50	1		12/08/14 10:29	79-00-5	
Trichloroethene	**3690**	ug/L	500	50.0	100		12/08/14 11:04	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		12/08/14 10:29	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 10:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	88-111		1		12/08/14 10:29	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	82-119		1		12/08/14 10:29	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 10:29	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 10:29		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: IW-127-20141204 **Lab ID: 60183996005** Collected: 12/04/14 15:38 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**22.2**	ug/L	10.0	5.0	1		12/08/14 09:50	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 09:50	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 09:50	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 09:50	75-25-2	
Bromomethane	**11.8**	ug/L	7.0	2.5	1		12/08/14 09:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 09:50	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 09:50	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 09:50	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:50	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 09:50	75-00-3	
Chloroform	**0.67J**	ug/L	5.0	0.50	1		12/08/14 09:50	67-66-3	
Chloromethane	**2.4J**	ug/L	10.0	0.50	1		12/08/14 09:50	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 09:50	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 09:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 09:50	75-35-4	
cis-1,2-Dichloroethene	**7.2**	ug/L	5.0	0.50	1		12/08/14 09:50	156-59-2	
trans-1,2-Dichloroethene	**1.1J**	ug/L	5.0	0.50	1		12/08/14 09:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 09:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:50	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:50	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 09:50	591-78-6	
Methylene chloride	**0.91J**	ug/L	5.0	0.50	1		12/08/14 09:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 09:50	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 09:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 09:50	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		12/08/14 09:50	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 09:50	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:50	79-00-5	
Trichloroethene	**182**	ug/L	5.0	0.50	1		12/08/14 09:50	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		12/08/14 09:50	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 09:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	88-111		1		12/08/14 09:50	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	82-119		1		12/08/14 09:50	17060-07-0	
Toluene-d8 (S)	91	%	91-107		1		12/08/14 09:50	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		12/08/14 09:50		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: MW-38-20141204 **Lab ID: 60183996006** Collected: 12/04/14 16:35 Received: 12/06/14 08:15 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		12/08/14 13:09	67-64-1	
Benzene	**2.0J**	ug/L	5.0	0.50	1		12/08/14 13:09	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 13:09	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 13:09	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 13:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 13:09	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 13:09	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 13:09	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 13:09	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 13:09	75-00-3	
Chloroform	**0.58J**	ug/L	5.0	0.50	1		12/08/14 13:09	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		12/08/14 13:09	74-87-3	
Dibromochloromethane	**1.2J**	ug/L	5.0	0.50	1		12/08/14 13:09	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 13:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 13:09	107-06-2	
1,1-Dichloroethene	**14.7**	ug/L	5.0	0.50	1		12/08/14 13:09	75-35-4	
cis-1,2-Dichloroethene	**697**	ug/L	500	50.0	100		12/08/14 15:44	156-59-2	
trans-1,2-Dichloroethene	**9.7**	ug/L	5.0	0.50	1		12/08/14 13:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 13:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 13:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 13:09	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 13:09	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 13:09	591-78-6	
Methylene chloride	**1.1J**	ug/L	5.0	0.50	1		12/08/14 13:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 13:09	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 13:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 13:09	79-34-5	
Tetrachloroethene	**1.1J**	ug/L	5.0	0.50	1		12/08/14 13:09	127-18-4	
Toluene	**0.84J**	ug/L	5.0	0.50	1		12/08/14 13:09	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 13:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 13:09	79-00-5	
Trichloroethene	**3190**	ug/L	500	50.0	100		12/08/14 15:44	79-01-6	
Vinyl chloride	**193**	ug/L	2.0	0.50	1		12/08/14 13:09	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 13:09	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	88-111		1		12/08/14 13:09	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	82-119		1		12/08/14 13:09	17060-07-0	
Toluene-d8 (S)	97	%	91-107		1		12/08/14 13:09	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 13:09		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: ITMW-11-20141204 **Lab ID: 60183996007** Collected: 12/04/14 17:50 Received: 12/06/14 08:15 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		12/08/14 09:41	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 09:41	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 09:41	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 09:41	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 09:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 09:41	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 09:41	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 09:41	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:41	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 09:41	75-00-3	
Chloroform	**0.65J**	ug/L	5.0	0.50	1		12/08/14 09:41	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		12/08/14 09:41	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 09:41	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 09:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 09:41	75-35-4	
cis-1,2-Dichloroethene	**55.0**	ug/L	5.0	0.50	1		12/08/14 09:41	156-59-2	
trans-1,2-Dichloroethene	**1.5J**	ug/L	5.0	0.50	1		12/08/14 09:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 09:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:41	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:41	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 09:41	591-78-6	
Methylene chloride	**1.2J**	ug/L	5.0	0.50	1		12/08/14 09:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 09:41	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 09:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 09:41	79-34-5	
Tetrachloroethene	**0.85J**	ug/L	5.0	0.50	1		12/08/14 09:41	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 09:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:41	79-00-5	
Trichloroethene	**1530**	ug/L	250	25.0	50		12/08/14 11:18	79-01-6	
Vinyl chloride	**6.4**	ug/L	2.0	0.50	1		12/08/14 09:41	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 09:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	88-111		1		12/08/14 09:41	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	82-119		1		12/08/14 09:41	17060-07-0	
Toluene-d8 (S)	98	%	91-107		1		12/08/14 09:41	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 09:41		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: ITMW-15-20141205 **Lab ID: 60183996008** Collected: 12/05/14 08:10 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**81.3**	ug/L	10.0	5.0	1		12/08/14 08:37	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 08:37	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 08:37	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 08:37	75-25-2	
Bromomethane	**14.2**	ug/L	7.0	2.5	1		12/08/14 08:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 08:37	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 08:37	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 08:37	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 08:37	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 08:37	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		12/08/14 08:37	67-66-3	
Chloromethane	**15.8**	ug/L	10.0	0.50	1		12/08/14 08:37	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 08:37	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 08:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 08:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 08:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 08:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 08:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 08:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 08:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 08:37	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 08:37	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 08:37	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		12/08/14 08:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 08:37	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 08:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 08:37	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		12/08/14 08:37	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 08:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 08:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 08:37	79-00-5	
Trichloroethene	**63.0**	ug/L	5.0	0.50	1		12/08/14 08:37	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		12/08/14 08:37	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 08:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	88-111		1		12/08/14 08:37	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	82-119		1		12/08/14 08:37	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 08:37	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 08:37		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: MW-172-20141205 **Lab ID: 60183996009** Collected: 12/05/14 09:25 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**22.2**	ug/L	10.0	5.0	1		12/08/14 09:09	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 09:09	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 09:09	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 09:09	75-25-2	
Bromomethane	**12.7**	ug/L	7.0	2.5	1		12/08/14 09:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 09:09	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 09:09	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 09:09	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:09	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 09:09	75-00-3	
Chloroform	**4.0J**	ug/L	5.0	0.50	1		12/08/14 09:09	67-66-3	
Chloromethane	**1.8J**	ug/L	10.0	0.50	1		12/08/14 09:09	74-87-3	
Dibromochloromethane	**1.9J**	ug/L	5.0	0.50	1		12/08/14 09:09	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 09:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 09:09	75-35-4	
cis-1,2-Dichloroethene	**15.6**	ug/L	5.0	0.50	1		12/08/14 09:09	156-59-2	
trans-1,2-Dichloroethene	**2.6J**	ug/L	5.0	0.50	1		12/08/14 09:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 09:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:09	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:09	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 09:09	591-78-6	
Methylene chloride	**1.7J**	ug/L	5.0	0.50	1		12/08/14 09:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 09:09	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 09:09	100-42-5	
1,1,2,2-Tetrachloroethane	**2.3**	ug/L	1.0	0.50	1		12/08/14 09:09	79-34-5	
Tetrachloroethene	**1.7J**	ug/L	5.0	0.50	1		12/08/14 09:09	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 09:09	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:09	71-55-6	
1,1,2-Trichloroethane	**0.69J**	ug/L	5.0	0.50	1		12/08/14 09:09	79-00-5	
Trichloroethene	**1810**	ug/L	125	12.5	25		12/08/14 11:48	79-01-6	
Vinyl chloride	**1.3J**	ug/L	2.0	0.50	1		12/08/14 09:09	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 09:09	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	88-111		1		12/08/14 09:09	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	82-119		1		12/08/14 09:09	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 09:09	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 09:09		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: ITMW-17-20141205 **Lab ID: 60183996010** Collected: 12/05/14 10:40 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**6.1J**	ug/L	10.0	5.0	1		12/08/14 09:57	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 09:57	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 09:57	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 09:57	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 09:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 09:57	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 09:57	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 09:57	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:57	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 09:57	75-00-3	
Chloroform	**1.4J**	ug/L	5.0	0.50	1		12/08/14 09:57	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		12/08/14 09:57	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 09:57	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 09:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:57	107-06-2	
1,1-Dichloroethene	**7.3**	ug/L	5.0	0.50	1		12/08/14 09:57	75-35-4	
cis-1,2-Dichloroethene	**210J**	ug/L	250	25.0	50		12/08/14 12:03	156-59-2	
trans-1,2-Dichloroethene	**25.9**	ug/L	5.0	0.50	1		12/08/14 09:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 09:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:57	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:57	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 09:57	591-78-6	
Methylene chloride	**0.70J**	ug/L	5.0	0.50	1		12/08/14 09:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 09:57	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 09:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 09:57	79-34-5	
Tetrachloroethene	**1.5J**	ug/L	5.0	0.50	1		12/08/14 09:57	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 09:57	108-88-3	
1,1,1-Trichloroethane	**0.73J**	ug/L	5.0	0.50	1		12/08/14 09:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:57	79-00-5	
Trichloroethene	**4630**	ug/L	250	25.0	50		12/08/14 12:03	79-01-6	
Vinyl chloride	**7.7**	ug/L	2.0	0.50	1		12/08/14 09:57	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 09:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	88-111		1		12/08/14 09:57	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	82-119		1		12/08/14 09:57	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 09:57	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 09:57		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: IW-147-20141205 **Lab ID: 60183996011** Collected: 12/05/14 11:40 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**141**	ug/L	10.0	5.0	1		12/08/14 12:05	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 12:05	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 12:05	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 12:05	75-25-2	
Bromomethane	**2.6J**	ug/L	7.0	2.5	1		12/08/14 12:05	74-83-9	
2-Butanone (MEK)	**19.0**	ug/L	10.0	5.0	1		12/08/14 12:05	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 12:05	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 12:05	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 12:05	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 12:05	75-00-3	
Chloroform	**71.5**	ug/L	5.0	0.50	1		12/08/14 12:05	67-66-3	
Chloromethane	**4.1J**	ug/L	10.0	0.50	1		12/08/14 12:05	74-87-3	
Dibromochloromethane	**64.3**	ug/L	5.0	0.50	1		12/08/14 12:05	124-48-1	
1,1-Dichloroethane	**4.4**	ug/L	2.4	0.50	1		12/08/14 12:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 12:05	107-06-2	
1,1-Dichloroethene	**62.8**	ug/L	5.0	0.50	1		12/08/14 12:05	75-35-4	
cis-1,2-Dichloroethene	**1320**	ug/L	5.0	0.50	1		12/08/14 12:05	156-59-2	E
cis-1,2-Dichloroethene	**1420J**	ug/L	10000	1000	2000		12/08/14 12:17	156-59-2	
trans-1,2-Dichloroethene	**80.1**	ug/L	5.0	0.50	1		12/08/14 12:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 12:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 12:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 12:05	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 12:05	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 12:05	591-78-6	
Methylene chloride	**39.8**	ug/L	5.0	0.50	1		12/08/14 12:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 12:05	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 12:05	100-42-5	
1,1,2,2-Tetrachloroethane	**26.8**	ug/L	1.0	0.50	1		12/08/14 12:05	79-34-5	
Tetrachloroethene	**62.7**	ug/L	5.0	0.50	1		12/08/14 12:05	127-18-4	
Toluene	**2.1J**	ug/L	5.0	0.50	1		12/08/14 12:05	108-88-3	
1,1,1-Trichloroethane	**359**	ug/L	5.0	0.50	1		12/08/14 12:05	71-55-6	E
1,1,1-Trichloroethane	ND	ug/L	10000	1000	2000		12/08/14 12:17	71-55-6	
1,1,2-Trichloroethane	**0.55J**	ug/L	5.0	0.50	1		12/08/14 12:05	79-00-5	
Trichloroethene	**12800**	ug/L	5.0	0.50	1		12/08/14 12:05	79-01-6	E
Trichloroethene	**91600**	ug/L	10000	1000	2000		12/08/14 12:17	79-01-6	
Vinyl chloride	**176**	ug/L	2.0	0.50	1		12/08/14 12:05	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 12:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		12/08/14 12:05	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		12/08/14 12:05	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		12/08/14 12:05	2037-26-5	
Preservation pH	**7.0**		0.10	0.10	1		12/08/14 12:05		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: MW-86-20141205 **Lab ID: 60183996012** Collected: 12/05/14 12:48 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**399**	ug/L	10.0	5.0	1		12/08/14 12:21	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 12:21	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 12:21	75-27-4	
Bromoform	**0.70J**	ug/L	5.0	0.50	1		12/08/14 12:21	75-25-2	
Bromomethane	**4.8J**	ug/L	7.0	2.5	1		12/08/14 12:21	74-83-9	
2-Butanone (MEK)	**143**	ug/L	10.0	5.0	1		12/08/14 12:21	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 12:21	75-15-0	
Carbon tetrachloride	**14.4**	ug/L	5.0	0.50	1		12/08/14 12:21	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 12:21	108-90-7	
Chloroethane	**1.2J**	ug/L	10.0	0.50	1		12/08/14 12:21	75-00-3	
Chloroform	**239**	ug/L	5.0	0.50	1		12/08/14 12:21	67-66-3	E
Chloroform	**4060J**	ug/L	10000	1000	2000		12/08/14 12:32	67-66-3	
Chloromethane	**17.2**	ug/L	10.0	0.50	1		12/08/14 12:21	74-87-3	
Dibromochloromethane	**45.7**	ug/L	5.0	0.50	1		12/08/14 12:21	124-48-1	
1,1-Dichloroethane	**44.2**	ug/L	2.4	0.50	1		12/08/14 12:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 12:21	107-06-2	
1,1-Dichloroethene	**295**	ug/L	5.0	0.50	1		12/08/14 12:21	75-35-4	E
1,1-Dichloroethene	ND	ug/L	10000	1000	2000		12/08/14 12:32	75-35-4	
cis-1,2-Dichloroethene	**290**	ug/L	5.0	0.50	1		12/08/14 12:21	156-59-2	E
cis-1,2-Dichloroethene	ND	ug/L	10000	1000	2000		12/08/14 12:32	156-59-2	
trans-1,2-Dichloroethene	**47.7**	ug/L	5.0	0.50	1		12/08/14 12:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 12:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 12:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 12:21	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 12:21	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 12:21	591-78-6	
Methylene chloride	**50.5**	ug/L	5.0	0.50	1		12/08/14 12:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 12:21	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 12:21	100-42-5	
1,1,2,2-Tetrachloroethane	**1510**	ug/L	1.0	0.50	1		12/08/14 12:21	79-34-5	E
1,1,2,2-Tetrachloroethane	**1710J**	ug/L	2000	1000	2000		12/08/14 12:32	79-34-5	
Tetrachloroethene	**44.0**	ug/L	5.0	0.50	1		12/08/14 12:21	127-18-4	
Toluene	**10.4**	ug/L	5.0	0.50	1		12/08/14 12:21	108-88-3	
1,1,1-Trichloroethane	**2400**	ug/L	5.0	0.50	1		12/08/14 12:21	71-55-6	E
1,1,1-Trichloroethane	**1310J**	ug/L	10000	1000	2000		12/08/14 12:32	71-55-6	
1,1,2-Trichloroethane	**10.7**	ug/L	5.0	0.50	1		12/08/14 12:21	79-00-5	
Trichloroethene	**31900**	ug/L	5.0	0.50	1		12/08/14 12:21	79-01-6	E
Trichloroethene	**169000**	ug/L	10000	1000	2000		12/08/14 12:32	79-01-6	
Vinyl chloride	**24.7**	ug/L	2.0	0.50	1		12/08/14 12:21	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 12:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		12/08/14 12:21	460-00-4	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 12:21		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: MW-94-20141204 **Lab ID: 60183996013** Collected: 12/04/14 13:00 Received: 12/06/14 08:15 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		12/08/14 13:25	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 13:25	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 13:25	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 13:25	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 13:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 13:25	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 13:25	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 13:25	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 13:25	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 13:25	75-00-3	
Chloroform	**3.3J**	ug/L	5.0	0.50	1		12/08/14 13:25	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		12/08/14 13:25	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 13:25	124-48-1	
1,1-Dichloroethane	**2.9**	ug/L	2.4	0.50	1		12/08/14 13:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 13:25	107-06-2	
1,1-Dichloroethene	**130**	ug/L	5.0	0.50	1		12/08/14 13:25	75-35-4	
cis-1,2-Dichloroethene	**250J**	ug/L	1250	125	250		12/08/14 15:58	156-59-2	
trans-1,2-Dichloroethene	**2.3J**	ug/L	5.0	0.50	1		12/08/14 13:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 13:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 13:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 13:25	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 13:25	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 13:25	591-78-6	
Methylene chloride	**0.63J**	ug/L	5.0	0.50	1		12/08/14 13:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 13:25	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 13:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 13:25	79-34-5	
Tetrachloroethene	**2.7J**	ug/L	5.0	0.50	1		12/08/14 13:25	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 13:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 13:25	71-55-6	
1,1,2-Trichloroethane	**0.67J**	ug/L	5.0	0.50	1		12/08/14 13:25	79-00-5	
Trichloroethene	**9570**	ug/L	1250	125	250		12/08/14 15:58	79-01-6	
Vinyl chloride	**3.0**	ug/L	2.0	0.50	1		12/08/14 13:25	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 13:25	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	88-111		1		12/08/14 13:25	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	82-119		1		12/08/14 13:25	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 13:25	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 13:25		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: MW-95-20141204 **Lab ID: 60183996014** Collected: 12/04/14 14:16 Received: 12/06/14 08:15 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		12/08/14 13:41	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 13:41	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 13:41	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 13:41	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 13:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 13:41	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 13:41	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 13:41	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 13:41	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 13:41	75-00-3	
Chloroform	**7.5**	ug/L	5.0	0.50	1		12/08/14 13:41	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		12/08/14 13:41	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 13:41	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 13:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 13:41	107-06-2	
1,1-Dichloroethene	**38.7**	ug/L	5.0	0.50	1		12/08/14 13:41	75-35-4	
cis-1,2-Dichloroethene	**159**	ug/L	5.0	0.50	1		12/08/14 13:41	156-59-2	
trans-1,2-Dichloroethene	**1.5J**	ug/L	5.0	0.50	1		12/08/14 13:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 13:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 13:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 13:41	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 13:41	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 13:41	591-78-6	
Methylene chloride	**3.8J**	ug/L	5.0	0.50	1		12/08/14 13:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 13:41	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 13:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 13:41	79-34-5	
Tetrachloroethene	**6.3**	ug/L	5.0	0.50	1		12/08/14 13:41	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 13:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 13:41	71-55-6	
1,1,2-Trichloroethane	**2.0J**	ug/L	5.0	0.50	1		12/08/14 13:41	79-00-5	
Trichloroethene	**20900**	ug/L	1000	100	200		12/08/14 16:13	79-01-6	
Vinyl chloride	**29.9**	ug/L	2.0	0.50	1		12/08/14 13:41	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 13:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	88-111		1		12/08/14 13:41	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	82-119		1		12/08/14 13:41	17060-07-0	
Toluene-d8 (S)	98	%	91-107		1		12/08/14 13:41	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 13:41		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: ITMW-12-20141204 **Lab ID: 60183996015** Collected: 12/04/14 15:52 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**8.4J**	ug/L	10.0	5.0	1		12/08/14 09:25	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 09:25	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 09:25	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 09:25	75-25-2	
Bromomethane	**6.5J**	ug/L	7.0	2.5	1		12/08/14 09:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 09:25	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 09:25	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 09:25	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:25	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 09:25	75-00-3	
Chloroform	**0.72J**	ug/L	5.0	0.50	1		12/08/14 09:25	67-66-3	
Chloromethane	**2.2J**	ug/L	10.0	0.50	1		12/08/14 09:25	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 09:25	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 09:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 09:25	75-35-4	
cis-1,2-Dichloroethene	**51.1**	ug/L	5.0	0.50	1		12/08/14 09:25	156-59-2	
trans-1,2-Dichloroethene	**6.8**	ug/L	5.0	0.50	1		12/08/14 09:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 09:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:25	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:25	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 09:25	591-78-6	
Methylene chloride	**0.95J**	ug/L	5.0	0.50	1		12/08/14 09:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 09:25	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 09:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 09:25	79-34-5	
Tetrachloroethene	**0.60J**	ug/L	5.0	0.50	1		12/08/14 09:25	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 09:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:25	79-00-5	
Trichloroethene	**468**	ug/L	125	12.5	25		12/08/14 12:47	79-01-6	
Vinyl chloride	**0.88J**	ug/L	2.0	0.50	1		12/08/14 09:25	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 09:25	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	88-111		1		12/08/14 09:25	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	82-119		1		12/08/14 09:25	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 09:25	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 09:25		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: ITMW-19-20141205 **Lab ID: 60183996016** Collected: 12/05/14 08:33 Received: 12/06/14 08:15 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		12/08/14 10:45	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 10:45	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 10:45	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 10:45	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 10:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 10:45	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 10:45	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 10:45	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 10:45	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 10:45	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		12/08/14 10:45	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		12/08/14 10:45	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 10:45	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 10:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 10:45	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 10:45	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 10:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 10:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 10:45	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 10:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 10:45	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 10:45	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 10:45	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		12/08/14 10:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 10:45	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 10:45	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 10:45	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		12/08/14 10:45	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 10:45	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 10:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 10:45	79-00-5	
Trichloroethene	**33.5**	ug/L	5.0	0.50	1		12/08/14 16:43	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		12/08/14 10:45	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 10:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	88-111		1		12/08/14 10:45	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	82-119		1		12/08/14 10:45	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 10:45	2037-26-5	
Preservation pH	**8.0**		0.10	0.10	1		12/08/14 10:45		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: IW-157-20141205 **Lab ID: 60183996017** Collected: 12/05/14 09:45 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**53.4**	ug/L	10.0	5.0	1		12/08/14 11:33	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 11:33	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 11:33	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 11:33	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 11:33	74-83-9	
2-Butanone (MEK)	**183**	ug/L	10.0	5.0	1		12/08/14 11:33	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 11:33	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 11:33	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 11:33	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 11:33	75-00-3	
Chloroform	**10.3**	ug/L	5.0	0.50	1		12/08/14 11:33	67-66-3	
Chloromethane	**0.62J**	ug/L	10.0	0.50	1		12/08/14 11:33	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 11:33	124-48-1	
1,1-Dichloroethane	**1.1J**	ug/L	2.4	0.50	1		12/08/14 11:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 11:33	107-06-2	
1,1-Dichloroethene	**27.4**	ug/L	5.0	0.50	1		12/08/14 11:33	75-35-4	
cis-1,2-Dichloroethene	**391**	ug/L	5.0	0.50	1		12/08/14 11:33	156-59-2	E
cis-1,2-Dichloroethene	ND	ug/L	5000	500	1000		12/08/14 13:16	156-59-2	
trans-1,2-Dichloroethene	**17.1**	ug/L	5.0	0.50	1		12/08/14 11:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 11:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 11:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 11:33	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 11:33	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 11:33	591-78-6	
Methylene chloride	**8.0**	ug/L	5.0	0.50	1		12/08/14 11:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 11:33	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 11:33	100-42-5	
1,1,2,2-Tetrachloroethane	**3.1**	ug/L	1.0	0.50	1		12/08/14 11:33	79-34-5	
Tetrachloroethene	**10.6**	ug/L	5.0	0.50	1		12/08/14 11:33	127-18-4	
Toluene	**0.58J**	ug/L	5.0	0.50	1		12/08/14 11:33	108-88-3	
1,1,1-Trichloroethane	**48.5**	ug/L	5.0	0.50	1		12/08/14 11:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 11:33	79-00-5	
Trichloroethene	**6300**	ug/L	5.0	0.50	1		12/08/14 11:33	79-01-6	E
Trichloroethene	**31700**	ug/L	5000	500	1000		12/08/14 13:16	79-01-6	
Vinyl chloride	**66.8**	ug/L	2.0	0.50	1		12/08/14 11:33	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 11:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		12/08/14 11:33	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		12/08/14 11:33	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		12/08/14 11:33	2037-26-5	
Preservation pH	**7.0**		0.10	0.10	1		12/08/14 11:33		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: MW-25-20141205 **Lab ID: 60183996018** Collected: 12/05/14 11:04 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**170**	ug/L	10.0	5.0	1		12/08/14 11:49	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 11:49	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 11:49	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 11:49	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 11:49	74-83-9	
2-Butanone (MEK)	**25.6**	ug/L	10.0	5.0	1		12/08/14 11:49	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 11:49	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 11:49	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 11:49	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 11:49	75-00-3	
Chloroform	**4.0J**	ug/L	5.0	0.50	1		12/08/14 11:49	67-66-3	
Chloromethane	**0.95J**	ug/L	10.0	0.50	1		12/08/14 11:49	74-87-3	
Dibromochloromethane	**2.6J**	ug/L	5.0	0.50	1		12/08/14 11:49	124-48-1	
1,1-Dichloroethane	**1.5J**	ug/L	2.4	0.50	1		12/08/14 11:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 11:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 11:49	75-35-4	
cis-1,2-Dichloroethene	**31.5**	ug/L	5.0	0.50	1		12/08/14 11:49	156-59-2	
trans-1,2-Dichloroethene	**5.3**	ug/L	5.0	0.50	1		12/08/14 11:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 11:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 11:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 11:49	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 11:49	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 11:49	591-78-6	
Methylene chloride	**2.7J**	ug/L	5.0	0.50	1		12/08/14 11:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 11:49	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 11:49	100-42-5	
1,1,2,2-Tetrachloroethane	**50.2**	ug/L	1.0	0.50	1		12/08/14 11:49	79-34-5	
Tetrachloroethene	**2.6J**	ug/L	5.0	0.50	1		12/08/14 11:49	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 11:49	108-88-3	
1,1,1-Trichloroethane	**4.7J**	ug/L	5.0	0.50	1		12/08/14 11:49	71-55-6	
1,1,2-Trichloroethane	**0.87J**	ug/L	5.0	0.50	1		12/08/14 11:49	79-00-5	
Trichloroethene	**2620J**	ug/L	5000	500	1000		12/08/14 13:31	79-01-6	
Vinyl chloride	**2.1**	ug/L	2.0	0.50	1		12/08/14 11:49	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 11:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	88-111		1		12/08/14 11:49	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	82-119		1		12/08/14 11:49	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 11:49	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 11:49		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: MW-85-20141205 **Lab ID: 60183996019** Collected: 12/05/14 12:45 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**55.5**	ug/L	10.0	5.0	1		12/08/14 10:13	67-64-1	
Benzene	**0.62J**	ug/L	5.0	0.50	1		12/08/14 10:13	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 10:13	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 10:13	75-25-2	
Bromomethane	**18.3**	ug/L	7.0	2.5	1		12/08/14 10:13	74-83-9	
2-Butanone (MEK)	**10.8**	ug/L	10.0	5.0	1		12/08/14 10:13	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 10:13	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 10:13	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 10:13	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 10:13	75-00-3	
Chloroform	**31.8**	ug/L	5.0	0.50	1		12/08/14 10:13	67-66-3	
Chloromethane	**11.2**	ug/L	10.0	0.50	1		12/08/14 10:13	74-87-3	
Dibromochloromethane	**22.5**	ug/L	5.0	0.50	1		12/08/14 10:13	124-48-1	
1,1-Dichloroethane	**2.0J**	ug/L	2.4	0.50	1		12/08/14 10:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 10:13	107-06-2	
1,1-Dichloroethene	**6.5**	ug/L	5.0	0.50	1		12/08/14 10:13	75-35-4	
cis-1,2-Dichloroethene	**280**	ug/L	250	25.0	50		12/08/14 13:46	156-59-2	
trans-1,2-Dichloroethene	**51.6**	ug/L	5.0	0.50	1		12/08/14 10:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 10:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 10:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 10:13	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 10:13	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 10:13	591-78-6	
Methylene chloride	**146**	ug/L	5.0	0.50	1		12/08/14 10:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 10:13	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 10:13	100-42-5	
1,1,2,2-Tetrachloroethane	**109**	ug/L	1.0	0.50	1		12/08/14 10:13	79-34-5	
Tetrachloroethene	**22.0**	ug/L	5.0	0.50	1		12/08/14 10:13	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 10:13	108-88-3	
1,1,1-Trichloroethane	**250J**	ug/L	250	25.0	50		12/08/14 13:46	71-55-6	
1,1,2-Trichloroethane	**2.3J**	ug/L	5.0	0.50	1		12/08/14 10:13	79-00-5	
Trichloroethene	**27700**	ug/L	2500	250	500		12/08/14 14:15	79-01-6	
Vinyl chloride	**7.7**	ug/L	2.0	0.50	1		12/08/14 10:13	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 10:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	88-111		1		12/08/14 10:13	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	82-119		1		12/08/14 10:13	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 10:13	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 10:13		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: TRIP BLANK-20141204 **Lab ID: 60183996020** Collected: 12/04/14 12:00 Received: 12/06/14 08:15 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		12/08/14 15:29	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 15:29	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 15:29	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 15:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 15:29	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 15:29	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 15:29	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 15:29	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		12/08/14 15:29	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		12/08/14 15:29	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 15:29	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 15:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 15:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 15:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 15:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 15:29	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 15:29	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		12/08/14 15:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 15:29	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 15:29	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 15:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 15:29	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		12/08/14 15:29	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 15:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		12/08/14 15:29	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		12/08/14 15:29	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		12/08/14 15:29	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 15:29		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: MW-141-20141205 **Lab ID: 60183996021** Collected: 12/05/14 14:00 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**83.3**	ug/L	10.0	5.0	1		12/08/14 12:37	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 12:37	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 12:37	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 12:37	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 12:37	74-83-9	
2-Butanone (MEK)	**11.9**	ug/L	10.0	5.0	1		12/08/14 12:37	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 12:37	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 12:37	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 12:37	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 12:37	75-00-3	
Chloroform	**18.8**	ug/L	5.0	0.50	1		12/08/14 12:37	67-66-3	
Chloromethane	**6.7J**	ug/L	10.0	0.50	1		12/08/14 12:37	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 12:37	124-48-1	
1,1-Dichloroethane	**1.7J**	ug/L	2.4	0.50	1		12/08/14 12:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 12:37	107-06-2	
1,1-Dichloroethene	**6.1**	ug/L	5.0	0.50	1		12/08/14 12:37	75-35-4	
cis-1,2-Dichloroethene	**232**	ug/L	5.0	0.50	1		12/08/14 12:37	156-59-2	E
cis-1,2-Dichloroethene	ND	ug/L	10000	1000	2000		12/08/14 14:01	156-59-2	
trans-1,2-Dichloroethene	**8.1**	ug/L	5.0	0.50	1		12/08/14 12:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 12:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 12:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 12:37	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 12:37	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 12:37	591-78-6	
Methylene chloride	**51.5**	ug/L	5.0	0.50	1		12/08/14 12:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 12:37	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 12:37	100-42-5	
1,1,2,2-Tetrachloroethane	**8.2**	ug/L	1.0	0.50	1		12/08/14 12:37	79-34-5	
Tetrachloroethene	**22.7**	ug/L	5.0	0.50	1		12/08/14 12:37	127-18-4	
Toluene	**0.61J**	ug/L	5.0	0.50	1		12/08/14 12:37	108-88-3	
1,1,1-Trichloroethane	**101**	ug/L	5.0	0.50	1		12/08/14 12:37	71-55-6	
1,1,2-Trichloroethane	**0.60J**	ug/L	5.0	0.50	1		12/08/14 12:37	79-00-5	
Trichloroethene	**8220**	ug/L	5.0	0.50	1		12/08/14 12:37	79-01-6	E
Trichloroethene	**46300**	ug/L	10000	1000	2000		12/08/14 14:01	79-01-6	
Vinyl chloride	**31.0**	ug/L	2.0	0.50	1		12/08/14 12:37	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 12:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		12/08/14 12:37	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		12/08/14 12:37	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		12/08/14 12:37	2037-26-5	
Preservation pH	**9.0**		0.10	0.10	1		12/08/14 12:37		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: IW-152-20141204 **Lab ID: 60183996022** Collected: 12/04/14 17:34 Received: 12/06/14 08:15 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		12/08/14 11:17	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 11:17	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 11:17	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 11:17	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 11:17	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 11:17	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 11:17	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 11:17	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 11:17	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 11:17	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		12/08/14 11:17	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		12/08/14 11:17	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 11:17	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 11:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 11:17	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 11:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 11:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 11:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 11:17	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 11:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 11:17	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 11:17	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 11:17	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		12/08/14 11:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 11:17	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 11:17	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 11:17	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		12/08/14 11:17	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 11:17	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 11:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 11:17	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 16:57	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		12/08/14 11:17	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 11:17	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	88-111		1		12/08/14 11:17	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	82-119		1		12/08/14 11:17	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 11:17	2037-26-5	
Preservation pH	**10.0**		0.10	0.10	1		12/08/14 11:17		

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60183996

QC Batch: MSV/66256 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60183996006, 60183996013, 60183996014

METHOD BLANK: 1490223 Matrix: Water
Associated Lab Samples: 60183996006, 60183996013, 60183996014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	12/08/14 08:14	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/08/14 08:14	
1,1,2-Trichloroethane	ug/L	ND	5.0	12/08/14 08:14	
1,1-Dichloroethane	ug/L	ND	2.4	12/08/14 08:14	
1,1-Dichloroethene	ug/L	ND	5.0	12/08/14 08:14	
1,2-Dichloroethane	ug/L	ND	5.0	12/08/14 08:14	
1,2-Dichloropropane	ug/L	ND	5.0	12/08/14 08:14	
2-Butanone (MEK)	ug/L	ND	10.0	12/08/14 08:14	
2-Hexanone	ug/L	ND	10.0	12/08/14 08:14	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	12/08/14 08:14	
Acetone	ug/L	ND	10.0	12/08/14 08:14	
Benzene	ug/L	ND	5.0	12/08/14 08:14	
Bromodichloromethane	ug/L	ND	5.0	12/08/14 08:14	
Bromoform	ug/L	ND	5.0	12/08/14 08:14	
Bromomethane	ug/L	ND	7.0	12/08/14 08:14	
Carbon disulfide	ug/L	ND	10.0	12/08/14 08:14	
Carbon tetrachloride	ug/L	ND	5.0	12/08/14 08:14	
Chlorobenzene	ug/L	ND	5.0	12/08/14 08:14	
Chloroethane	ug/L	ND	10.0	12/08/14 08:14	
Chloroform	ug/L	ND	5.0	12/08/14 08:14	
Chloromethane	ug/L	ND	10.0	12/08/14 08:14	
cis-1,2-Dichloroethene	ug/L	ND	5.0	12/08/14 08:14	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/08/14 08:14	
Dibromochloromethane	ug/L	ND	5.0	12/08/14 08:14	
Ethylbenzene	ug/L	ND	5.0	12/08/14 08:14	
Methylene chloride	ug/L	ND	5.0	12/08/14 08:14	
Styrene	ug/L	ND	5.0	12/08/14 08:14	
Tetrachloroethene	ug/L	ND	5.0	12/08/14 08:14	
Toluene	ug/L	ND	5.0	12/08/14 08:14	
trans-1,2-Dichloroethene	ug/L	ND	5.0	12/08/14 08:14	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/08/14 08:14	
Vinyl chloride	ug/L	ND	2.0	12/08/14 08:14	
Xylene (Total)	ug/L	ND	5.0	12/08/14 08:14	
1,2-Dichloroethane-d4 (S)	%	104	80-120	12/08/14 08:14	
4-Bromofluorobenzene (S)	%	98	80-120	12/08/14 08:14	
Toluene-d8 (S)	%	100	80-120	12/08/14 08:14	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60183996

LABORATORY CONTROL SAMPLE: 1490224

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.0	105	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	21.0	105	73-121	
1,1,2-Trichloroethane	ug/L	20	20.7	104	80-120	
1,1-Dichloroethane	ug/L	20	19.9	100	80-120	
1,1-Dichloroethene	ug/L	20	19.4	97	80-120	
1,2-Dichloroethane	ug/L	20	20.7	103	81-120	
1,2-Dichloropropane	ug/L	20	20.2	101	80-120	
2-Butanone (MEK)	ug/L	100	97.2	97	67-122	
2-Hexanone	ug/L	100	108	108	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	106	106	76-120	
Acetone	ug/L	100	103	103	72-120	
Benzene	ug/L	20	20.3	101	80-120	
Bromodichloromethane	ug/L	20	21.8	109	80-120	
Bromoform	ug/L	20	21.9	110	73-138	
Bromomethane	ug/L	20	22.0	110	38-137	
Carbon disulfide	ug/L	20	21.2	106	71-129	
Carbon tetrachloride	ug/L	20	20.7	104	67-146	
Chlorobenzene	ug/L	20	20.5	102	80-120	
Chloroethane	ug/L	20	17.8	89	76-120	
Chloroform	ug/L	20	21.0	105	80-120	
Chloromethane	ug/L	20	18.7	94	34-165	
cis-1,2-Dichloroethene	ug/L	20	19.7	98	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.1	101	80-120	
Dibromochloromethane	ug/L	20	20.9	104	80-126	
Ethylbenzene	ug/L	20	20.6	103	80-120	
Methylene chloride	ug/L	20	19.8	99	80-120	
Styrene	ug/L	20	22.2	111	80-123	
Tetrachloroethene	ug/L	20	20.1	101	80-123	
Toluene	ug/L	20	20.1	100	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.8	99	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.5	107	80-129	
Vinyl chloride	ug/L	20	20.1	100	62-125	
Xylene (Total)	ug/L	60	62.4	104	80-120	
1,2-Dichloroethane-d4 (S)	%			103	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			99	80-120	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60183996

QC Batch: MSV/66261 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60183996006, 60183996013, 60183996014, 60183996020

METHOD BLANK: 1490271 Matrix: Water
Associated Lab Samples: 60183996006, 60183996013, 60183996014, 60183996020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	12/08/14 15:14	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/08/14 15:14	
1,1,2-Trichloroethane	ug/L	ND	5.0	12/08/14 15:14	
1,1-Dichloroethane	ug/L	ND	2.4	12/08/14 15:14	
1,1-Dichloroethene	ug/L	ND	5.0	12/08/14 15:14	
1,2-Dichloroethane	ug/L	ND	5.0	12/08/14 15:14	
1,2-Dichloropropane	ug/L	ND	5.0	12/08/14 15:14	
2-Butanone (MEK)	ug/L	ND	10.0	12/08/14 15:14	
2-Hexanone	ug/L	ND	10.0	12/08/14 15:14	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	12/08/14 15:14	
Acetone	ug/L	ND	10.0	12/08/14 15:14	
Benzene	ug/L	ND	5.0	12/08/14 15:14	
Bromodichloromethane	ug/L	ND	5.0	12/08/14 15:14	
Bromoform	ug/L	ND	5.0	12/08/14 15:14	
Bromomethane	ug/L	ND	7.0	12/08/14 15:14	
Carbon disulfide	ug/L	ND	10.0	12/08/14 15:14	
Carbon tetrachloride	ug/L	ND	5.0	12/08/14 15:14	
Chlorobenzene	ug/L	ND	5.0	12/08/14 15:14	
Chloroethane	ug/L	ND	10.0	12/08/14 15:14	
Chloroform	ug/L	ND	5.0	12/08/14 15:14	
Chloromethane	ug/L	ND	10.0	12/08/14 15:14	
cis-1,2-Dichloroethene	ug/L	ND	5.0	12/08/14 15:14	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/08/14 15:14	
Dibromochloromethane	ug/L	ND	5.0	12/08/14 15:14	
Ethylbenzene	ug/L	ND	5.0	12/08/14 15:14	
Methylene chloride	ug/L	ND	5.0	12/08/14 15:14	
Styrene	ug/L	ND	5.0	12/08/14 15:14	
Tetrachloroethene	ug/L	ND	5.0	12/08/14 15:14	
Toluene	ug/L	ND	5.0	12/08/14 15:14	
trans-1,2-Dichloroethene	ug/L	ND	5.0	12/08/14 15:14	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/08/14 15:14	
Trichloroethene	ug/L	ND	5.0	12/08/14 15:14	
Vinyl chloride	ug/L	ND	2.0	12/08/14 15:14	
Xylene (Total)	ug/L	ND	5.0	12/08/14 15:14	
1,2-Dichloroethane-d4 (S)	%	99	80-120	12/08/14 15:14	
4-Bromofluorobenzene (S)	%	100	80-120	12/08/14 15:14	
Toluene-d8 (S)	%	101	80-120	12/08/14 15:14	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60183996

LABORATORY CONTROL SAMPLE: 1490272

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	19.4	97	73-121	
1,1,2-Trichloroethane	ug/L	20	20.7	103	80-120	
1,1-Dichloroethane	ug/L	20	21.0	105	80-120	
1,1-Dichloroethene	ug/L	20	19.9	100	80-120	
1,2-Dichloroethane	ug/L	20	21.0	105	81-120	
1,2-Dichloropropane	ug/L	20	20.8	104	80-120	
2-Butanone (MEK)	ug/L	100	101	101	67-122	
2-Hexanone	ug/L	100	95.7	96	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	103	103	76-120	
Acetone	ug/L	100	95.8	96	72-120	
Benzene	ug/L	20	21.2	106	80-120	
Bromodichloromethane	ug/L	20	21.3	106	80-120	
Bromoform	ug/L	20	20.6	103	73-138	
Bromomethane	ug/L	20	14.1	70	38-137	
Carbon disulfide	ug/L	20	20.7	104	71-129	
Carbon tetrachloride	ug/L	20	20.5	102	67-146	
Chlorobenzene	ug/L	20	20.5	102	80-120	
Chloroethane	ug/L	20	18.6	93	76-120	
Chloroform	ug/L	20	20.5	102	80-120	
Chloromethane	ug/L	20	14.8	74	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.0	100	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.3	102	80-120	
Dibromochloromethane	ug/L	20	21.0	105	80-126	
Ethylbenzene	ug/L	20	20.4	102	80-120	
Methylene chloride	ug/L	20	19.6	98	80-120	
Styrene	ug/L	20	20.6	103	80-123	
Tetrachloroethene	ug/L	20	20.1	100	80-123	
Toluene	ug/L	20	21.2	106	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.3	101	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.1	100	80-129	
Trichloroethene	ug/L	20	21.1	105	80-120	
Vinyl chloride	ug/L	20	18.1	91	62-125	
Xylene (Total)	ug/L	60	61.3	102	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			103	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60183996

QC Batch: MSV/66255 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60183996001, 60183996002, 60183996003, 60183996004, 60183996007, 60183996008, 60183996009, 60183996010, 60183996011, 60183996012, 60183996015, 60183996016, 60183996017, 60183996018, 60183996019, 60183996021, 60183996022

METHOD BLANK: 1490221 Matrix: Water
Associated Lab Samples: 60183996001, 60183996002, 60183996003, 60183996004, 60183996007, 60183996008, 60183996009, 60183996010, 60183996011, 60183996012, 60183996015, 60183996016, 60183996017, 60183996018, 60183996019, 60183996021, 60183996022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	12/08/14 08:14	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/08/14 08:14	
1,1,2-Trichloroethane	ug/L	ND	5.0	12/08/14 08:14	
1,1-Dichloroethane	ug/L	ND	2.4	12/08/14 08:14	
1,1-Dichloroethene	ug/L	ND	5.0	12/08/14 08:14	
1,2-Dichloroethane	ug/L	ND	5.0	12/08/14 08:14	
1,2-Dichloropropane	ug/L	ND	5.0	12/08/14 08:14	
2-Butanone (MEK)	ug/L	ND	10.0	12/08/14 08:14	
2-Hexanone	ug/L	ND	10.0	12/08/14 08:14	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	12/08/14 08:14	
Acetone	ug/L	ND	10.0	12/08/14 08:14	
Benzene	ug/L	ND	5.0	12/08/14 08:14	
Bromodichloromethane	ug/L	ND	5.0	12/08/14 08:14	
Bromoform	ug/L	ND	5.0	12/08/14 08:14	
Bromomethane	ug/L	ND	7.0	12/08/14 08:14	
Carbon disulfide	ug/L	ND	10.0	12/08/14 08:14	
Carbon tetrachloride	ug/L	ND	5.0	12/08/14 08:14	
Chlorobenzene	ug/L	ND	5.0	12/08/14 08:14	
Chloroethane	ug/L	ND	10.0	12/08/14 08:14	
Chloroform	ug/L	ND	5.0	12/08/14 08:14	
Chloromethane	ug/L	ND	10.0	12/08/14 08:14	
cis-1,2-Dichloroethene	ug/L	ND	5.0	12/08/14 08:14	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/08/14 08:14	
Dibromochloromethane	ug/L	ND	5.0	12/08/14 08:14	
Ethylbenzene	ug/L	ND	5.0	12/08/14 08:14	
Methylene chloride	ug/L	ND	5.0	12/08/14 08:14	
Styrene	ug/L	ND	5.0	12/08/14 08:14	
Tetrachloroethene	ug/L	ND	5.0	12/08/14 08:14	
Toluene	ug/L	ND	5.0	12/08/14 08:14	
trans-1,2-Dichloroethene	ug/L	ND	5.0	12/08/14 08:14	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/08/14 08:14	
Trichloroethene	ug/L	ND	5.0	12/08/14 08:14	
Vinyl chloride	ug/L	ND	2.0	12/08/14 08:14	
Xylene (Total)	ug/L	ND	5.0	12/08/14 08:14	
1,2-Dichloroethane-d4 (S)	%	104	80-120	12/08/14 08:14	
4-Bromofluorobenzene (S)	%	98	80-120	12/08/14 08:14	
Toluene-d8 (S)	%	100	80-120	12/08/14 08:14	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60183996

LABORATORY CONTROL SAMPLE: 1490222

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.0	105	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	21.0	105	73-121	
1,1,2-Trichloroethane	ug/L	20	20.7	104	80-120	
1,1-Dichloroethane	ug/L	20	19.9	100	80-120	
1,1-Dichloroethene	ug/L	20	19.4	97	80-120	
1,2-Dichloroethane	ug/L	20	20.7	103	81-120	
1,2-Dichloropropane	ug/L	20	20.2	101	80-120	
2-Butanone (MEK)	ug/L	100	97.2	97	67-122	
2-Hexanone	ug/L	100	108	108	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	106	106	76-120	
Acetone	ug/L	100	103	103	72-120	
Benzene	ug/L	20	20.3	101	80-120	
Bromodichloromethane	ug/L	20	21.8	109	80-120	
Bromoform	ug/L	20	21.9	110	73-138	
Bromomethane	ug/L	20	22.0	110	38-137	
Carbon disulfide	ug/L	20	21.2	106	71-129	
Carbon tetrachloride	ug/L	20	20.7	104	67-146	
Chlorobenzene	ug/L	20	20.5	102	80-120	
Chloroethane	ug/L	20	17.8	89	76-120	
Chloroform	ug/L	20	21.0	105	80-120	
Chloromethane	ug/L	20	18.7	94	34-165	
cis-1,2-Dichloroethene	ug/L	20	19.7	98	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.1	101	80-120	
Dibromochloromethane	ug/L	20	20.9	104	80-126	
Ethylbenzene	ug/L	20	20.6	103	80-120	
Methylene chloride	ug/L	20	19.8	99	80-120	
Styrene	ug/L	20	22.2	111	80-123	
Tetrachloroethene	ug/L	20	20.1	101	80-123	
Toluene	ug/L	20	20.1	100	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.8	99	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.5	107	80-129	
Trichloroethene	ug/L	20	19.9	99	80-120	
Vinyl chloride	ug/L	20	20.1	100	62-125	
Xylene (Total)	ug/L	60	62.4	104	80-120	
1,2-Dichloroethane-d4 (S)	%			103	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			99	80-120	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60183996

QC Batch: MSV/66260 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60183996001, 60183996003, 60183996004, 60183996005, 60183996007, 60183996009, 60183996010, 60183996011, 60183996012, 60183996015, 60183996017, 60183996018, 60183996019, 60183996021

METHOD BLANK: 1490269 Matrix: Water
Associated Lab Samples: 60183996001, 60183996003, 60183996004, 60183996005, 60183996007, 60183996009, 60183996010, 60183996011, 60183996012, 60183996015, 60183996017, 60183996018, 60183996019, 60183996021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	12/08/14 09:35	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/08/14 09:35	
1,1,2-Trichloroethane	ug/L	ND	5.0	12/08/14 09:35	
1,1-Dichloroethane	ug/L	ND	2.4	12/08/14 09:35	
1,1-Dichloroethene	ug/L	ND	5.0	12/08/14 09:35	
1,2-Dichloroethane	ug/L	ND	5.0	12/08/14 09:35	
1,2-Dichloropropane	ug/L	ND	5.0	12/08/14 09:35	
2-Butanone (MEK)	ug/L	ND	10.0	12/08/14 09:35	
2-Hexanone	ug/L	ND	10.0	12/08/14 09:35	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	12/08/14 09:35	
Acetone	ug/L	ND	10.0	12/08/14 09:35	
Benzene	ug/L	ND	5.0	12/08/14 09:35	
Bromodichloromethane	ug/L	ND	5.0	12/08/14 09:35	
Bromoform	ug/L	ND	5.0	12/08/14 09:35	
Bromomethane	ug/L	ND	7.0	12/08/14 09:35	
Carbon disulfide	ug/L	ND	10.0	12/08/14 09:35	
Carbon tetrachloride	ug/L	ND	5.0	12/08/14 09:35	
Chlorobenzene	ug/L	ND	5.0	12/08/14 09:35	
Chloroethane	ug/L	ND	10.0	12/08/14 09:35	
Chloroform	ug/L	ND	5.0	12/08/14 09:35	
Chloromethane	ug/L	ND	10.0	12/08/14 09:35	
cis-1,2-Dichloroethene	ug/L	ND	5.0	12/08/14 09:35	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/08/14 09:35	
Dibromochloromethane	ug/L	ND	5.0	12/08/14 09:35	
Ethylbenzene	ug/L	ND	5.0	12/08/14 09:35	
Methylene chloride	ug/L	ND	5.0	12/08/14 09:35	
Styrene	ug/L	ND	5.0	12/08/14 09:35	
Tetrachloroethene	ug/L	ND	5.0	12/08/14 09:35	
Toluene	ug/L	ND	5.0	12/08/14 09:35	
trans-1,2-Dichloroethene	ug/L	ND	5.0	12/08/14 09:35	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/08/14 09:35	
Trichloroethene	ug/L	ND	5.0	12/08/14 09:35	
Vinyl chloride	ug/L	ND	2.0	12/08/14 09:35	
Xylene (Total)	ug/L	ND	5.0	12/08/14 09:35	
1,2-Dichloroethane-d4 (S)	%	105	80-120	12/08/14 09:35	
4-Bromofluorobenzene (S)	%	101	80-120	12/08/14 09:35	
Toluene-d8 (S)	%	95	80-120	12/08/14 09:35	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60183996

LABORATORY CONTROL SAMPLE: 1490270

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.6	98	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.2	101	73-121	
1,1,2-Trichloroethane	ug/L	20	19.7	99	80-120	
1,1-Dichloroethane	ug/L	20	19.9	99	80-120	
1,1-Dichloroethene	ug/L	20	18.7	93	80-120	
1,2-Dichloroethane	ug/L	20	21.4	107	81-120	
1,2-Dichloropropane	ug/L	20	20.4	102	80-120	
2-Butanone (MEK)	ug/L	100	108	108	67-122	
2-Hexanone	ug/L	100	98.2	98	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	112	112	76-120	
Acetone	ug/L	100	102	102	72-120	
Benzene	ug/L	20	20.6	103	80-120	
Bromodichloromethane	ug/L	20	22.2	111	80-120	
Bromoform	ug/L	20	20.2	101	73-138	
Bromomethane	ug/L	20	16.6	83	38-137	
Carbon disulfide	ug/L	20	20.1	100	71-129	
Carbon tetrachloride	ug/L	20	19.4	97	67-146	
Chlorobenzene	ug/L	20	19.1	96	80-120	
Chloroethane	ug/L	20	18.5	92	76-120	
Chloroform	ug/L	20	20.4	102	80-120	
Chloromethane	ug/L	20	15.8	79	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.4	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.7	109	80-120	
Dibromochloromethane	ug/L	20	20.9	105	80-126	
Ethylbenzene	ug/L	20	19.4	97	80-120	
Methylene chloride	ug/L	20	20.1	100	80-120	
Styrene	ug/L	20	20.1	100	80-123	
Tetrachloroethene	ug/L	20	17.9	90	80-123	
Toluene	ug/L	20	19.2	96	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.9	100	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.7	98	80-129	
Trichloroethene	ug/L	20	20.5	102	80-120	
Vinyl chloride	ug/L	20	17.1	86	62-125	
Xylene (Total)	ug/L	60	56.7	94	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			95	80-120	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60183996

QC Batch: MSV/66280 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60183996002, 60183996016, 60183996022

METHOD BLANK: 1490388 Matrix: Water
Associated Lab Samples: 60183996002, 60183996016, 60183996022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	ug/L	ND	5.0	12/08/14 15:14	
1,2-Dichloroethane-d4 (S)	%	99	80-120	12/08/14 15:14	
4-Bromofluorobenzene (S)	%	100	80-120	12/08/14 15:14	
Toluene-d8 (S)	%	101	80-120	12/08/14 15:14	

LABORATORY CONTROL SAMPLE: 1490389

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	20	21.1	105	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			103	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALIFIERS

Project: Fort Smith, AR
Pace Project No.: 60183996

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/66255
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/66256
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/66260
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/66261
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/66280
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

E Analyte concentration exceeded the calibration range. The reported result is estimated.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Fort Smith, AR
Pace Project No.: 60183996

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60183996006	MW-38-20141204	EPA 5030B/8260	MSV/66256		
60183996006	MW-38-20141204	EPA 5030B/8260	MSV/66261		
60183996013	MW-94-20141204	EPA 5030B/8260	MSV/66256		
60183996013	MW-94-20141204	EPA 5030B/8260	MSV/66261		
60183996014	MW-95-20141204	EPA 5030B/8260	MSV/66256		
60183996014	MW-95-20141204	EPA 5030B/8260	MSV/66261		
60183996020	TRIP BLANK-20141204	EPA 5030B/8260	MSV/66261		
60183996001	MW-92-20141204	EPA 5030B/8260	MSV/66255		
60183996001	MW-92-20141204	EPA 5030B/8260	MSV/66260		
60183996002	IW-153-20141204	EPA 5030B/8260	MSV/66255		
60183996002	IW-153-20141204	EPA 5030B/8260	MSV/66280		
60183996003	MW-93-20141204	EPA 5030B/8260	MSV/66255		
60183996003	MW-93-20141204	EPA 5030B/8260	MSV/66260		
60183996004	ITMW-18-20141204	EPA 5030B/8260	MSV/66255		
60183996004	ITMW-18-20141204	EPA 5030B/8260	MSV/66260		
60183996005	IW-127-20141204	EPA 5030B/8260	MSV/66260		
60183996007	ITMW-11-20141204	EPA 5030B/8260	MSV/66255		
60183996007	ITMW-11-20141204	EPA 5030B/8260	MSV/66260		
60183996008	ITMW-15-20141205	EPA 5030B/8260	MSV/66255		
60183996009	MW-172-20141205	EPA 5030B/8260	MSV/66255		
60183996009	MW-172-20141205	EPA 5030B/8260	MSV/66260		
60183996010	ITMW-17-20141205	EPA 5030B/8260	MSV/66255		
60183996010	ITMW-17-20141205	EPA 5030B/8260	MSV/66260		
60183996011	IW-147-20141205	EPA 5030B/8260	MSV/66255		
60183996011	IW-147-20141205	EPA 5030B/8260	MSV/66260		
60183996012	MW-86-20141205	EPA 5030B/8260	MSV/66255		
60183996012	MW-86-20141205	EPA 5030B/8260	MSV/66260		
60183996015	ITMW-12-20141204	EPA 5030B/8260	MSV/66255		
60183996015	ITMW-12-20141204	EPA 5030B/8260	MSV/66260		
60183996016	ITMW-19-20141205	EPA 5030B/8260	MSV/66255		
60183996016	ITMW-19-20141205	EPA 5030B/8260	MSV/66280		
60183996017	IW-157-20141205	EPA 5030B/8260	MSV/66255		
60183996017	IW-157-20141205	EPA 5030B/8260	MSV/66260		
60183996018	MW-25-20141205	EPA 5030B/8260	MSV/66255		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Fort Smith, AR
Pace Project No.: 60183996

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60183996018	**MW-25-20141205**	EPA 5030B/8260	MSV/66260		
60183996019	**MW-85-20141205**	EPA 5030B/8260	MSV/66255		
60183996019	**MW-85-20141205**	EPA 5030B/8260	MSV/66260		
60183996021	**MW-141-20141205**	EPA 5030B/8260	MSV/66255		
60183996021	**MW-141-20141205**	EPA 5030B/8260	MSV/66260		
60183996022	**IW-152-20141204**	EPA 5030B/8260	MSV/66255		
60183996022	**IW-152-20141204**	EPA 5030B/8260	MSV/66280		

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Sample Condition Upon Receipt

WO# : 60183996

60183996

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 6113 5281 8194 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 12/6

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. 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: 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): 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: _____

Project Manager Review: JRS for (MTW) Date: 12-8-14

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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 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:	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:	

Section C Invoice Information:

Attention:	Tamara Gleason
Company Name:	ENVIRON
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, ~~7709 soil~~ VS

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 Ascorbic	Analysis Test Y/N	8260 client specific list	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-92-20141204	WT	G			12/4/14	0930		3								X	X	X		7 day hold 001
2	~~MW-153-20141204~~ MW-153-20141124	WT	G			12/4/14	1127		3								X	X	X		7 day hold 002
3	MW-93-20141204	WT	G			12/4/14	1242		3								X	X	X		7 day hold 003
4	ITMW-18-20141204	WT	G			12/4/14	1417		3								X	X	X		7 day hold 004
5	IW-12-1-20141204	WT	G			12/4/14	1538		3								X	X	X		7 day hold 005
6	MW-38-20141204	WT	G			12/4/14	1035		3				X					X	(3) DG9H		006
7	ITMW-11-20141204	WT	G			12/4/14	1750		3								X	X	(3) DG9H		7 day hold 007
8	ITMW-15-20141205	WT	G			12/5/14	0810		3								X	X			7 day hold 008
9	MW-172-20141205	WT	G			12/5/14	0925		3								X	X			7 day hold 009
10	ITMW-17-20141205	WT	G			12/5/14	1040		3								X	X			7 day hold 010
11	IW-147-20141205	WT	G			12/5/14	1140		3								X	X			7 day hold 011
12	MW-80-20141205	WT	G			12/5/14	1248		3								X	X			7 day hold 012

Requested Analysis Filtered (Y/N)

Pace Project No./ Lab I.D. 60183996

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Victoria Sieglen / ENVIRON	12/5/14	1400		12/6	0815	1.1	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Sieglen

SIGNATURE of SAMPLER: Victoria Sieglen

DATE Signed (MM/DD/YY): 12/5/14

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.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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Section 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:	

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 Ascorbic Acid	Analysis Test Y/N	8260 client specific list: 8260 VOCs w/ MC	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-94-20141204					12/4/14	1300		3				X					Y	X		013
2	MW-95-20141204					12/4/14	1416		3				X					Y	X		014
3	ITMW-12-20141204					12/4/14	1552		5								X	Y	X		Hold 7 day 015
4	ITMW-19-20141205					12/5/14	0833		5								X	Y	X		Hold 7 day 016
5	IW-157-20141205					12/5/14	0945		5								X	Y	X		Hold 7 day 017
6	MW-25-20141205					12/5/14	1104		5								X	Y	X		Hold 7 day 018
7	MW-85-20141205					12/5/14	1245		5								X	Y	X		Hold 7 day 019
8	Trip Blank-20141204					12/4/14	1200		2				X					Y	X		020
9	MW-141-20141205					12/5/14	1400		3									Y	X		021
10	IW-152-20141204					12/4/14	1734		5								X	Y	X		Hold 7 day 022
11																					
12																					

Requested Analysis Filtered (Y/N)

Residual Chlorine (Y/N)

Pace Project No./ Lab I.D.: 60183996

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Lucy Cross / ENVIRON	12/4/14			12/6	0815	61	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lucy Cross

SIGNATURE of SAMPLER: Lucy Cross

DATE Signed (MM/DD/YY): 12/4/2014

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 11, 2014

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

RE: Project: Fort Smith, AR
Pace Project No.: 60183996

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on December 06, 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.

Amended report, REV-1 to add E flag data to samples 011, 012, 017, and 021.

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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CERTIFICATIONS

Project: Fort Smith, AR
Pace Project No.: 60183996

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.: 60183996

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60183996001	MW-92-20141204	Water	12/04/14 09:30	12/06/14 08:15
60183996002	IW-153-20141204	Water	12/04/14 11:27	12/06/14 08:15
60183996003	MW-93-20141204	Water	12/04/14 12:42	12/06/14 08:15
60183996004	ITMW-18-20141204	Water	12/04/14 14:17	12/06/14 08:15
60183996005	IW-127-20141204	Water	12/04/14 15:38	12/06/14 08:15
60183996006	MW-38-20141204	Water	12/04/14 16:35	12/06/14 08:15
60183996007	ITMW-11-20141204	Water	12/04/14 17:50	12/06/14 08:15
60183996008	ITMW-15-20141205	Water	12/05/14 08:10	12/06/14 08:15
60183996009	MW-172-20141205	Water	12/05/14 09:25	12/06/14 08:15
60183996010	ITMW-17-20141205	Water	12/05/14 10:40	12/06/14 08:15
60183996011	IW-147-20141205	Water	12/05/14 11:40	12/06/14 08:15
60183996012	MW-86-20141205	Water	12/05/14 12:48	12/06/14 08:15
60183996013	MW-94-20141204	Water	12/04/14 13:00	12/06/14 08:15
60183996014	MW-95-20141204	Water	12/04/14 14:16	12/06/14 08:15
60183996015	ITMW-12-20141204	Water	12/04/14 15:52	12/06/14 08:15
60183996016	ITMW-19-20141205	Water	12/05/14 08:33	12/06/14 08:15
60183996017	IW-157-20141205	Water	12/05/14 09:45	12/06/14 08:15
60183996018	MW-25-20141205	Water	12/05/14 11:04	12/06/14 08:15
60183996019	MW-85-20141205	Water	12/05/14 12:45	12/06/14 08:15
60183996020	TRIP BLANK-20141204	Water	12/04/14 12:00	12/06/14 08:15
60183996021	MW-141-20141205	Water	12/05/14 14:00	12/06/14 08:15
60183996022	IW-152-20141204	Water	12/04/14 17:34	12/06/14 08:15

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SAMPLE ANALYTE COUNT

Project: Fort Smith, AR
Pace Project No.: 60183996

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60183996001	MW-92-20141204	EPA 5030B/8260	PRG	38
60183996002	IW-153-20141204	EPA 5030B/8260	PRG	38
60183996003	MW-93-20141204	EPA 5030B/8260	PRG	38
60183996004	ITMW-18-20141204	EPA 5030B/8260	PRG	38
60183996005	IW-127-20141204	EPA 5030B/8260	PRG	38
60183996006	MW-38-20141204	EPA 5030B/8260	PRG	38
60183996007	ITMW-11-20141204	EPA 5030B/8260	PRG	38
60183996008	ITMW-15-20141205	EPA 5030B/8260	PRG	38
60183996009	MW-172-20141205	EPA 5030B/8260	PRG	38
60183996010	ITMW-17-20141205	EPA 5030B/8260	PRG	38
60183996011	IW-147-20141205	EPA 5030B/8260	PRG	38
60183996012	MW-86-20141205	EPA 5030B/8260	PRG	36
60183996013	MW-94-20141204	EPA 5030B/8260	PRG	38
60183996014	MW-95-20141204	EPA 5030B/8260	PRG	38
60183996015	ITMW-12-20141204	EPA 5030B/8260	PRG	38
60183996016	ITMW-19-20141205	EPA 5030B/8260	PRG	38
60183996017	IW-157-20141205	EPA 5030B/8260	PRG	38
60183996018	MW-25-20141205	EPA 5030B/8260	PRG	38
60183996019	MW-85-20141205	EPA 5030B/8260	PRG	38
60183996020	TRIP BLANK-20141204	EPA 5030B/8260	PRG	38
60183996021	MW-141-20141205	EPA 5030B/8260	PRG	38
60183996022	IW-152-20141204	EPA 5030B/8260	PRG	38

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PROJECT NARRATIVE

Project: Fort Smith, AR
Pace Project No.: 60183996

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: December 11, 2014

General Information:
22 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/66255
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/66256
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/66260
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/66261
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/66280
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: Fort Smith, AR
Pace Project No.: 60183996

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: December 11, 2014

Analyte Comments:

QC Batch: MSV/66255

E: Analyte concentration exceeded the calibration range. The reported result is estimated.

- IW-147-20141205 (Lab ID: 60183996011)
  - 1,1,1-Trichloroethane
  - cis-1,2-Dichloroethene
  - Trichloroethene
- IW-157-20141205 (Lab ID: 60183996017)
  - cis-1,2-Dichloroethene
  - Trichloroethene
- MW-141-20141205 (Lab ID: 60183996021)
  - cis-1,2-Dichloroethene
  - Trichloroethene
- MW-86-20141205 (Lab ID: 60183996012)
  - 1,1-Dichloroethene
  - 1,1,1-Trichloroethane
  - 1,1,2,2-Tetrachloroethane
  - cis-1,2-Dichloroethene
  - Chloroform
  - Trichloroethene

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.: 60183996

Sample: MW-92-20141204 **Lab ID: 60183996001** Collected: 12/04/14 09:30 Received: 12/06/14 08:15 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		12/08/14 08:53	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 08:53	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 08:53	75-27-4	
Bromoform	**0.63J**	ug/L	5.0	0.50	1		12/08/14 08:53	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 08:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 08:53	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 08:53	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 08:53	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 08:53	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 08:53	75-00-3	
Chloroform	**0.62J**	ug/L	5.0	0.50	1		12/08/14 08:53	67-66-3	
Chloromethane	**0.68J**	ug/L	10.0	0.50	1		12/08/14 08:53	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 08:53	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 08:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 08:53	107-06-2	
1,1-Dichloroethene	**3.1J**	ug/L	5.0	0.50	1		12/08/14 08:53	75-35-4	
cis-1,2-Dichloroethene	**23.4**	ug/L	5.0	0.50	1		12/08/14 08:53	156-59-2	
trans-1,2-Dichloroethene	**1.8J**	ug/L	5.0	0.50	1		12/08/14 08:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 08:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 08:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 08:53	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 08:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 08:53	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		12/08/14 08:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 08:53	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 08:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 08:53	79-34-5	
Tetrachloroethene	**0.80J**	ug/L	5.0	0.50	1		12/08/14 08:53	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 08:53	108-88-3	
1,1,1-Trichloroethane	**3.6J**	ug/L	5.0	0.50	1		12/08/14 08:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 08:53	79-00-5	
Trichloroethene	**2200**	ug/L	125	12.5	25		12/08/14 10:19	79-01-6	
Vinyl chloride	**10.3**	ug/L	2.0	0.50	1		12/08/14 08:53	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 08:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	88-111		1		12/08/14 08:53	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	82-119		1		12/08/14 08:53	17060-07-0	
Toluene-d8 (S)	98	%	91-107		1		12/08/14 08:53	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 08:53		

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: IW-153-20141204 **Lab ID: 60183996002** Collected: 12/04/14 11:27 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**28.8**	ug/L	10.0	5.0	1		12/08/14 12:53	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 12:53	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 12:53	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 12:53	75-25-2	
Bromomethane	**3.1J**	ug/L	7.0	2.5	1		12/08/14 12:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 12:53	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 12:53	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 12:53	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 12:53	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 12:53	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		12/08/14 12:53	67-66-3	
Chloromethane	**6.7J**	ug/L	10.0	0.50	1		12/08/14 12:53	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 12:53	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 12:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 12:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 12:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 12:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 12:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 12:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 12:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 12:53	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 12:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 12:53	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		12/08/14 12:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 12:53	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 12:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 12:53	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		12/08/14 12:53	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 12:53	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 12:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 12:53	79-00-5	
Trichloroethene	**1.6J**	ug/L	5.0	0.50	1		12/08/14 16:28	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		12/08/14 12:53	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 12:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	88-111		1		12/08/14 12:53	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	82-119		1		12/08/14 12:53	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 12:53	2037-26-5	
Preservation pH	**8.0**		0.10	0.10	1		12/08/14 12:53		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: MW-93-20141204 **Lab ID: 60183996003** Collected: 12/04/14 12:42 Received: 12/06/14 08:15 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		12/08/14 11:01	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 11:01	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 11:01	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 11:01	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 11:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 11:01	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 11:01	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 11:01	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 11:01	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 11:01	75-00-3	
Chloroform	**7.7**	ug/L	5.0	0.50	1		12/08/14 11:01	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		12/08/14 11:01	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 11:01	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 11:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 11:01	107-06-2	
1,1-Dichloroethene	**22.6**	ug/L	5.0	0.50	1		12/08/14 11:01	75-35-4	
cis-1,2-Dichloroethene	**85.7**	ug/L	5.0	0.50	1		12/08/14 11:01	156-59-2	
trans-1,2-Dichloroethene	**1.2J**	ug/L	5.0	0.50	1		12/08/14 11:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 11:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 11:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 11:01	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 11:01	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 11:01	591-78-6	
Methylene chloride	**3.2J**	ug/L	5.0	0.50	1		12/08/14 11:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 11:01	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 11:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 11:01	79-34-5	
Tetrachloroethene	**3.5J**	ug/L	5.0	0.50	1		12/08/14 11:01	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 11:01	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 11:01	71-55-6	
1,1,2-Trichloroethane	**1.2J**	ug/L	5.0	0.50	1		12/08/14 11:01	79-00-5	
Trichloroethene	**14600**	ug/L	1000	100	200		12/08/14 10:49	79-01-6	
Vinyl chloride	**2.5**	ug/L	2.0	0.50	1		12/08/14 11:01	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 11:01	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	88-111		1		12/08/14 11:01	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	82-119		1		12/08/14 11:01	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 11:01	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 11:01		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: ITMW-18-20141204 **Lab ID: 60183996004** Collected: 12/04/14 14:17 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**17.9**	ug/L	10.0	5.0	1		12/08/14 10:29	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 10:29	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 10:29	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 10:29	75-25-2	
Bromomethane	**4.5J**	ug/L	7.0	2.5	1		12/08/14 10:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 10:29	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 10:29	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 10:29	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 10:29	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 10:29	75-00-3	
Chloroform	**2.7J**	ug/L	5.0	0.50	1		12/08/14 10:29	67-66-3	
Chloromethane	**3.1J**	ug/L	10.0	0.50	1		12/08/14 10:29	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 10:29	124-48-1	
1,1-Dichloroethane	**2.2J**	ug/L	2.4	0.50	1		12/08/14 10:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 10:29	107-06-2	
1,1-Dichloroethene	**1.2J**	ug/L	5.0	0.50	1		12/08/14 10:29	75-35-4	
cis-1,2-Dichloroethene	**74.3**	ug/L	5.0	0.50	1		12/08/14 10:29	156-59-2	
trans-1,2-Dichloroethene	**13.3**	ug/L	5.0	0.50	1		12/08/14 10:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 10:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 10:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 10:29	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 10:29	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 10:29	591-78-6	
Methylene chloride	**0.52J**	ug/L	5.0	0.50	1		12/08/14 10:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 10:29	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 10:29	100-42-5	
1,1,2,2-Tetrachloroethane	**0.96J**	ug/L	1.0	0.50	1		12/08/14 10:29	79-34-5	
Tetrachloroethene	**1.8J**	ug/L	5.0	0.50	1		12/08/14 10:29	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 10:29	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 10:29	71-55-6	
1,1,2-Trichloroethane	**0.70J**	ug/L	5.0	0.50	1		12/08/14 10:29	79-00-5	
Trichloroethene	**3690**	ug/L	500	50.0	100		12/08/14 11:04	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		12/08/14 10:29	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 10:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	88-111		1		12/08/14 10:29	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	82-119		1		12/08/14 10:29	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 10:29	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 10:29		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: IW-127-20141204 **Lab ID: 60183996005** Collected: 12/04/14 15:38 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**22.2**	ug/L	10.0	5.0	1		12/08/14 09:50	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 09:50	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 09:50	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 09:50	75-25-2	
Bromomethane	**11.8**	ug/L	7.0	2.5	1		12/08/14 09:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 09:50	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 09:50	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 09:50	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:50	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 09:50	75-00-3	
Chloroform	**0.67J**	ug/L	5.0	0.50	1		12/08/14 09:50	67-66-3	
Chloromethane	**2.4J**	ug/L	10.0	0.50	1		12/08/14 09:50	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 09:50	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 09:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 09:50	75-35-4	
cis-1,2-Dichloroethene	**7.2**	ug/L	5.0	0.50	1		12/08/14 09:50	156-59-2	
trans-1,2-Dichloroethene	**1.1J**	ug/L	5.0	0.50	1		12/08/14 09:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 09:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:50	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:50	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 09:50	591-78-6	
Methylene chloride	**0.91J**	ug/L	5.0	0.50	1		12/08/14 09:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 09:50	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 09:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 09:50	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		12/08/14 09:50	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 09:50	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:50	79-00-5	
Trichloroethene	**182**	ug/L	5.0	0.50	1		12/08/14 09:50	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		12/08/14 09:50	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 09:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	88-111		1		12/08/14 09:50	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	82-119		1		12/08/14 09:50	17060-07-0	
Toluene-d8 (S)	91	%	91-107		1		12/08/14 09:50	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		12/08/14 09:50		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: MW-38-20141204 **Lab ID: 60183996006** Collected: 12/04/14 16:35 Received: 12/06/14 08:15 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		12/08/14 13:09	67-64-1	
Benzene	**2.0J**	ug/L	5.0	0.50	1		12/08/14 13:09	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 13:09	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 13:09	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 13:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 13:09	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 13:09	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 13:09	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 13:09	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 13:09	75-00-3	
Chloroform	**0.58J**	ug/L	5.0	0.50	1		12/08/14 13:09	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		12/08/14 13:09	74-87-3	
Dibromochloromethane	**1.2J**	ug/L	5.0	0.50	1		12/08/14 13:09	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 13:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 13:09	107-06-2	
1,1-Dichloroethene	**14.7**	ug/L	5.0	0.50	1		12/08/14 13:09	75-35-4	
cis-1,2-Dichloroethene	**697**	ug/L	500	50.0	100		12/08/14 15:44	156-59-2	
trans-1,2-Dichloroethene	**9.7**	ug/L	5.0	0.50	1		12/08/14 13:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 13:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 13:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 13:09	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 13:09	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 13:09	591-78-6	
Methylene chloride	**1.1J**	ug/L	5.0	0.50	1		12/08/14 13:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 13:09	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 13:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 13:09	79-34-5	
Tetrachloroethene	**1.1J**	ug/L	5.0	0.50	1		12/08/14 13:09	127-18-4	
Toluene	**0.84J**	ug/L	5.0	0.50	1		12/08/14 13:09	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 13:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 13:09	79-00-5	
Trichloroethene	**3190**	ug/L	500	50.0	100		12/08/14 15:44	79-01-6	
Vinyl chloride	**193**	ug/L	2.0	0.50	1		12/08/14 13:09	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 13:09	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	88-111		1		12/08/14 13:09	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	82-119		1		12/08/14 13:09	17060-07-0	
Toluene-d8 (S)	97	%	91-107		1		12/08/14 13:09	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 13:09		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: ITMW-11-20141204 **Lab ID: 60183996007** Collected: 12/04/14 17:50 Received: 12/06/14 08:15 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		12/08/14 09:41	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 09:41	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 09:41	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 09:41	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 09:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 09:41	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 09:41	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 09:41	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:41	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 09:41	75-00-3	
Chloroform	**0.65J**	ug/L	5.0	0.50	1		12/08/14 09:41	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		12/08/14 09:41	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 09:41	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 09:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 09:41	75-35-4	
cis-1,2-Dichloroethene	**55.0**	ug/L	5.0	0.50	1		12/08/14 09:41	156-59-2	
trans-1,2-Dichloroethene	**1.5J**	ug/L	5.0	0.50	1		12/08/14 09:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 09:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:41	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:41	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 09:41	591-78-6	
Methylene chloride	**1.2J**	ug/L	5.0	0.50	1		12/08/14 09:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 09:41	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 09:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 09:41	79-34-5	
Tetrachloroethene	**0.85J**	ug/L	5.0	0.50	1		12/08/14 09:41	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 09:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:41	79-00-5	
Trichloroethene	**1530**	ug/L	250	25.0	50		12/08/14 11:18	79-01-6	
Vinyl chloride	**6.4**	ug/L	2.0	0.50	1		12/08/14 09:41	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 09:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	88-111		1		12/08/14 09:41	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	82-119		1		12/08/14 09:41	17060-07-0	
Toluene-d8 (S)	98	%	91-107		1		12/08/14 09:41	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 09:41		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: ITMW-15-20141205 **Lab ID: 60183996008** Collected: 12/05/14 08:10 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**81.3**	ug/L	10.0	5.0	1		12/08/14 08:37	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 08:37	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 08:37	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 08:37	75-25-2	
Bromomethane	**14.2**	ug/L	7.0	2.5	1		12/08/14 08:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 08:37	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 08:37	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 08:37	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 08:37	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 08:37	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		12/08/14 08:37	67-66-3	
Chloromethane	**15.8**	ug/L	10.0	0.50	1		12/08/14 08:37	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 08:37	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 08:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 08:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 08:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 08:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 08:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 08:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 08:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 08:37	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 08:37	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 08:37	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		12/08/14 08:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 08:37	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 08:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 08:37	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		12/08/14 08:37	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 08:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 08:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 08:37	79-00-5	
Trichloroethene	**63.0**	ug/L	5.0	0.50	1		12/08/14 08:37	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		12/08/14 08:37	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 08:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	88-111		1		12/08/14 08:37	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	82-119		1		12/08/14 08:37	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 08:37	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 08:37		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: MW-172-20141205 **Lab ID: 60183996009** Collected: 12/05/14 09:25 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**22.2**	ug/L	10.0	5.0	1		12/08/14 09:09	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 09:09	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 09:09	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 09:09	75-25-2	
Bromomethane	**12.7**	ug/L	7.0	2.5	1		12/08/14 09:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 09:09	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 09:09	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 09:09	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:09	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 09:09	75-00-3	
Chloroform	**4.0J**	ug/L	5.0	0.50	1		12/08/14 09:09	67-66-3	
Chloromethane	**1.8J**	ug/L	10.0	0.50	1		12/08/14 09:09	74-87-3	
Dibromochloromethane	**1.9J**	ug/L	5.0	0.50	1		12/08/14 09:09	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 09:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 09:09	75-35-4	
cis-1,2-Dichloroethene	**15.6**	ug/L	5.0	0.50	1		12/08/14 09:09	156-59-2	
trans-1,2-Dichloroethene	**2.6J**	ug/L	5.0	0.50	1		12/08/14 09:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 09:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:09	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:09	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 09:09	591-78-6	
Methylene chloride	**1.7J**	ug/L	5.0	0.50	1		12/08/14 09:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 09:09	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 09:09	100-42-5	
1,1,2,2-Tetrachloroethane	**2.3**	ug/L	1.0	0.50	1		12/08/14 09:09	79-34-5	
Tetrachloroethene	**1.7J**	ug/L	5.0	0.50	1		12/08/14 09:09	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 09:09	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:09	71-55-6	
1,1,2-Trichloroethane	**0.69J**	ug/L	5.0	0.50	1		12/08/14 09:09	79-00-5	
Trichloroethene	**1810**	ug/L	125	12.5	25		12/08/14 11:48	79-01-6	
Vinyl chloride	**1.3J**	ug/L	2.0	0.50	1		12/08/14 09:09	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 09:09	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	88-111		1		12/08/14 09:09	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	82-119		1		12/08/14 09:09	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 09:09	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 09:09		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: ITMW-17-20141205 **Lab ID: 60183996010** Collected: 12/05/14 10:40 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**6.1J**	ug/L	10.0	5.0	1		12/08/14 09:57	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 09:57	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 09:57	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 09:57	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 09:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 09:57	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 09:57	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 09:57	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:57	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 09:57	75-00-3	
Chloroform	**1.4J**	ug/L	5.0	0.50	1		12/08/14 09:57	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		12/08/14 09:57	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 09:57	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 09:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:57	107-06-2	
1,1-Dichloroethene	**7.3**	ug/L	5.0	0.50	1		12/08/14 09:57	75-35-4	
cis-1,2-Dichloroethene	**210J**	ug/L	250	25.0	50		12/08/14 12:03	156-59-2	
trans-1,2-Dichloroethene	**25.9**	ug/L	5.0	0.50	1		12/08/14 09:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 09:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:57	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:57	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 09:57	591-78-6	
Methylene chloride	**0.70J**	ug/L	5.0	0.50	1		12/08/14 09:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 09:57	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 09:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 09:57	79-34-5	
Tetrachloroethene	**1.5J**	ug/L	5.0	0.50	1		12/08/14 09:57	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 09:57	108-88-3	
1,1,1-Trichloroethane	**0.73J**	ug/L	5.0	0.50	1		12/08/14 09:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:57	79-00-5	
Trichloroethene	**4630**	ug/L	250	25.0	50		12/08/14 12:03	79-01-6	
Vinyl chloride	**7.7**	ug/L	2.0	0.50	1		12/08/14 09:57	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 09:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	88-111		1		12/08/14 09:57	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	82-119		1		12/08/14 09:57	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 09:57	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 09:57		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: IW-147-20141205 **Lab ID: 60183996011** Collected: 12/05/14 11:40 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**141**	ug/L	10.0	5.0	1		12/08/14 12:05	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 12:05	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 12:05	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 12:05	75-25-2	
Bromomethane	**2.6J**	ug/L	7.0	2.5	1		12/08/14 12:05	74-83-9	
2-Butanone (MEK)	**19.0**	ug/L	10.0	5.0	1		12/08/14 12:05	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 12:05	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 12:05	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 12:05	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 12:05	75-00-3	
Chloroform	**71.5**	ug/L	5.0	0.50	1		12/08/14 12:05	67-66-3	
Chloromethane	**4.1J**	ug/L	10.0	0.50	1		12/08/14 12:05	74-87-3	
Dibromochloromethane	**64.3**	ug/L	5.0	0.50	1		12/08/14 12:05	124-48-1	
1,1-Dichloroethane	**4.4**	ug/L	2.4	0.50	1		12/08/14 12:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 12:05	107-06-2	
1,1-Dichloroethene	**62.8**	ug/L	5.0	0.50	1		12/08/14 12:05	75-35-4	
cis-1,2-Dichloroethene	**1320**	ug/L	5.0	0.50	1		12/08/14 12:05	156-59-2	E
cis-1,2-Dichloroethene	**1420J**	ug/L	10000	1000	2000		12/08/14 12:17	156-59-2	
trans-1,2-Dichloroethene	**80.1**	ug/L	5.0	0.50	1		12/08/14 12:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 12:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 12:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 12:05	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 12:05	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 12:05	591-78-6	
Methylene chloride	**39.8**	ug/L	5.0	0.50	1		12/08/14 12:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 12:05	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 12:05	100-42-5	
1,1,2,2-Tetrachloroethane	**26.8**	ug/L	1.0	0.50	1		12/08/14 12:05	79-34-5	
Tetrachloroethene	**62.7**	ug/L	5.0	0.50	1		12/08/14 12:05	127-18-4	
Toluene	**2.1J**	ug/L	5.0	0.50	1		12/08/14 12:05	108-88-3	
1,1,1-Trichloroethane	**359**	ug/L	5.0	0.50	1		12/08/14 12:05	71-55-6	E
1,1,1-Trichloroethane	ND	ug/L	10000	1000	2000		12/08/14 12:17	71-55-6	
1,1,2-Trichloroethane	**0.55J**	ug/L	5.0	0.50	1		12/08/14 12:05	79-00-5	
Trichloroethene	**12800**	ug/L	5.0	0.50	1		12/08/14 12:05	79-01-6	E
Trichloroethene	**91600**	ug/L	10000	1000	2000		12/08/14 12:17	79-01-6	
Vinyl chloride	**176**	ug/L	2.0	0.50	1		12/08/14 12:05	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 12:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		12/08/14 12:05	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		12/08/14 12:05	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		12/08/14 12:05	2037-26-5	
Preservation pH	**7.0**		0.10	0.10	1		12/08/14 12:05		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: MW-86-20141205 **Lab ID: 60183996012** Collected: 12/05/14 12:48 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**399**	ug/L	10.0	5.0	1		12/08/14 12:21	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 12:21	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 12:21	75-27-4	
Bromoform	**0.70J**	ug/L	5.0	0.50	1		12/08/14 12:21	75-25-2	
Bromomethane	**4.8J**	ug/L	7.0	2.5	1		12/08/14 12:21	74-83-9	
2-Butanone (MEK)	**143**	ug/L	10.0	5.0	1		12/08/14 12:21	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 12:21	75-15-0	
Carbon tetrachloride	**14.4**	ug/L	5.0	0.50	1		12/08/14 12:21	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 12:21	108-90-7	
Chloroethane	**1.2J**	ug/L	10.0	0.50	1		12/08/14 12:21	75-00-3	
Chloroform	**239**	ug/L	5.0	0.50	1		12/08/14 12:21	67-66-3	E
Chloroform	**4060J**	ug/L	10000	1000	2000		12/08/14 12:32	67-66-3	
Chloromethane	**17.2**	ug/L	10.0	0.50	1		12/08/14 12:21	74-87-3	
Dibromochloromethane	**45.7**	ug/L	5.0	0.50	1		12/08/14 12:21	124-48-1	
1,1-Dichloroethane	**44.2**	ug/L	2.4	0.50	1		12/08/14 12:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 12:21	107-06-2	
1,1-Dichloroethene	**295**	ug/L	5.0	0.50	1		12/08/14 12:21	75-35-4	E
1,1-Dichloroethene	ND	ug/L	10000	1000	2000		12/08/14 12:32	75-35-4	
cis-1,2-Dichloroethene	**290**	ug/L	5.0	0.50	1		12/08/14 12:21	156-59-2	E
cis-1,2-Dichloroethene	ND	ug/L	10000	1000	2000		12/08/14 12:32	156-59-2	
trans-1,2-Dichloroethene	**47.7**	ug/L	5.0	0.50	1		12/08/14 12:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 12:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 12:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 12:21	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 12:21	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 12:21	591-78-6	
Methylene chloride	**50.5**	ug/L	5.0	0.50	1		12/08/14 12:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 12:21	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 12:21	100-42-5	
1,1,2,2-Tetrachloroethane	**1510**	ug/L	1.0	0.50	1		12/08/14 12:21	79-34-5	E
1,1,2,2-Tetrachloroethane	**1710J**	ug/L	2000	1000	2000		12/08/14 12:32	79-34-5	
Tetrachloroethene	**44.0**	ug/L	5.0	0.50	1		12/08/14 12:21	127-18-4	
Toluene	**10.4**	ug/L	5.0	0.50	1		12/08/14 12:21	108-88-3	
1,1,1-Trichloroethane	**2400**	ug/L	5.0	0.50	1		12/08/14 12:21	71-55-6	E
1,1,1-Trichloroethane	**1310J**	ug/L	10000	1000	2000		12/08/14 12:32	71-55-6	
1,1,2-Trichloroethane	**10.7**	ug/L	5.0	0.50	1		12/08/14 12:21	79-00-5	
Trichloroethene	**31900**	ug/L	5.0	0.50	1		12/08/14 12:21	79-01-6	E
Trichloroethene	**169000**	ug/L	10000	1000	2000		12/08/14 12:32	79-01-6	
Vinyl chloride	**24.7**	ug/L	2.0	0.50	1		12/08/14 12:21	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 12:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		12/08/14 12:21	460-00-4	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 12:21		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: MW-94-20141204 **Lab ID: 60183996013** Collected: 12/04/14 13:00 Received: 12/06/14 08:15 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		12/08/14 13:25	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 13:25	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 13:25	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 13:25	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 13:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 13:25	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 13:25	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 13:25	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 13:25	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 13:25	75-00-3	
Chloroform	**3.3J**	ug/L	5.0	0.50	1		12/08/14 13:25	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		12/08/14 13:25	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 13:25	124-48-1	
1,1-Dichloroethane	**2.9**	ug/L	2.4	0.50	1		12/08/14 13:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 13:25	107-06-2	
1,1-Dichloroethene	**130**	ug/L	5.0	0.50	1		12/08/14 13:25	75-35-4	
cis-1,2-Dichloroethene	**250J**	ug/L	1250	125	250		12/08/14 15:58	156-59-2	
trans-1,2-Dichloroethene	**2.3J**	ug/L	5.0	0.50	1		12/08/14 13:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 13:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 13:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 13:25	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 13:25	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 13:25	591-78-6	
Methylene chloride	**0.63J**	ug/L	5.0	0.50	1		12/08/14 13:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 13:25	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 13:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 13:25	79-34-5	
Tetrachloroethene	**2.7J**	ug/L	5.0	0.50	1		12/08/14 13:25	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 13:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 13:25	71-55-6	
1,1,2-Trichloroethane	**0.67J**	ug/L	5.0	0.50	1		12/08/14 13:25	79-00-5	
Trichloroethene	**9570**	ug/L	1250	125	250		12/08/14 15:58	79-01-6	
Vinyl chloride	**3.0**	ug/L	2.0	0.50	1		12/08/14 13:25	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 13:25	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	88-111		1		12/08/14 13:25	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	82-119		1		12/08/14 13:25	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 13:25	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 13:25		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: MW-95-20141204 **Lab ID: 60183996014** Collected: 12/04/14 14:16 Received: 12/06/14 08:15 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		12/08/14 13:41	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 13:41	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 13:41	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 13:41	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 13:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 13:41	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 13:41	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 13:41	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 13:41	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 13:41	75-00-3	
Chloroform	**7.5**	ug/L	5.0	0.50	1		12/08/14 13:41	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		12/08/14 13:41	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 13:41	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 13:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 13:41	107-06-2	
1,1-Dichloroethene	**38.7**	ug/L	5.0	0.50	1		12/08/14 13:41	75-35-4	
cis-1,2-Dichloroethene	**159**	ug/L	5.0	0.50	1		12/08/14 13:41	156-59-2	
trans-1,2-Dichloroethene	**1.5J**	ug/L	5.0	0.50	1		12/08/14 13:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 13:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 13:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 13:41	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 13:41	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 13:41	591-78-6	
Methylene chloride	**3.8J**	ug/L	5.0	0.50	1		12/08/14 13:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 13:41	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 13:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 13:41	79-34-5	
Tetrachloroethene	**6.3**	ug/L	5.0	0.50	1		12/08/14 13:41	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 13:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 13:41	71-55-6	
1,1,2-Trichloroethane	**2.0J**	ug/L	5.0	0.50	1		12/08/14 13:41	79-00-5	
Trichloroethene	**20900**	ug/L	1000	100	200		12/08/14 16:13	79-01-6	
Vinyl chloride	**29.9**	ug/L	2.0	0.50	1		12/08/14 13:41	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 13:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	88-111		1		12/08/14 13:41	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	82-119		1		12/08/14 13:41	17060-07-0	
Toluene-d8 (S)	98	%	91-107		1		12/08/14 13:41	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 13:41		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: ITMW-12-20141204 **Lab ID: 60183996015** Collected: 12/04/14 15:52 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**8.4J**	ug/L	10.0	5.0	1		12/08/14 09:25	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 09:25	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 09:25	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 09:25	75-25-2	
Bromomethane	**6.5J**	ug/L	7.0	2.5	1		12/08/14 09:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 09:25	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 09:25	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 09:25	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:25	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 09:25	75-00-3	
Chloroform	**0.72J**	ug/L	5.0	0.50	1		12/08/14 09:25	67-66-3	
Chloromethane	**2.2J**	ug/L	10.0	0.50	1		12/08/14 09:25	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 09:25	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 09:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 09:25	75-35-4	
cis-1,2-Dichloroethene	**51.1**	ug/L	5.0	0.50	1		12/08/14 09:25	156-59-2	
trans-1,2-Dichloroethene	**6.8**	ug/L	5.0	0.50	1		12/08/14 09:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 09:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 09:25	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 09:25	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 09:25	591-78-6	
Methylene chloride	**0.95J**	ug/L	5.0	0.50	1		12/08/14 09:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 09:25	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 09:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 09:25	79-34-5	
Tetrachloroethene	**0.60J**	ug/L	5.0	0.50	1		12/08/14 09:25	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 09:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 09:25	79-00-5	
Trichloroethene	**468**	ug/L	125	12.5	25		12/08/14 12:47	79-01-6	
Vinyl chloride	**0.88J**	ug/L	2.0	0.50	1		12/08/14 09:25	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 09:25	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	88-111		1		12/08/14 09:25	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	82-119		1		12/08/14 09:25	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 09:25	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 09:25		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: ITMW-19-20141205 **Lab ID: 60183996016** Collected: 12/05/14 08:33 Received: 12/06/14 08:15 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		12/08/14 10:45	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 10:45	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 10:45	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 10:45	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 10:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 10:45	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 10:45	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 10:45	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 10:45	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 10:45	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		12/08/14 10:45	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		12/08/14 10:45	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 10:45	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 10:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 10:45	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 10:45	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 10:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 10:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 10:45	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 10:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 10:45	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 10:45	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 10:45	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		12/08/14 10:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 10:45	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 10:45	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 10:45	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		12/08/14 10:45	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 10:45	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 10:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 10:45	79-00-5	
Trichloroethene	**33.5**	ug/L	5.0	0.50	1		12/08/14 16:43	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		12/08/14 10:45	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 10:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	88-111		1		12/08/14 10:45	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	82-119		1		12/08/14 10:45	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 10:45	2037-26-5	
Preservation pH	**8.0**		0.10	0.10	1		12/08/14 10:45		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: IW-157-20141205 **Lab ID: 60183996017** Collected: 12/05/14 09:45 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**53.4**	ug/L	10.0	5.0	1		12/08/14 11:33	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 11:33	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 11:33	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 11:33	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 11:33	74-83-9	
2-Butanone (MEK)	**183**	ug/L	10.0	5.0	1		12/08/14 11:33	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 11:33	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 11:33	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 11:33	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 11:33	75-00-3	
Chloroform	**10.3**	ug/L	5.0	0.50	1		12/08/14 11:33	67-66-3	
Chloromethane	**0.62J**	ug/L	10.0	0.50	1		12/08/14 11:33	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 11:33	124-48-1	
1,1-Dichloroethane	**1.1J**	ug/L	2.4	0.50	1		12/08/14 11:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 11:33	107-06-2	
1,1-Dichloroethene	**27.4**	ug/L	5.0	0.50	1		12/08/14 11:33	75-35-4	
cis-1,2-Dichloroethene	**391**	ug/L	5.0	0.50	1		12/08/14 11:33	156-59-2	E
cis-1,2-Dichloroethene	ND	ug/L	5000	500	1000		12/08/14 13:16	156-59-2	
trans-1,2-Dichloroethene	**17.1**	ug/L	5.0	0.50	1		12/08/14 11:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 11:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 11:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 11:33	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 11:33	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 11:33	591-78-6	
Methylene chloride	**8.0**	ug/L	5.0	0.50	1		12/08/14 11:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 11:33	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 11:33	100-42-5	
1,1,2,2-Tetrachloroethane	**3.1**	ug/L	1.0	0.50	1		12/08/14 11:33	79-34-5	
Tetrachloroethene	**10.6**	ug/L	5.0	0.50	1		12/08/14 11:33	127-18-4	
Toluene	**0.58J**	ug/L	5.0	0.50	1		12/08/14 11:33	108-88-3	
1,1,1-Trichloroethane	**48.5**	ug/L	5.0	0.50	1		12/08/14 11:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 11:33	79-00-5	
Trichloroethene	**6300**	ug/L	5.0	0.50	1		12/08/14 11:33	79-01-6	E
Trichloroethene	**31700**	ug/L	5000	500	1000		12/08/14 13:16	79-01-6	
Vinyl chloride	**66.8**	ug/L	2.0	0.50	1		12/08/14 11:33	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 11:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		12/08/14 11:33	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		12/08/14 11:33	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		12/08/14 11:33	2037-26-5	
Preservation pH	**7.0**		0.10	0.10	1		12/08/14 11:33		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: MW-25-20141205 **Lab ID: 60183996018** Collected: 12/05/14 11:04 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**170**	ug/L	10.0	5.0	1		12/08/14 11:49	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 11:49	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 11:49	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 11:49	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 11:49	74-83-9	
2-Butanone (MEK)	**25.6**	ug/L	10.0	5.0	1		12/08/14 11:49	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 11:49	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 11:49	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 11:49	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 11:49	75-00-3	
Chloroform	**4.0J**	ug/L	5.0	0.50	1		12/08/14 11:49	67-66-3	
Chloromethane	**0.95J**	ug/L	10.0	0.50	1		12/08/14 11:49	74-87-3	
Dibromochloromethane	**2.6J**	ug/L	5.0	0.50	1		12/08/14 11:49	124-48-1	
1,1-Dichloroethane	**1.5J**	ug/L	2.4	0.50	1		12/08/14 11:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 11:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 11:49	75-35-4	
cis-1,2-Dichloroethene	**31.5**	ug/L	5.0	0.50	1		12/08/14 11:49	156-59-2	
trans-1,2-Dichloroethene	**5.3**	ug/L	5.0	0.50	1		12/08/14 11:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 11:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 11:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 11:49	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 11:49	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 11:49	591-78-6	
Methylene chloride	**2.7J**	ug/L	5.0	0.50	1		12/08/14 11:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 11:49	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 11:49	100-42-5	
1,1,2,2-Tetrachloroethane	**50.2**	ug/L	1.0	0.50	1		12/08/14 11:49	79-34-5	
Tetrachloroethene	**2.6J**	ug/L	5.0	0.50	1		12/08/14 11:49	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 11:49	108-88-3	
1,1,1-Trichloroethane	**4.7J**	ug/L	5.0	0.50	1		12/08/14 11:49	71-55-6	
1,1,2-Trichloroethane	**0.87J**	ug/L	5.0	0.50	1		12/08/14 11:49	79-00-5	
Trichloroethene	**2620J**	ug/L	5000	500	1000		12/08/14 13:31	79-01-6	
Vinyl chloride	**2.1**	ug/L	2.0	0.50	1		12/08/14 11:49	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 11:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	88-111		1		12/08/14 11:49	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	82-119		1		12/08/14 11:49	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 11:49	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 11:49		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: MW-85-20141205 **Lab ID: 60183996019** Collected: 12/05/14 12:45 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**55.5**	ug/L	10.0	5.0	1		12/08/14 10:13	67-64-1	
Benzene	**0.62J**	ug/L	5.0	0.50	1		12/08/14 10:13	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 10:13	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 10:13	75-25-2	
Bromomethane	**18.3**	ug/L	7.0	2.5	1		12/08/14 10:13	74-83-9	
2-Butanone (MEK)	**10.8**	ug/L	10.0	5.0	1		12/08/14 10:13	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 10:13	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 10:13	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 10:13	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 10:13	75-00-3	
Chloroform	**31.8**	ug/L	5.0	0.50	1		12/08/14 10:13	67-66-3	
Chloromethane	**11.2**	ug/L	10.0	0.50	1		12/08/14 10:13	74-87-3	
Dibromochloromethane	**22.5**	ug/L	5.0	0.50	1		12/08/14 10:13	124-48-1	
1,1-Dichloroethane	**2.0J**	ug/L	2.4	0.50	1		12/08/14 10:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 10:13	107-06-2	
1,1-Dichloroethene	**6.5**	ug/L	5.0	0.50	1		12/08/14 10:13	75-35-4	
cis-1,2-Dichloroethene	**280**	ug/L	250	25.0	50		12/08/14 13:46	156-59-2	
trans-1,2-Dichloroethene	**51.6**	ug/L	5.0	0.50	1		12/08/14 10:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 10:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 10:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 10:13	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 10:13	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 10:13	591-78-6	
Methylene chloride	**146**	ug/L	5.0	0.50	1		12/08/14 10:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 10:13	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 10:13	100-42-5	
1,1,2,2-Tetrachloroethane	**109**	ug/L	1.0	0.50	1		12/08/14 10:13	79-34-5	
Tetrachloroethene	**22.0**	ug/L	5.0	0.50	1		12/08/14 10:13	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 10:13	108-88-3	
1,1,1-Trichloroethane	**250J**	ug/L	250	25.0	50		12/08/14 13:46	71-55-6	
1,1,2-Trichloroethane	**2.3J**	ug/L	5.0	0.50	1		12/08/14 10:13	79-00-5	
Trichloroethene	**27700**	ug/L	2500	250	500		12/08/14 14:15	79-01-6	
Vinyl chloride	**7.7**	ug/L	2.0	0.50	1		12/08/14 10:13	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 10:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	88-111		1		12/08/14 10:13	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	82-119		1		12/08/14 10:13	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 10:13	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 10:13		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: TRIP BLANK-20141204 **Lab ID: 60183996020** Collected: 12/04/14 12:00 Received: 12/06/14 08:15 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		12/08/14 15:29	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 15:29	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 15:29	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 15:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 15:29	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 15:29	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 15:29	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 15:29	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		12/08/14 15:29	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		12/08/14 15:29	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 15:29	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 15:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 15:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 15:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 15:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 15:29	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 15:29	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		12/08/14 15:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 15:29	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 15:29	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 15:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 15:29	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 15:29	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		12/08/14 15:29	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 15:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		12/08/14 15:29	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		12/08/14 15:29	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		12/08/14 15:29	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		12/08/14 15:29		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: MW-141-20141205 **Lab ID: 60183996021** Collected: 12/05/14 14:00 Received: 12/06/14 08:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**83.3**	ug/L	10.0	5.0	1		12/08/14 12:37	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 12:37	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 12:37	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 12:37	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 12:37	74-83-9	
2-Butanone (MEK)	**11.9**	ug/L	10.0	5.0	1		12/08/14 12:37	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 12:37	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 12:37	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 12:37	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 12:37	75-00-3	
Chloroform	**18.8**	ug/L	5.0	0.50	1		12/08/14 12:37	67-66-3	
Chloromethane	**6.7J**	ug/L	10.0	0.50	1		12/08/14 12:37	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 12:37	124-48-1	
1,1-Dichloroethane	**1.7J**	ug/L	2.4	0.50	1		12/08/14 12:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 12:37	107-06-2	
1,1-Dichloroethene	**6.1**	ug/L	5.0	0.50	1		12/08/14 12:37	75-35-4	
cis-1,2-Dichloroethene	**232**	ug/L	5.0	0.50	1		12/08/14 12:37	156-59-2	E
cis-1,2-Dichloroethene	ND	ug/L	10000	1000	2000		12/08/14 14:01	156-59-2	
trans-1,2-Dichloroethene	**8.1**	ug/L	5.0	0.50	1		12/08/14 12:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 12:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 12:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 12:37	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 12:37	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 12:37	591-78-6	
Methylene chloride	**51.5**	ug/L	5.0	0.50	1		12/08/14 12:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 12:37	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 12:37	100-42-5	
1,1,2,2-Tetrachloroethane	**8.2**	ug/L	1.0	0.50	1		12/08/14 12:37	79-34-5	
Tetrachloroethene	**22.7**	ug/L	5.0	0.50	1		12/08/14 12:37	127-18-4	
Toluene	**0.61J**	ug/L	5.0	0.50	1		12/08/14 12:37	108-88-3	
1,1,1-Trichloroethane	**101**	ug/L	5.0	0.50	1		12/08/14 12:37	71-55-6	
1,1,2-Trichloroethane	**0.60J**	ug/L	5.0	0.50	1		12/08/14 12:37	79-00-5	
Trichloroethene	**8220**	ug/L	5.0	0.50	1		12/08/14 12:37	79-01-6	E
Trichloroethene	**46300**	ug/L	10000	1000	2000		12/08/14 14:01	79-01-6	
Vinyl chloride	**31.0**	ug/L	2.0	0.50	1		12/08/14 12:37	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 12:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		12/08/14 12:37	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		12/08/14 12:37	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		12/08/14 12:37	2037-26-5	
Preservation pH	**9.0**		0.10	0.10	1		12/08/14 12:37		

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ANALYTICAL RESULTS

Project: Fort Smith, AR
Pace Project No.: 60183996

Sample: IW-152-20141204 **Lab ID: 60183996022** Collected: 12/04/14 17:34 Received: 12/06/14 08:15 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		12/08/14 11:17	67-64-1	
Benzene	ND	ug/L	5.0	0.50	1		12/08/14 11:17	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.50	1		12/08/14 11:17	75-27-4	
Bromoform	ND	ug/L	5.0	0.50	1		12/08/14 11:17	75-25-2	
Bromomethane	ND	ug/L	7.0	2.5	1		12/08/14 11:17	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		12/08/14 11:17	78-93-3	
Carbon disulfide	ND	ug/L	10.0	2.5	1		12/08/14 11:17	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.50	1		12/08/14 11:17	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.50	1		12/08/14 11:17	108-90-7	
Chloroethane	ND	ug/L	10.0	0.50	1		12/08/14 11:17	75-00-3	
Chloroform	ND	ug/L	5.0	0.50	1		12/08/14 11:17	67-66-3	
Chloromethane	ND	ug/L	10.0	0.50	1		12/08/14 11:17	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.50	1		12/08/14 11:17	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.50	1		12/08/14 11:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 11:17	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 11:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 11:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 11:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.50	1		12/08/14 11:17	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 11:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		12/08/14 11:17	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.50	1		12/08/14 11:17	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		12/08/14 11:17	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.50	1		12/08/14 11:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		12/08/14 11:17	108-10-1	
Styrene	ND	ug/L	5.0	0.50	1		12/08/14 11:17	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		12/08/14 11:17	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.50	1		12/08/14 11:17	127-18-4	
Toluene	ND	ug/L	5.0	0.50	1		12/08/14 11:17	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 11:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.50	1		12/08/14 11:17	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.50	1		12/08/14 16:57	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.50	1		12/08/14 11:17	75-01-4	
Xylene (Total)	ND	ug/L	5.0	1.5	1		12/08/14 11:17	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	88-111		1		12/08/14 11:17	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	82-119		1		12/08/14 11:17	17060-07-0	
Toluene-d8 (S)	99	%	91-107		1		12/08/14 11:17	2037-26-5	
Preservation pH	**10.0**		0.10	0.10	1		12/08/14 11:17		

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60183996

QC Batch: MSV/66256 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60183996006, 60183996013, 60183996014

METHOD BLANK: 1490223 Matrix: Water
Associated Lab Samples: 60183996006, 60183996013, 60183996014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	12/08/14 08:14	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/08/14 08:14	
1,1,2-Trichloroethane	ug/L	ND	5.0	12/08/14 08:14	
1,1-Dichloroethane	ug/L	ND	2.4	12/08/14 08:14	
1,1-Dichloroethene	ug/L	ND	5.0	12/08/14 08:14	
1,2-Dichloroethane	ug/L	ND	5.0	12/08/14 08:14	
1,2-Dichloropropane	ug/L	ND	5.0	12/08/14 08:14	
2-Butanone (MEK)	ug/L	ND	10.0	12/08/14 08:14	
2-Hexanone	ug/L	ND	10.0	12/08/14 08:14	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	12/08/14 08:14	
Acetone	ug/L	ND	10.0	12/08/14 08:14	
Benzene	ug/L	ND	5.0	12/08/14 08:14	
Bromodichloromethane	ug/L	ND	5.0	12/08/14 08:14	
Bromoform	ug/L	ND	5.0	12/08/14 08:14	
Bromomethane	ug/L	ND	7.0	12/08/14 08:14	
Carbon disulfide	ug/L	ND	10.0	12/08/14 08:14	
Carbon tetrachloride	ug/L	ND	5.0	12/08/14 08:14	
Chlorobenzene	ug/L	ND	5.0	12/08/14 08:14	
Chloroethane	ug/L	ND	10.0	12/08/14 08:14	
Chloroform	ug/L	ND	5.0	12/08/14 08:14	
Chloromethane	ug/L	ND	10.0	12/08/14 08:14	
cis-1,2-Dichloroethene	ug/L	ND	5.0	12/08/14 08:14	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/08/14 08:14	
Dibromochloromethane	ug/L	ND	5.0	12/08/14 08:14	
Ethylbenzene	ug/L	ND	5.0	12/08/14 08:14	
Methylene chloride	ug/L	ND	5.0	12/08/14 08:14	
Styrene	ug/L	ND	5.0	12/08/14 08:14	
Tetrachloroethene	ug/L	ND	5.0	12/08/14 08:14	
Toluene	ug/L	ND	5.0	12/08/14 08:14	
trans-1,2-Dichloroethene	ug/L	ND	5.0	12/08/14 08:14	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/08/14 08:14	
Vinyl chloride	ug/L	ND	2.0	12/08/14 08:14	
Xylene (Total)	ug/L	ND	5.0	12/08/14 08:14	
1,2-Dichloroethane-d4 (S)	%	104	80-120	12/08/14 08:14	
4-Bromofluorobenzene (S)	%	98	80-120	12/08/14 08:14	
Toluene-d8 (S)	%	100	80-120	12/08/14 08:14	

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.: 60183996

LABORATORY CONTROL SAMPLE: 1490224

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.0	105	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	21.0	105	73-121	
1,1,2-Trichloroethane	ug/L	20	20.7	104	80-120	
1,1-Dichloroethane	ug/L	20	19.9	100	80-120	
1,1-Dichloroethene	ug/L	20	19.4	97	80-120	
1,2-Dichloroethane	ug/L	20	20.7	103	81-120	
1,2-Dichloropropane	ug/L	20	20.2	101	80-120	
2-Butanone (MEK)	ug/L	100	97.2	97	67-122	
2-Hexanone	ug/L	100	108	108	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	106	106	76-120	
Acetone	ug/L	100	103	103	72-120	
Benzene	ug/L	20	20.3	101	80-120	
Bromodichloromethane	ug/L	20	21.8	109	80-120	
Bromoform	ug/L	20	21.9	110	73-138	
Bromomethane	ug/L	20	22.0	110	38-137	
Carbon disulfide	ug/L	20	21.2	106	71-129	
Carbon tetrachloride	ug/L	20	20.7	104	67-146	
Chlorobenzene	ug/L	20	20.5	102	80-120	
Chloroethane	ug/L	20	17.8	89	76-120	
Chloroform	ug/L	20	21.0	105	80-120	
Chloromethane	ug/L	20	18.7	94	34-165	
cis-1,2-Dichloroethene	ug/L	20	19.7	98	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.1	101	80-120	
Dibromochloromethane	ug/L	20	20.9	104	80-126	
Ethylbenzene	ug/L	20	20.6	103	80-120	
Methylene chloride	ug/L	20	19.8	99	80-120	
Styrene	ug/L	20	22.2	111	80-123	
Tetrachloroethene	ug/L	20	20.1	101	80-123	
Toluene	ug/L	20	20.1	100	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.8	99	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.5	107	80-129	
Vinyl chloride	ug/L	20	20.1	100	62-125	
Xylene (Total)	ug/L	60	62.4	104	80-120	
1,2-Dichloroethane-d4 (S)	%			103	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			99	80-120	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60183996

QC Batch: MSV/66261 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60183996006, 60183996013, 60183996014, 60183996020

METHOD BLANK: 1490271 Matrix: Water
Associated Lab Samples: 60183996006, 60183996013, 60183996014, 60183996020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	12/08/14 15:14	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/08/14 15:14	
1,1,2-Trichloroethane	ug/L	ND	5.0	12/08/14 15:14	
1,1-Dichloroethane	ug/L	ND	2.4	12/08/14 15:14	
1,1-Dichloroethene	ug/L	ND	5.0	12/08/14 15:14	
1,2-Dichloroethane	ug/L	ND	5.0	12/08/14 15:14	
1,2-Dichloropropane	ug/L	ND	5.0	12/08/14 15:14	
2-Butanone (MEK)	ug/L	ND	10.0	12/08/14 15:14	
2-Hexanone	ug/L	ND	10.0	12/08/14 15:14	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	12/08/14 15:14	
Acetone	ug/L	ND	10.0	12/08/14 15:14	
Benzene	ug/L	ND	5.0	12/08/14 15:14	
Bromodichloromethane	ug/L	ND	5.0	12/08/14 15:14	
Bromoform	ug/L	ND	5.0	12/08/14 15:14	
Bromomethane	ug/L	ND	7.0	12/08/14 15:14	
Carbon disulfide	ug/L	ND	10.0	12/08/14 15:14	
Carbon tetrachloride	ug/L	ND	5.0	12/08/14 15:14	
Chlorobenzene	ug/L	ND	5.0	12/08/14 15:14	
Chloroethane	ug/L	ND	10.0	12/08/14 15:14	
Chloroform	ug/L	ND	5.0	12/08/14 15:14	
Chloromethane	ug/L	ND	10.0	12/08/14 15:14	
cis-1,2-Dichloroethene	ug/L	ND	5.0	12/08/14 15:14	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/08/14 15:14	
Dibromochloromethane	ug/L	ND	5.0	12/08/14 15:14	
Ethylbenzene	ug/L	ND	5.0	12/08/14 15:14	
Methylene chloride	ug/L	ND	5.0	12/08/14 15:14	
Styrene	ug/L	ND	5.0	12/08/14 15:14	
Tetrachloroethene	ug/L	ND	5.0	12/08/14 15:14	
Toluene	ug/L	ND	5.0	12/08/14 15:14	
trans-1,2-Dichloroethene	ug/L	ND	5.0	12/08/14 15:14	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/08/14 15:14	
Trichloroethene	ug/L	ND	5.0	12/08/14 15:14	
Vinyl chloride	ug/L	ND	2.0	12/08/14 15:14	
Xylene (Total)	ug/L	ND	5.0	12/08/14 15:14	
1,2-Dichloroethane-d4 (S)	%	99	80-120	12/08/14 15:14	
4-Bromofluorobenzene (S)	%	100	80-120	12/08/14 15:14	
Toluene-d8 (S)	%	101	80-120	12/08/14 15:14	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60183996

LABORATORY CONTROL SAMPLE: 1490272

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	19.4	97	73-121	
1,1,2-Trichloroethane	ug/L	20	20.7	103	80-120	
1,1-Dichloroethane	ug/L	20	21.0	105	80-120	
1,1-Dichloroethene	ug/L	20	19.9	100	80-120	
1,2-Dichloroethane	ug/L	20	21.0	105	81-120	
1,2-Dichloropropane	ug/L	20	20.8	104	80-120	
2-Butanone (MEK)	ug/L	100	101	101	67-122	
2-Hexanone	ug/L	100	95.7	96	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	103	103	76-120	
Acetone	ug/L	100	95.8	96	72-120	
Benzene	ug/L	20	21.2	106	80-120	
Bromodichloromethane	ug/L	20	21.3	106	80-120	
Bromoform	ug/L	20	20.6	103	73-138	
Bromomethane	ug/L	20	14.1	70	38-137	
Carbon disulfide	ug/L	20	20.7	104	71-129	
Carbon tetrachloride	ug/L	20	20.5	102	67-146	
Chlorobenzene	ug/L	20	20.5	102	80-120	
Chloroethane	ug/L	20	18.6	93	76-120	
Chloroform	ug/L	20	20.5	102	80-120	
Chloromethane	ug/L	20	14.8	74	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.0	100	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.3	102	80-120	
Dibromochloromethane	ug/L	20	21.0	105	80-126	
Ethylbenzene	ug/L	20	20.4	102	80-120	
Methylene chloride	ug/L	20	19.6	98	80-120	
Styrene	ug/L	20	20.6	103	80-123	
Tetrachloroethene	ug/L	20	20.1	100	80-123	
Toluene	ug/L	20	21.2	106	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.3	101	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.1	100	80-129	
Trichloroethene	ug/L	20	21.1	105	80-120	
Vinyl chloride	ug/L	20	18.1	91	62-125	
Xylene (Total)	ug/L	60	61.3	102	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			103	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60183996

QC Batch: MSV/66255 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60183996001, 60183996002, 60183996003, 60183996004, 60183996007, 60183996008, 60183996009, 60183996010, 60183996011, 60183996012, 60183996015, 60183996016, 60183996017, 60183996018, 60183996019, 60183996021, 60183996022

METHOD BLANK: 1490221 Matrix: Water
Associated Lab Samples: 60183996001, 60183996002, 60183996003, 60183996004, 60183996007, 60183996008, 60183996009, 60183996010, 60183996011, 60183996012, 60183996015, 60183996016, 60183996017, 60183996018, 60183996019, 60183996021, 60183996022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	12/08/14 08:14	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/08/14 08:14	
1,1,2-Trichloroethane	ug/L	ND	5.0	12/08/14 08:14	
1,1-Dichloroethane	ug/L	ND	2.4	12/08/14 08:14	
1,1-Dichloroethene	ug/L	ND	5.0	12/08/14 08:14	
1,2-Dichloroethane	ug/L	ND	5.0	12/08/14 08:14	
1,2-Dichloropropane	ug/L	ND	5.0	12/08/14 08:14	
2-Butanone (MEK)	ug/L	ND	10.0	12/08/14 08:14	
2-Hexanone	ug/L	ND	10.0	12/08/14 08:14	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	12/08/14 08:14	
Acetone	ug/L	ND	10.0	12/08/14 08:14	
Benzene	ug/L	ND	5.0	12/08/14 08:14	
Bromodichloromethane	ug/L	ND	5.0	12/08/14 08:14	
Bromoform	ug/L	ND	5.0	12/08/14 08:14	
Bromomethane	ug/L	ND	7.0	12/08/14 08:14	
Carbon disulfide	ug/L	ND	10.0	12/08/14 08:14	
Carbon tetrachloride	ug/L	ND	5.0	12/08/14 08:14	
Chlorobenzene	ug/L	ND	5.0	12/08/14 08:14	
Chloroethane	ug/L	ND	10.0	12/08/14 08:14	
Chloroform	ug/L	ND	5.0	12/08/14 08:14	
Chloromethane	ug/L	ND	10.0	12/08/14 08:14	
cis-1,2-Dichloroethene	ug/L	ND	5.0	12/08/14 08:14	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/08/14 08:14	
Dibromochloromethane	ug/L	ND	5.0	12/08/14 08:14	
Ethylbenzene	ug/L	ND	5.0	12/08/14 08:14	
Methylene chloride	ug/L	ND	5.0	12/08/14 08:14	
Styrene	ug/L	ND	5.0	12/08/14 08:14	
Tetrachloroethene	ug/L	ND	5.0	12/08/14 08:14	
Toluene	ug/L	ND	5.0	12/08/14 08:14	
trans-1,2-Dichloroethene	ug/L	ND	5.0	12/08/14 08:14	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/08/14 08:14	
Trichloroethene	ug/L	ND	5.0	12/08/14 08:14	
Vinyl chloride	ug/L	ND	2.0	12/08/14 08:14	
Xylene (Total)	ug/L	ND	5.0	12/08/14 08:14	
1,2-Dichloroethane-d4 (S)	%	104	80-120	12/08/14 08:14	
4-Bromofluorobenzene (S)	%	98	80-120	12/08/14 08:14	
Toluene-d8 (S)	%	100	80-120	12/08/14 08:14	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60183996

LABORATORY CONTROL SAMPLE: 1490222

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.0	105	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	21.0	105	73-121	
1,1,2-Trichloroethane	ug/L	20	20.7	104	80-120	
1,1-Dichloroethane	ug/L	20	19.9	100	80-120	
1,1-Dichloroethene	ug/L	20	19.4	97	80-120	
1,2-Dichloroethane	ug/L	20	20.7	103	81-120	
1,2-Dichloropropane	ug/L	20	20.2	101	80-120	
2-Butanone (MEK)	ug/L	100	97.2	97	67-122	
2-Hexanone	ug/L	100	108	108	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	106	106	76-120	
Acetone	ug/L	100	103	103	72-120	
Benzene	ug/L	20	20.3	101	80-120	
Bromodichloromethane	ug/L	20	21.8	109	80-120	
Bromoform	ug/L	20	21.9	110	73-138	
Bromomethane	ug/L	20	22.0	110	38-137	
Carbon disulfide	ug/L	20	21.2	106	71-129	
Carbon tetrachloride	ug/L	20	20.7	104	67-146	
Chlorobenzene	ug/L	20	20.5	102	80-120	
Chloroethane	ug/L	20	17.8	89	76-120	
Chloroform	ug/L	20	21.0	105	80-120	
Chloromethane	ug/L	20	18.7	94	34-165	
cis-1,2-Dichloroethene	ug/L	20	19.7	98	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.1	101	80-120	
Dibromochloromethane	ug/L	20	20.9	104	80-126	
Ethylbenzene	ug/L	20	20.6	103	80-120	
Methylene chloride	ug/L	20	19.8	99	80-120	
Styrene	ug/L	20	22.2	111	80-123	
Tetrachloroethene	ug/L	20	20.1	101	80-123	
Toluene	ug/L	20	20.1	100	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.8	99	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.5	107	80-129	
Trichloroethene	ug/L	20	19.9	99	80-120	
Vinyl chloride	ug/L	20	20.1	100	62-125	
Xylene (Total)	ug/L	60	62.4	104	80-120	
1,2-Dichloroethane-d4 (S)	%			103	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			99	80-120	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60183996

QC Batch: MSV/66260 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60183996001, 60183996003, 60183996004, 60183996005, 60183996007, 60183996009, 60183996010, 60183996011, 60183996012, 60183996015, 60183996017, 60183996018, 60183996019, 60183996021

METHOD BLANK: 1490269 Matrix: Water
Associated Lab Samples: 60183996001, 60183996003, 60183996004, 60183996005, 60183996007, 60183996009, 60183996010, 60183996011, 60183996012, 60183996015, 60183996017, 60183996018, 60183996019, 60183996021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	12/08/14 09:35	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	12/08/14 09:35	
1,1,2-Trichloroethane	ug/L	ND	5.0	12/08/14 09:35	
1,1-Dichloroethane	ug/L	ND	2.4	12/08/14 09:35	
1,1-Dichloroethene	ug/L	ND	5.0	12/08/14 09:35	
1,2-Dichloroethane	ug/L	ND	5.0	12/08/14 09:35	
1,2-Dichloropropane	ug/L	ND	5.0	12/08/14 09:35	
2-Butanone (MEK)	ug/L	ND	10.0	12/08/14 09:35	
2-Hexanone	ug/L	ND	10.0	12/08/14 09:35	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	12/08/14 09:35	
Acetone	ug/L	ND	10.0	12/08/14 09:35	
Benzene	ug/L	ND	5.0	12/08/14 09:35	
Bromodichloromethane	ug/L	ND	5.0	12/08/14 09:35	
Bromoform	ug/L	ND	5.0	12/08/14 09:35	
Bromomethane	ug/L	ND	7.0	12/08/14 09:35	
Carbon disulfide	ug/L	ND	10.0	12/08/14 09:35	
Carbon tetrachloride	ug/L	ND	5.0	12/08/14 09:35	
Chlorobenzene	ug/L	ND	5.0	12/08/14 09:35	
Chloroethane	ug/L	ND	10.0	12/08/14 09:35	
Chloroform	ug/L	ND	5.0	12/08/14 09:35	
Chloromethane	ug/L	ND	10.0	12/08/14 09:35	
cis-1,2-Dichloroethene	ug/L	ND	5.0	12/08/14 09:35	
cis-1,3-Dichloropropene	ug/L	ND	1.0	12/08/14 09:35	
Dibromochloromethane	ug/L	ND	5.0	12/08/14 09:35	
Ethylbenzene	ug/L	ND	5.0	12/08/14 09:35	
Methylene chloride	ug/L	ND	5.0	12/08/14 09:35	
Styrene	ug/L	ND	5.0	12/08/14 09:35	
Tetrachloroethene	ug/L	ND	5.0	12/08/14 09:35	
Toluene	ug/L	ND	5.0	12/08/14 09:35	
trans-1,2-Dichloroethene	ug/L	ND	5.0	12/08/14 09:35	
trans-1,3-Dichloropropene	ug/L	ND	1.0	12/08/14 09:35	
Trichloroethene	ug/L	ND	5.0	12/08/14 09:35	
Vinyl chloride	ug/L	ND	2.0	12/08/14 09:35	
Xylene (Total)	ug/L	ND	5.0	12/08/14 09:35	
1,2-Dichloroethane-d4 (S)	%	105	80-120	12/08/14 09:35	
4-Bromofluorobenzene (S)	%	101	80-120	12/08/14 09:35	
Toluene-d8 (S)	%	95	80-120	12/08/14 09:35	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60183996

LABORATORY CONTROL SAMPLE: 1490270

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.6	98	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.2	101	73-121	
1,1,2-Trichloroethane	ug/L	20	19.7	99	80-120	
1,1-Dichloroethane	ug/L	20	19.9	99	80-120	
1,1-Dichloroethene	ug/L	20	18.7	93	80-120	
1,2-Dichloroethane	ug/L	20	21.4	107	81-120	
1,2-Dichloropropane	ug/L	20	20.4	102	80-120	
2-Butanone (MEK)	ug/L	100	108	108	67-122	
2-Hexanone	ug/L	100	98.2	98	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	112	112	76-120	
Acetone	ug/L	100	102	102	72-120	
Benzene	ug/L	20	20.6	103	80-120	
Bromodichloromethane	ug/L	20	22.2	111	80-120	
Bromoform	ug/L	20	20.2	101	73-138	
Bromomethane	ug/L	20	16.6	83	38-137	
Carbon disulfide	ug/L	20	20.1	100	71-129	
Carbon tetrachloride	ug/L	20	19.4	97	67-146	
Chlorobenzene	ug/L	20	19.1	96	80-120	
Chloroethane	ug/L	20	18.5	92	76-120	
Chloroform	ug/L	20	20.4	102	80-120	
Chloromethane	ug/L	20	15.8	79	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.4	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.7	109	80-120	
Dibromochloromethane	ug/L	20	20.9	105	80-126	
Ethylbenzene	ug/L	20	19.4	97	80-120	
Methylene chloride	ug/L	20	20.1	100	80-120	
Styrene	ug/L	20	20.1	100	80-123	
Tetrachloroethene	ug/L	20	17.9	90	80-123	
Toluene	ug/L	20	19.2	96	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.9	100	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.7	98	80-129	
Trichloroethene	ug/L	20	20.5	102	80-120	
Vinyl chloride	ug/L	20	17.1	86	62-125	
Xylene (Total)	ug/L	60	56.7	94	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			95	80-120	

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QUALITY CONTROL DATA

Project: Fort Smith, AR
Pace Project No.: 60183996

QC Batch: MSV/66280 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60183996002, 60183996016, 60183996022

METHOD BLANK: 1490388 Matrix: Water
Associated Lab Samples: 60183996002, 60183996016, 60183996022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	ug/L	ND	5.0	12/08/14 15:14	
1,2-Dichloroethane-d4 (S)	%	99	80-120	12/08/14 15:14	
4-Bromofluorobenzene (S)	%	100	80-120	12/08/14 15:14	
Toluene-d8 (S)	%	101	80-120	12/08/14 15:14	

LABORATORY CONTROL SAMPLE: 1490389

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	20	21.1	105	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			103	80-120	
Toluene-d8 (S)	%			101	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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Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: Fort Smith, AR
Pace Project No.: 60183996

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/66255
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/66256
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/66260
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/66261
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/66280
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

E Analyte concentration exceeded the calibration range. The reported result is estimated.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Fort Smith, AR
Pace Project No.: 60183996

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60183996006	MW-38-20141204	EPA 5030B/8260	MSV/66256		
60183996006	MW-38-20141204	EPA 5030B/8260	MSV/66261		
60183996013	MW-94-20141204	EPA 5030B/8260	MSV/66256		
60183996013	MW-94-20141204	EPA 5030B/8260	MSV/66261		
60183996014	MW-95-20141204	EPA 5030B/8260	MSV/66256		
60183996014	MW-95-20141204	EPA 5030B/8260	MSV/66261		
60183996020	TRIP BLANK-20141204	EPA 5030B/8260	MSV/66261		
60183996001	MW-92-20141204	EPA 5030B/8260	MSV/66255		
60183996001	MW-92-20141204	EPA 5030B/8260	MSV/66260		
60183996002	IW-153-20141204	EPA 5030B/8260	MSV/66255		
60183996002	IW-153-20141204	EPA 5030B/8260	MSV/66280		
60183996003	MW-93-20141204	EPA 5030B/8260	MSV/66255		
60183996003	MW-93-20141204	EPA 5030B/8260	MSV/66260		
60183996004	ITMW-18-20141204	EPA 5030B/8260	MSV/66255		
60183996004	ITMW-18-20141204	EPA 5030B/8260	MSV/66260		
60183996005	IW-127-20141204	EPA 5030B/8260	MSV/66260		
60183996007	ITMW-11-20141204	EPA 5030B/8260	MSV/66255		
60183996007	ITMW-11-20141204	EPA 5030B/8260	MSV/66260		
60183996008	ITMW-15-20141205	EPA 5030B/8260	MSV/66255		
60183996009	MW-172-20141205	EPA 5030B/8260	MSV/66255		
60183996009	MW-172-20141205	EPA 5030B/8260	MSV/66260		
60183996010	ITMW-17-20141205	EPA 5030B/8260	MSV/66255		
60183996010	ITMW-17-20141205	EPA 5030B/8260	MSV/66260		
60183996011	IW-147-20141205	EPA 5030B/8260	MSV/66255		
60183996011	IW-147-20141205	EPA 5030B/8260	MSV/66260		
60183996012	MW-86-20141205	EPA 5030B/8260	MSV/66255		
60183996012	MW-86-20141205	EPA 5030B/8260	MSV/66260		
60183996015	ITMW-12-20141204	EPA 5030B/8260	MSV/66255		
60183996015	ITMW-12-20141204	EPA 5030B/8260	MSV/66260		
60183996016	ITMW-19-20141205	EPA 5030B/8260	MSV/66255		
60183996016	ITMW-19-20141205	EPA 5030B/8260	MSV/66280		
60183996017	IW-157-20141205	EPA 5030B/8260	MSV/66255		
60183996017	IW-157-20141205	EPA 5030B/8260	MSV/66260		
60183996018	MW-25-20141205	EPA 5030B/8260	MSV/66255		

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Fort Smith, AR
Pace Project No.: 60183996

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60183996018	**MW-25-20141205**	EPA 5030B/8260	MSV/66260		
60183996019	**MW-85-20141205**	EPA 5030B/8260	MSV/66255		
60183996019	**MW-85-20141205**	EPA 5030B/8260	MSV/66260		
60183996021	**MW-141-20141205**	EPA 5030B/8260	MSV/66255		
60183996021	**MW-141-20141205**	EPA 5030B/8260	MSV/66260		
60183996022	**IW-152-20141204**	EPA 5030B/8260	MSV/66255		
60183996022	**IW-152-20141204**	EPA 5030B/8260	MSV/66280		

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Sample Condition Upon Receipt

WO# : 60183996

60183996

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☒ UPS ☐ USPS ☐ Client ☐ Commercial ☐ Pace ☐ Other ☐

Tracking #: 6113 5281 8194 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 12/6

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. 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: 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): 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: _____

Project Manager Review: JRS for (MTW) Date: 12-8-14

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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 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:	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:	

Section C Invoice Information:

Attention:	Tamara Gleason
Company Name:	ENVIRON
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, ~~7709 soil~~ VS

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 Ascorbic	Analysis Test Y/N	8260 client specific list	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-92-20141204	WT	G			12/4/14	0930		3								X	X	X		7 day hold 001
2	~~MW-153-20141204~~ MW-153-20141124	WT	G			12/4/14	1127		3								X	X	X		7 day hold 002
3	MW-93-20141204	WT	G			12/4/14	1242		3								X	X	X		7 day hold 003
4	ITMW-18-20141204	WT	G			12/4/14	1417		3								X	X	X		7 day hold 004
5	IW-12-1-20141204	WT	G			12/4/14	1538		3								X	X	X		7 day hold 005
6	MW-38-20141204	WT	G			12/4/14	1035		3				X					X	(3) DG9H		006
7	ITMW-11-20141204	WT	G			12/4/14	1750		3								X	X	(3) DG9H		7 day hold 007
8	ITMW-15-20141205	WT	G			12/5/14	0810		3								X	X			7 day hold 008
9	MW-172-20141205	WT	G			12/5/14	0925		3								X	X			7 day hold 009
10	ITMW-17-20141205	WT	G			12/5/14	1040		3								X	X			7 day hold 010
11	IW-147-20141205	WT	G			12/5/14	1140		3								X	X			7 day hold 011
12	MW-80-20141205	WT	G			12/5/14	1248		3								X	X			7 day hold 012

Requested Analysis Filtered (Y/N)

Pace Project No./ Lab I.D. 60183996

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Victoria Sieglen / ENVIRON	12/5/14	1400		12/6	0815	1.1	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Sieglen

SIGNATURE of SAMPLER: Victoria Sieglen

DATE Signed (MM/DD/YY): 12/5/14

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.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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Section 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:	

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 Ascorbic Acid	Analysis Test Y/N	8260 client specific list: 8260 VOCs w/ MC	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-94-20141204					12/4/14	1300		3				X					Y	X		013
2	MW-95-20141204					12/4/14	1416		3				X					Y	X		014
3	ITMW-12-20141204					12/4/14	1552		5								X	Y	X		Hold 7 day 015
4	ITMW-19-20141205					12/5/14	0833		5								X	Y	X		Hold 7 day 016
5	IW-157-20141205					12/5/14	0945		5								X	Y	X		Hold 7 day 017
6	MW-25-20141205					12/5/14	1104		5								X	Y	X		Hold 7 day 018
7	MW-85-20141205					12/5/14	1245		5								X	Y	X		Hold 7 day 019
8	Trip Blank-20141204					12/4/14	1200		2				X					Y	X		020
9	MW-141-20141205					12/5/14	1400		3									Y	X		021
10	IW-152-20141204					12/4/14	1734		5								X	Y	X		Hold 7 day 022
11																					
12																					

Requested Analysis Filtered (Y/N)

Residual Chlorine (Y/N)

Pace Project No./ Lab I.D.: 60183996

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Lucy Cross / ENVIRON	12/4/14			12/6	0815	61	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lucy Cross

SIGNATURE of SAMPLER: Lucy Cross

DATE Signed (MM/DD/YY): 12/4/2014

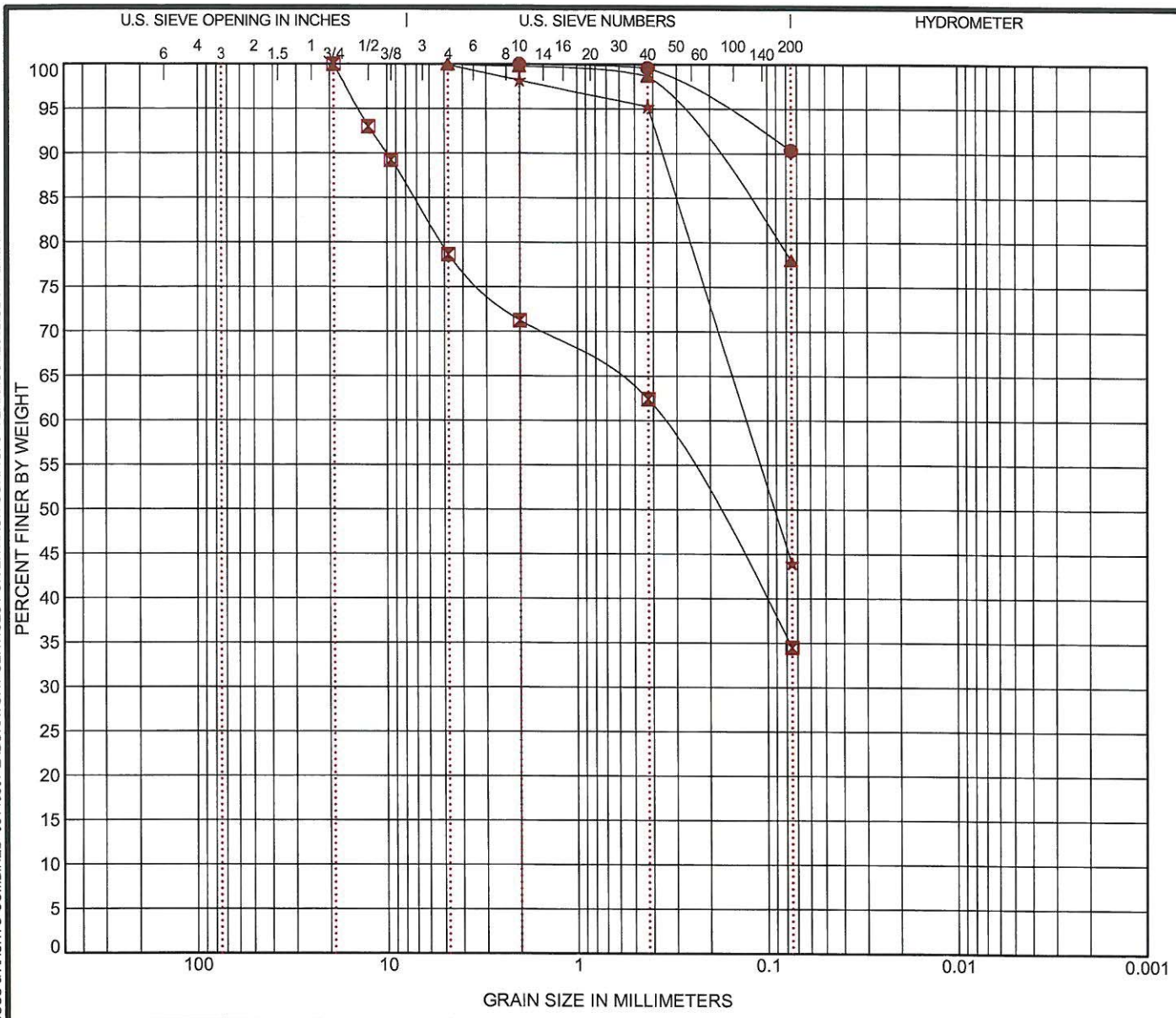
Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*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.

Appendix F
Geotechnical Laboratory Report

GRAIN SIZE DISTRIBUTION

ASTM D422



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Boring ID	Depth	USCS Classification	AASHTO Classification	LL	PL	PI	Cc	Cu
●	20140929-mw-92-sl(15-17')	15.0	LEAN CLAY(CL)	16(A-6)	34	15	19		
⊠	20140929-mw-92-sl(25-26')	25.0	CLAYEY SAND with GRAVEL(SC)	0(A-2-4)	27	17	10		
▲	20140929-mw-92-sl(8-10')	8.0	LEAN CLAY with SAND(CL)	22(A-7-6)	46	17	29		
★	20141002-mw-93-sl(20-22')	20.0	SILTY, CLAYEY SAND(SC-SM)	0(A-4)	22	18	4		

	Boring ID	Depth	D_{100}	D_{60}	D_{30}	D_{10}	%Gravel	%Sand	%Silt	%Clay
●	20140929-mw-92-sl(15-17')	15.0	2				0.0	9.6	90.4	
⊠	20140929-mw-92-sl(25-26')	25.0	19	0.366			21.4	44.2	34.5	
▲	20140929-mw-92-sl(8-10')	8.0	4.75				0.0	22.0	78.0	
★	20141002-mw-93-sl(20-22')	20.0	4.75	0.129			0.0	56.0	44.0	

PROJECT: Laboratory Services for ENVIRON Corp

SITE: Oklahoma City, Oklahoma

Terracon
4701 North Stiles Avenue
Oklahoma City, Oklahoma

PROJECT NUMBER: 03146307

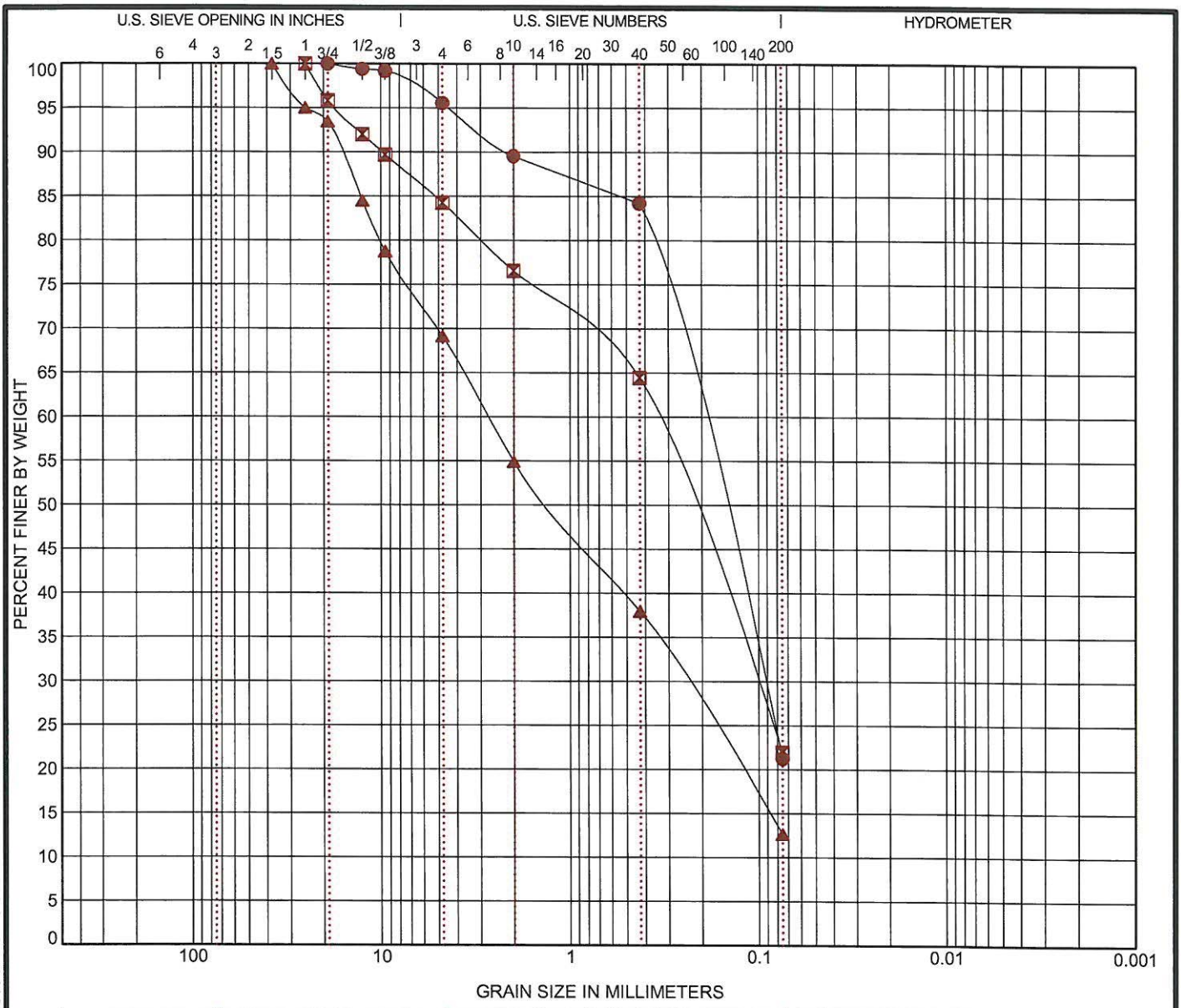
CLIENT: ENVIRON International Corporation
Grand Rapids, Michigan

EXHIBIT: B-1

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GRAIN SIZE: USCS & AASHTO COMBINED 03146307 LABORATORY SERVICES FOR ENVIRON CORP.GPJ TERRACON2012.GDT 12/15/14

GRAIN SIZE DISTRIBUTION

ASTM D422



COBBLES	GRAVEL		SAND			SILT OR CLAY
	coarse	fine	coarse	medium	fine	

	Boring ID	Depth	USCS Classification	AASHTO Classification	LL	PL	PI	Cc	Cu
●	20141002-mw-93-sl(25-27')	25.0	SILTY SAND(SM)	0(A-2-4)	19	16	3		
⊠	20141010-mw-172-sl(20-22')	20.0	SILTY, CLAYEY SAND with GRAVEL(SC-SM)	0(A-2-4)	19	15	4		
▲	20141010-mw-172-sl(25-27')	25.0	SILTY SAND with GRAVEL(SM)	0(A-1-b)	NP	NP	NP		

	Boring ID	Depth	D_{100}	D_{60}	D_{30}	D_{10}	%Gravel	%Sand	%Silt	%Clay
●	20141002-mw-93-sl(25-27')	25.0	19	0.218	0.095		4.4	74.3	21.2	
⊠	20141010-mw-172-sl(20-22')	20.0	25	0.354	0.104		15.7	62.3	22.0	
▲	20141010-mw-172-sl(25-27')	25.0	37.5	2.727	0.247		30.9	56.5	12.6	

PROJECT: Laboratory Services for ENVIRON Corp

SITE: Oklahoma City, Oklahoma

Terracon
4701 North Stiles Avenue
Oklahoma City, Oklahoma

PROJECT NUMBER: 03146307

CLIENT: ENVIRON International Corporation
Grand Rapids, Michigan

EXHIBIT: B-2

LABORATORY TESTS ARE NOT VALID IF SEPARATED FROM ORIGINAL REPORT. GRAIN SIZE: USCS & AASHTO COMBINED 03146307 LABORATORY SERVICES FOR ENVIRON CORP.GPJ TERRACON2012.GDT 12/15/14

MOISTURE CONTENT, DRY DENSITY DETERMINATION, POROSITY AND TOTAL ORGANIC CONTENT RESULTS

LABORATORY SERVICES FOR ENVIRON INTERNATIONAL CORP
FORT SMITH, ARKANSAS

TERRACON PROJECT NO. 03146307

Boring No./Sample No.	Water Content (%)	Dry Density (pcf)	Porosity (%)	Total Organic Content (%)
20140929-MW-92-SL-(15'-17')	17.3	113.4	32.74	2.4
20140929-MW-92-SL-(25'-27')	17.1	114.2	30.98	1.9
20140929-MW-92-SL-(8'-10')	18.6	106.5	36.85	2.2
20141002-MW-93-SL-(20'-22')	18.1	108.6	34.37	2.2
20141002-MW-93-SL-(25'-27')	17.5	117.9	28.75	0.8
20141010-MW-172-SL-(20'-22')	9.9	113.7	31.28	2.4
20141010-MW-172-SL-(25'-27')	12.5	127.9	22.72	2.8

Karim Saadeddine
Laboratory Manager



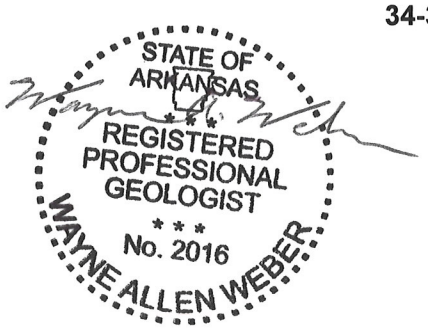
ATTACHMENT D
Large Diameter Borings Summary Report
Whirlpool Corporation
Fort Smith, Arkansas

Prepared for:
Whirlpool Corporation

Prepared by:
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1 Introduction

ENVIRON International Corporation (ENVIRON), on behalf of Whirlpool Corporation, is submitting this summary report describing the completion of the voluntary Large Diameter Borings (LDBs) in Area 1 of the Whirlpool Fort Smith facility located at 6400 Jenny Lind Road on the south side of Fort Smith, Arkansas (the "Site"). The work was performed in accordance with Remedial Action Decision Document (RADD) issued by Arkansas Department of Environmental Quality (ADEQ) on December 27, 2013; the Final Remedy Work Plan submitted on February 24, 2014; the Supplement to the February 2014 Final Remedy Work Plan; Area 1 Work Plan submitted on September 8, 2014; and, the October 7, 2014, Response to ADEQ Correspondence dated September 23, 2014.

The voluntary completion of the LDBs near and within the linear drainage feature (see Area 1 Soil Investigation Summary Report, submitted August 15, 2014, for discussion of the linear drainage feature) represents another step in the adaptive remedy approach being employed to facilitate implementation of the most effective remedial actions to address current onsite and offsite conditions. This voluntary action enhances the scope of the remedy in Area 1 and supplements the ongoing remediation activities that began earlier this year.

The LDBs consisted of a voluntary, supplemental soil removal effort in the linear drainage feature including backfilling with limestone gravel to adjust the naturally low groundwater pH to enhance natural attenuation. The third ISCO injection event was performed after the LDBs were completed and consisted of an ISCO injection event in Area 1 and the linear drainage feature.

2 Large Diameter Borings

A series of four foot diameter borings (hereinafter referred to as large diameter borings or LDBs) were completed along the Area 1 linear drainage feature to remove impacted soil from the Vadose Zone and the Basal Transmissive Zone. The Work Plan proposed the drilling of 19 LDBs completed to the top of the underlying shale using an approximate 15 foot spacing between borings. Work was completed between October 1 and October 10, 2014.

2.1 Site Preparation

Prior to initiating drilling activities, a private utility locator was contracted to identify underground utilities and other potential obstructions in the work area. Based on the results of the utility location, the proposed LDB locations were adjusted in the field to minimize the potential for encountering underground utilities and maintain the proposed 15 foot spacing to the extent practicable. Figure 1 provides the surveyed locations of the completed borings. Due to the relatively large number of identified utilities and potential obstructions in the work area, excavation of soil at each boring location was planned to expose and clear subsurface utilities to a depth of 6 feet below ground surface (bgs). To provide sufficient clearance for the LDBs, utilities were cleared for a 6 foot square area for each respective area.

On October 1, 2014, Pier Drillers, Inc. (PDI) and K&M Wrecking (K&M) of Oklahoma City, Oklahoma, mobilized at the site to perform the excavation and drilling activities. Following a site walk, health and safety meeting and scope of work discussion, K&M began saw cutting concrete to prepare each boring location for utility clearance excavation. Eleven of the 19 boring locations (LDB-1 through LDB-10 and LDB-19) required saw cutting and removal of the concrete surface to access the soil for excavation. Following saw cutting, the 6 foot by 6 foot concrete squares were broken using a Bobcat with jackhammer attachment. The surficial broken concrete pavement was removed and loaded into a 10 cubic yard (yd^3) truck for transportation offsite by K&M and delivered to the City of Fort Smith, Arkansas, to be reused for erosion control.

2.2 Excavation and Drilling Activities

On October 2, 2014, K&M began utility clearance excavation using a track-mounted Bobcat mini-excavator to remove soil and to expose and/or remove utilities and obstructions. A 6 foot by 6 foot area was carefully excavated at each boring locations to a depth of 6 feet bgs to clear and expose utilities and obstructions, except for boring LDB-15 where the excavation was limited to a 5 foot by 5 foot area due to the presence of a 12 inch pipeline that could not be damaged or removed. When utilities and/or obstructions were encountered during excavation, the onsite Whirlpool representative was contacted to determine if the utilities/obstruction could be removed prior to proceeding with excavation or should be left intact. Each utility clearance excavation resulted in the removal of approximately 8 YD3 of impacted soil, or a total of approximately 150 CY for the 19 excavations (Table 1).

On October 2, 2014, PDI began drilling the LDBs using a track-mounted Soilmec SR-50 pier auger rig equipped with a 4 foot diameter solid-flight rock auger. Following the completion of each utility clearance excavation, PDI prepared for drilling by positioning the rig at the boring

location, placing the auger in the approximately center of each excavation and zeroing the on-board computer at the approximate surface elevation to accurately record depth measurements. The drilling process consisted of rotating the auger downward at approximately 3 foot depth intervals (i.e. the length of the auger), retracting the auger to surface and spinning the auger to discard the soil cuttings at the ground surface. The drilling continued in each boring until evidence of the top of the shale was encountered, including:

- Visual observation of shale in cuttings;
- Visual observation of shale material on the auger; and/or
- Change in rate of penetration during drilling.

Boring depths ranged from 27 to 30.3 feet bgs. The drilling process at each boring removed approximately 10.6 yd^3 of impacted soil for a total of approximately 201 yd^3 based on field depth measurements for each of the 19 borings (Table 1).

The LDBs were backfilled with crushed limestone gravel and lean cement (i.e. sand with Portland cement). In addition to potentially increasing the naturally low groundwater pH to promote biological natural attenuation, a secondary purpose of the gravel backfill was to fill the bottom portion of the completed borings to the approximate groundwater potentiometric level (roughly 15 feet bgs) so that contaminated groundwater would not be displaced to the surface while backfilling the auger borehole with lean cement. Gravel was placed in each boring to the approximate level groundwater settled at following drilling which generally ranged from approximately 13.5 to 15 feet bgs, except at LDB-9 and LDB-13 where the groundwater level was at 10 and 11 feet bgs, respectively. A total of 320 tons of crushed limestone gravel was used to backfill the borings.

The remaining annular space of each boring was filled with lean cement to within approximately 1 to 2 feet from the surface. A total of 193 yd^3 of lean cement was used to backfill the borings. Following curing of the lean cement, the final 1 to 2 feet was filled to match the surrounding area (i.e. concrete, gravel or soil; whichever was present at the surface prior to performing the boring). For borings located in areas paved with concrete, gravel was placed from the top of the cured lean cement to the bottom of the concrete surface and compacted (i.e. approximately 4 inches bgs) prior to the placement of 3,500 psi strength concrete to match the existing surface. For borings completed in areas covered by soil or gravel, crushed limestone gravel was placed from the top of the cured lean cement to the ground surface and compacted to match the existing surface (i.e. approximately 1 to 2 feet bgs).

As requested by ADEQ in their correspondence dated September 23, 2014, drill cuttings and excavation spoil from the LDB activities were placed in 20 yd^3 roll-off boxes (provided by Action Environmental of Wilson, Oklahoma). As drill cuttings and excavation spoil were generated, the material was removed from the ground surface using a Bobcat loader and placed in lined roll-off boxes. Residual spoil that could not be removed from concrete surfaces using the Bobcat loader were swept using brooms and collected and placed in the lined roll-off boxes. Residual spoil remaining on the soil surface was removed by scraping into the native soil surface using the Bobcat loader (i.e. over-excavated) and placing the material in lined roll-off boxes.

The disposition of drill cuttings and spoil were tracked by individual boring and roll-off box identification numbers. As spoil was generated, field personnel documented the boring number where the spoil was generated (i.e. the boring) and the roll-off box identification number where the spoil was placed. Table 2 provides the spoil/roll-off box disposition tracking information.

A total of 23 roll-off boxes were filled during excavation and drilling activities. In preparation for the eventual offsite transportation to disposal facilities, each roll-off box was weighed using the onsite scales to assess if the weight of the roll-off boxes met applicable weight restrictions for offsite transport (e.g. less than the 80,000 pounds combined weight limit of the roll-off box and semi-tractor trailer). Although the onsite scales had not been recently calibrated, the difference in tare weight for one of the roll-off trucks as measured by the onsite scales and by a certified offsite scale was calculated and used to determine the approximate weight of each roll-off box. This process determined that a majority of the initial 23 roll-off boxes were inadvertently over weight restrictions (i.e. over weight for legal offsite transport). As such, additional roll-off boxes were delivered to the site to contain soil to be unloaded from overweight roll-off boxes. A total of eight additional roll-off boxes were delivered to the site, filled with soil removed from overweight boxes and sampled for waste characterization purposes. Refer to Table 2 for a summary of the disposition of soil removed from overweight boxes and the boxes that received the unloaded overweight soil.

2.3 Field Observations

Although typical continuous soil sampling and logging was not performed during drilling, general soil types and approximate horizon depths were logged by the PDI driller based on penetration rates experienced during drilling and the cuttings observed on the surface. Driller's logs are provided in Appendix A. Visual observation of the soil encountered in the upper 6 feet during excavation of boring locations was similar for all 19 borings consisting of brownish-tan sandy clay. As stated above, the description of soil encountered during drilling (i.e. 6 feet to 30 feet bgs) was based on visual observation of drill cuttings. However, assessment of soil types, thicknesses and depths below 6 feet were difficult to ascertain due to mixing and heaving of the soil caused by the drilling process, in particular for horizons containing clay and sand-size particles. In general, clayey and sandy soil was observed from the surface to approximately 25 feet bgs. Larger gravel-sized particles were more readily observed and were noted near the bottom of borings between 25 and 30 feet bgs. Large cobble-sized stones were observed in borings LDBD-14, LDBD-15 and LDBD-16.

In addition to general soil observations, a photoionization detector (PID) was used to monitor for the presence of VOCs during excavation and drilling for health and safety purposes. Although no direct headspace measurements were collected from the soil (i.e. only breathing zone PID measurements for health and safety purposes and relative odor observations), the PID readings were also used to estimate the relative VOC concentrations in soil at each boring. No odor or PID detections were documented in the upper 3 feet of soil at each excavation. In general, the areas that were observed to have the highest PID readings included borings LDB-6 through LDB-8 (including LDB-19) and at borings LDB-12 through LDB-14. The spatial distribution of PID readings measured during excavation and drilling appear to be consistent with previously completed subsurface soil and groundwater sampling.

Saturated soil was encountered in all borings with the exception of LDB-17 and LDB-18, which were located on the west end of the linear drainage feature. When saturated soil was encountered, the groundwater level rose to approximately 13 to 15 feet bgs. These groundwater observations during drilling of the LDBs were consistent with previously completed borings and monitoring wells. Based on the absence of groundwater and low PID readings observed at borings LDB-17 and LDB-18, the farthest west proposed boring location (LDB-19) was moved to a position between LDB-6 and LDB-7 where field observations indicated higher soil VOC concentrations were present.

2.4 Waste Characterization and Disposal

Disposal characterization sampling was performed by Tec-An of Oklahoma City, Oklahoma, under contract to PDI during the excavation and drilling activities. ENVIRON performed characterization sampling of the additional roll-off boxes that were filled after the completion of the drilling activities (i.e. soil removed from overweight boxes).

Two samples were collected from each roll-off box, immediately placed in an ice-cooled chest for preservation and submitted for analysis under standard chain-of-custody procedures. Tec-An collected two samples from roll-off boxes 1 through 23 and submitted the samples to Environmental Testing, Inc. (ETI) of Oklahoma City, Oklahoma, for analysis. ENVIRON collected two samples from roll-off boxes 24 through 31 and submitted the samples to Pace Analytical Services, Inc. (Pace) of Lenexa, Kansas, for analysis. All samples were analyzed in accordance with the parameters requested from disposal facilities for proper disposal which included performance of toxicity characteristic leachate procedure (TCLP) testing for VOCs and RCRA metals. Analytical reports are provided in Appendix B. A review of the analytical results indicated a total of six roll off boxes contained soil with concentrations above the Characteristically Hazardous threshold of 0.5 milligrams per liter (mg/L) for TCE (Table 2).

A total of 25 roll-off boxes containing nonhazardous spoil were transported offsite in November and December, 2014 to the City of Fort Smith Municipal Waste Landfill in Fort Smith, Arkansas for disposal. A total of six roll-off boxes containing characteristically hazardous spoil were transported offsite in December 2014 to the Clean Harbors' Lone Mountain, LLC RCRA disposal facility in Waynoka, Oklahoma for disposal. Copies of nonhazardous and hazardous waste manifests are provided in Appendix C.

2.5 Large Diameter Boring Summary

A total of 19 LDBs were completed along the Area 1 linear drainage feature to remove TCE contaminated Vadose Zone and Basal Transmissive Zone soils in and around Area 1. The proposed LDB locations were adjusted in the field to minimize the potential for encountering underground utilities and maintain the proposed 15 foot spacing to the extent practicable. Due to the relatively large number of identified utilities and potential obstructions in the work area, excavation of soil at each boring location was completed to expose and clear subsurface utilities to a depth of 6 feet bgs. When utilities and/or obstructions were encountered during excavation, the onsite Whirlpool representative was contacted to determine if the utilities/obstruction could be removed prior to proceeding with excavation or should be left intact. Each utility clearance

excavation resulted in the removal of approximately 8 yd^3 of soil, or a total of approximately 152 yd^3 for the 19 utility clearance excavations.

The four feet diameter LDBs were drilled by PDI of Oklahoma City, Oklahoma. The borings were completed to the top of the shale that was encountered at depths ranging from 27 to 30.3 feet bgs. The drilling process at each boring removed approximately 10.6 yd^3 of soil for a total of approximately 201 yd^3 of soil removed for all 19 borings.

The LDBs were backfilled with crushed limestone gravel and lean cement (i.e. sand with Portland cement). Gravel was placed in each boring to the approximate level groundwater settled at following drilling which generally ranged from approximately 13.5 to 15 feet bgs. Limestone gravel was placed to potentially increase the naturally low groundwater pH to promote biological natural attenuation and a secondary purpose of the gravel backfill was to fill the bottom portion of the completed borings to the approximate groundwater potentiometric level (roughly 15 feet bgs) so that contaminated groundwater would not be displaced to the surface while backfilling the auger borehole with lean cement. The remaining annular space of each boring was filled with lean cement to within approximately 1 to 2 feet from the surface. For borings located in areas paved with concrete, gravel was placed from the top of the cured lean cement to the bottom of the concrete surface and compacted prior to the placement of concrete to match the existing surface.

Excavation spoil and drill cuttings were placed into lined roll-off boxes for storage prior to offsite disposal. Waste characterization samples were collected from the roll-offs. A total of 31 roll-off boxes were used to contain the approximately 353 yd^3 of excavation spoil and drill cuttings. Twenty-five of the 31 roll-offs containing nonhazardous soil were transported offsite in November and December, 2014 to the City of Fort Smith Municipal Waste Landfill in Fort Smith, Arkansas for disposal. A total of six of the 31 roll-off boxes containing characteristically hazardous soil were transported offsite in December 2014 to the Clean Harbors' Lone Mountain, LLC RCRA disposal facility in Waynoka, Oklahoma, for disposal. The characteristically hazardous roll-off boxes contained soils from at least portions of LDB-1, LBD-4, LDB-5, LDB-7, LDB-12, LDB-13, LDB-14, LDB-18 and LDB-19.

Tables

TABLE 1
ESTIMATION OF SOIL VOLUMES EXCAVATED
Whirlpool Facility - Fort Smith, Arkansas

Boring ID	Excavation Depth (feet)	Borehole Depth (feet)	Depth to Gravel Backfill (feet)	Depth to Lean Cement* (feet)	Surface Gravel Thickness* (feet)	Concrete Thickness* (feet)	Actual Borehole Length (feet)	Gravel Thickness (feet)
1	6	28.0	14.0	2.0	1.6	0.4	22.0	14.0
2	6	28.6	13.8	2.0	1.6	0.4	22.6	14.8
3	6	29.0	14.8	2.0	1.6	0.4	23.0	14.2
4	6	28.0	14.9	2.0	1.6	0.4	22.0	13.1
5	6	27.0	15.0	2.0	1.6	0.4	21.0	12.0
6	6	27.0	14.9	2.0	1.6	0.4	21.0	12.1
7	6	28.7	15.0	2.0	1.6	0.4	22.7	13.7
8	6	28.6	14.6	2.0	1.6	0.4	22.6	14.0
9	6	27.6	10.0	2.0	1.6	0.4	21.6	17.6
10	6	28.6	13.0	2.0	1.6	0.4	22.6	15.6
11	6	28.6	14.0	2.0	2.0	NA	22.6	14.6
12	6	28.3	15.0	2.0	2.0	NA	22.3	13.3
13	6	28.6	11.0	2.0	2.0	NA	22.6	17.6
14	6	29.3	14.0	2.0	2.0	NA	23.3	15.3
15	6	29.6	14.6	2.0	2.0	NA	23.6	15.0
16	6	30	15.0	2.0	2.0	NA	24.0	15.0
17	6	30	15.0	2.0	2.0	NA	24.0	15.0
18	6	30.3	15.0	2.0	2.0	NA	24.3	15.3
19	6	29.3	15.0	2.0	2.0	NA	23.3	14.3
TOTALS	**114**	**545.1**	**268.6**	**38.0**	**34.0**	**4.0**	431.1	-

	Utility Clearance Excavations	Large Diameter Borings	Total
Volume Estimates (cyds)	152	201	**353**

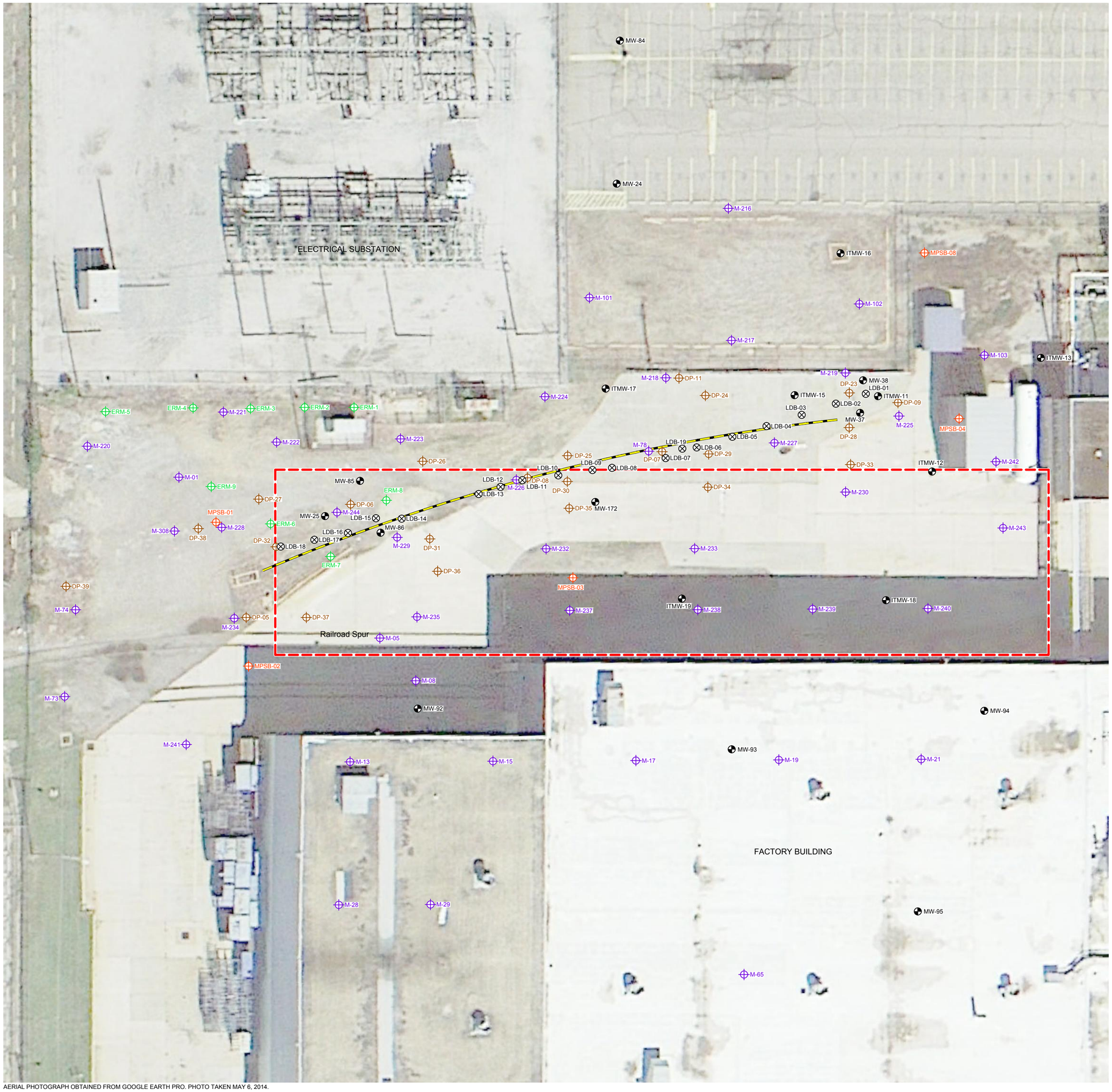
Notes:
* - depths are approximate

TABLE 2
SUMMARY OF LARGE DIAMETER BORING ROLL-OFF BOX INFORMATION
Whirlpool Facility - Fort Smith, Arkansas

Tec-An, Inc. Roll-Off Box ID	ENVIRON Identified Container Label	Source Large Diameter Boring Excavation	Source Large Diameter Boring Borehole	Date Material Placed in Roll Off Box	Date Roll Off Box Sampled	Sample ID	Analytical Results	Disposal Classification	Receiving Facility
1	25480	LDB-2, LDB-3 and LDB-5 (1/2)	-	10/2/2014	10/2/2014	1A and 1B	TCE = <0.125 mg/kg	Non-hazardous	City of Fort Smith LF
2	RB37763	LDB-3 and LDB-4	-	10/2/2014	10/2/2014	2A and 2B	TCE = 0.269 mg/kg	Non-hazardous	City of Fort Smith LF
3	25475	LDB-1	LDB-2	10/2/2014	10/2/2014	3A and 3B	TCE = 0.165 mg/kg	Non-hazardous	City of Fort Smith LF
4	25477	-	LDB-3	10/2/2014	10/2/2014	4A and 4B	TCE = 0.589 mg/kg	Non-hazardous	City of Fort Smith LF
5	25472	-	LDB-1 and LDB-4 (top 1/2)	10/3/2014	10/3/2014	5A and 5B	TCE = 7.51 mg/kg	Non-hazardous	City of Fort Smith LF
6	25473	LDB-5 and LDB-6	LBD-6	10/3/2014	10/3/2014	6A and 6B	TCE = 1.07 mg/kg	Non-hazardous	City of Fort Smith LF
7	25479		LDB-4 (bottom 1/2) and LDB-5	10/3/2014	10/3/2014	7A and 7B	**TCE = 2.25 mg/L**	Characteristically Hazardous	Clean Harbors Lone Mountain LF
8	25484	LDB-7	LDB-7	10/4/2014	10/4/2014	8A and 8B	**TCE = 9.99 mg/L**	Characteristically Hazardous	Clean Harbors Lone Mountain LF
9	25474	LDB-8 and LDB-9 (1/2)	LDB-8	10/4/2014	10/4/2014	9A and 9B	TCE = 4.24 mg/kg	Non-hazardous	City of Fort Smith LF
10	25540	LDB-9 (1/2) and LDB-10	-	10/4/2014	10/4/2014	10A and 10B	TCE = 0.215 mg/kg	Non-hazardous	City of Fort Smith LF
11	25449	-	LDB-9	10/4/2014	10/4/2014	11A and 11B	TCE = 0.166 mg/kg	Non-hazardous	City of Fort Smith LF
12	25406	LDB-11 (1/2)	LDB-10	10/4/2014	10/4/2014	12A and 12B	TCE = 2.82 mg/kg	Non-hazardous	City of Fort Smith LF
13	300525	LDB-1 (1/2) and LDB-12	-	10/4/2014	10/4/2014	13A and 13B	TCE = 2.76 mg/kg (13A) **TCE = 0.540 mg/L (13B)**	Characteristically Hazardous	Clean Harbors Lone Mountain LF
14	25536	LDB-12 (1 cyd), LDB-13	LDB-11	10/6/2014	10/6/2014	14A and 14B	**TCE = 0.475 mg/L**	Non-hazardous	City of Fort Smith LF
15	25469	-	LDB-11 (3 cyds) and LDB-12	10/6/2014	10/6/2014	15A and 15B	**TCE = 0.407 mg/L**	Non-hazardous	City of Fort Smith LF
16	25498	LDB-14	LDB-13	10/6/2014	10/6/2014	16A and 16B	**TCE = 0.997 mg/L**	Characteristically Hazardous	Clean Harbors Lone Mountain LF
17	25409	-	LDB-14	10/6/2014	10/6/2014	17A and 17B	**TCE = 0.517 mg/L**	Characteristically Hazardous	Clean Harbors Lone Mountain LF
18	25582	LDB-17	LDB-14 (2 cyds) and LDB-17 (top 1/2)	10/6/2014	10/6/2014	18A and 18B	TCE = 3.76 mg/kg	Non-hazardous	City of Fort Smith LF
19	25606	LDB-15 (1/2) and LDB-16	LDB-17 (bottom 1/2)	10/6/2014	10/6/2014	19A and 19B	TCE = 0.830 mg/kg	Non-hazardous	City of Fort Smith LF
20	25404	LDB-15 (1/2)	LDB-15 (top 1/2)	10/7/2014	10/7/2014	20A and 20B	**TCE = 0.380 mg/L**	Non-hazardous	City of Fort Smith LF
21	25583	LDB-18	LDB-18	10/8/2014	10/8/2014	21A and 21B	TCE = 2.28 mg/kg	Non-hazardous	City of Fort Smith LF
22	25551	LDB-19	LDB-18 (3 cyds)	10/8/2014	10/8/2014	22A and 22B	**TCE = 4.65 mg/L**	Characteristically Hazardous	Clean Harbors Lone Mountain LF
23	25450	-	LDB-19	10/8/2014	10/8/2014	23A and 23B	TCE = 0.548 mg/kg	Non-hazardous	City of Fort Smith LF
24	25186	-	LDB-15 (bottom 1/2) and LDB-16	10/8/2014	10/9/2014	24A and 24B	**TCE = <0.05 mg/L (24A)** **TCE = <0.05 mg/L (24B)**	Non-hazardous	City of Fort Smith LF
25	25545	LDB-15 (bottom 1/2) and LDB-16 (2 cyds); Box 22 (25551) (2 bkts); Box 23 (25450) (4 bkts); Box 18 (25582) (4 bkts); Box 21 (25583) (4 bkts)		10/8/2014	10/9/2014	25A and 25B	**TCE = <0.05 mg/L (25A)** **TCE = <0.05 mg/L (25B)**	Non-hazardous	City of Fort Smith LF
26	25160	Box 20 (25404) (5 bkts); Box 17 (25409) (4 bkts)		10/9/2014	10/9/2014	26A and 26B	**TCE = <0.05 mg/L (26A)** **TCE = 0.158 mg/L (26B)**	Non-hazardous	City of Fort Smith LF
27	25209	Box 15 (25469) (7 bkts); Box 10 (25540) (2 bkts); Box 9 (25474) (2 bkts); Box 12 (25406) (2 bkts)		10/9/2014	10/9/2014	27A and 27B	**TCE = <0.05 mg/L (27A)** **TCE = <0.05 mg/L (27B)**	Non-hazardous	City of Fort Smith LF
28	25187	Box 19 (25606) (3 bkts); Box 16 (25498) (4 bkts); Box 5 (25472) (4 bkts)		10/9/2014	10/10/2014	28A and 28B	**TCE = <0.05 mg/L (28A)** **TCE = 0.114 mg/L (28B)**	Non-hazardous	City of Fort Smith LF
29	25132	Box 5 (25472) (3 bkts); Box 14 (25536) (3 bkts); Box 7 (25479) (7 bkts); Box 4 (25477) (2 bkts)		10/10/2014	10/10/2014	29A and 29B	**TCE = <0.05 mg/L (29A)** **TCE = 0.0503 mg/L (29B)**	Non-hazardous	City of Fort Smith LF
30	25A-216RT	Box 7 (25479) (2 bkts); Box 9 (25474) (3 bkts); Box 8 (25484) (1 bkts)		10/10/2014	10/10/2014	30A and 30B	**TCE = <0.05 mg/L (30A)** **TCE = <0.05 mg/L (30B)**	Non-hazardous	City of Fort Smith LF
31	25529	Box 8 (25484) (1 bkts); Box 6 (25473) (11 bkts)		10/10/2014	10/10/2014	31A and 31B	**TCE = <0.05 mg/L (31A)** **TCE = 0.201 mg/L (31B)**	Non-hazardous	City of Fort Smith LF

Notes:
bkts - Number of Bobcat loader buckets of soil transffered from overfilled roll-off boxes
cyds- Cubic yards
LDB - Large Diameter Boring
LF - Land fill
mg/kg - Milligrams per kilograms
mg/L - Milligrams per liter
- Roll off boxes 24 through 31 were filled with excess soil from the boxes 1 through 23 that were overfilled.
- Bold text indicates that samples results were reported in mg/L (TCLP).
All other sample results reported in mg/kg represent total concentrations (i.e., not TCLP)

Figures



AERIAL PHOTOGRAPH OBTAINED FROM GOOGLE EARTH PRO. PHOTO TAKEN MAY 6, 2014.

L:\Loop Project Files\00_CAD FILES\34\NMRS_Whirlpool Ft. Smith LitSup 3433233A\2014-12\1-1_Large Diameter Borings.dwg

N

LEGEND

- EXTENT OF AREA 1
- FORMER LINEAR DRAINAGE FEATURE
- MIP BORINGS
- ERM BORINGS
- DP BORINGS
- MPSB BORINGS
- MONITORING WELLS
- LARGE DIAMETER BORINGS

0 15 30 60

APPROXIMATE SCALE (FT)

LARGE DIAMETER BORINGS

AREA 1 DETAIL
WHIRLPOOL FACILITY
FORT SMITH, ARKANSAS

ENVIRON

FIGURE 1

DRAFTED BY: CKL | DATE: 12/24/14 | 3433233A

Appendix A

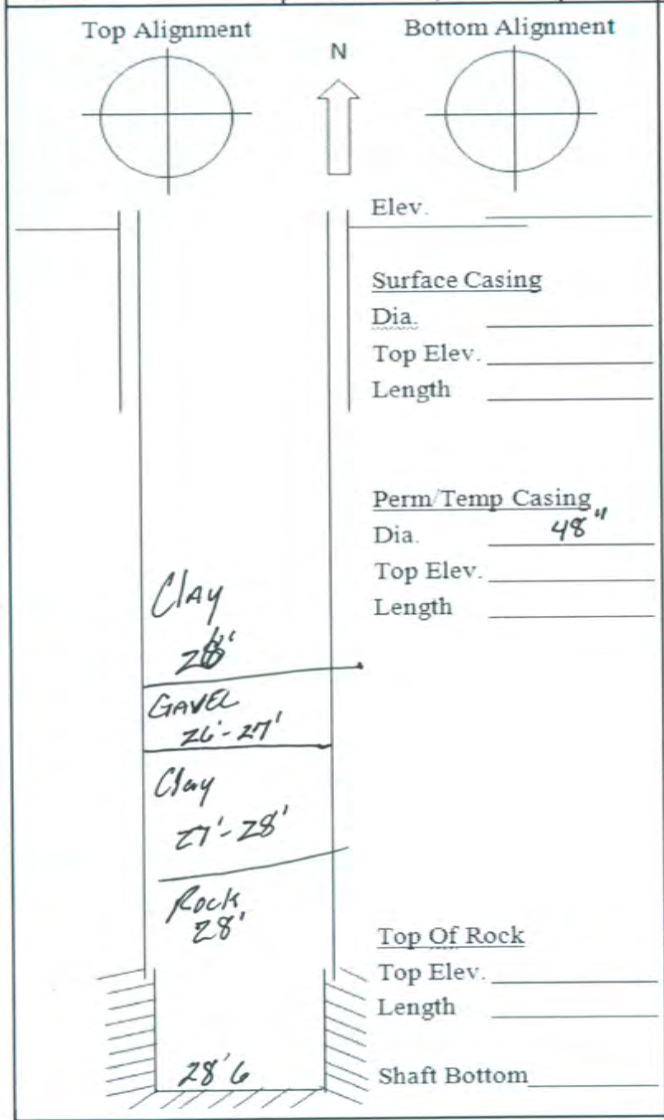
Large Diameter Boring Driller's Log

Project: Whirlpool Plant

Location: Ft. Smith, AR

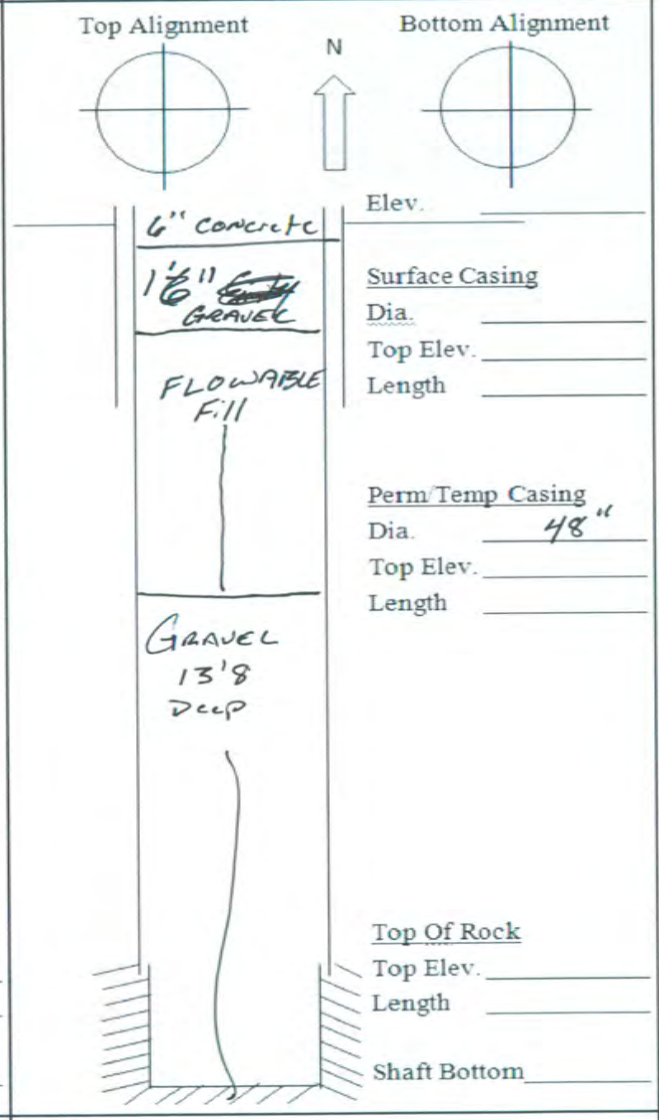
Date: 10-2-14

Mark:	Location: 2	



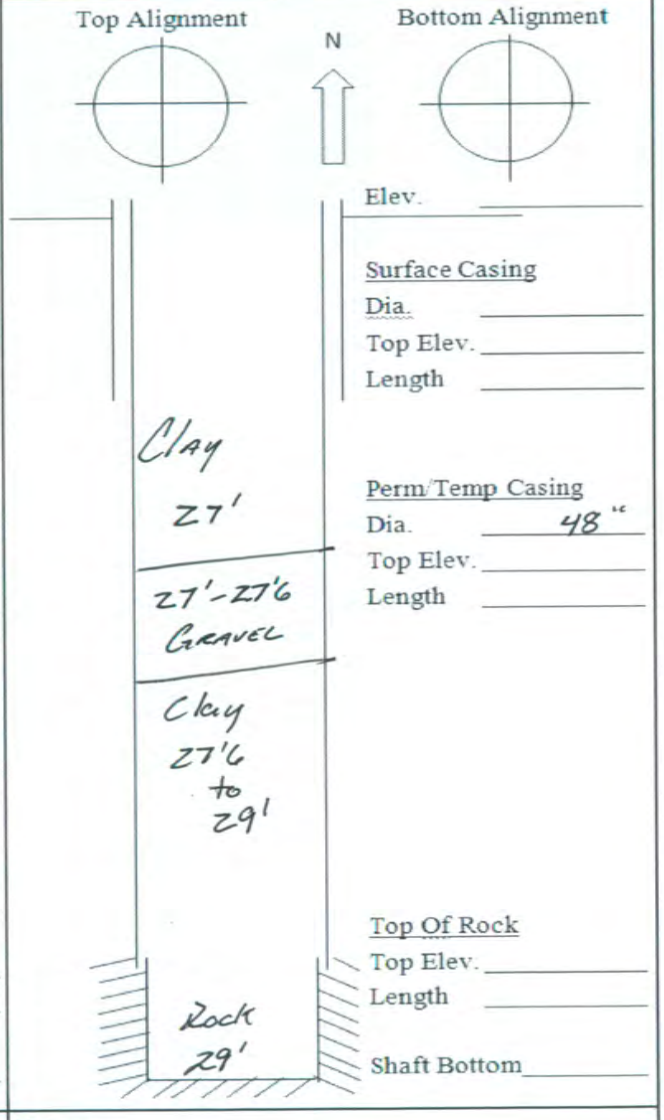
Notes:

Mark:	Location: 2	



Notes:

Mark:	Location: 3	



Notes:

Pier Drillers

Geotech

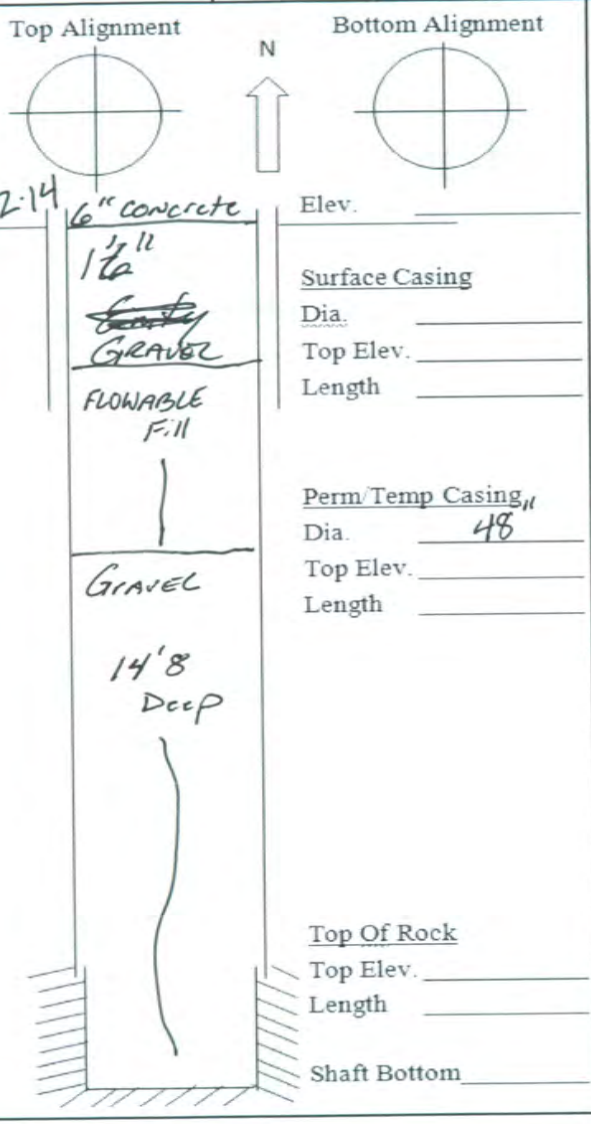
Contractor

Project: irlpool Plant

Location: Ft. Smith, AR

Date:

Mark:	Location: 3	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

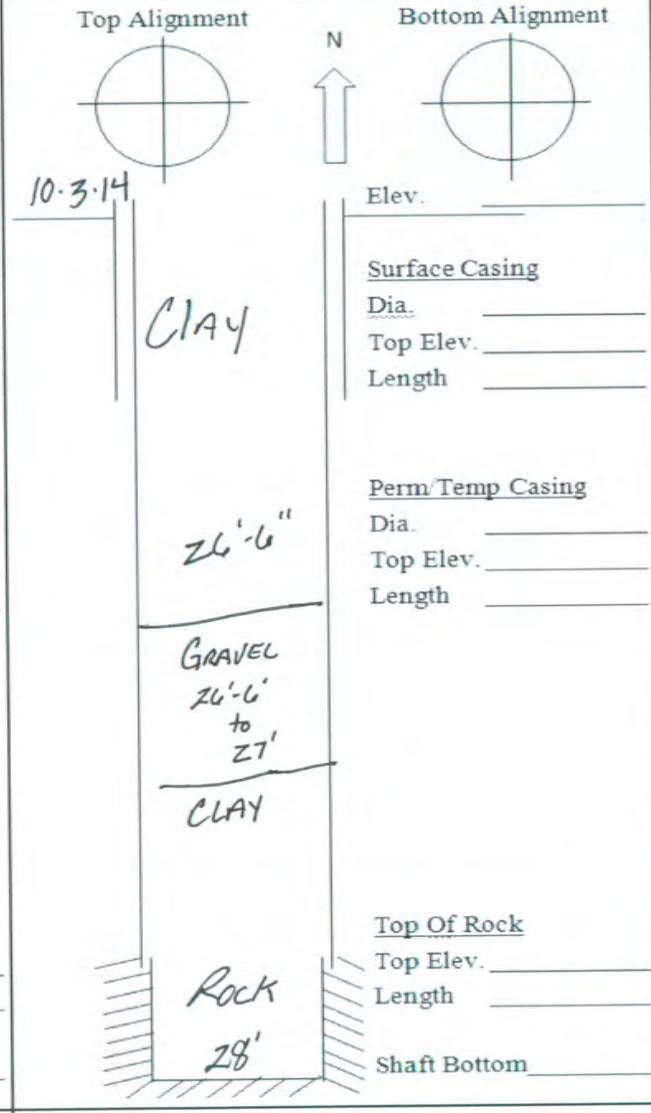
Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Mark:	Location: 1	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

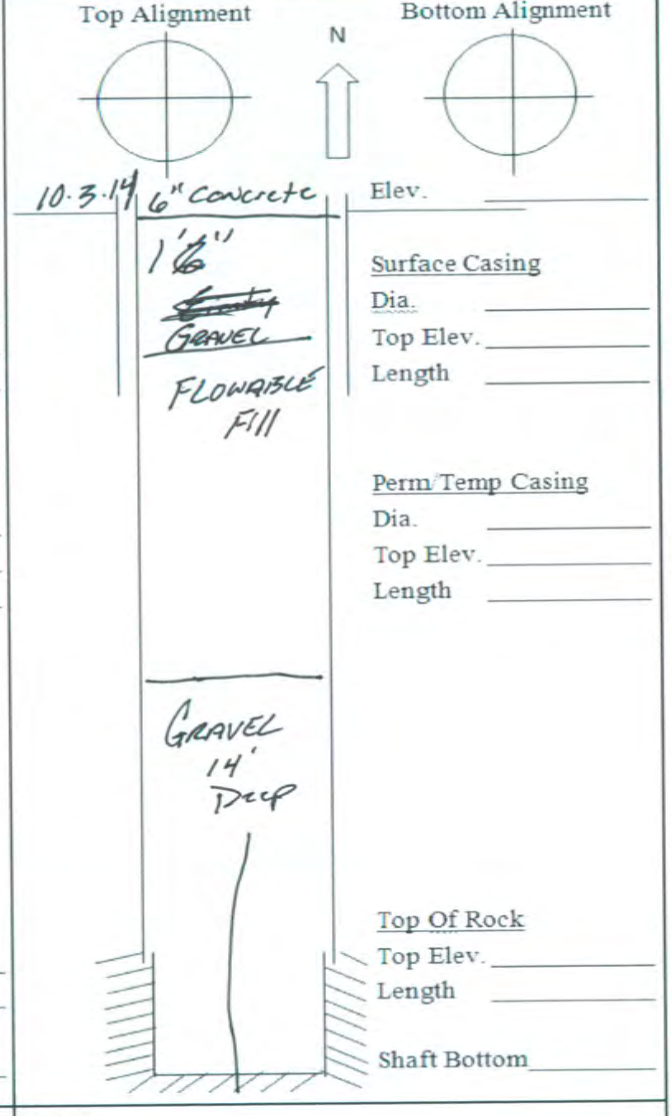
Perm/Temp Casing
Dia. _____
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Mark:	Location: 1	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

Perm/Temp Casing
Dia. _____
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Pier Drillers

Geotech

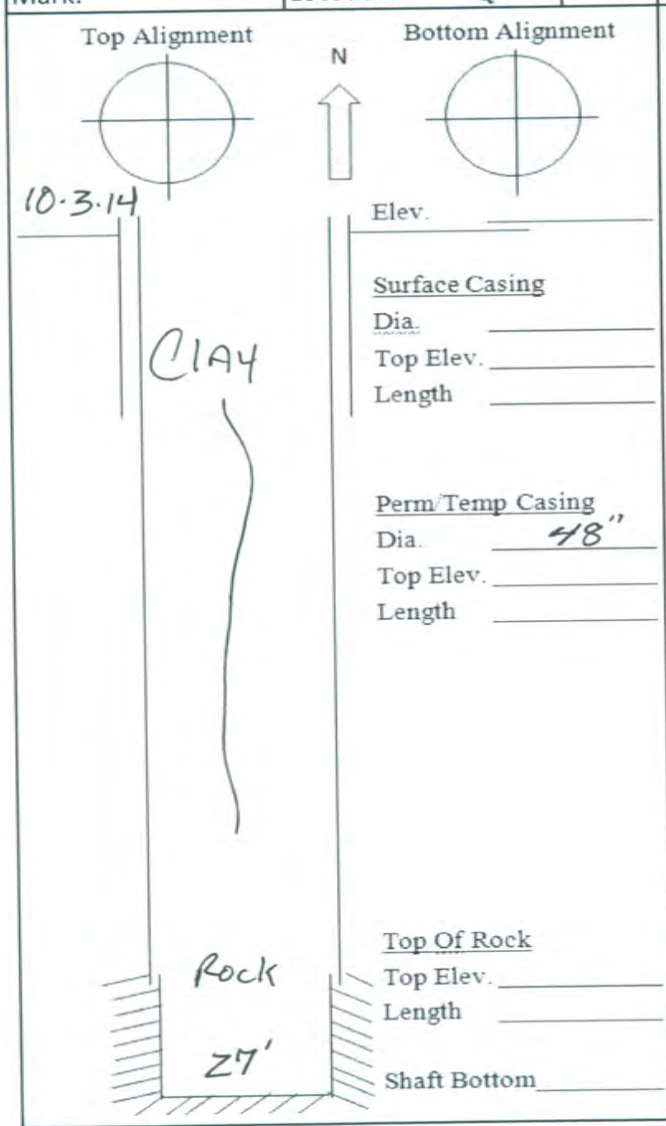
Contractor

Project: irlpool Plant

Location: Ft. Smith, AR

Date:

Mark:	Location: 6	



Elev.

Surface Casing
Dia.
Top Elev.
Length

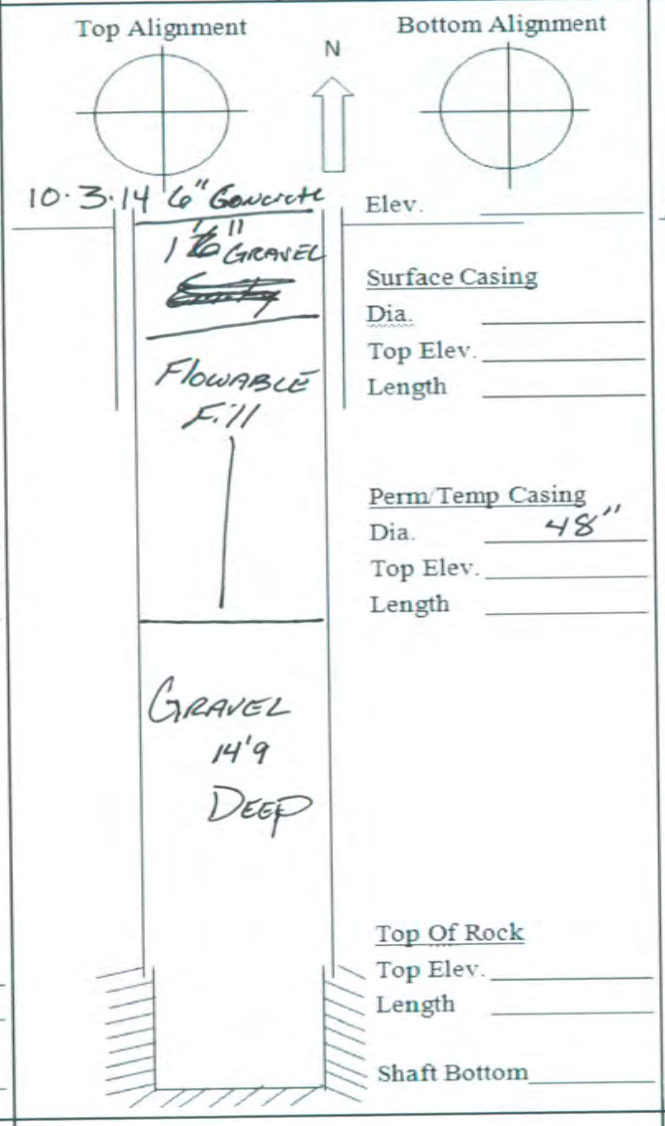
Perm/Temp Casing
Dia. 48"
Top Elev.
Length

Top Of Rock
Top Elev.
Length

Shaft Bottom

Notes:

Mark:	Location: 6	



Elev.

Surface Casing
Dia.
Top Elev.
Length

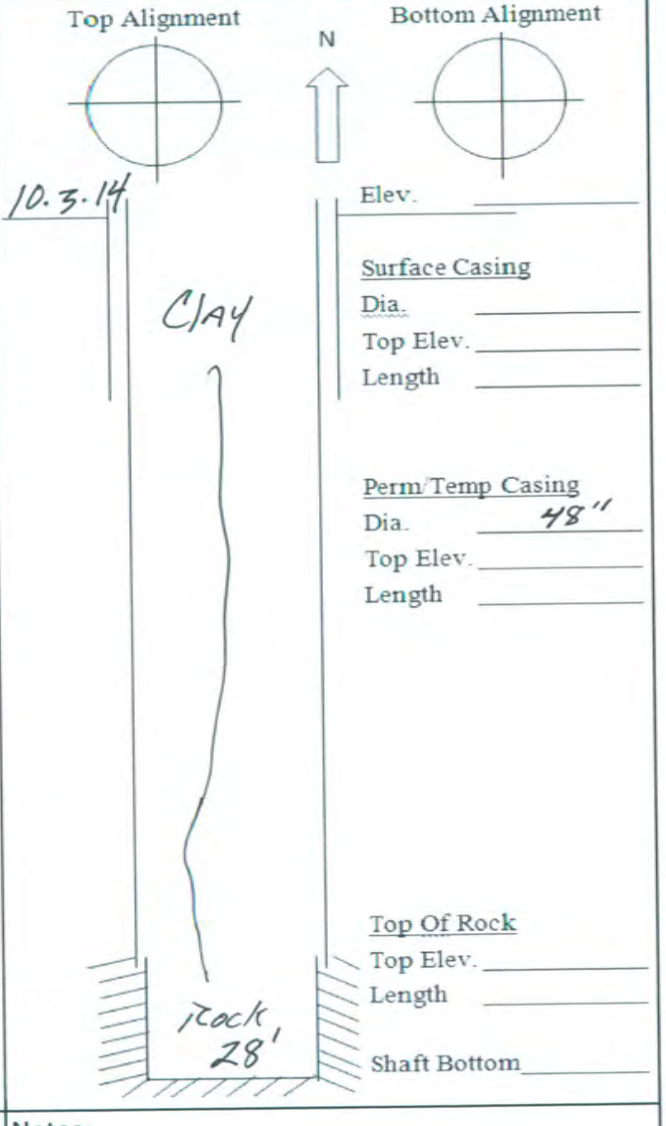
Perm/Temp Casing
Dia. 48"
Top Elev.
Length

Top Of Rock
Top Elev.
Length

Shaft Bottom

Notes:

Mark:	Location: 4	



Elev.

Surface Casing
Dia.
Top Elev.
Length

Perm/Temp Casing
Dia. 48"
Top Elev.
Length

Top Of Rock
Top Elev.
Length

Shaft Bottom

Notes:

Pier Drillers

Geotech

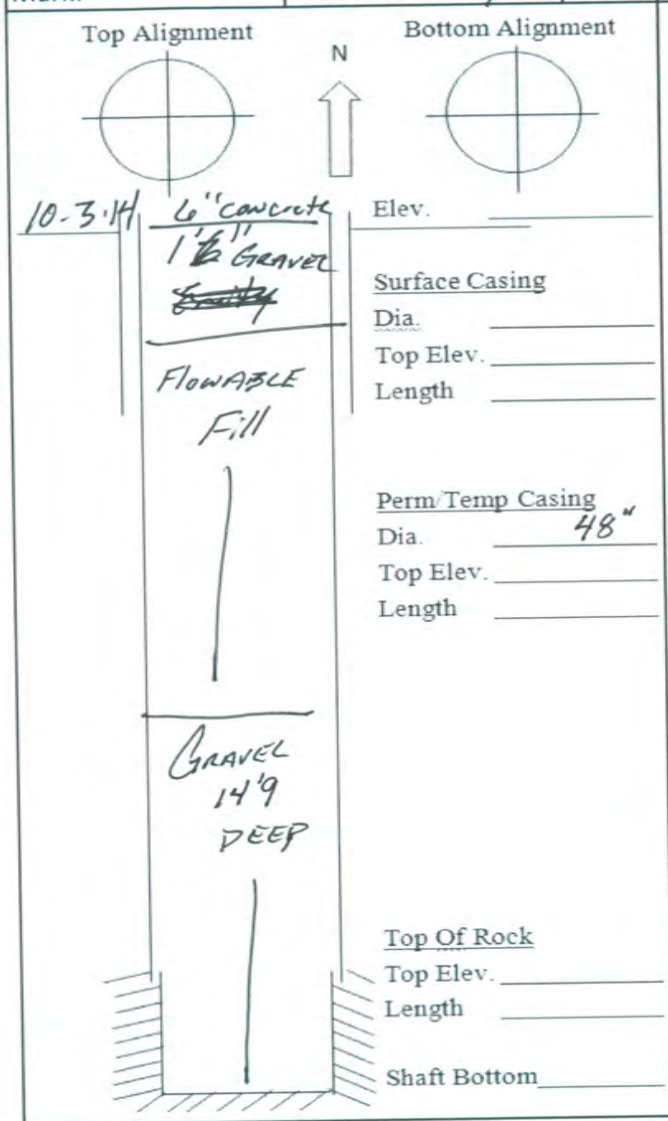
Contractor

Project: irlpool Plant

Location: Ft. Smith, AR

Date:

Mark:	Location: 4	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

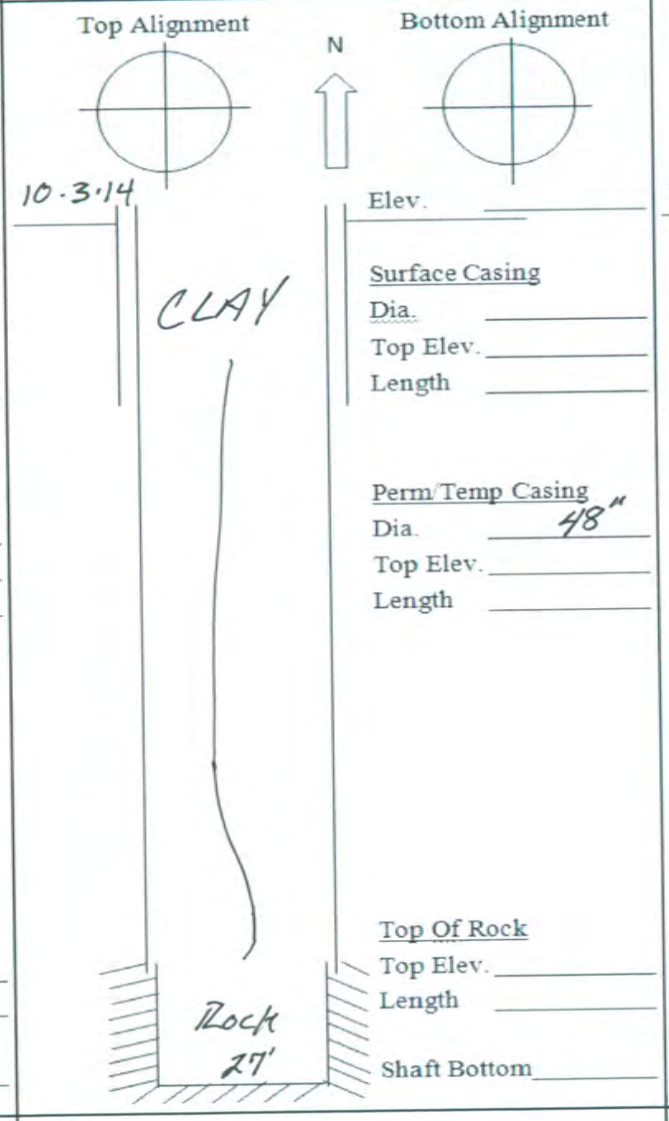
Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Mark:	Location: 5	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

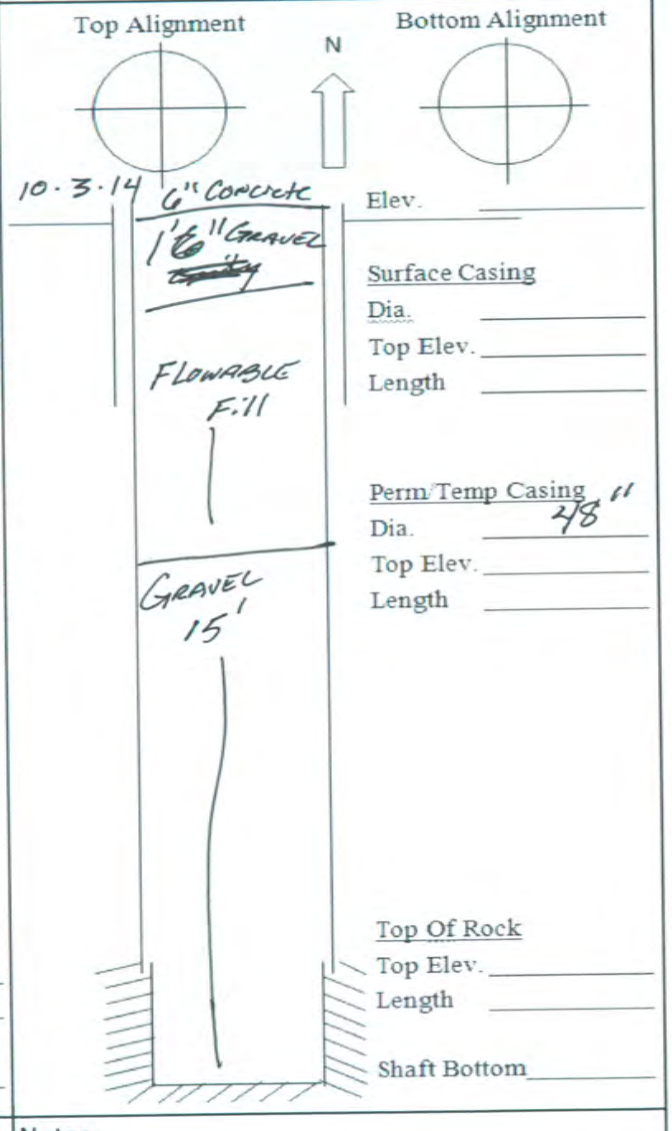
Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Mark:	Location: 5	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Pier Drillers

Geotech

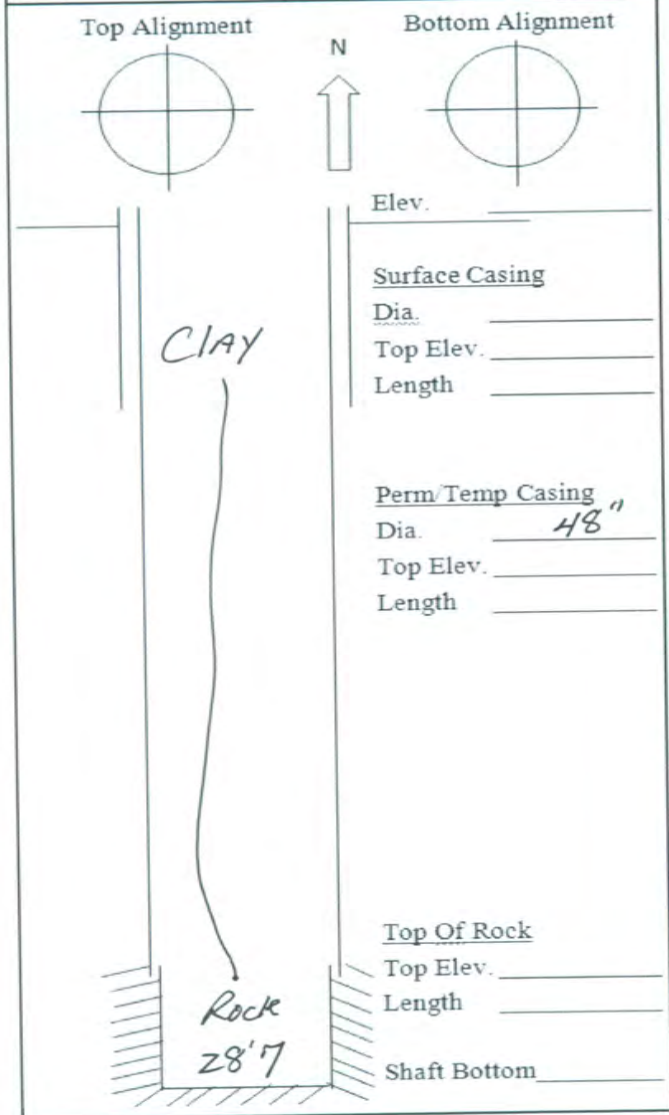
Contractor

Project: Whirlpool Plant

Location: Ft. Smith, AR

Date: 10-4-14

Mark:	Location: 7	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

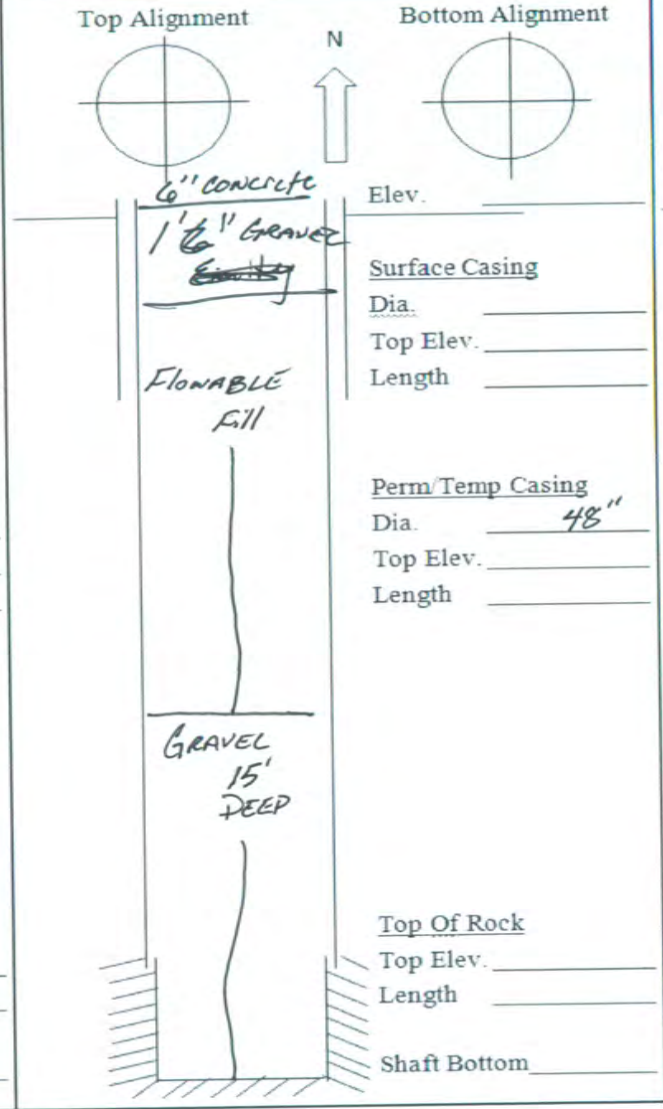
Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Mark:	Location: 7	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

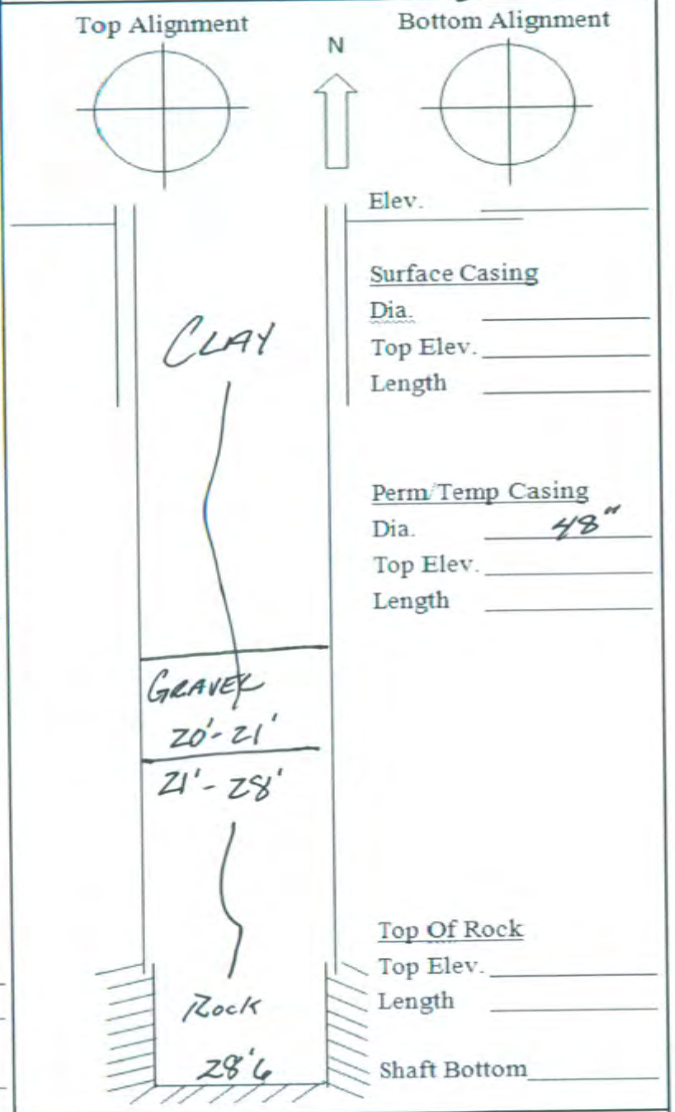
Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Mark:	Location: 8	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Pier Drillers

Geotech

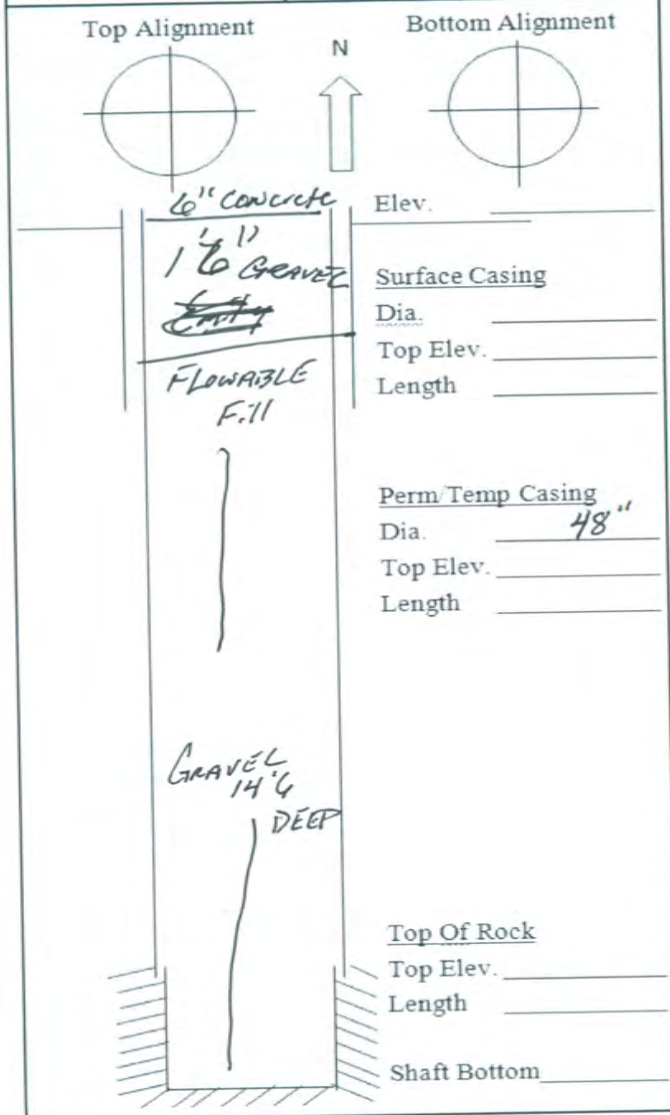
Contractor

Project: Whirlpool Plant

Location: Ft. Smith, AR

Date: 10.4.14

Mark:	Location: 8	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

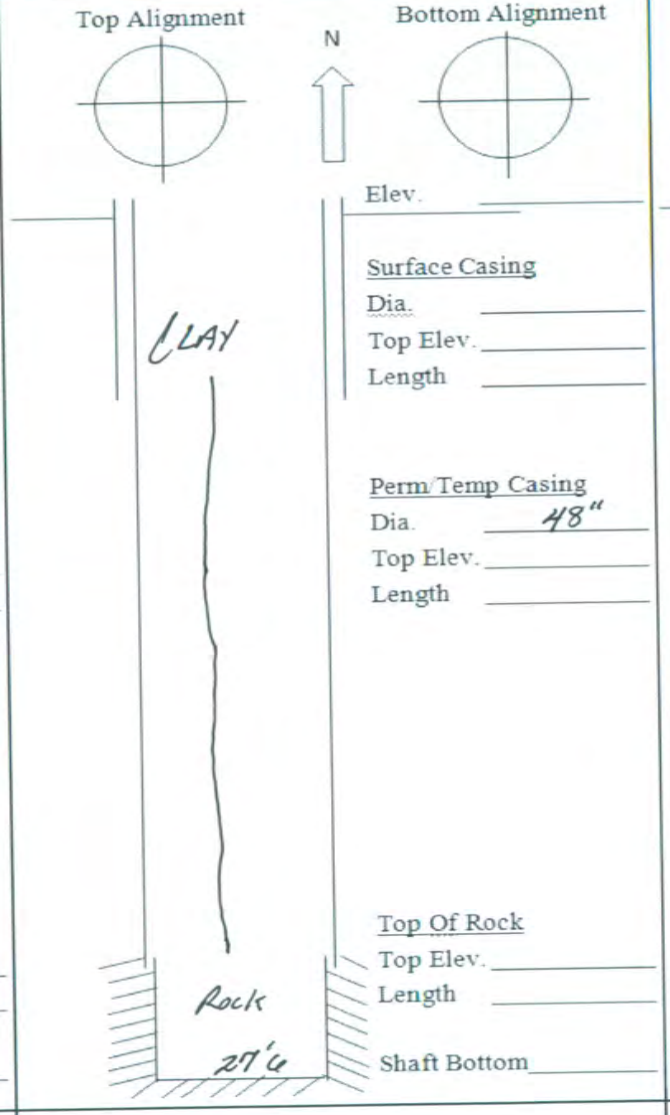
Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Mark:	Location: 9	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

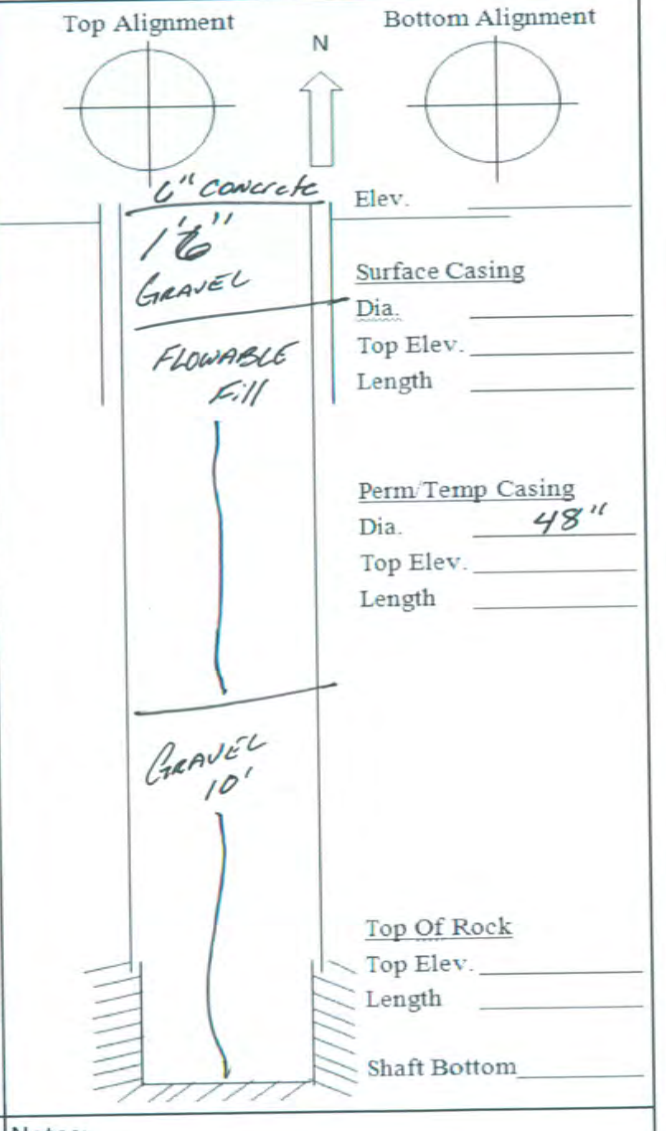
Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Mark:	Location: 9	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Pier Drillers

Geotech

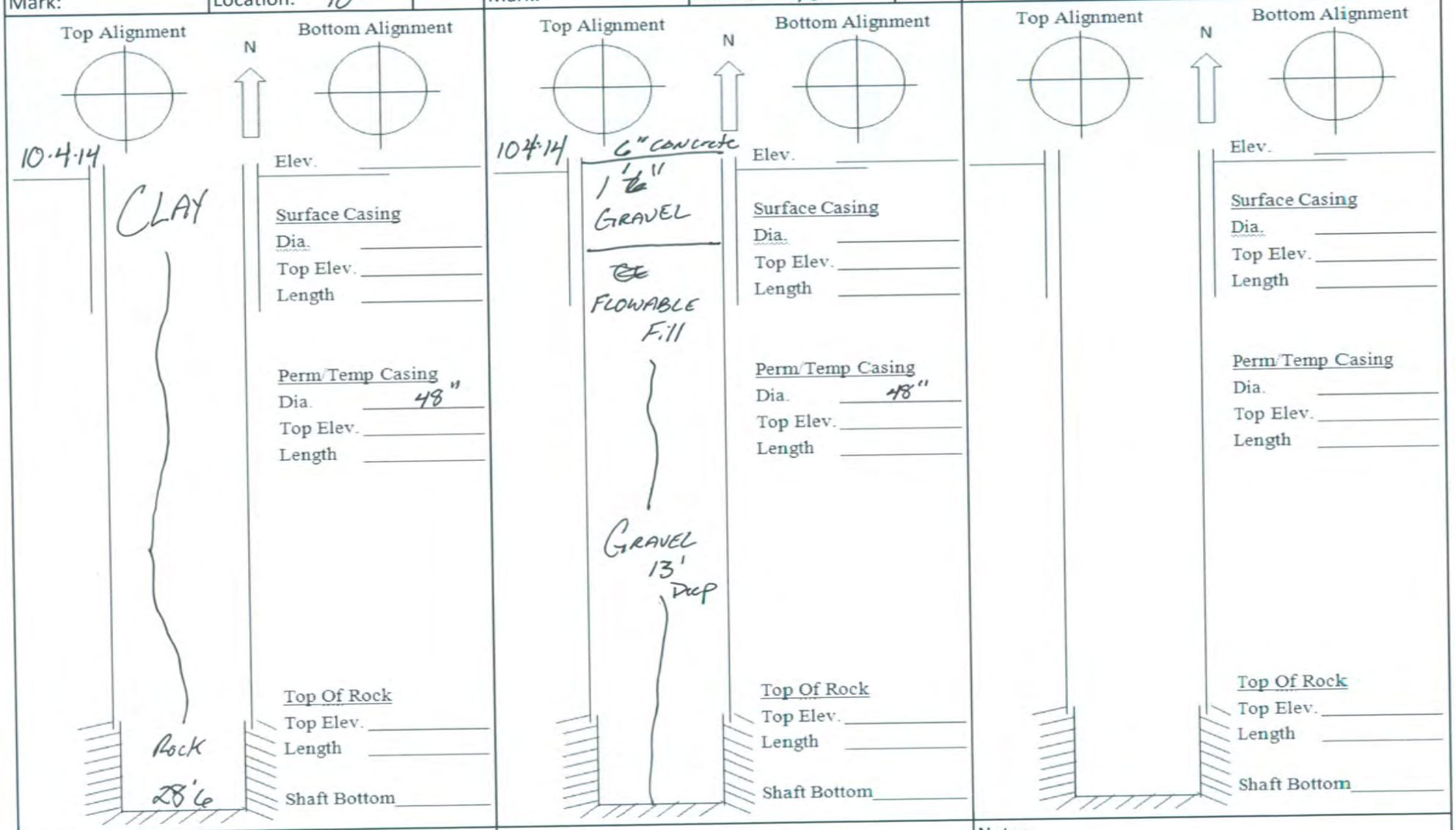
Contractor

Project: irlpool Plant

Location: Ft. Smith, AR

Date: 10.4.14

Mark:	Location: 10		Mark:	Location: 10		Mark:	Location:	



Notes:	Notes:	Notes:

Pier Drillers

Geotech

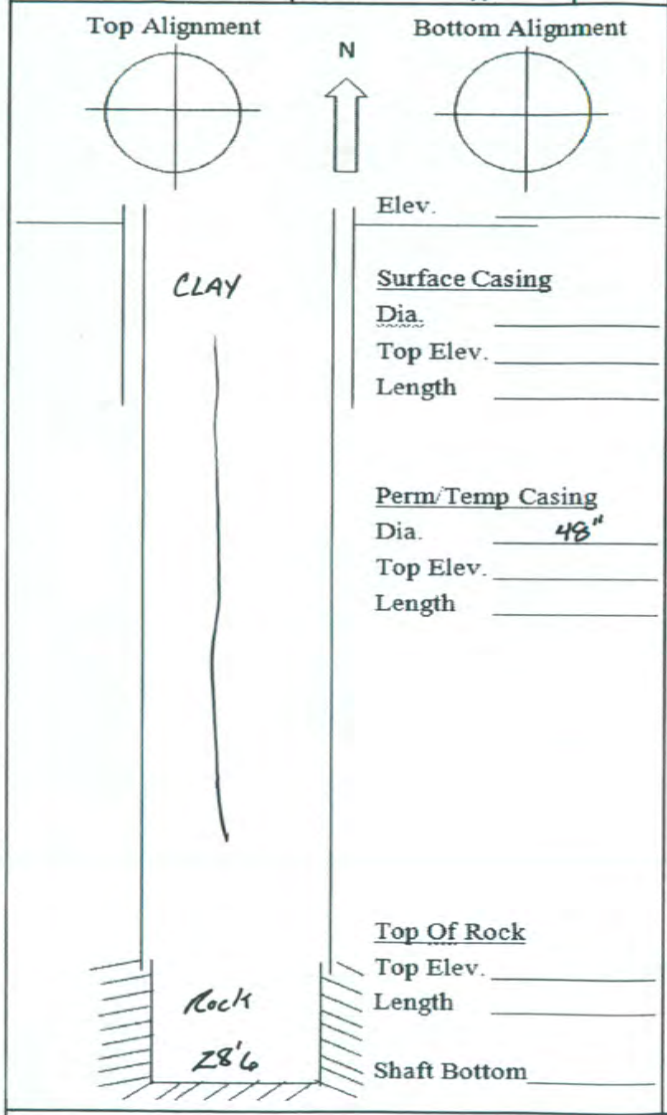
Contractor

Project: Whirlpool Plant

Location: Ft. Smith, AR

Date: 10.6.14

Mark:	Location: 11		Mark:	Location: 11		Mark:	Location: 12	



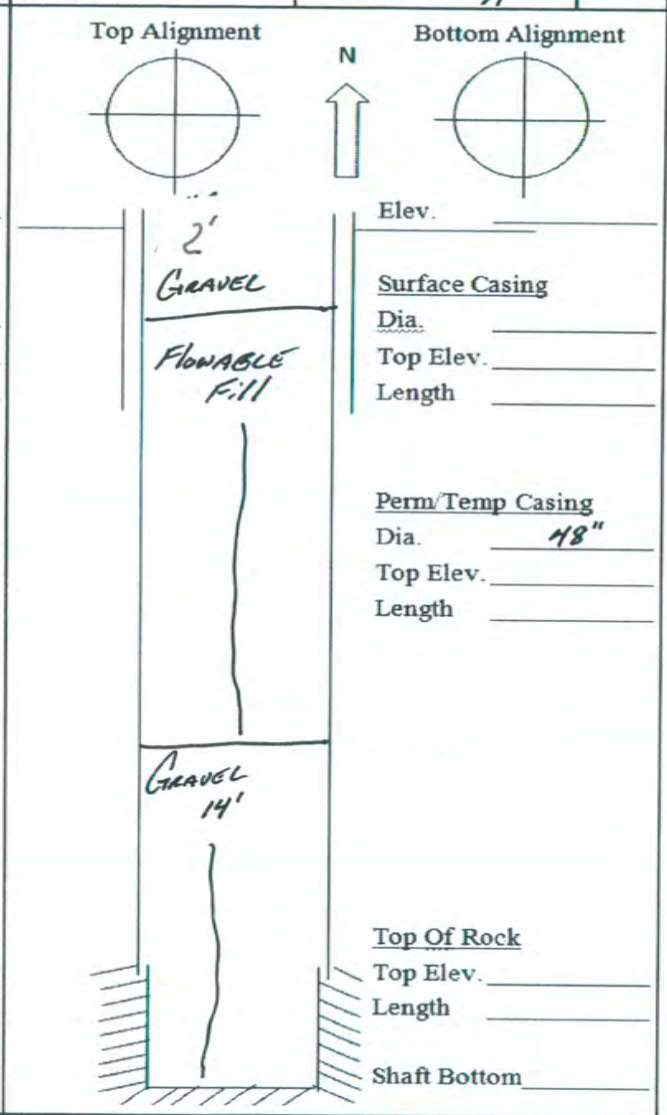
Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____



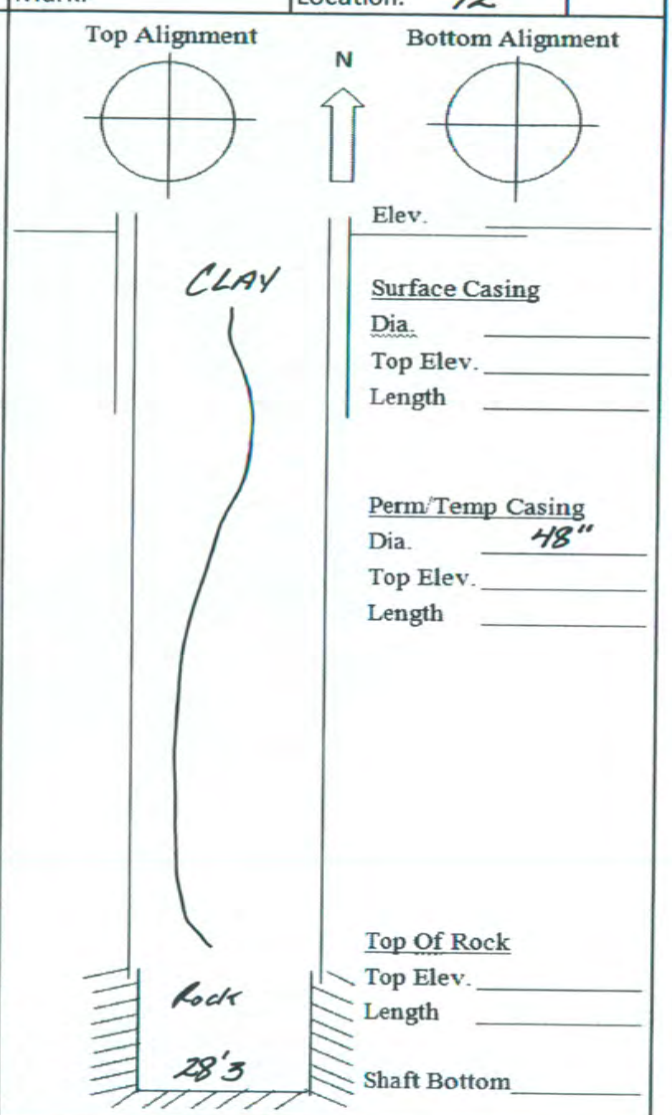
Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:	Notes:	Notes:

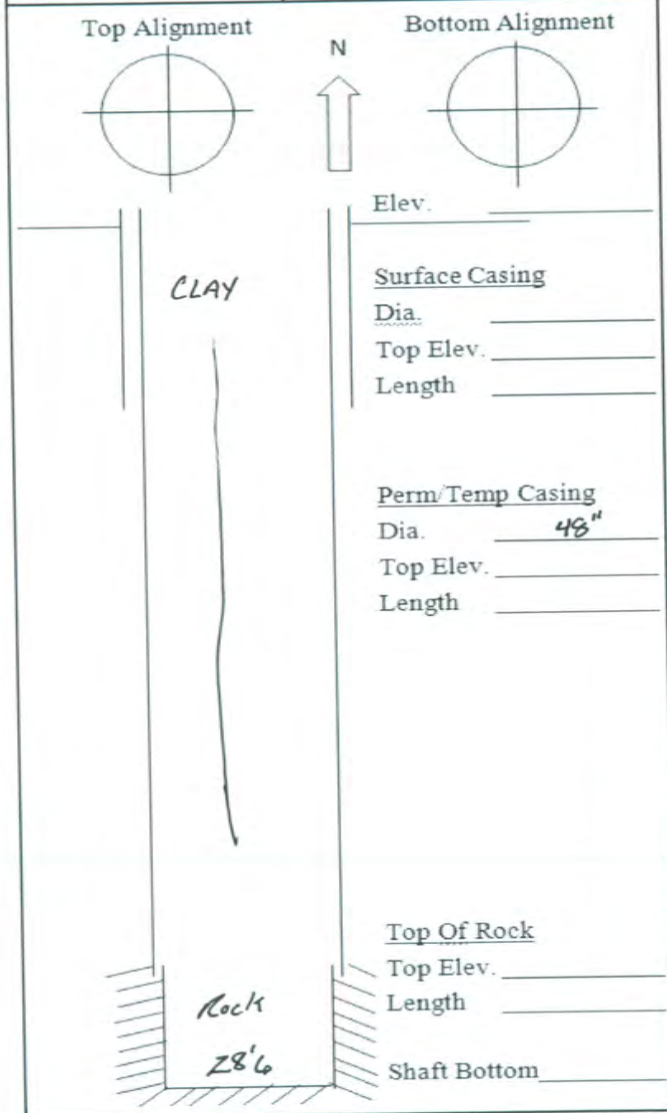
Pier Drillers | Geotech | Contractor

Project: irlpool Plant

Location: Ft. Smith, AR

Date: 10·6·14

Mark:	Location: 11	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

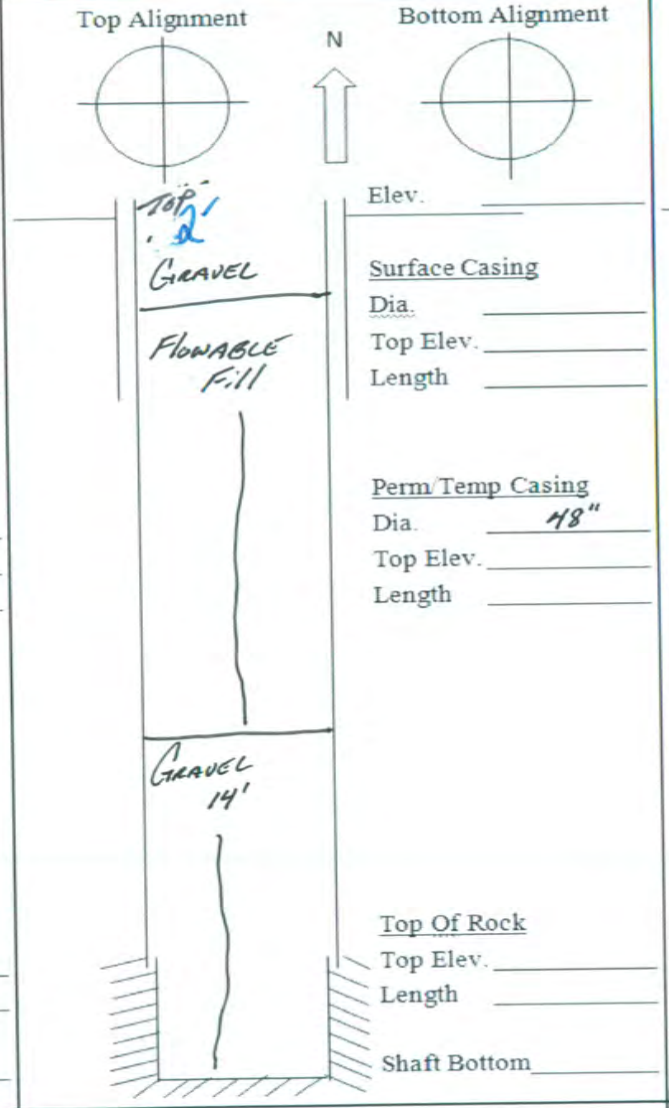
Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Mark:	Location: 11	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

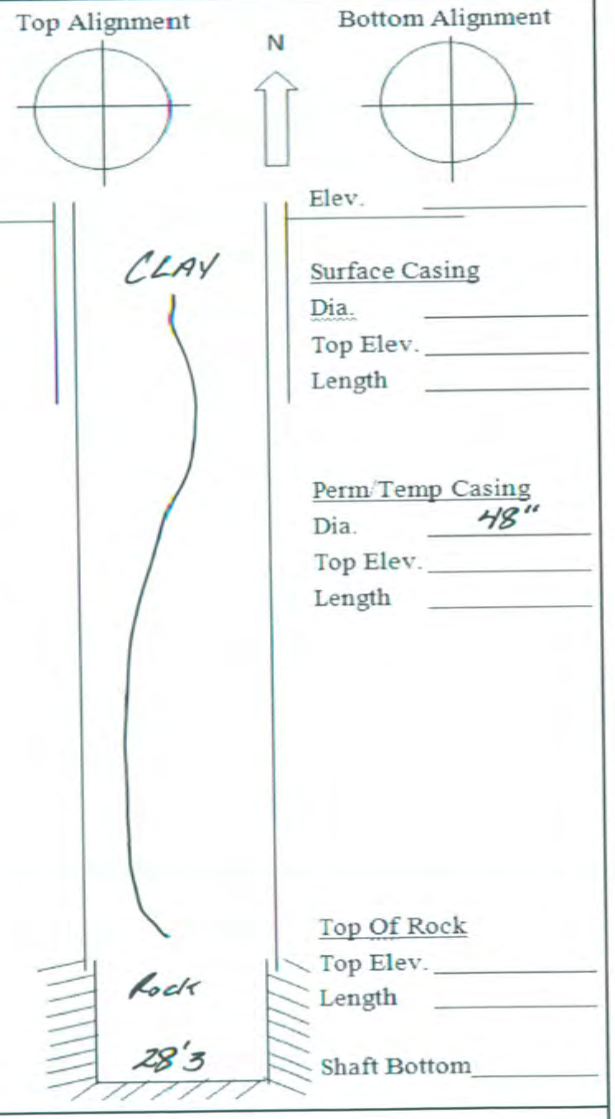
Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Mark:	Location: 12	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Pier Drillers

Geotech

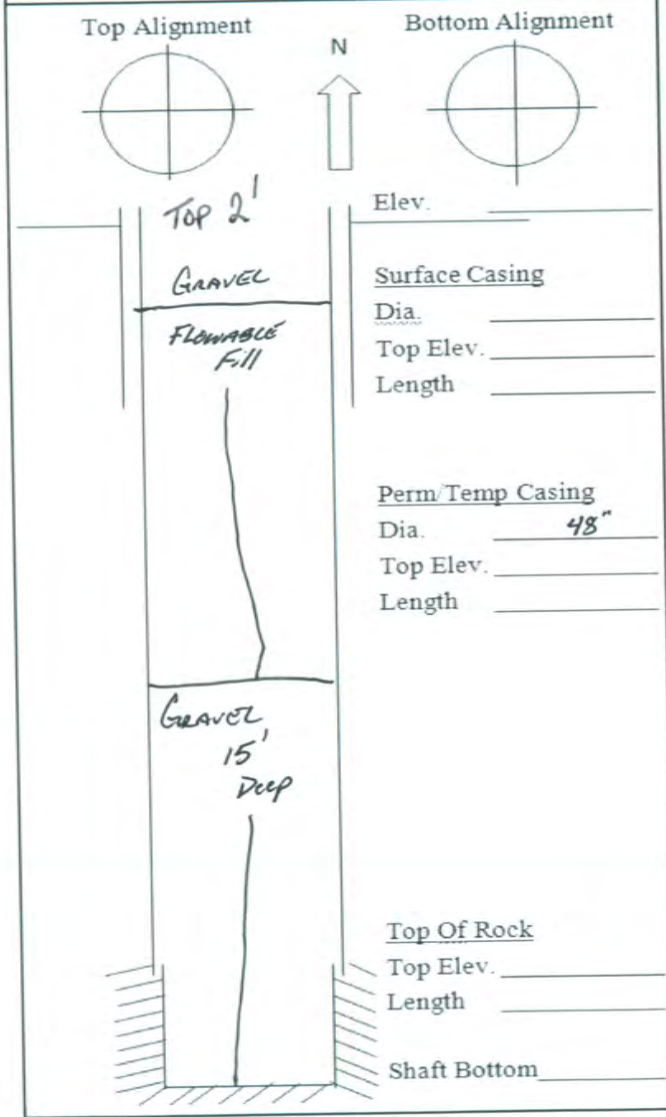
Contractor

Project: irlpool Plant

Location: Ft. Smith, AR

Date: 10·6·14

Mark:	Location: 12	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

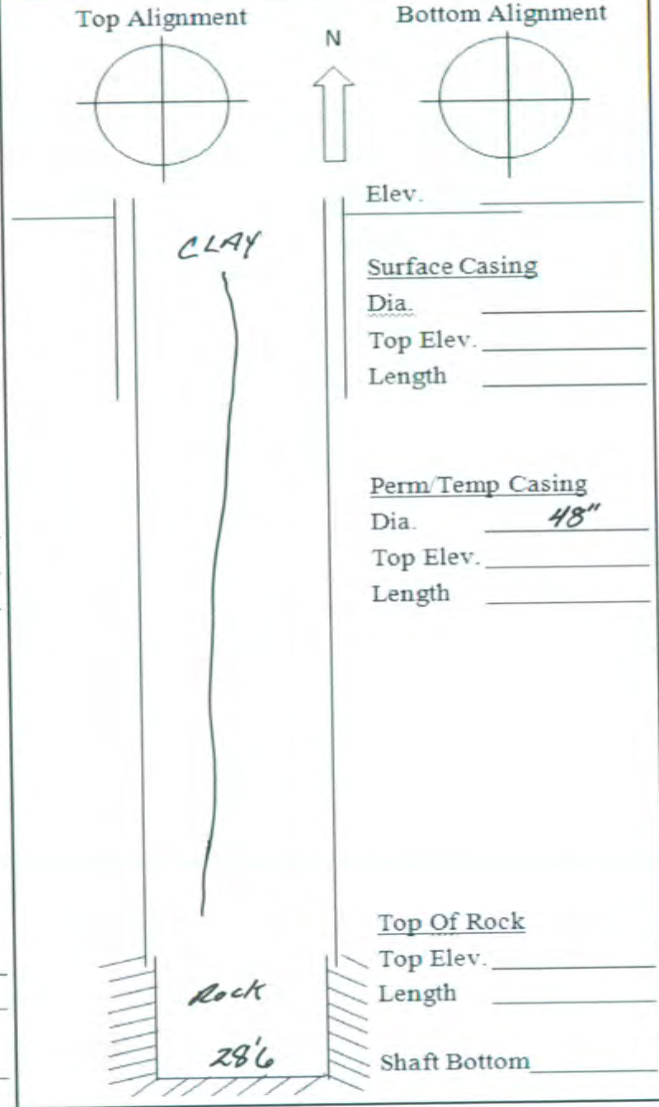
Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Mark:	Location: 13	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

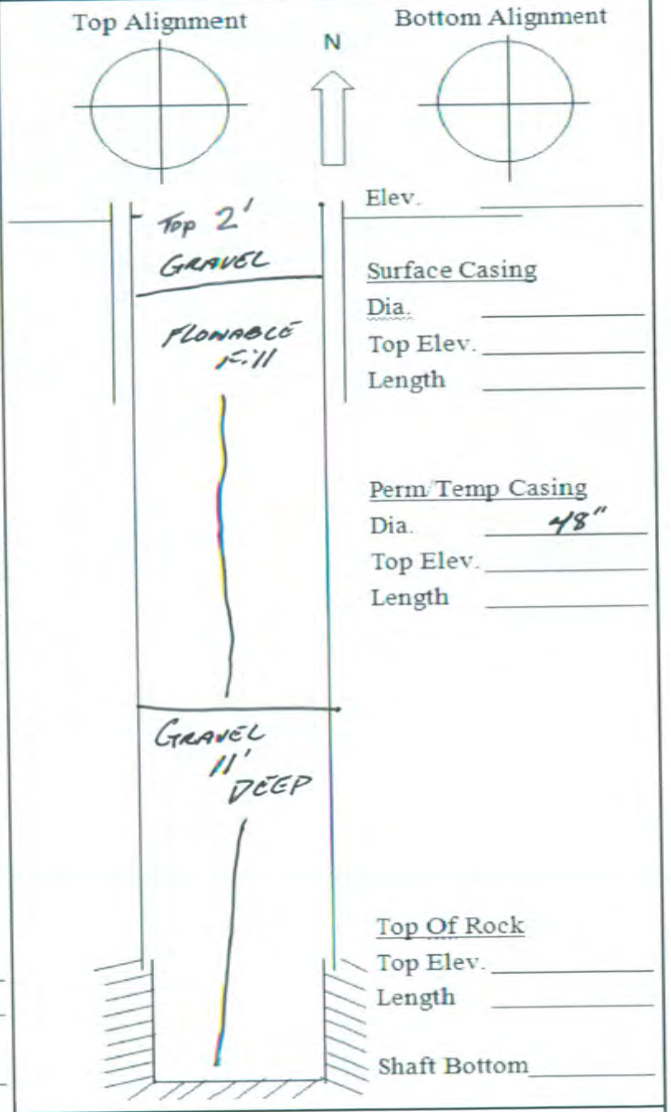
Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Mark:	Location: 13	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Pier Drillers

Geotech

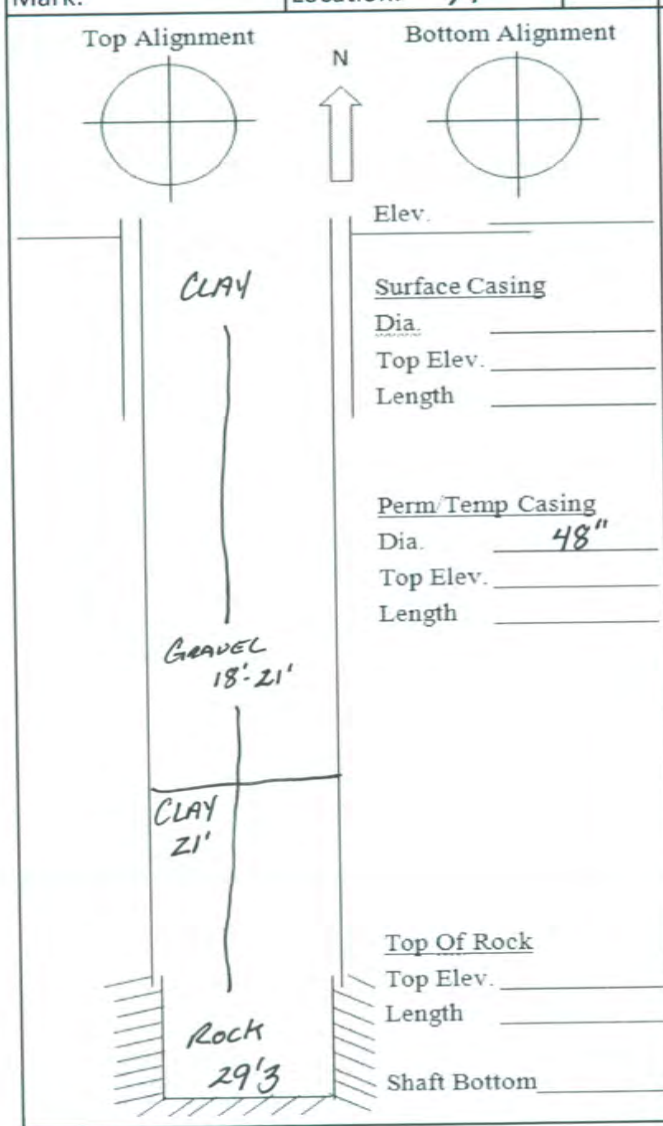
Contractor

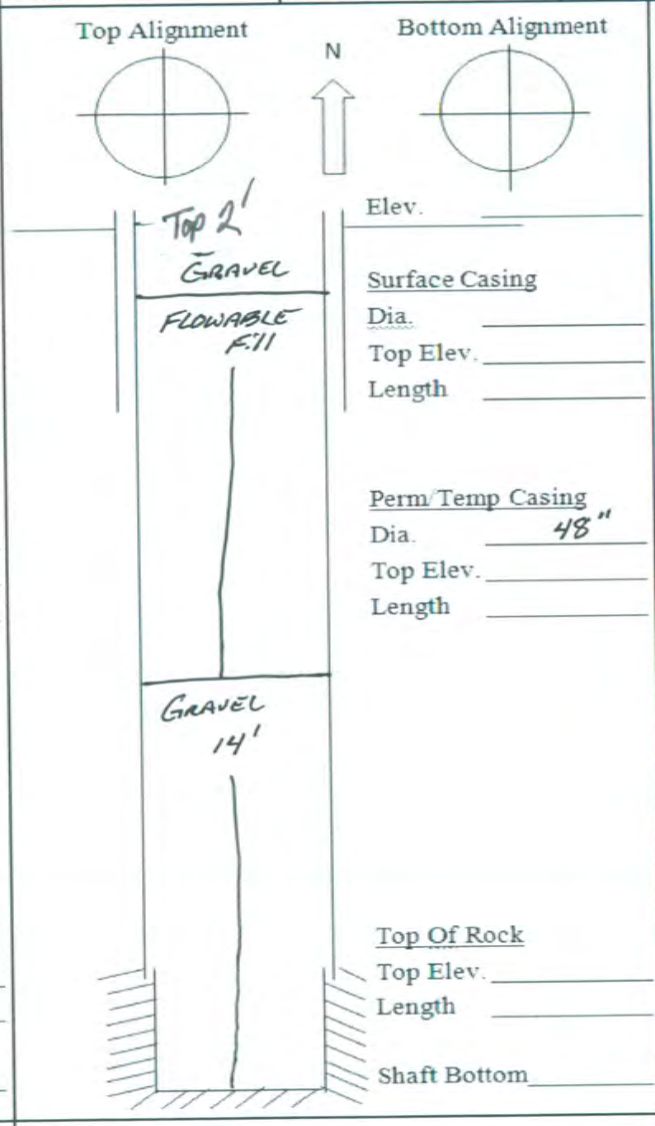
Project: irlpool Plant

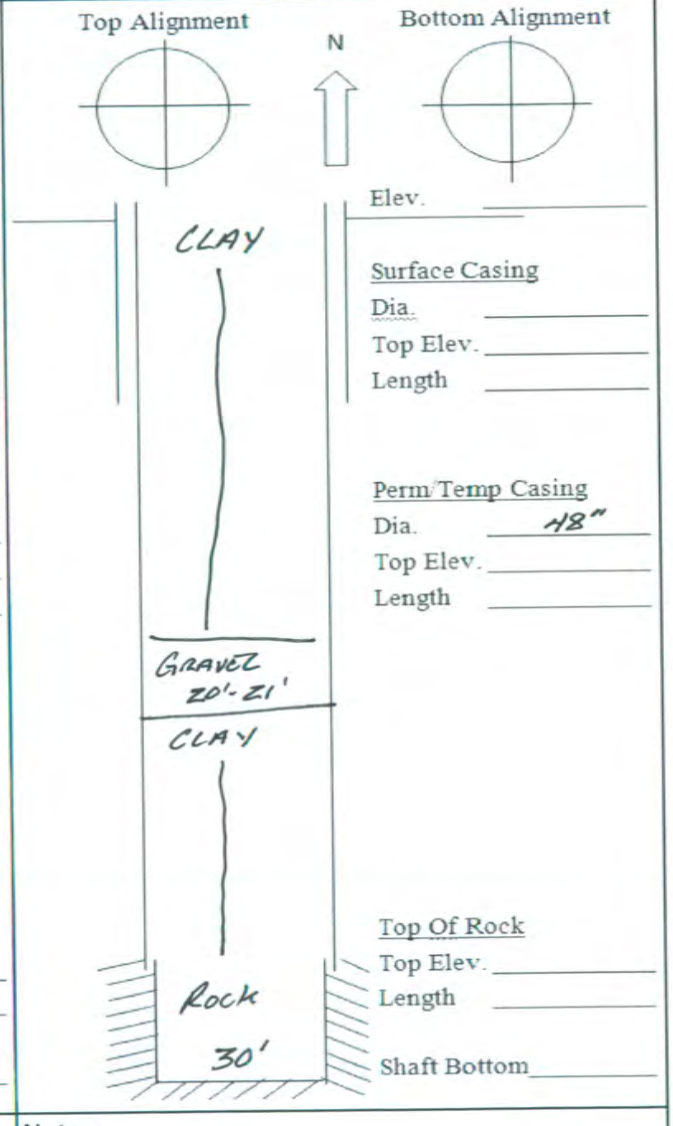
Location: Ft. Smith, AR

Date: 10-6-14

Mark:	Location: 14		Mark:	Location: 14		Mark:	Location: 17	







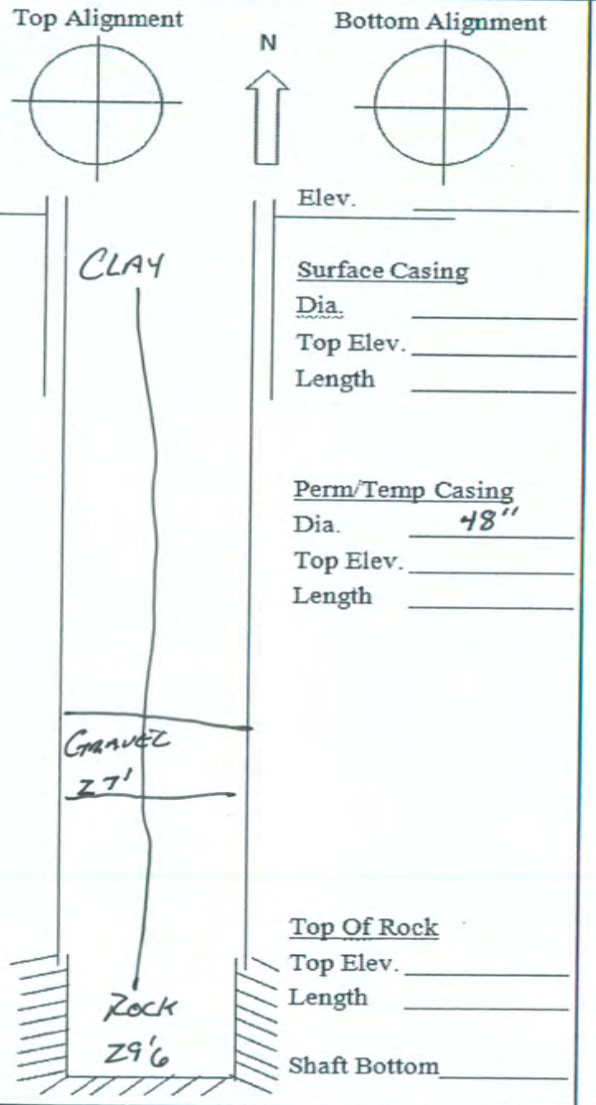
Notes:	Notes:	Notes:

Pier Drillers | Geotech | Contractor

Project: irlpool Plant
Location: Ft. Smith, AR

Date: 10-7-14

Mark:	Location: 15		Mark:	Location: 15		Mark:	Location: 16	



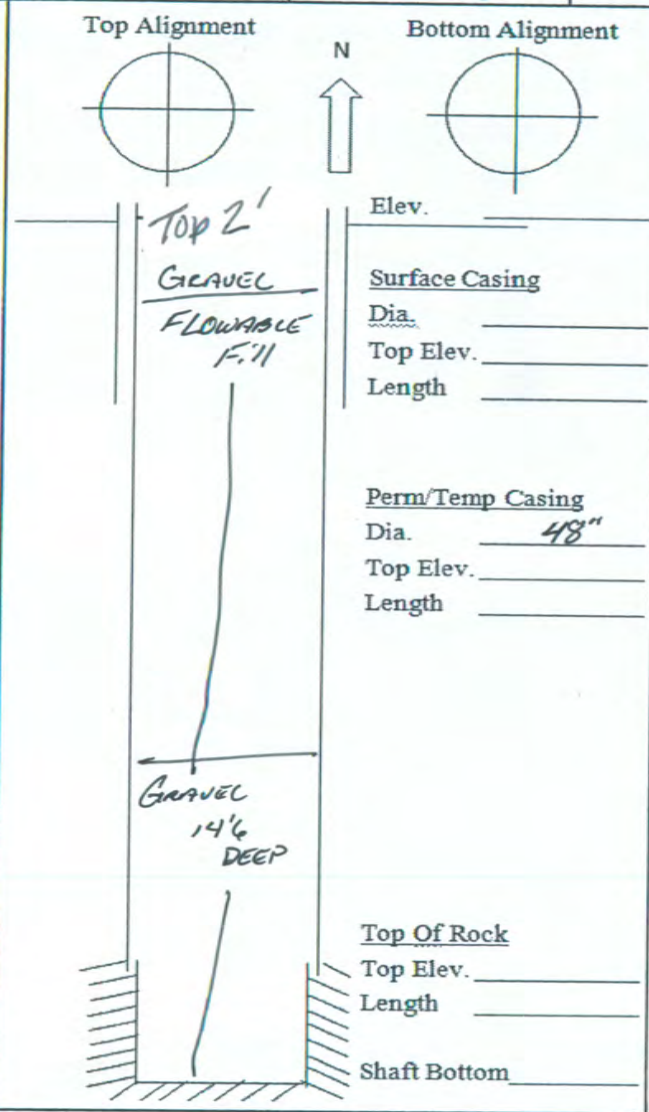
Elev.

Surface Casing
Dia.
Top Elev.
Length

Perm/Temp Casing
Dia. 48"
Top Elev.
Length

Top Of Rock
Top Elev.
Length

Shaft Bottom



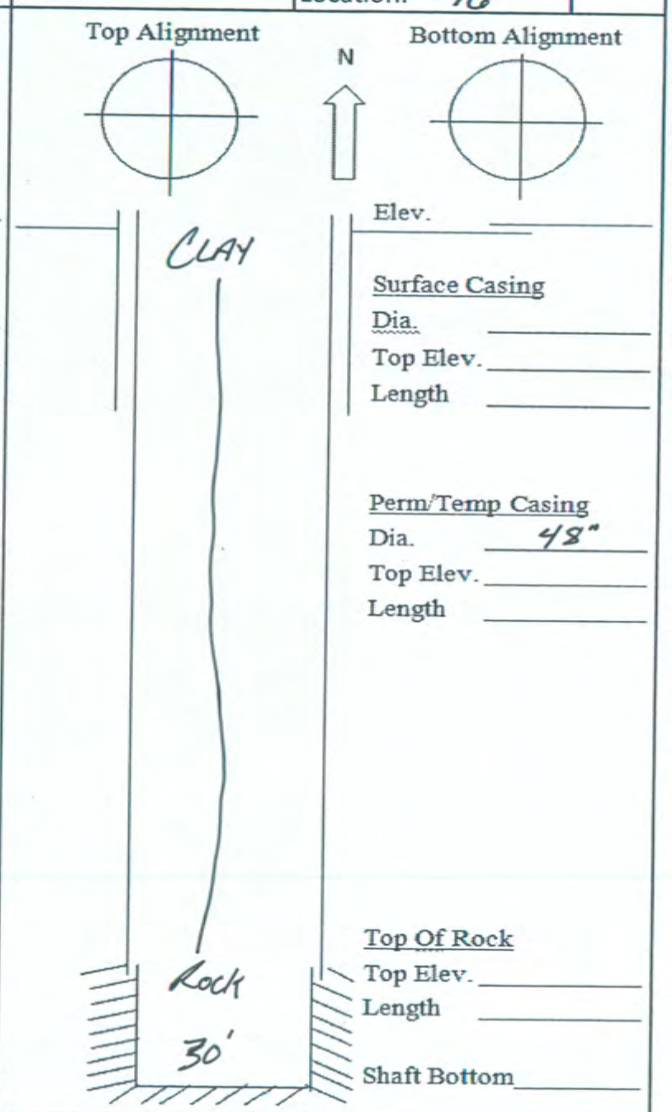
Elev.

Surface Casing
Dia.
Top Elev.
Length

Perm/Temp Casing
Dia. 48"
Top Elev.
Length

Top Of Rock
Top Elev.
Length

Shaft Bottom



Elev.

Surface Casing
Dia.
Top Elev.
Length

Perm/Temp Casing
Dia. 48"
Top Elev.
Length

Top Of Rock
Top Elev.
Length

Shaft Bottom

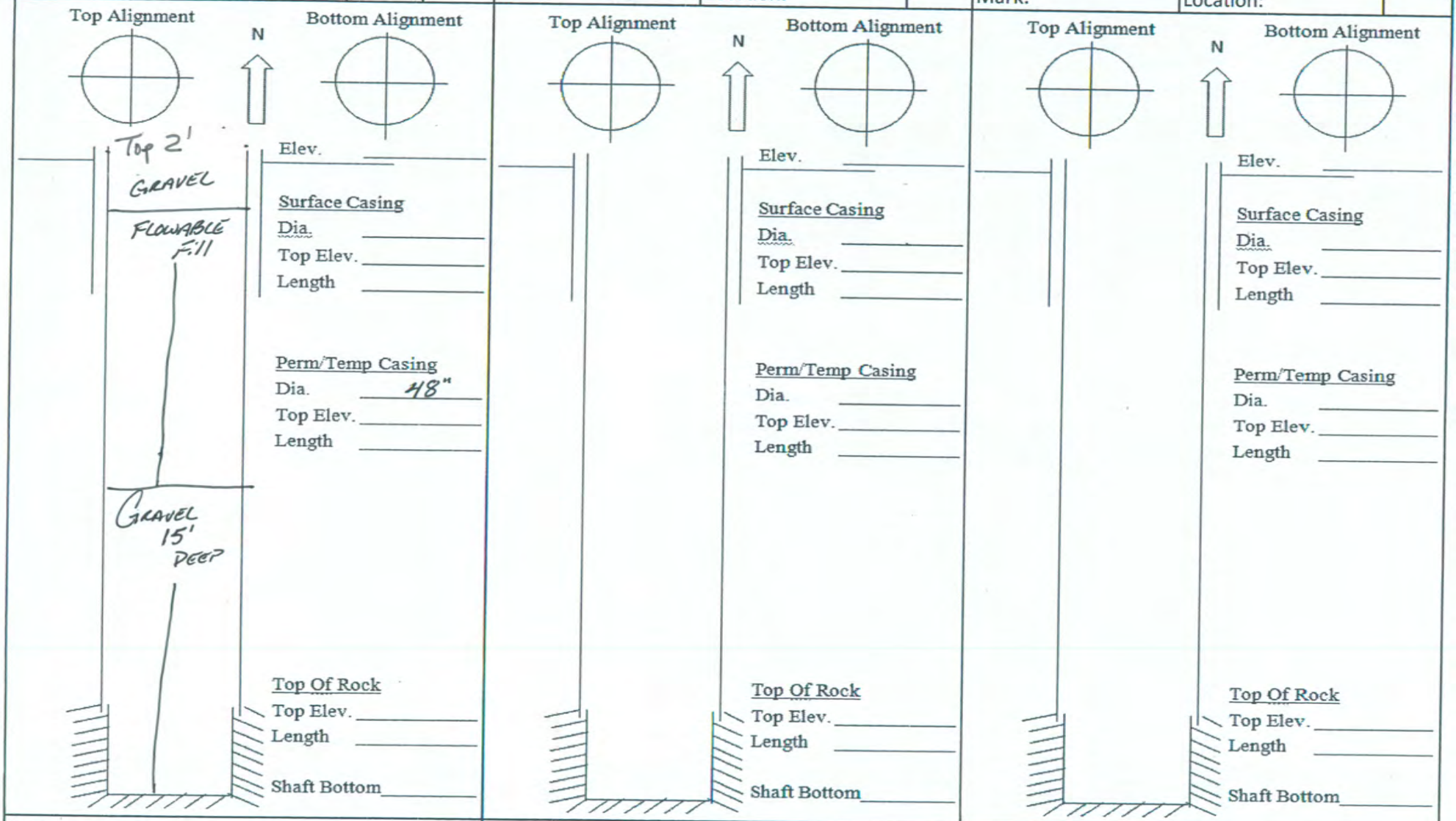
Notes:	Notes:	Notes:

Pier Drillers | Geotech | Contractor

Project: irlpool Plant
Location: Ft. Smith, AR

Date: 10-7-14

Mark:	Location: 14		Mark:	Location:		Mark:	Location:	



Notes:	Notes:	Notes:

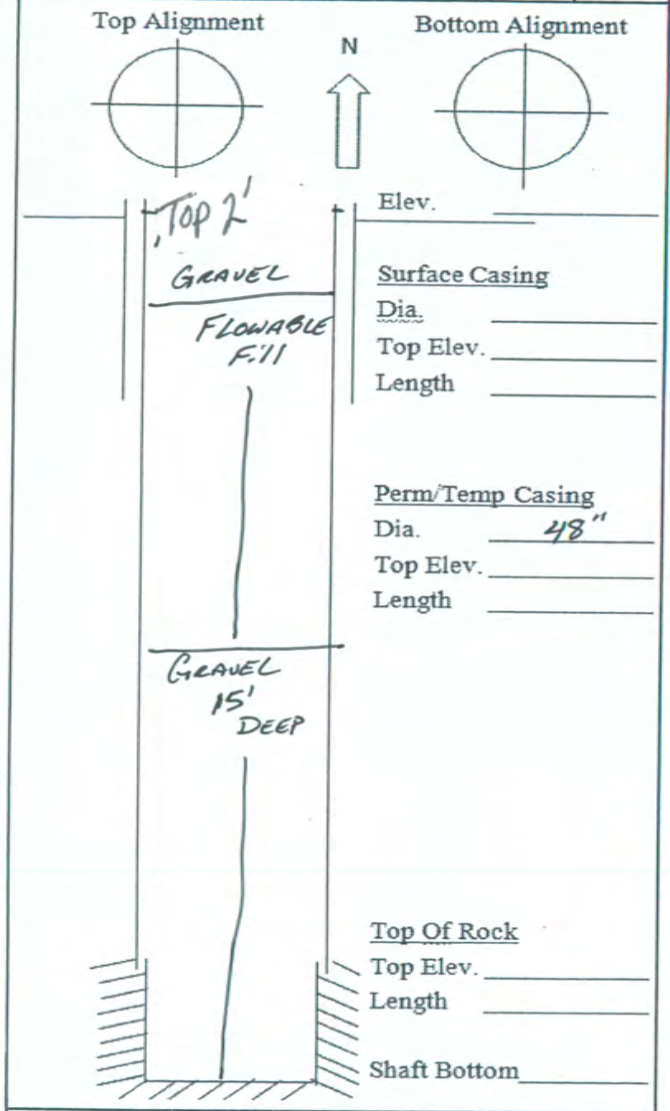
Pier Drillers | Geotech | Contractor

Project: irlpool Plant

Location: Ft. Smith, AR

Date: 10-6-14

Mark:	Location: 17	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

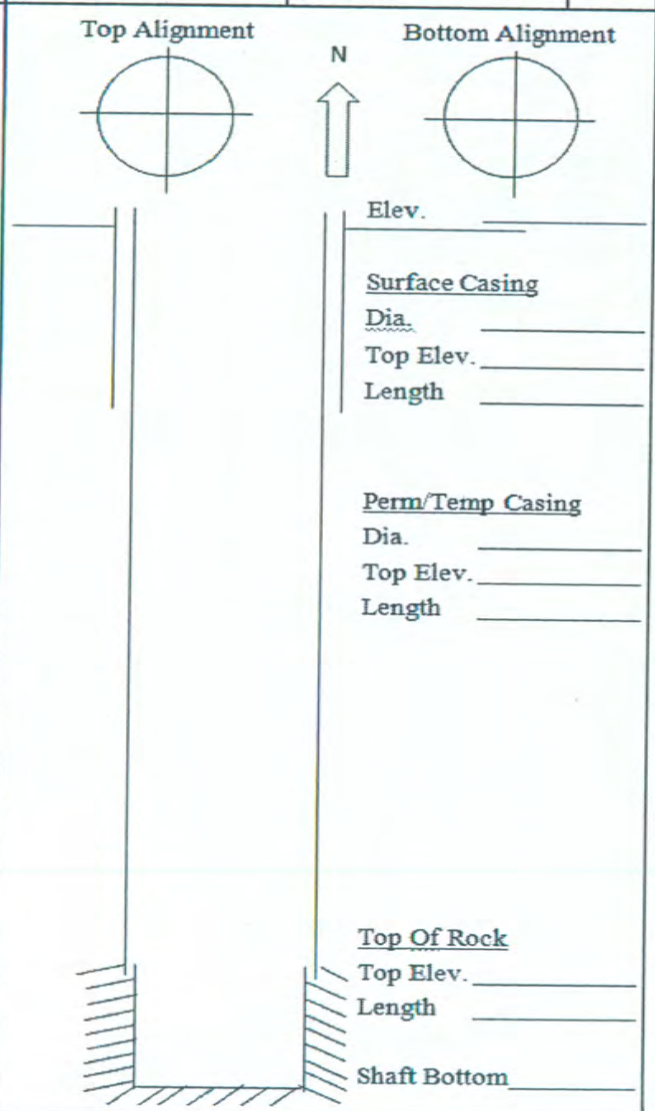
Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Mark:	Location:	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

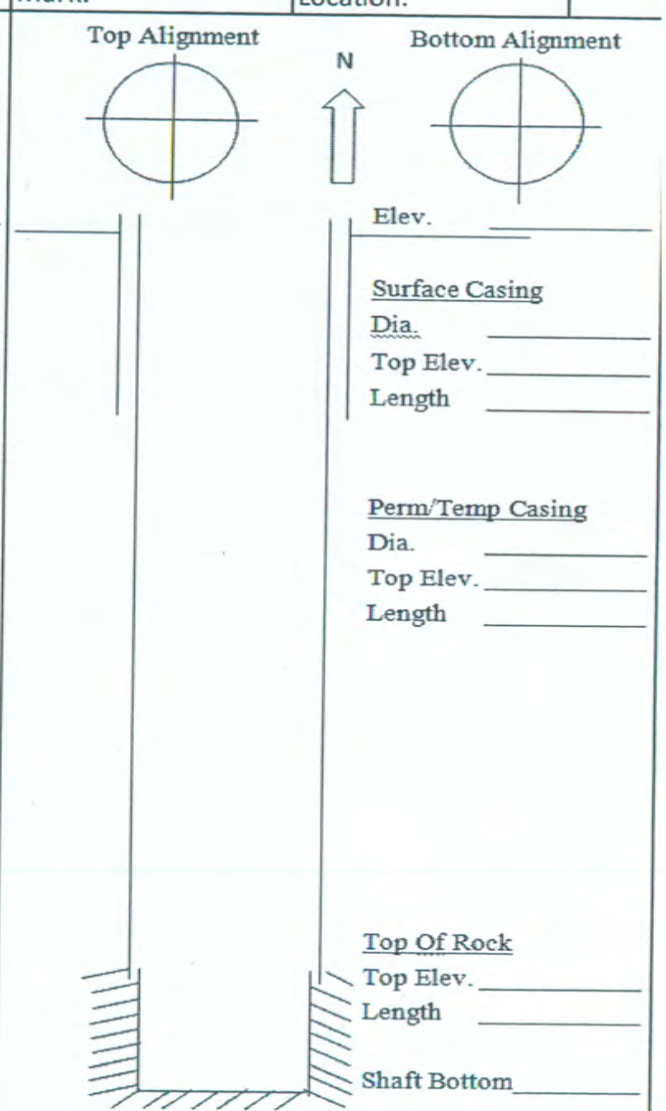
Perm/Temp Casing
Dia. _____
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

Mark:	Location:	



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

Perm/Temp Casing
Dia. _____
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:

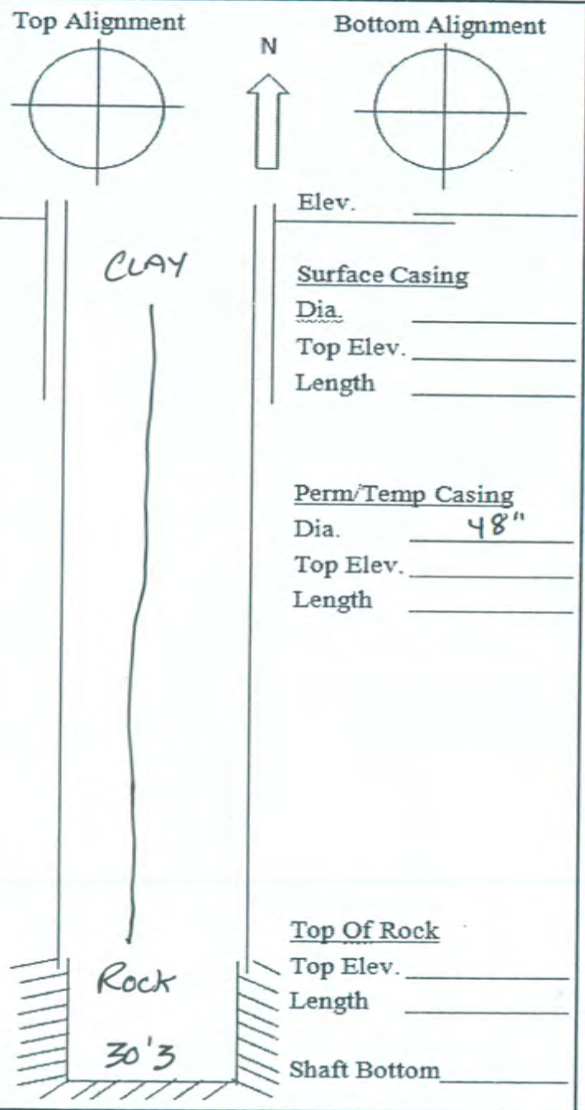
Pier Drillers

Geotech

Contractor

Project: irlpool Plant
Location: Ft. Smith, AR
Date: 10.8.14

Mark:	Location: 18	Mark:	Location: 18'	Mark:	Location: 19



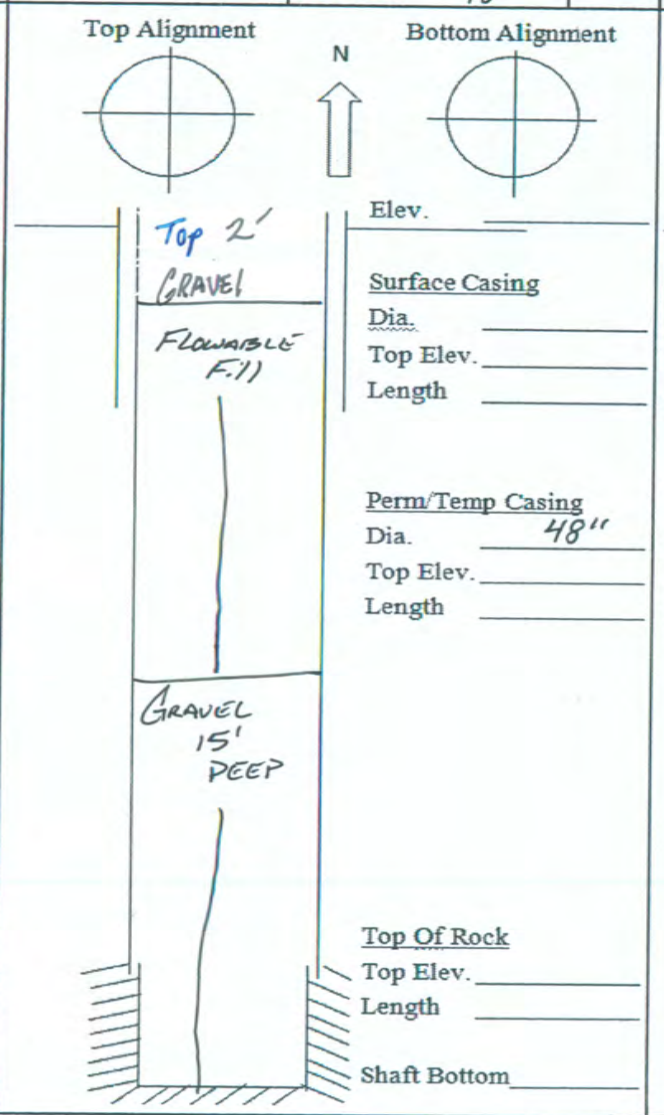
Elev.

Surface Casing
Dia.
Top Elev.
Length

Perm/Temp Casing
Dia. 48"
Top Elev.
Length

Top Of Rock
Top Elev.
Length

Shaft Bottom



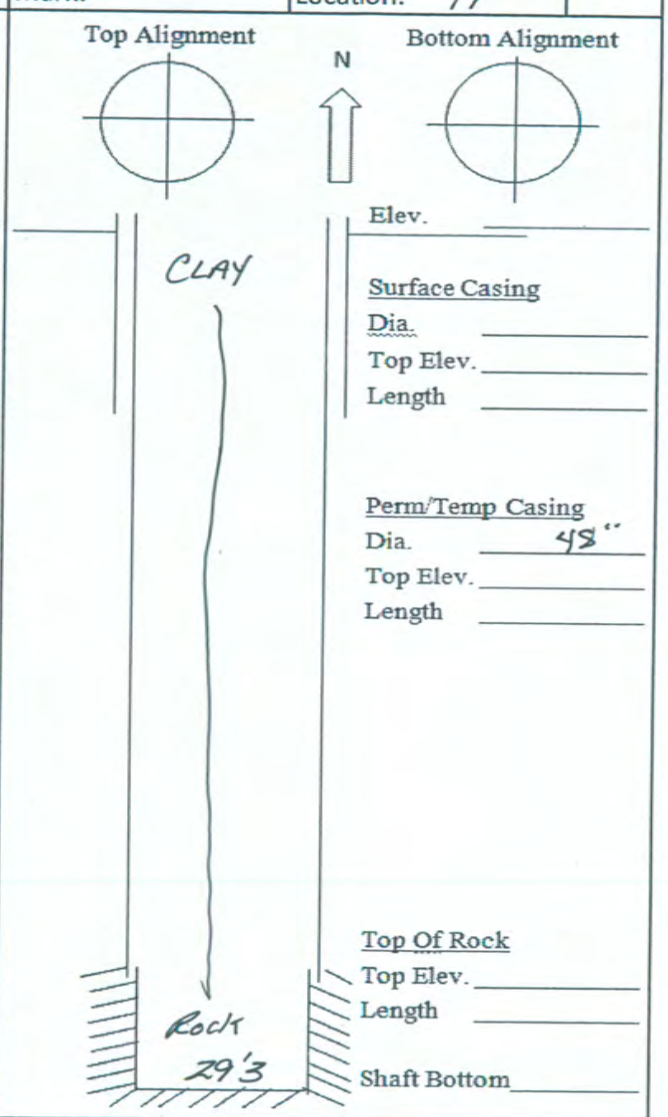
Elev.

Surface Casing
Dia.
Top Elev.
Length

Perm/Temp Casing
Dia. 48"
Top Elev.
Length

Top Of Rock
Top Elev.
Length

Shaft Bottom



Elev.

Surface Casing
Dia.
Top Elev.
Length

Perm/Temp Casing
Dia. 48"
Top Elev.
Length

Top Of Rock
Top Elev.
Length

Shaft Bottom

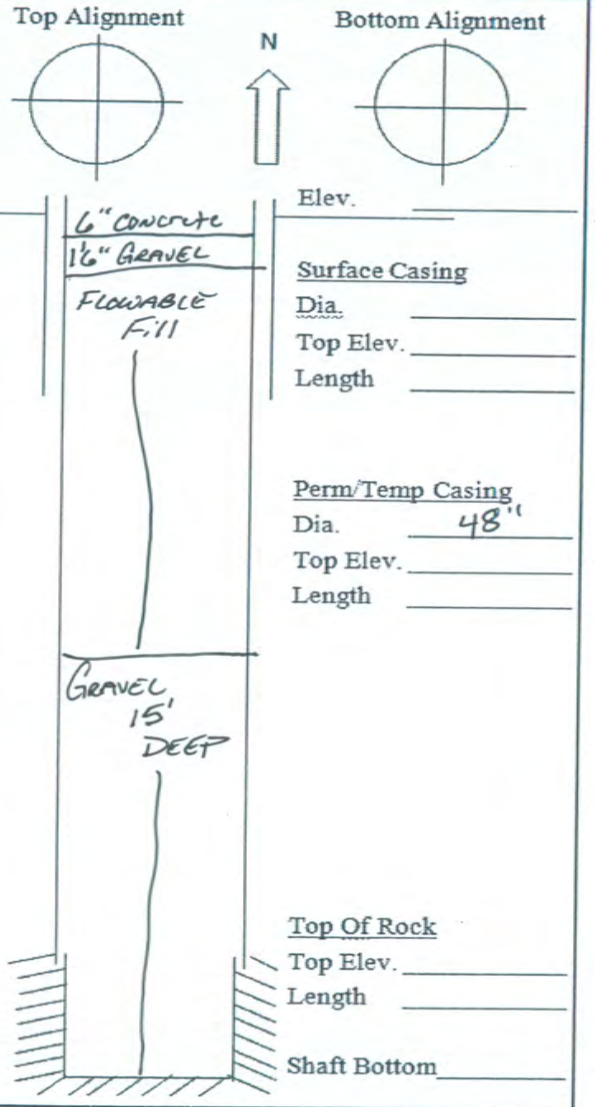
Notes:	Notes:	Notes:

Pier Drillers Geotech Contractor

Project: irlpool Plant
Location: Ft. Smith, AR

Date: 10·8·14

Mark:	Location: 19		Mark:	Location:		Mark:	Location:	



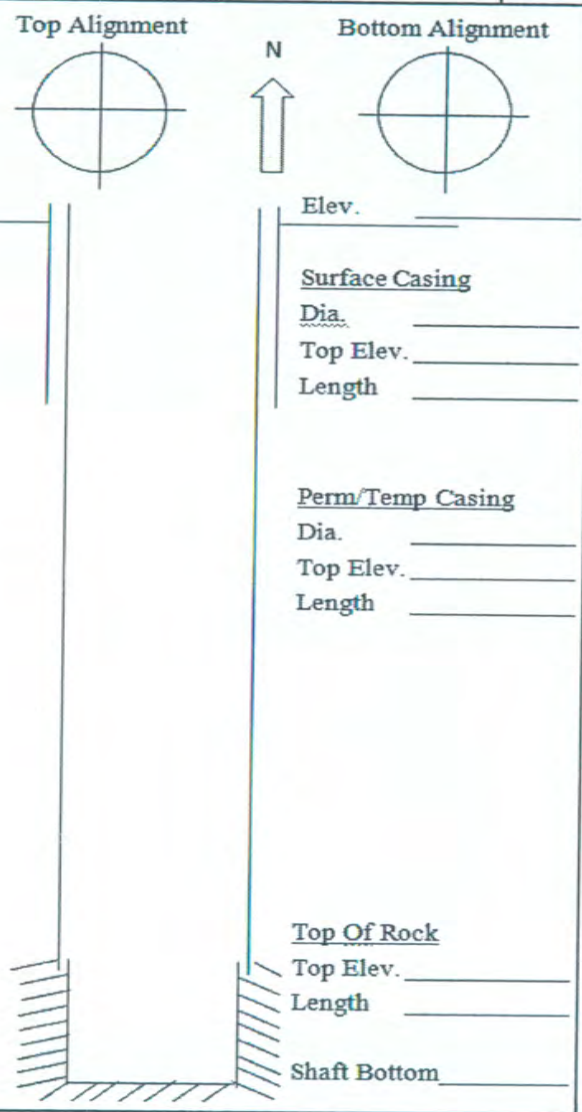
Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

Perm/Temp Casing
Dia. 48"
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____



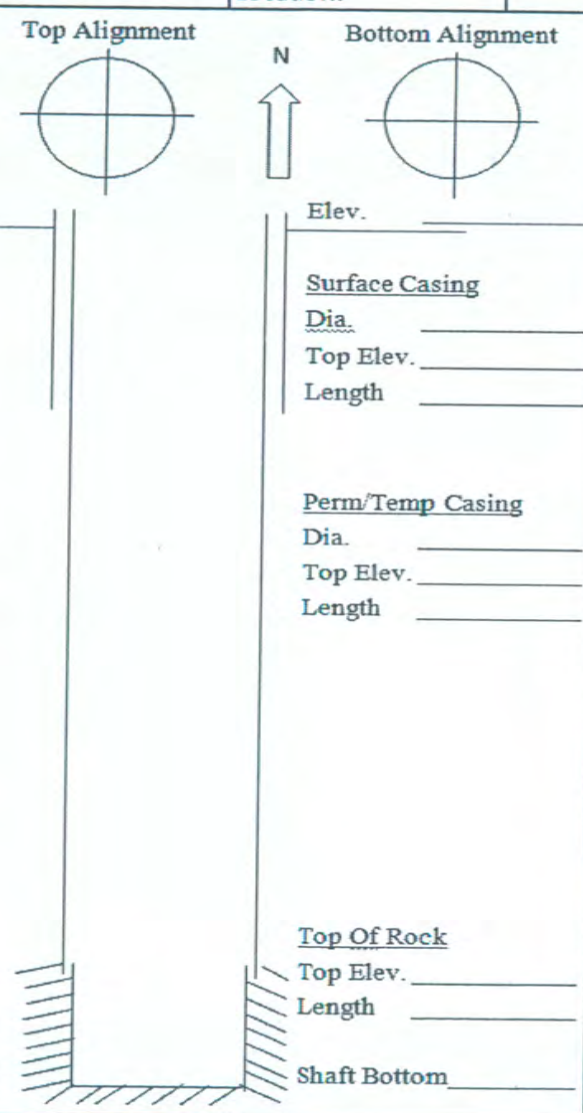
Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

Perm/Temp Casing
Dia. _____
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____



Elev. _____

Surface Casing
Dia. _____
Top Elev. _____
Length _____

Perm/Temp Casing
Dia. _____
Top Elev. _____
Length _____

Top Of Rock
Top Elev. _____
Length _____

Shaft Bottom _____

Notes:	Notes:	Notes:

Pier Drillers Geotech Contractor

Appendix B

Laboratory Analytical Reports for Large Diameter Boring Disposal Characterization Sampling

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October 24, 2014

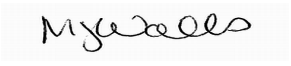
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on October 11, 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: EDD, Environ_AR
Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

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: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60180177001	**27A**	Solid	10/09/14 12:00	10/11/14 12:50
60180177002	**27B**	Solid	10/09/14 12:05	10/11/14 12:50
60180177003	**25A**	Solid	10/09/14 12:30	10/11/14 12:50
60180177004	**25B**	Solid	10/09/14 12:35	10/11/14 12:50
60180177005	**24B**	Solid	10/09/14 12:45	10/11/14 12:50
60180177006	**24A**	Solid	10/09/14 12:40	10/11/14 12:50
60180177007	**26A**	Solid	10/09/14 12:20	10/11/14 12:50
60180177008	**26B**	Solid	10/09/14 12:25	10/11/14 12:50
60180177009	**28A**	Solid	10/10/14 07:30	10/11/14 12:50
60180177010	**28B**	Solid	10/10/14 07:40	10/11/14 12:50
60180177011	**29A**	Solid	10/10/14 08:20	10/11/14 12:50
60180177012	**29B**	Solid	10/10/14 08:37	10/11/14 12:50
60180177013	**30A**	Solid	10/10/14 13:12	10/11/14 12:50
60180177014	**30B**	Solid	10/10/14 13:18	10/11/14 12:50
60180177015	**31A**	Solid	10/10/14 13:40	10/11/14 12:50
60180177016	**31B**	Solid	10/10/14 13:49	10/11/14 12:50

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60180177001	27A	EPA 6010	JGP, TDS	7
		EPA 7470	ZBM	1
		EPA 8260	EAK	13
60180177002	27B	EPA 6010	JGP, TDS	7
		EPA 7470	ZBM	1
		EPA 8260	EAK	13
60180177003	25A	EPA 6010	JGP, TDS	7
		EPA 7470	ZBM	1
		EPA 8260	EAK	13
60180177004	25B	EPA 6010	JGP, TDS	7
		EPA 7470	ZBM	1
		EPA 8260	EAK	13
60180177005	24B	EPA 6010	JGP, TDS	7
		EPA 7470	ZBM	1
		EPA 8260	PRG	13
60180177006	24A	EPA 6010	TDS	7
		EPA 7470	ZBM	1
		EPA 8260	PRG	13
60180177007	26A	EPA 6010	TDS	7
		EPA 7470	ZBM	1
		EPA 8260	PRG	13
60180177008	26B	EPA 6010	TDS	7
		EPA 7470	ZBM	1
		EPA 8260	PRG	13
60180177009	28A	EPA 6010	TDS	7
		EPA 7470	ZBM	1
		EPA 8260	PRG	13
60180177010	28B	EPA 6010	TDS	7
		EPA 7470	ZBM	1
		EPA 8260	PRG	13
60180177011	29A	EPA 6010	TDS	7
		EPA 7470	ZBM	1
		EPA 8260	PRG	13
60180177012	29B	EPA 6010	TDS	7
		EPA 7470	ZBM	1
		EPA 8260	PRG	13
60180177013	30A	EPA 6010	TDS	7

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Lab ID	Sample ID	Method	Analysts	Analytes Reported
		EPA 7470	ZBM	1
		EPA 8260	PRG	13
60180177014	**30B**	EPA 6010	TDS	7
		EPA 7470	ZBM	1
		EPA 8260	PRG	13
60180177015	**31A**	EPA 6010	TDS	7
		EPA 7470	ZBM	1
		EPA 8260	PRG	13
60180177016	**31B**	EPA 6010	TDS	7
		EPA 7470	ZBM	1
		EPA 8260	PRG	13

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ANALYTICAL RESULTS

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Sample: 27A **Lab ID: 60180177001** Collected: 10/09/14 12:00 Received: 10/11/14 12:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/17/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/20/14 13:30	10/21/14 10:10	7440-38-2	
Barium	ND	mg/L	2.5	1	10/20/14 13:30	10/21/14 11:32	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/20/14 13:30	10/21/14 10:10	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/20/14 13:30	10/21/14 10:10	7440-47-3	
Lead	ND	mg/L	0.50	1	10/20/14 13:30	10/21/14 10:10	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/20/14 13:30	10/21/14 10:10	7782-49-2	
Silver	ND	mg/L	0.10	1	10/20/14 13:30	10/21/14 10:10	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/17/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/20/14 10:05	10/21/14 12:34	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Benzene	ND	ug/L	50.0	1		10/21/14 15:32	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/21/14 15:32	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/21/14 15:32	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/21/14 15:32	108-90-7	
Chloroform	ND	ug/L	200	1		10/21/14 15:32	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/21/14 15:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/21/14 15:32	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/21/14 15:32	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/21/14 15:32	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/21/14 15:32	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	108	%	80-120	1		10/21/14 15:32	17060-07-0	
Toluene-d8 (S)	94	%	80-120	1		10/21/14 15:32	2037-26-5	
4-Bromofluorobenzene (S)	93	%	80-120	1		10/21/14 15:32	460-00-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Sample: 27B **Lab ID: 60180177002** Collected: 10/09/14 12:05 Received: 10/11/14 12:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/17/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/20/14 13:30	10/21/14 10:17	7440-38-2	
Barium	ND	mg/L	2.5	1	10/20/14 13:30	10/21/14 11:42	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/20/14 13:30	10/21/14 10:17	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/20/14 13:30	10/21/14 10:17	7440-47-3	
Lead	ND	mg/L	0.50	1	10/20/14 13:30	10/21/14 10:17	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/20/14 13:30	10/21/14 10:17	7782-49-2	
Silver	ND	mg/L	0.10	1	10/20/14 13:30	10/21/14 10:17	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/17/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/20/14 10:05	10/21/14 12:41	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Benzene	ND	ug/L	50.0	1		10/21/14 15:46	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/21/14 15:46	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/21/14 15:46	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/21/14 15:46	108-90-7	
Chloroform	ND	ug/L	200	1		10/21/14 15:46	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/21/14 15:46	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/21/14 15:46	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/21/14 15:46	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/21/14 15:46	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/21/14 15:46	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	106	%	80-120	1		10/21/14 15:46	17060-07-0	
Toluene-d8 (S)	94	%	80-120	1		10/21/14 15:46	2037-26-5	
4-Bromofluorobenzene (S)	94	%	80-120	1		10/21/14 15:46	460-00-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Sample: 25A **Lab ID: 60180177003** Collected: 10/09/14 12:30 Received: 10/11/14 12:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/17/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/20/14 13:30	10/21/14 10:19	7440-38-2	
Barium	ND	mg/L	2.5	1	10/20/14 13:30	10/21/14 11:46	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/20/14 13:30	10/21/14 10:19	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/20/14 13:30	10/21/14 10:19	7440-47-3	
Lead	ND	mg/L	0.50	1	10/20/14 13:30	10/21/14 10:19	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/20/14 13:30	10/21/14 10:19	7782-49-2	
Silver	ND	mg/L	0.10	1	10/20/14 13:30	10/21/14 10:19	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/17/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/20/14 10:05	10/21/14 12:43	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Benzene	ND	ug/L	50.0	1		10/21/14 16:00	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/21/14 16:00	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/21/14 16:00	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/21/14 16:00	108-90-7	
Chloroform	ND	ug/L	200	1		10/21/14 16:00	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/21/14 16:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/21/14 16:00	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/21/14 16:00	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/21/14 16:00	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/21/14 16:00	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	104	%	80-120	1		10/21/14 16:00	17060-07-0	
Toluene-d8 (S)	94	%	80-120	1		10/21/14 16:00	2037-26-5	
4-Bromofluorobenzene (S)	92	%	80-120	1		10/21/14 16:00	460-00-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Sample: 25B **Lab ID: 60180177004** Collected: 10/09/14 12:35 Received: 10/11/14 12:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/17/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/20/14 13:30	10/21/14 10:21	7440-38-2	
Barium	ND	mg/L	2.5	1	10/20/14 13:30	10/21/14 11:49	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/20/14 13:30	10/21/14 10:21	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/20/14 13:30	10/21/14 10:21	7440-47-3	
Lead	ND	mg/L	0.50	1	10/20/14 13:30	10/21/14 10:21	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/20/14 13:30	10/21/14 10:21	7782-49-2	
Silver	ND	mg/L	0.10	1	10/20/14 13:30	10/21/14 10:21	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/17/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/20/14 10:05	10/21/14 12:45	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Benzene	ND	ug/L	50.0	1		10/21/14 16:14	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/21/14 16:14	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/21/14 16:14	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/21/14 16:14	108-90-7	
Chloroform	ND	ug/L	200	1		10/21/14 16:14	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/21/14 16:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/21/14 16:14	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/21/14 16:14	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/21/14 16:14	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/21/14 16:14	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	80-120	1		10/21/14 16:14	17060-07-0	
Toluene-d8 (S)	98	%	80-120	1		10/21/14 16:14	2037-26-5	
4-Bromofluorobenzene (S)	93	%	80-120	1		10/21/14 16:14	460-00-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Sample: 24B **Lab ID: 60180177005** Collected: 10/09/14 12:45 Received: 10/11/14 12:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/17/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/20/14 13:30	10/21/14 10:34	7440-38-2	
Barium	ND	mg/L	2.5	1	10/20/14 13:30	10/21/14 11:53	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/20/14 13:30	10/21/14 10:34	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/20/14 13:30	10/21/14 10:34	7440-47-3	
Lead	ND	mg/L	0.50	1	10/20/14 13:30	10/21/14 10:34	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/20/14 13:30	10/21/14 10:34	7782-49-2	
Silver	ND	mg/L	0.10	1	10/20/14 13:30	10/21/14 10:34	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/17/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/20/14 10:05	10/21/14 12:52	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/21/14 00:00							
Benzene	ND	ug/L	50.0	1		10/22/14 17:40	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/22/14 17:40	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/22/14 17:40	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/22/14 17:40	108-90-7	
Chloroform	ND	ug/L	200	1		10/22/14 17:40	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/22/14 17:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/22/14 17:40	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/22/14 17:40	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/22/14 17:40	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/22/14 17:40	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	97	%	80-120	1		10/22/14 17:40	17060-07-0	
Toluene-d8 (S)	94	%	80-120	1		10/22/14 17:40	2037-26-5	
4-Bromofluorobenzene (S)	96	%	80-120	1		10/22/14 17:40	460-00-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Sample: 24A **Lab ID: 60180177006** Collected: 10/09/14 12:40 Received: 10/11/14 12:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:20	7440-38-2	
Barium	ND	mg/L	2.5	1	10/21/14 10:15	10/21/14 16:20	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/21/14 10:15	10/21/14 16:20	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:20	7440-47-3	
Lead	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:20	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:20	7782-49-2	
Silver	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:20	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/21/14 16:00	10/22/14 12:04	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/21/14 00:00							
Benzene	ND	ug/L	50.0	1		10/22/14 18:12	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/22/14 18:12	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/22/14 18:12	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/22/14 18:12	108-90-7	
Chloroform	ND	ug/L	200	1		10/22/14 18:12	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/22/14 18:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/22/14 18:12	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/22/14 18:12	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/22/14 18:12	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/22/14 18:12	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	80-120	1		10/22/14 18:12	17060-07-0	
Toluene-d8 (S)	96	%	80-120	1		10/22/14 18:12	2037-26-5	
4-Bromofluorobenzene (S)	96	%	80-120	1		10/22/14 18:12	460-00-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Sample: 26A **Lab ID: 60180177007** Collected: 10/09/14 12:20 Received: 10/11/14 12:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:23	7440-38-2	
Barium	ND	mg/L	2.5	1	10/21/14 10:15	10/21/14 16:23	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/21/14 10:15	10/21/14 16:23	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:23	7440-47-3	
Lead	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:23	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:23	7782-49-2	
Silver	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:23	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/21/14 16:00	10/22/14 12:07	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/21/14 00:00							
Benzene	ND	ug/L	50.0	1		10/22/14 18:28	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/22/14 18:28	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/22/14 18:28	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/22/14 18:28	108-90-7	
Chloroform	ND	ug/L	200	1		10/22/14 18:28	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/22/14 18:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/22/14 18:28	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/22/14 18:28	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/22/14 18:28	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/22/14 18:28	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	80-120	1		10/22/14 18:28	17060-07-0	
Toluene-d8 (S)	95	%	80-120	1		10/22/14 18:28	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120	1		10/22/14 18:28	460-00-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Sample: 26B **Lab ID: 60180177008** Collected: 10/09/14 12:25 Received: 10/11/14 12:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:04	7440-38-2	
Barium	ND	mg/L	2.5	1	10/21/14 10:15	10/21/14 16:04	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/21/14 10:15	10/21/14 16:04	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:04	7440-47-3	
Lead	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:04	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:04	7782-49-2	
Silver	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:04	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/21/14 16:00	10/22/14 12:09	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/21/14 00:00							
Benzene	ND	ug/L	50.0	1		10/22/14 18:44	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/22/14 18:44	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/22/14 18:44	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/22/14 18:44	108-90-7	
Chloroform	ND	ug/L	200	1		10/22/14 18:44	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/22/14 18:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/22/14 18:44	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/22/14 18:44	127-18-4	
Trichloroethene	**158**	ug/L	50.0	1		10/22/14 18:44	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/22/14 18:44	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	97	%	80-120	1		10/22/14 18:44	17060-07-0	
Toluene-d8 (S)	94	%	80-120	1		10/22/14 18:44	2037-26-5	
4-Bromofluorobenzene (S)	96	%	80-120	1		10/22/14 18:44	460-00-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Sample: 28A **Lab ID: 60180177009** Collected: 10/10/14 07:30 Received: 10/11/14 12:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:25	7440-38-2	
Barium	ND	mg/L	2.5	1	10/21/14 10:15	10/21/14 16:25	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/21/14 10:15	10/21/14 16:25	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:25	7440-47-3	
Lead	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:25	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:25	7782-49-2	
Silver	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:25	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/21/14 16:00	10/22/14 12:16	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/21/14 00:00							
Benzene	ND	ug/L	50.0	1		10/22/14 18:59	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/22/14 18:59	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/22/14 18:59	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/22/14 18:59	108-90-7	
Chloroform	ND	ug/L	200	1		10/22/14 18:59	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/22/14 18:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/22/14 18:59	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/22/14 18:59	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/22/14 18:59	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/22/14 18:59	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	80-120	1		10/22/14 18:59	17060-07-0	
Toluene-d8 (S)	96	%	80-120	1		10/22/14 18:59	2037-26-5	
4-Bromofluorobenzene (S)	98	%	80-120	1		10/22/14 18:59	460-00-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Sample: 28B **Lab ID: 60180177010** Collected: 10/10/14 07:40 Received: 10/11/14 12:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:27	7440-38-2	
Barium	ND	mg/L	2.5	1	10/21/14 10:15	10/21/14 16:27	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/21/14 10:15	10/21/14 16:27	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:27	7440-47-3	
Lead	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:27	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:27	7782-49-2	
Silver	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:27	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/21/14 16:00	10/22/14 12:18	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/21/14 00:00							
Benzene	ND	ug/L	50.0	1		10/22/14 19:15	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/22/14 19:15	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/22/14 19:15	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/22/14 19:15	108-90-7	
Chloroform	ND	ug/L	200	1		10/22/14 19:15	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/22/14 19:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/22/14 19:15	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/22/14 19:15	127-18-4	
Trichloroethene	**114**	ug/L	50.0	1		10/22/14 19:15	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/22/14 19:15	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	97	%	80-120	1		10/22/14 19:15	17060-07-0	
Toluene-d8 (S)	95	%	80-120	1		10/22/14 19:15	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120	1		10/22/14 19:15	460-00-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Sample: 29A **Lab ID: 60180177011** Collected: 10/10/14 08:20 Received: 10/11/14 12:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:30	7440-38-2	
Barium	ND	mg/L	2.5	1	10/21/14 10:15	10/21/14 16:30	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/21/14 10:15	10/21/14 16:30	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:30	7440-47-3	
Lead	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:30	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:30	7782-49-2	
Silver	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:30	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/21/14 16:00	10/22/14 12:20	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/21/14 00:00							
Benzene	ND	ug/L	50.0	1		10/22/14 19:31	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/22/14 19:31	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/22/14 19:31	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/22/14 19:31	108-90-7	
Chloroform	ND	ug/L	200	1		10/22/14 19:31	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/22/14 19:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/22/14 19:31	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/22/14 19:31	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/22/14 19:31	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/22/14 19:31	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	96	%	80-120	1		10/22/14 19:31	17060-07-0	
Toluene-d8 (S)	95	%	80-120	1		10/22/14 19:31	2037-26-5	
4-Bromofluorobenzene (S)	97	%	80-120	1		10/22/14 19:31	460-00-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Sample: 29B **Lab ID: 60180177012** Collected: 10/10/14 08:37 Received: 10/11/14 12:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:32	7440-38-2	
Barium	ND	mg/L	2.5	1	10/21/14 10:15	10/21/14 16:32	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/21/14 10:15	10/21/14 16:32	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:32	7440-47-3	
Lead	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:32	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:32	7782-49-2	
Silver	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:32	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/21/14 16:00	10/22/14 12:27	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/21/14 00:00							
Benzene	ND	ug/L	50.0	1		10/22/14 19:47	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/22/14 19:47	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/22/14 19:47	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/22/14 19:47	108-90-7	
Chloroform	ND	ug/L	200	1		10/22/14 19:47	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/22/14 19:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/22/14 19:47	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/22/14 19:47	127-18-4	
Trichloroethene	**50.3**	ug/L	50.0	1		10/22/14 19:47	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/22/14 19:47	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	80-120	1		10/22/14 19:47	17060-07-0	
Toluene-d8 (S)	94	%	80-120	1		10/22/14 19:47	2037-26-5	
4-Bromofluorobenzene (S)	97	%	80-120	1		10/22/14 19:47	460-00-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Sample: 30A **Lab ID: 60180177013** Collected: 10/10/14 13:12 Received: 10/11/14 12:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:34	7440-38-2	
Barium	ND	mg/L	2.5	1	10/21/14 10:15	10/21/14 16:34	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/21/14 10:15	10/21/14 16:34	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:34	7440-47-3	
Lead	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:34	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:34	7782-49-2	
Silver	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:34	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/21/14 16:00	10/22/14 12:29	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/22/14 00:00							
Benzene	ND	ug/L	50.0	1		10/23/14 18:19	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/23/14 18:19	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/23/14 18:19	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/23/14 18:19	108-90-7	
Chloroform	ND	ug/L	200	1		10/23/14 18:19	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/23/14 18:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/23/14 18:19	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/23/14 18:19	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/23/14 18:19	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/23/14 18:19	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	97	%	80-120	1		10/23/14 18:19	17060-07-0	
Toluene-d8 (S)	94	%	80-120	1		10/23/14 18:19	2037-26-5	
4-Bromofluorobenzene (S)	97	%	80-120	1		10/23/14 18:19	460-00-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Sample: 30B **Lab ID: 60180177014** Collected: 10/10/14 13:18 Received: 10/11/14 12:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:36	7440-38-2	
Barium	ND	mg/L	2.5	1	10/21/14 10:15	10/21/14 16:36	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/21/14 10:15	10/21/14 16:36	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:36	7440-47-3	
Lead	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:36	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:36	7782-49-2	
Silver	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:36	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/21/14 16:00	10/22/14 12:31	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/22/14 00:00							
Benzene	ND	ug/L	50.0	1		10/23/14 18:51	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/23/14 18:51	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/23/14 18:51	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/23/14 18:51	108-90-7	
Chloroform	ND	ug/L	200	1		10/23/14 18:51	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/23/14 18:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/23/14 18:51	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/23/14 18:51	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/23/14 18:51	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/23/14 18:51	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	96	%	80-120	1		10/23/14 18:51	17060-07-0	
Toluene-d8 (S)	94	%	80-120	1		10/23/14 18:51	2037-26-5	
4-Bromofluorobenzene (S)	97	%	80-120	1		10/23/14 18:51	460-00-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Sample: 31A **Lab ID: 60180177015** Collected: 10/10/14 13:40 Received: 10/11/14 12:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:39	7440-38-2	
Barium	ND	mg/L	2.5	1	10/21/14 10:15	10/21/14 16:39	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/21/14 10:15	10/21/14 16:39	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:39	7440-47-3	
Lead	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:39	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:39	7782-49-2	
Silver	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:39	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/21/14 16:00	10/22/14 12:33	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/22/14 00:00							
Benzene	ND	ug/L	50.0	1		10/23/14 19:07	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/23/14 19:07	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/23/14 19:07	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/23/14 19:07	108-90-7	
Chloroform	ND	ug/L	200	1		10/23/14 19:07	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/23/14 19:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/23/14 19:07	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/23/14 19:07	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/23/14 19:07	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/23/14 19:07	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	97	%	80-120	1		10/23/14 19:07	17060-07-0	
Toluene-d8 (S)	95	%	80-120	1		10/23/14 19:07	2037-26-5	
4-Bromofluorobenzene (S)	98	%	80-120	1		10/23/14 19:07	460-00-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Sample: 31B **Lab ID: 60180177016** Collected: 10/10/14 13:49 Received: 10/11/14 12:50 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:41	7440-38-2	
Barium	ND	mg/L	2.5	1	10/21/14 10:15	10/21/14 16:41	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/21/14 10:15	10/21/14 16:41	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:41	7440-47-3	
Lead	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:41	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/21/14 10:15	10/21/14 16:41	7782-49-2	
Silver	ND	mg/L	0.10	1	10/21/14 10:15	10/21/14 16:41	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/20/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/21/14 16:00	10/22/14 12:36	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/22/14 00:00							
Benzene	ND	ug/L	50.0	1		10/23/14 19:23	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/23/14 19:23	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/23/14 19:23	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/23/14 19:23	108-90-7	
Chloroform	ND	ug/L	200	1		10/23/14 19:23	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/23/14 19:23	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/23/14 19:23	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/23/14 19:23	127-18-4	
Trichloroethene	**201**	ug/L	50.0	1		10/23/14 19:23	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/23/14 19:23	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	98	%	80-120	1		10/23/14 19:23	17060-07-0	
Toluene-d8 (S)	95	%	80-120	1		10/23/14 19:23	2037-26-5	
4-Bromofluorobenzene (S)	95	%	80-120	1		10/23/14 19:23	460-00-4	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

QC Batch: MERP/8929 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 60180177001, 60180177002, 60180177003, 60180177004, 60180177005

METHOD BLANK: 1463529 Matrix: Water
Associated Lab Samples: 60180177001, 60180177002, 60180177003, 60180177004, 60180177005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.0020	10/21/14 12:29	

LABORATORY CONTROL SAMPLE: 1463530

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	.005	0.0057	115	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1463531 1463532

Parameter	Units	60180177001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	.015	.015	0.016	0.016	109	109	75-125	0	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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QUALITY CONTROL DATA

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

QC Batch: MERP/8936 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 60180177006, 60180177007, 60180177008, 60180177009, 60180177010, 60180177011, 60180177012, 60180177013, 60180177014, 60180177015, 60180177016

METHOD BLANK: 1464378 Matrix: Water
Associated Lab Samples: 60180177006, 60180177007, 60180177008, 60180177009, 60180177010, 60180177011, 60180177012, 60180177013, 60180177014, 60180177015, 60180177016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.0020	10/22/14 12:00	

LABORATORY CONTROL SAMPLE: 1464379

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	.005	0.0051	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1464380 1464381

Parameter	Units	60180177008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	.015	.015	0.016	0.016	109	109	75-125	0	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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QUALITY CONTROL DATA

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

QC Batch: MPRP/29396 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET TCLP
Associated Lab Samples: 60180177001, 60180177002, 60180177003, 60180177004, 60180177005

METHOD BLANK: 1463805 Matrix: Water
Associated Lab Samples: 60180177001, 60180177002, 60180177003, 60180177004, 60180177005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.50	10/21/14 09:34	
Barium	mg/L	ND	2.5	10/21/14 09:34	
Cadmium	mg/L	ND	0.050	10/21/14 09:34	
Chromium	mg/L	ND	0.10	10/21/14 09:34	
Lead	mg/L	ND	0.50	10/21/14 09:34	
Selenium	mg/L	ND	0.50	10/21/14 09:34	
Silver	mg/L	ND	0.10	10/21/14 09:34	

LABORATORY CONTROL SAMPLE: 1463806

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	1	0.90	90	80-120	
Barium	mg/L	1	0.90	90	80-120	
Cadmium	mg/L	1	0.92	92	80-120	
Chromium	mg/L	1	0.93	93	80-120	
Lead	mg/L	1	0.92	92	80-120	
Selenium	mg/L	1	0.84	84	80-120	
Silver	mg/L	.5	0.44	89	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1463807 1463808

Parameter	Units	60180177001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	10	10	8.7	8.2	87	82	75-125	6	20	
Barium	mg/L	ND	10	10	13.0	12.2	111	103	75-125	6	20	
Cadmium	mg/L	ND	10	10	8.8	8.3	88	83	75-125	6	20	
Chromium	mg/L	ND	10	10	8.3	7.9	83	79	75-125	5	20	
Lead	mg/L	ND	10	10	8.5	8.1	85	81	75-125	5	20	
Selenium	mg/L	ND	10	10	8.3	7.8	83	78	75-125	7	20	
Silver	mg/L	ND	5	5	4.2	3.9	83	78	75-125	6	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

QC Batch: MPRP/29414 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET TCLP
Associated Lab Samples: 60180177006, 60180177007, 60180177008, 60180177009, 60180177010, 60180177011, 60180177012, 60180177013, 60180177014, 60180177015, 60180177016

METHOD BLANK: 1464234 Matrix: Water
Associated Lab Samples: 60180177006, 60180177007, 60180177008, 60180177009, 60180177010, 60180177011, 60180177012, 60180177013, 60180177014, 60180177015, 60180177016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.50	10/21/14 15:50	
Barium	mg/L	ND	2.5	10/21/14 15:50	
Cadmium	mg/L	ND	0.050	10/21/14 15:50	
Chromium	mg/L	ND	0.10	10/21/14 15:50	
Lead	mg/L	ND	0.50	10/21/14 15:50	
Selenium	mg/L	ND	0.50	10/21/14 15:50	
Silver	mg/L	ND	0.10	10/21/14 15:50	

LABORATORY CONTROL SAMPLE: 1464235

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	1	0.94	94	80-120	
Barium	mg/L	1	0.95	95	80-120	
Cadmium	mg/L	1	0.94	94	80-120	
Chromium	mg/L	1	0.91	91	80-120	
Lead	mg/L	1	0.94	94	80-120	
Selenium	mg/L	1	0.88	88	80-120	
Silver	mg/L	.5	0.45	91	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1464236 1464237

Parameter	Units	60180177008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	10	10	8.7	9.2	87	92	75-125	6	20	
Barium	mg/L	ND	10	10	9.8	10.4	86	92	75-125	6	20	
Cadmium	mg/L	ND	10	10	8.6	9.2	86	92	75-125	6	20	
Chromium	mg/L	ND	10	10	8.1	8.6	81	86	75-125	7	20	
Lead	mg/L	ND	10	10	8.5	9.0	85	90	75-125	6	20	
Selenium	mg/L	ND	10	10	8.4	8.9	84	89	75-125	6	20	
Silver	mg/L	ND	5	5	4.1	4.4	83	88	75-125	7	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

QC Batch: MSV/65243 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV TCLP
Associated Lab Samples: 60180177001, 60180177002, 60180177003, 60180177004

METHOD BLANK: 1464445 Matrix: Water
Associated Lab Samples: 60180177001, 60180177002, 60180177003, 60180177004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	50.0	10/21/14 14:21	
1,2-Dichloroethane	ug/L	ND	50.0	10/21/14 14:21	
2-Butanone (MEK)	ug/L	ND	1000	10/21/14 14:21	
Benzene	ug/L	ND	50.0	10/21/14 14:21	
Carbon tetrachloride	ug/L	ND	50.0	10/21/14 14:21	
Chlorobenzene	ug/L	ND	50.0	10/21/14 14:21	
Chloroform	ug/L	ND	200	10/21/14 14:21	
Tetrachloroethene	ug/L	ND	50.0	10/21/14 14:21	
Trichloroethene	ug/L	ND	50.0	10/21/14 14:21	
Vinyl chloride	ug/L	ND	100	10/21/14 14:21	
1,2-Dichloroethane-d4 (S)	%	105	80-120	10/21/14 14:21	
4-Bromofluorobenzene (S)	%	94	80-120	10/21/14 14:21	
Toluene-d8 (S)	%	94	80-120	10/21/14 14:21	

LABORATORY CONTROL SAMPLE: 1464446

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	200	206	103	78-126	
1,2-Dichloroethane	ug/L	200	221	110	77-123	
2-Butanone (MEK)	ug/L	1000	940J	94	52-145	
Benzene	ug/L	200	206	103	80-120	
Carbon tetrachloride	ug/L	200	210	105	78-128	
Chlorobenzene	ug/L	200	221	111	80-120	
Chloroform	ug/L	200	209	105	79-120	
Tetrachloroethene	ug/L	200	219	109	80-121	
Trichloroethene	ug/L	200	201	101	80-120	
Vinyl chloride	ug/L	200	211	106	59-120	
1,2-Dichloroethane-d4 (S)	%			104	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			95	80-120	

MATRIX SPIKE SAMPLE: 1464447

Parameter	Units	60180670001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	ND	200	210	105	60-144	
1,2-Dichloroethane	ug/L	ND	200	198	99	49-148	
2-Butanone (MEK)	ug/L	ND	1000	852J	85	36-145	
Benzene	ug/L	ND	200	193	96	37-157	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

MATRIX SPIKE SAMPLE: 1464447

Parameter	Units	60180670001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	ND	200	218	109	68-142	
Chlorobenzene	ug/L	ND	200	203	101	66-133	
Chloroform	ug/L	ND	200	198J	99	66-127	
Tetrachloroethene	ug/L	ND	200	209	105	69-133	
Trichloroethene	ug/L	ND	200	195	97	61-135	
Vinyl chloride	ug/L	ND	200	201	101	44-128	
1,2-Dichloroethane-d4 (S)	%				105	80-120	
4-Bromofluorobenzene (S)	%				98	80-120	
Toluene-d8 (S)	%				96	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

QC Batch: MSV/65275 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV TCLP
Associated Lab Samples: 60180177005, 60180177006, 60180177007, 60180177008, 60180177009, 60180177010, 60180177011, 60180177012

METHOD BLANK: 1465212 Matrix: Water
Associated Lab Samples: 60180177005, 60180177006, 60180177007, 60180177008, 60180177009, 60180177010, 60180177011, 60180177012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	50.0	10/22/14 17:24	
1,2-Dichloroethane	ug/L	ND	50.0	10/22/14 17:24	
2-Butanone (MEK)	ug/L	ND	1000	10/22/14 17:24	
Benzene	ug/L	ND	50.0	10/22/14 17:24	
Carbon tetrachloride	ug/L	ND	50.0	10/22/14 17:24	
Chlorobenzene	ug/L	ND	50.0	10/22/14 17:24	
Chloroform	ug/L	ND	200	10/22/14 17:24	
Tetrachloroethene	ug/L	ND	50.0	10/22/14 17:24	
Trichloroethene	ug/L	ND	50.0	10/22/14 17:24	
Vinyl chloride	ug/L	ND	100	10/22/14 17:24	
1,2-Dichloroethane-d4 (S)	%	99	80-120	10/22/14 17:24	
4-Bromofluorobenzene (S)	%	96	80-120	10/22/14 17:24	
Toluene-d8 (S)	%	96	80-120	10/22/14 17:24	

LABORATORY CONTROL SAMPLE: 1465213

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	200	196	98	78-126	
1,2-Dichloroethane	ug/L	200	196	98	77-123	
2-Butanone (MEK)	ug/L	1000	807J	81	52-145	
Benzene	ug/L	200	187	94	80-120	
Carbon tetrachloride	ug/L	200	186	93	78-128	
Chlorobenzene	ug/L	200	208	104	80-120	
Chloroform	ug/L	200	197J	99	79-120	
Tetrachloroethene	ug/L	200	193	96	80-121	
Trichloroethene	ug/L	200	186	93	80-120	
Vinyl chloride	ug/L	200	182	91	59-120	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			94	80-120	

MATRIX SPIKE SAMPLE: 1465214

Parameter	Units	60180177005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	ND	200	196	98	60-144	
1,2-Dichloroethane	ug/L	ND	200	182	91	49-148	
2-Butanone (MEK)	ug/L	ND	1000	700J	69	36-145	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

MATRIX SPIKE SAMPLE: 1465214

Parameter	Units	60180177005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Benzene	ug/L	ND	200	187	94	37-157	
Carbon tetrachloride	ug/L	ND	200	190	95	68-142	
Chlorobenzene	ug/L	ND	200	197	98	66-133	
Chloroform	ug/L	ND	200	190J	95	66-127	
Tetrachloroethene	ug/L	ND	200	197	99	69-133	
Trichloroethene	ug/L	ND	200	186	89	61-135	
Vinyl chloride	ug/L	ND	200	169	84	44-128	
1,2-Dichloroethane-d4 (S)	%				95	80-120	
4-Bromofluorobenzene (S)	%				99	80-120	
Toluene-d8 (S)	%				94	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

QC Batch: MSV/65297 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV TCLP
Associated Lab Samples: 60180177013, 60180177014, 60180177015, 60180177016

METHOD BLANK: 1465947 Matrix: Water
Associated Lab Samples: 60180177013, 60180177014, 60180177015, 60180177016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	50.0	10/23/14 18:03	
1,2-Dichloroethane	ug/L	ND	50.0	10/23/14 18:03	
2-Butanone (MEK)	ug/L	ND	1000	10/23/14 18:03	
Benzene	ug/L	ND	50.0	10/23/14 18:03	
Carbon tetrachloride	ug/L	ND	50.0	10/23/14 18:03	
Chlorobenzene	ug/L	ND	50.0	10/23/14 18:03	
Chloroform	ug/L	ND	200	10/23/14 18:03	
Tetrachloroethene	ug/L	ND	50.0	10/23/14 18:03	
Trichloroethene	ug/L	ND	50.0	10/23/14 18:03	
Vinyl chloride	ug/L	ND	100	10/23/14 18:03	
1,2-Dichloroethane-d4 (S)	%	97	80-120	10/23/14 18:03	
4-Bromofluorobenzene (S)	%	98	80-120	10/23/14 18:03	
Toluene-d8 (S)	%	95	80-120	10/23/14 18:03	

LABORATORY CONTROL SAMPLE: 1465948

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	200	199	100	78-126	
1,2-Dichloroethane	ug/L	200	191	95	77-123	
2-Butanone (MEK)	ug/L	1000	802J	80	52-145	
Benzene	ug/L	200	192	96	80-120	
Carbon tetrachloride	ug/L	200	185	93	78-128	
Chlorobenzene	ug/L	200	205	103	80-120	
Chloroform	ug/L	200	190J	95	79-120	
Tetrachloroethene	ug/L	200	198	99	80-121	
Trichloroethene	ug/L	200	192	96	80-120	
Vinyl chloride	ug/L	200	166	83	59-120	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			94	80-120	

MATRIX SPIKE SAMPLE: 1465949

Parameter	Units	60180177013 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	ND	200	199	100	60-144	
1,2-Dichloroethane	ug/L	ND	200	183	92	49-148	
2-Butanone (MEK)	ug/L	ND	1000	724J	71	36-145	
Benzene	ug/L	ND	200	186	93	37-157	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

MATRIX SPIKE SAMPLE: 1465949

Parameter	Units	60180177013 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	ND	200	193	96	68-142	
Chlorobenzene	ug/L	ND	200	199	99	66-133	
Chloroform	ug/L	ND	200	188J	94	66-127	
Tetrachloroethene	ug/L	ND	200	201	101	69-133	
Trichloroethene	ug/L	ND	200	185	92	61-135	
Vinyl chloride	ug/L	ND	200	157	79	44-128	
1,2-Dichloroethane-d4 (S)	%				95	80-120	
4-Bromofluorobenzene (S)	%				98	80-120	
Toluene-d8 (S)	%				93	80-120	

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QUALIFIERS

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

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: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180177001	**27A**	EPA 3010	MPRP/29396	EPA 6010	ICP/22081
60180177002	**27B**	EPA 3010	MPRP/29396	EPA 6010	ICP/22081
60180177003	**25A**	EPA 3010	MPRP/29396	EPA 6010	ICP/22081
60180177004	**25B**	EPA 3010	MPRP/29396	EPA 6010	ICP/22081
60180177005	**24B**	EPA 3010	MPRP/29396	EPA 6010	ICP/22081
60180177006	**24A**	EPA 3010	MPRP/29414	EPA 6010	ICP/22091
60180177007	**26A**	EPA 3010	MPRP/29414	EPA 6010	ICP/22091
60180177008	**26B**	EPA 3010	MPRP/29414	EPA 6010	ICP/22091
60180177009	**28A**	EPA 3010	MPRP/29414	EPA 6010	ICP/22091
60180177010	**28B**	EPA 3010	MPRP/29414	EPA 6010	ICP/22091
60180177011	**29A**	EPA 3010	MPRP/29414	EPA 6010	ICP/22091
60180177012	**29B**	EPA 3010	MPRP/29414	EPA 6010	ICP/22091
60180177013	**30A**	EPA 3010	MPRP/29414	EPA 6010	ICP/22091
60180177014	**30B**	EPA 3010	MPRP/29414	EPA 6010	ICP/22091
60180177015	**31A**	EPA 3010	MPRP/29414	EPA 6010	ICP/22091
60180177016	**31B**	EPA 3010	MPRP/29414	EPA 6010	ICP/22091
60180177001	**27A**	EPA 7470	MERP/8929	EPA 7470	MERC/8885
60180177002	**27B**	EPA 7470	MERP/8929	EPA 7470	MERC/8885
60180177003	**25A**	EPA 7470	MERP/8929	EPA 7470	MERC/8885
60180177004	**25B**	EPA 7470	MERP/8929	EPA 7470	MERC/8885
60180177005	**24B**	EPA 7470	MERP/8929	EPA 7470	MERC/8885
60180177006	**24A**	EPA 7470	MERP/8936	EPA 7470	MERC/8891
60180177007	**26A**	EPA 7470	MERP/8936	EPA 7470	MERC/8891
60180177008	**26B**	EPA 7470	MERP/8936	EPA 7470	MERC/8891
60180177009	**28A**	EPA 7470	MERP/8936	EPA 7470	MERC/8891
60180177010	**28B**	EPA 7470	MERP/8936	EPA 7470	MERC/8891
60180177011	**29A**	EPA 7470	MERP/8936	EPA 7470	MERC/8891
60180177012	**29B**	EPA 7470	MERP/8936	EPA 7470	MERC/8891
60180177013	**30A**	EPA 7470	MERP/8936	EPA 7470	MERC/8891
60180177014	**30B**	EPA 7470	MERP/8936	EPA 7470	MERC/8891
60180177015	**31A**	EPA 7470	MERP/8936	EPA 7470	MERC/8891
60180177016	**31B**	EPA 7470	MERP/8936	EPA 7470	MERC/8891
60180177001	**27A**	EPA 8260	MSV/65243		
60180177002	**27B**	EPA 8260	MSV/65243		
60180177003	**25A**	EPA 8260	MSV/65243		
60180177004	**25B**	EPA 8260	MSV/65243		
60180177005	**24B**	EPA 8260	MSV/65275		
60180177006	**24A**	EPA 8260	MSV/65275		
60180177007	**26A**	EPA 8260	MSV/65275		
60180177008	**26B**	EPA 8260	MSV/65275		
60180177009	**28A**	EPA 8260	MSV/65275		
60180177010	**28B**	EPA 8260	MSV/65275		
60180177011	**29A**	EPA 8260	MSV/65275		
60180177012	**29B**	EPA 8260	MSV/65275		
60180177013	**30A**	EPA 8260	MSV/65297		
60180177014	**30B**	EPA 8260	MSV/65297		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FT. SMITH AR
Pace Project No.: 60180177

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180177015	**31A**	EPA 8260	MSV/65297		
60180177016	**31B**	EPA 8260	MSV/65297		

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Sample Condition Upon Receipt

WO#: 60180177

60180177

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 ☒ zip

Thermometer Used: T-239 / T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 1.4

Date and initials of person examining contents: JB 10/14

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.
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: 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): _____		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: MJW Date: 10/13/14

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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 2

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

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	TCLP RCRA Metals	TCLP VOCs											CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Requested Analysis Filtered (Y/N)	N	N													60180177
1	27A	SL	G	10/9/14	1200				2	X									X	X	(2) WGFU									001
2	27B	SL	G	10/9/14	1205				2	X									X	X										002
3	25A	SL	G	10/9/14	1230				2	X									X	X										003
4	25B	SL	G	10/9/14	1235				2	X									X	X										004
5	24B	SL	G	10/9/14	1245				2	X									X	X										005
6	24A	SL	G	10/9/14	1240				2	X									X	X										006
7	26A	SL	G	10/9/14	1220				2	X									X	X										007
8	26B	SL	G	10/9/14	1225				2	X									X	X										008
9	28A	SL	G	10/10/14	730				2	X									X	X										009
10	28B	SL	G	10/10/14	740				2	X									X	X										010
11	29A	SL	G	10/10/14	820				2	X									X	X										011
12	29B	SL	G	10/10/14	837				2	X									X	X										012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Level IV data package required	Wendy Stonestreet / Environ	10/11/2014	1250		10/14	1250	1.4	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Wendy Stonestreet

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 10/14/2014

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

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 2

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

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	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: TCLP RCRA Metals	TCLP VOCs								CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 60186177
		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	2	2									
1	30A		SL	G	10/10/14	1312				2	X									X	X	(2)	06FU						013
2	30B		SL	G	10/10/14	1318				2	X									X	X								014
3	31A		SL	G	10/10/14	1340				2	X									X	X								015
4	31B		SL	G	10/10/14	1349				2	X									X	X								016
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	Wendy Stonestreet ENVIRON	10/11/2014	1250		10/11	1250	1.4	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Wendy Stonestreet

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 10/11/2014

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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October 29, 2014

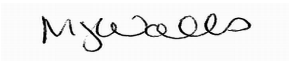
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: Whirlpool FORT SMITH, AR-TCLP
Pace Project No.: 60180638

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on October 17, 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: Whirlpool FORT SMITH, AR-TCLP
Pace Project No.: 60180638

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: Whirlpool FORT SMITH, AR-TCLP
Pace Project No.: 60180638

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60180638001	**RB27670RT A**	Solid	10/16/14 17:25	10/17/14 11:05
60180638002	**RB37736TR A**	Solid	10/16/14 17:33	10/17/14 11:05
60180638003	**RB37736TR B**	Solid	10/16/14 17:35	10/17/14 11:05
60180638004	**RB37733RT A**	Solid	10/16/14 17:29	10/17/14 11:05
60180638005	**RB37733RT B**	Solid	10/16/14 17:37	10/17/14 11:05
60180638006	**RB27670RT B**	Solid	10/16/14 17:27	10/17/14 11:05

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SAMPLE ANALYTE COUNT

Project: Whirlpool FORT SMITH, AR-TCLP
Pace Project No.: 60180638

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60180638001	**RB27670RT A**	EPA 6010	JGP	7
		EPA 7470	ZBM	1
		EPA 8260	JKL	13
60180638002	**RB37736TR A**	EPA 6010	JGP	7
		EPA 7470	ZBM	1
		EPA 8260	JKL	13
60180638003	**RB37736TR B**	EPA 6010	JGP	7
		EPA 7470	ZBM	1
		EPA 8260	JKL	13
60180638004	**RB37733RT A**	EPA 6010	JGP	7
		EPA 7470	ZBM	1
		EPA 8260	JKL	13
60180638005	**RB37733RT B**	EPA 6010	JGP	7
		EPA 7470	ZBM	1
		EPA 8260	JKL	13
60180638006	**RB27670RT B**	EPA 6010	JGP	7
		EPA 7470	ZBM	1
		EPA 8260	JKL	13

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ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH, AR-TCLP
Pace Project No.: 60180638

Sample: RB27670RT A **Lab ID: 60180638001** Collected: 10/16/14 17:25 Received: 10/17/14 11:05 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/23/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/24/14 13:45	10/25/14 12:36	7440-38-2	
Barium	ND	mg/L	2.5	1	10/24/14 13:45	10/25/14 12:36	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/24/14 13:45	10/25/14 12:36	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/24/14 13:45	10/25/14 12:36	7440-47-3	
Lead	ND	mg/L	0.50	1	10/24/14 13:45	10/25/14 12:36	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/24/14 13:45	10/25/14 12:36	7782-49-2	
Silver	ND	mg/L	0.10	1	10/24/14 13:45	10/25/14 12:36	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/23/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/25/14 10:50	10/25/14 15:21	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/27/14 00:00							
Benzene	ND	ug/L	50.0	1		10/29/14 12:43	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/29/14 12:43	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/29/14 12:43	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/29/14 12:43	108-90-7	
Chloroform	ND	ug/L	200	1		10/29/14 12:43	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/29/14 12:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/29/14 12:43	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/29/14 12:43	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/29/14 12:43	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/29/14 12:43	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	106	%	80-120	1		10/29/14 12:43	17060-07-0	
Toluene-d8 (S)	99	%	80-120	1		10/29/14 12:43	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120	1		10/29/14 12:43	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH, AR-TCLP
Pace Project No.: 60180638

Sample: RB37736TR A **Lab ID: 60180638002** Collected: 10/16/14 17:33 Received: 10/17/14 11:05 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/23/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/24/14 13:45	10/25/14 12:40	7440-38-2	
Barium	ND	mg/L	2.5	1	10/24/14 13:45	10/25/14 12:40	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/24/14 13:45	10/25/14 12:40	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/24/14 13:45	10/25/14 12:40	7440-47-3	
Lead	ND	mg/L	0.50	1	10/24/14 13:45	10/25/14 12:40	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/24/14 13:45	10/25/14 12:40	7782-49-2	
Silver	ND	mg/L	0.10	1	10/24/14 13:45	10/25/14 12:40	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/23/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/25/14 10:50	10/25/14 15:28	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/27/14 00:00							
Benzene	ND	ug/L	50.0	1		10/29/14 13:13	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/29/14 13:13	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/29/14 13:13	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/29/14 13:13	108-90-7	
Chloroform	ND	ug/L	200	1		10/29/14 13:13	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/29/14 13:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/29/14 13:13	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/29/14 13:13	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/29/14 13:13	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/29/14 13:13	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	107	%	80-120	1		10/29/14 13:13	17060-07-0	
Toluene-d8 (S)	99	%	80-120	1		10/29/14 13:13	2037-26-5	
4-Bromofluorobenzene (S)	98	%	80-120	1		10/29/14 13:13	460-00-4	

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
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ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH, AR-TCLP
Pace Project No.: 60180638

Sample: RB37736TR B **Lab ID: 60180638003** Collected: 10/16/14 17:35 Received: 10/17/14 11:05 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/23/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/24/14 13:45	10/25/14 12:43	7440-38-2	
Barium	ND	mg/L	2.5	1	10/24/14 13:45	10/25/14 12:43	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/24/14 13:45	10/25/14 12:43	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/24/14 13:45	10/25/14 12:43	7440-47-3	
Lead	ND	mg/L	0.50	1	10/24/14 13:45	10/25/14 12:43	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/24/14 13:45	10/25/14 12:43	7782-49-2	
Silver	ND	mg/L	0.10	1	10/24/14 13:45	10/25/14 12:43	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/23/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/25/14 10:50	10/25/14 15:30	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/27/14 00:00							
Benzene	ND	ug/L	50.0	1		10/29/14 13:29	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/29/14 13:29	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/29/14 13:29	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/29/14 13:29	108-90-7	
Chloroform	ND	ug/L	200	1		10/29/14 13:29	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/29/14 13:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/29/14 13:29	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/29/14 13:29	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/29/14 13:29	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/29/14 13:29	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	108	%	80-120	1		10/29/14 13:29	17060-07-0	
Toluene-d8 (S)	99	%	80-120	1		10/29/14 13:29	2037-26-5	
4-Bromofluorobenzene (S)	98	%	80-120	1		10/29/14 13:29	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH, AR-TCLP
Pace Project No.: 60180638

Sample: RB37733RT A **Lab ID: 60180638004** Collected: 10/16/14 17:29 Received: 10/17/14 11:05 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/23/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/24/14 13:45	10/25/14 12:47	7440-38-2	
Barium	ND	mg/L	2.5	1	10/24/14 13:45	10/25/14 12:47	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/24/14 13:45	10/25/14 12:47	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/24/14 13:45	10/25/14 12:47	7440-47-3	
Lead	ND	mg/L	0.50	1	10/24/14 13:45	10/25/14 12:47	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/24/14 13:45	10/25/14 12:47	7782-49-2	
Silver	ND	mg/L	0.10	1	10/24/14 13:45	10/25/14 12:47	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/23/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/25/14 10:50	10/25/14 15:32	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/27/14 00:00							
Benzene	ND	ug/L	50.0	1		10/29/14 13:44	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/29/14 13:44	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/29/14 13:44	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/29/14 13:44	108-90-7	
Chloroform	ND	ug/L	200	1		10/29/14 13:44	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/29/14 13:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/29/14 13:44	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/29/14 13:44	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/29/14 13:44	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/29/14 13:44	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	101	%	80-120	1		10/29/14 13:44	17060-07-0	
Toluene-d8 (S)	99	%	80-120	1		10/29/14 13:44	2037-26-5	
4-Bromofluorobenzene (S)	97	%	80-120	1		10/29/14 13:44	460-00-4	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH, AR-TCLP
Pace Project No.: 60180638

Sample: RB37733RT B **Lab ID: 60180638005** Collected: 10/16/14 17:37 Received: 10/17/14 11:05 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/23/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/24/14 13:45	10/25/14 12:57	7440-38-2	
Barium	ND	mg/L	2.5	1	10/24/14 13:45	10/25/14 12:57	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/24/14 13:45	10/25/14 12:57	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/24/14 13:45	10/25/14 12:57	7440-47-3	
Lead	ND	mg/L	0.50	1	10/24/14 13:45	10/25/14 12:57	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/24/14 13:45	10/25/14 12:57	7782-49-2	
Silver	ND	mg/L	0.10	1	10/24/14 13:45	10/25/14 12:57	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/23/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/25/14 10:50	10/25/14 15:35	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/27/14 00:00							
Benzene	ND	ug/L	50.0	1		10/29/14 13:59	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/29/14 13:59	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/29/14 13:59	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/29/14 13:59	108-90-7	
Chloroform	ND	ug/L	200	1		10/29/14 13:59	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/29/14 13:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/29/14 13:59	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/29/14 13:59	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/29/14 13:59	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/29/14 13:59	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	93	%	80-120	1		10/29/14 13:59	17060-07-0	
Toluene-d8 (S)	99	%	80-120	1		10/29/14 13:59	2037-26-5	
4-Bromofluorobenzene (S)	98	%	80-120	1		10/29/14 13:59	460-00-4	

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ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH, AR-TCLP
Pace Project No.: 60180638

Sample: RB27670RT B **Lab ID: 60180638006** Collected: 10/16/14 17:27 Received: 10/17/14 11:05 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/23/14 00:00							
Arsenic	ND	mg/L	0.50	1	10/24/14 13:45	10/25/14 13:01	7440-38-2	
Barium	ND	mg/L	2.5	1	10/24/14 13:45	10/25/14 13:01	7440-39-3	
Cadmium	ND	mg/L	0.050	1	10/24/14 13:45	10/25/14 13:01	7440-43-9	
Chromium	ND	mg/L	0.10	1	10/24/14 13:45	10/25/14 13:01	7440-47-3	
Lead	ND	mg/L	0.50	1	10/24/14 13:45	10/25/14 13:01	7439-92-1	
Selenium	ND	mg/L	0.50	1	10/24/14 13:45	10/25/14 13:01	7782-49-2	
Silver	ND	mg/L	0.10	1	10/24/14 13:45	10/25/14 13:01	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/23/14 00:00							
Mercury	ND	mg/L	0.0020	1	10/25/14 10:50	10/25/14 15:37	7439-97-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/27/14 00:00							
Benzene	ND	ug/L	50.0	1		10/29/14 14:15	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	1		10/29/14 14:15	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	1		10/29/14 14:15	56-23-5	
Chlorobenzene	ND	ug/L	50.0	1		10/29/14 14:15	108-90-7	
Chloroform	ND	ug/L	200	1		10/29/14 14:15	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	1		10/29/14 14:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	1		10/29/14 14:15	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	1		10/29/14 14:15	127-18-4	
Trichloroethene	ND	ug/L	50.0	1		10/29/14 14:15	79-01-6	
Vinyl chloride	ND	ug/L	100	1		10/29/14 14:15	75-01-4	
Surrogates								
1,2-Dichloroethane-d4 (S)	96	%	80-120	1		10/29/14 14:15	17060-07-0	
Toluene-d8 (S)	98	%	80-120	1		10/29/14 14:15	2037-26-5	
4-Bromofluorobenzene (S)	99	%	80-120	1		10/29/14 14:15	460-00-4	

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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH, AR-TCLP
Pace Project No.: 60180638

QC Batch: MERP/8960 Analysis Method: EPA 7470
QC Batch Method: EPA 7470 Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 60180638001, 60180638002, 60180638003, 60180638004, 60180638005, 60180638006

METHOD BLANK: 1466944 Matrix: Water
Associated Lab Samples: 60180638001, 60180638002, 60180638003, 60180638004, 60180638005, 60180638006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.0020	10/25/14 15:08	

LABORATORY CONTROL SAMPLE: 1466945

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	.005	0.0049	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1466946 1466947

Parameter	Units	60180586001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	.015	.015	0.016	0.015	110	103	75-125	6	20	

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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH, AR-TCLP
Pace Project No.: 60180638

QC Batch: MPRP/29476 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET TCLP
Associated Lab Samples: 60180638001, 60180638002, 60180638003, 60180638004, 60180638005, 60180638006

METHOD BLANK: 1466954 Matrix: Water
Associated Lab Samples: 60180638001, 60180638002, 60180638003, 60180638004, 60180638005, 60180638006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.50	10/25/14 12:19	
Barium	mg/L	ND	2.5	10/25/14 12:19	
Cadmium	mg/L	ND	0.050	10/25/14 12:19	
Chromium	mg/L	ND	0.10	10/25/14 12:19	
Lead	mg/L	ND	0.50	10/25/14 12:19	
Selenium	mg/L	ND	0.50	10/25/14 12:19	
Silver	mg/L	ND	0.10	10/25/14 12:19	

LABORATORY CONTROL SAMPLE: 1466955

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	1	0.98	98	80-120	
Barium	mg/L	1	1.0	101	80-120	
Cadmium	mg/L	1	1.0	100	80-120	
Chromium	mg/L	1	1.0	102	80-120	
Lead	mg/L	1	1.0	102	80-120	
Selenium	mg/L	1	0.97	97	80-120	
Silver	mg/L	.5	0.49	97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1466956 1466957

Parameter	Units	60180586001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	10	10	10.0	9.9	100	99	75-125	1	20	
Barium	mg/L	ND	10	10	10.3	10.2	101	100	75-125	1	20	
Cadmium	mg/L	ND	10	10	10.1	10	101	100	75-125	1	20	
Chromium	mg/L	0.40	10	10	10.5	10.3	101	99	75-125	1	20	
Lead	mg/L	ND	10	10	10.2	10.1	98	98	75-125	1	20	
Selenium	mg/L	ND	10	10	10	9.8	100	98	75-125	2	20	
Silver	mg/L	ND	5	5	4.9	4.9	99	97	75-125	1	20	

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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH, AR-TCLP
Pace Project No.: 60180638

QC Batch: MSV/65406 Analysis Method: EPA 8260
QC Batch Method: EPA 8260 Analysis Description: 8260 MSV TCLP
Associated Lab Samples: 60180638001, 60180638002, 60180638003, 60180638004, 60180638005, 60180638006

METHOD BLANK: 1469007 Matrix: Water
Associated Lab Samples: 60180638001, 60180638002, 60180638003, 60180638004, 60180638005, 60180638006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	50.0	10/29/14 12:27	
1,2-Dichloroethane	ug/L	ND	50.0	10/29/14 12:27	
2-Butanone (MEK)	ug/L	ND	1000	10/29/14 12:27	
Benzene	ug/L	ND	50.0	10/29/14 12:27	
Carbon tetrachloride	ug/L	ND	50.0	10/29/14 12:27	
Chlorobenzene	ug/L	ND	50.0	10/29/14 12:27	
Chloroform	ug/L	ND	200	10/29/14 12:27	
Tetrachloroethene	ug/L	ND	50.0	10/29/14 12:27	
Trichloroethene	ug/L	ND	50.0	10/29/14 12:27	
Vinyl chloride	ug/L	ND	100	10/29/14 12:27	
1,2-Dichloroethane-d4 (S)	%	101	80-120	10/29/14 12:27	
4-Bromofluorobenzene (S)	%	99	80-120	10/29/14 12:27	
Toluene-d8 (S)	%	99	80-120	10/29/14 12:27	

LABORATORY CONTROL SAMPLE: 1469008

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	1000	942	94	78-126	
1,2-Dichloroethane	ug/L	1000	832	83	77-123	
2-Butanone (MEK)	ug/L	5000	3700	74	52-145	
Benzene	ug/L	1000	826	83	80-120	
Carbon tetrachloride	ug/L	1000	940	94	78-128	
Chlorobenzene	ug/L	1000	837	84	80-120	
Chloroform	ug/L	1000	845	85	79-120	
Tetrachloroethene	ug/L	1000	844	84	80-121	
Trichloroethene	ug/L	1000	850	85	80-120	
Vinyl chloride	ug/L	1000	991	99	59-120	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			98	80-120	

MATRIX SPIKE SAMPLE: 1469009

Parameter	Units	60180638001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	ND	1000	884	88	60-144	
1,2-Dichloroethane	ug/L	ND	1000	804	80	49-148	
2-Butanone (MEK)	ug/L	ND	5000	3570	71	36-145	
Benzene	ug/L	ND	1000	807	81	37-157	

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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH, AR-TCLP
Pace Project No.: 60180638

MATRIX SPIKE SAMPLE: 1469009

Parameter	Units	60180638001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Carbon tetrachloride	ug/L	ND	1000	730	73	68-142	
Chlorobenzene	ug/L	ND	1000	823	82	66-133	
Chloroform	ug/L	ND	1000	824	82	66-127	
Tetrachloroethene	ug/L	ND	1000	796	80	69-133	
Trichloroethene	ug/L	ND	1000	826	81	61-135	
Vinyl chloride	ug/L	ND	1000	928	93	44-128	
1,2-Dichloroethane-d4 (S)	%				93	80-120	
4-Bromofluorobenzene (S)	%				99	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: Whirlpool FORT SMITH, AR-TCLP
Pace Project No.: 60180638

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: Whirlpool FORT SMITH, AR-TCLP
Pace Project No.: 60180638

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60180638001	**RB27670RT A**	EPA 3010	MPRP/29476	EPA 6010	ICP/22131
60180638002	**RB37736TR A**	EPA 3010	MPRP/29476	EPA 6010	ICP/22131
60180638003	**RB37736TR B**	EPA 3010	MPRP/29476	EPA 6010	ICP/22131
60180638004	**RB37733RT A**	EPA 3010	MPRP/29476	EPA 6010	ICP/22131
60180638005	**RB37733RT B**	EPA 3010	MPRP/29476	EPA 6010	ICP/22131
60180638006	**RB27670RT B**	EPA 3010	MPRP/29476	EPA 6010	ICP/22131
60180638001	**RB27670RT A**	EPA 7470	MERP/8960	EPA 7470	MERC/8913
60180638002	**RB37736TR A**	EPA 7470	MERP/8960	EPA 7470	MERC/8913
60180638003	**RB37736TR B**	EPA 7470	MERP/8960	EPA 7470	MERC/8913
60180638004	**RB37733RT A**	EPA 7470	MERP/8960	EPA 7470	MERC/8913
60180638005	**RB37733RT B**	EPA 7470	MERP/8960	EPA 7470	MERC/8913
60180638006	**RB27670RT B**	EPA 7470	MERP/8960	EPA 7470	MERC/8913
60180638001	**RB27670RT A**	EPA 8260	MSV/65406		
60180638002	**RB37736TR A**	EPA 8260	MSV/65406		
60180638003	**RB37736TR B**	EPA 8260	MSV/65406		
60180638004	**RB37733RT A**	EPA 8260	MSV/65406		
60180638005	**RB37733RT B**	EPA 8260	MSV/65406		
60180638006	**RB27670RT B**	EPA 8260	MSV/65406		

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Sample Condition Upon Receipt

WO# : 60180638

60180638

Client Name: Enviro

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: 5.2

Temperature should be above freezing to 6°C

Date and initials of person examining contents: GW 10/17/14

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.
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: 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): _____		15.
Headspace in VOA vials (>6mm):	☐Yes ☐No ☑N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☑No ☐N/A	17. List State: MJW

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MD Date: 10/17/14

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Chain-of-Custody and 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:	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

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	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	TCLP RCRA METALS	TCLP VOCs	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 60160638
1	RB27670RT A	SL	G	10/16/14	1725	—	—		2	X								N	X	X		N	001
2	RB37736RT A	SL	G	10/16/14	1733	—	—		2	X								N	X	X		N	002
3	RB37736RTB	SL	G	10/16/14	1735	—	—		2	X								N	X	X		N	003
4	RB37733RTA	SL	G	10/16/14	1739	—	—		2	X								N	X	X		N	004
5	RB37733RTB	SL	G	10/16/14	1737	—	—		2	X								N	X	X		N	005
6	RB27670RTB	SL	G	10/16/14	1727	—	—		2	X								N	X	X		N	006
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

2 (WGFW)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Level IV data package required	Wendy Stonestreet	10/17/14		Gr White pace	10/17	1105	5.2	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Wendy Stonestreet

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY):

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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November 04, 2014

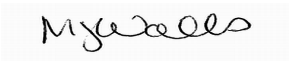
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: Ft. Smith AR TCLP
Pace Project No.: 60181468

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on October 30, 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: Ft. Smith AR TCLP
Pace Project No.: 60181468

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: Ft. Smith AR TCLP
Pace Project No.: 60181468

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60181468001	**VACBOX-WW-20141029**	Water	10/29/14 14:30	10/30/14 01:21

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SAMPLE ANALYTE COUNT

Project: Ft. Smith AR TCLP
Pace Project No.: 60181468

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60181468001	**VACBOX-WW-20141029**	EPA 6010	SMW	7
		EPA 7470	ZBM	1
		EPA 8270	JMT	18
		EPA 8260	JKL	13

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ANALYTICAL RESULTS

Project: Ft. Smith AR TCLP
Pace Project No.: 60181468

Sample: VACBOX-WW-20141029 **Lab ID: 60181468001** Collected: 10/29/14 14:30 Received: 10/30/14 01:21 Matrix: Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
6010 MET ICP, TCLP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Leachate Method/Date: EPA 1311; 10/30/14 00:00								
Arsenic	ND	mg/L	0.50	5	1	10/31/14 10:30	11/02/14 13:58	7440-38-2	
Barium	ND	mg/L	2.5	100	1	10/31/14 10:30	11/02/14 13:58	7440-39-3	
Cadmium	ND	mg/L	0.050	1	1	10/31/14 10:30	11/02/14 13:58	7440-43-9	
Chromium	ND	mg/L	0.10	5	1	10/31/14 10:30	11/02/14 13:58	7440-47-3	
Lead	ND	mg/L	0.50	5	1	10/31/14 10:30	11/02/14 13:58	7439-92-1	
Selenium	ND	mg/L	0.50	1	1	10/31/14 10:30	11/02/14 13:58	7782-49-2	
Silver	ND	mg/L	0.10	5	1	10/31/14 10:30	11/02/14 13:58	7440-22-4	
7470 Mercury, TCLP	Analytical Method: EPA 7470 Preparation Method: EPA 7470 Leachate Method/Date: EPA 1311; 10/30/14 00:00								
Mercury	ND	mg/L	0.0020	.2	1	10/31/14 11:30	10/31/14 17:02	7439-97-6	
8270 MSSV TCLP Sep Funnel	Analytical Method: EPA 8270 Preparation Method: EPA 3510 Leachate Method/Date: EPA 1311; 10/30/14 00:00								
1,4-Dichlorobenzene	ND	ug/L	100	7500	1	10/31/14 00:00	11/03/14 15:34	106-46-7	
2,4-Dinitrotoluene	ND	ug/L	100	130	1	10/31/14 00:00	11/03/14 15:34	121-14-2	
Hexachloro-1,3-butadiene	ND	ug/L	100	500	1	10/31/14 00:00	11/03/14 15:34	87-68-3	
Hexachlorobenzene	ND	ug/L	100	130	1	10/31/14 00:00	11/03/14 15:34	118-74-1	
Hexachloroethane	ND	ug/L	100	3000	1	10/31/14 00:00	11/03/14 15:34	67-72-1	
2-Methylphenol(o-Cresol)	ND	ug/L	100	200000	1	10/31/14 00:00	11/03/14 15:34	95-48-7	
3&4-Methylphenol(m&p Cresol)	ND	ug/L	200	200000	1	10/31/14 00:00	11/03/14 15:34		
Nitrobenzene	ND	ug/L	100	2000	1	10/31/14 00:00	11/03/14 15:34	98-95-3	
Pentachlorophenol	ND	ug/L	500	100000	1	10/31/14 00:00	11/03/14 15:34	87-86-5	
Pyridine	ND	ug/L	100	5000	1	10/31/14 00:00	11/03/14 15:34	110-86-1	
2,4,5-Trichlorophenol	ND	ug/L	500	400000	1	10/31/14 00:00	11/03/14 15:34	95-95-4	
2,4,6-Trichlorophenol	ND	ug/L	100	2000	1	10/31/14 00:00	11/03/14 15:34	88-06-2	
Surrogates									
Nitrobenzene-d5 (S)	83	%	44-120		1	10/31/14 00:00	11/03/14 15:34	4165-60-0	
2-Fluorobiphenyl (S)	88	%	49-120		1	10/31/14 00:00	11/03/14 15:34	321-60-8	
Terphenyl-d14 (S)	94	%	52-122		1	10/31/14 00:00	11/03/14 15:34	1718-51-0	
Phenol-d6 (S)	74	%	36-120		1	10/31/14 00:00	11/03/14 15:34	13127-88-3	
2-Fluorophenol (S)	76	%	37-120		1	10/31/14 00:00	11/03/14 15:34	367-12-4	
2,4,6-Tribromophenol (S)	90	%	36-128		1	10/31/14 00:00	11/03/14 15:34	118-79-6	
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/30/14 00:00								
Benzene	ND	ug/L	50.0	500	1		11/03/14 16:34	71-43-2	
2-Butanone (MEK)	ND	ug/L	1000	200000	1		11/03/14 16:34	78-93-3	
Carbon tetrachloride	ND	ug/L	50.0	500	1		11/03/14 16:34	56-23-5	
Chlorobenzene	ND	ug/L	50.0	100000	1		11/03/14 16:34	108-90-7	
Chloroform	ND	ug/L	200	6000	1		11/03/14 16:34	67-66-3	
1,2-Dichloroethane	ND	ug/L	50.0	500	1		11/03/14 16:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	50.0	700	1		11/03/14 16:34	75-35-4	
Tetrachloroethene	ND	ug/L	50.0	700	1		11/03/14 16:34	127-18-4	
Trichloroethene	**14200**	ug/L	1000	500	20		11/04/14 16:04	79-01-6	
Vinyl chloride	ND	ug/L	100	200	1		11/03/14 16:34	75-01-4	

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ANALYTICAL RESULTS

Project: Ft. Smith AR TCLP
Pace Project No.: 60181468

Sample: VACBOX-WW-20141029 **Lab ID: 60181468001** Collected: 10/29/14 14:30 Received: 10/30/14 01:21 Matrix: Water

Parameters	Results	Units	Report Limit	Reg. Limit	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV TCLP	Analytical Method: EPA 8260 Leachate Method/Date: EPA 1311; 10/30/14 00:00								
Surrogates									
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		11/03/14 16:34	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		11/03/14 16:34	2037-26-5	
4-Bromofluorobenzene (S)	100	%	80-120		1		11/03/14 16:34	460-00-4	

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QUALITY CONTROL DATA

Project: Ft. Smith AR TCLP
Pace Project No.: 60181468

QC Batch: MERP/8996
QC Batch Method: EPA 7470
Analysis Method: EPA 7470
Analysis Description: 7470 Mercury TCLP
Associated Lab Samples: 60181468001

METHOD BLANK: 1470908 Matrix: Water
Associated Lab Samples: 60181468001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Mercury	mg/L	ND	0.0020	10/31/14 16:58	

LABORATORY CONTROL SAMPLE: 1470909

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Mercury	mg/L	.005	0.0049	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1470910 1470911

Parameter	Units	60181363001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Mercury	mg/L	ND	.015	.015	0.018	0.019	122	124	75-125	1	20	

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QUALITY CONTROL DATA

Project: Ft. Smith AR TCLP
Pace Project No.: 60181468

QC Batch: MPRP/29600
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET TCLP
Associated Lab Samples: 60181468001

METHOD BLANK: 1470938 Matrix: Water
Associated Lab Samples: 60181468001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Arsenic	mg/L	ND	0.50	11/02/14 13:53	
Barium	mg/L	ND	2.5	11/02/14 13:53	
Cadmium	mg/L	ND	0.050	11/02/14 13:53	
Chromium	mg/L	ND	0.10	11/02/14 13:53	
Lead	mg/L	ND	0.50	11/02/14 13:53	
Selenium	mg/L	ND	0.50	11/02/14 13:53	
Silver	mg/L	ND	0.10	11/02/14 13:53	

LABORATORY CONTROL SAMPLE: 1470939

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Arsenic	mg/L	1	0.92	92	80-120	
Barium	mg/L	1	0.98	98	80-120	
Cadmium	mg/L	1	0.94	94	80-120	
Chromium	mg/L	1	0.95	95	80-120	
Lead	mg/L	1	0.97	97	80-120	
Selenium	mg/L	1	0.92	92	80-120	
Silver	mg/L	.5	0.47	95	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1470940 1470941

Parameter	Units	60181363001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Arsenic	mg/L	ND	10	10	9.4	9.4	94	94	75-125	0	20	
Barium	mg/L	ND	10	10	10.5	10.4	96	95	75-125	1	20	
Cadmium	mg/L	ND	10	10	9.4	9.4	94	94	75-125	0	20	
Chromium	mg/L	ND	10	10	9.1	9.1	91	91	75-125	1	20	
Lead	mg/L	ND	10	10	9.2	9.2	92	92	75-125	0	20	
Selenium	mg/L	ND	10	10	9.5	9.4	95	94	75-125	1	20	
Silver	mg/L	ND	5	5	4.7	4.6	93	93	75-125	0	20	

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QUALITY CONTROL DATA

Project: Ft. Smith AR TCLP
Pace Project No.: 60181468

QC Batch: MSV/65485
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV TCLP
Associated Lab Samples: 60181468001

METHOD BLANK: 1471967
Matrix: Water
Associated Lab Samples: 60181468001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1-Dichloroethene	ug/L	ND	50.0	11/03/14 16:19	
1,2-Dichloroethane	ug/L	ND	50.0	11/03/14 16:19	
2-Butanone (MEK)	ug/L	ND	1000	11/03/14 16:19	
Benzene	ug/L	ND	50.0	11/03/14 16:19	
Carbon tetrachloride	ug/L	ND	50.0	11/03/14 16:19	
Chlorobenzene	ug/L	ND	50.0	11/03/14 16:19	
Chloroform	ug/L	ND	200	11/03/14 16:19	
Tetrachloroethene	ug/L	ND	50.0	11/03/14 16:19	
Vinyl chloride	ug/L	ND	100	11/03/14 16:19	
1,2-Dichloroethane-d4 (S)	%	104	80-120	11/03/14 16:19	
4-Bromofluorobenzene (S)	%	99	80-120	11/03/14 16:19	
Toluene-d8 (S)	%	99	80-120	11/03/14 16:19	

LABORATORY CONTROL SAMPLE: 1471968

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	1000	1020	102	78-126	
1,2-Dichloroethane	ug/L	1000	1020	102	77-123	
2-Butanone (MEK)	ug/L	5000	4770	95	52-145	
Benzene	ug/L	1000	976	98	80-120	
Carbon tetrachloride	ug/L	1000	1100	110	78-128	
Chlorobenzene	ug/L	1000	1070	107	80-120	
Chloroform	ug/L	1000	1050	105	79-120	
Tetrachloroethene	ug/L	1000	1060	106	80-121	
Vinyl chloride	ug/L	1000	1120	112	59-120	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			101	80-120	

MATRIX SPIKE SAMPLE: 1471969

Parameter	Units	60181468001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,1-Dichloroethene	ug/L	ND	1000	1050	104	60-144	
1,2-Dichloroethane	ug/L	ND	1000	993	99	49-148	
2-Butanone (MEK)	ug/L	ND	5000	4720	94	36-145	
Benzene	ug/L	ND	1000	994	99	37-157	
Carbon tetrachloride	ug/L	ND	1000	1170	117	68-142	
Chlorobenzene	ug/L	ND	1000	1130	113	66-133	

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QUALITY CONTROL DATA

Project: Ft. Smith AR TCLP
Pace Project No.: 60181468

MATRIX SPIKE SAMPLE: 1471969

Parameter	Units	60181468001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloroform	ug/L	ND	1000	1050	105	66-127	
Tetrachloroethene	ug/L	ND	1000	1130	112	69-133	
Vinyl chloride	ug/L	ND	1000	1210	120	44-128	
1,2-Dichloroethane-d4 (S)	%				91	80-120	
4-Bromofluorobenzene (S)	%				100	80-120	
Toluene-d8 (S)	%				99	80-120	

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QUALITY CONTROL DATA

Project: Ft. Smith AR TCLP
Pace Project No.: 60181468

QC Batch: MSV/65517
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV TCLP
Associated Lab Samples: 60181468001

METHOD BLANK: 1472608
Matrix: Water
Associated Lab Samples: 60181468001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	ug/L	ND	50.0	11/04/14 15:49	
1,2-Dichloroethane-d4 (S)	%	111	80-120	11/04/14 15:49	
4-Bromofluorobenzene (S)	%	99	80-120	11/04/14 15:49	
Toluene-d8 (S)	%	100	80-120	11/04/14 15:49	

LABORATORY CONTROL SAMPLE: 1472609

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	1000	925	92	80-120	
1,2-Dichloroethane-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			100	80-120	

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: Ft. Smith AR TCLP
Pace Project No.: 60181468

QC Batch: OEXT/46926
QC Batch Method: EPA 3510
Analysis Method: EPA 8270
Analysis Description: 8270 TCLP MSSV
Associated Lab Samples: 60181468001

METHOD BLANK: 1470893 Matrix: Water
Associated Lab Samples: 60181468001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	100	11/03/14 14:52	
2,4,5-Trichlorophenol	ug/L	ND	500	11/03/14 14:52	
2,4,6-Trichlorophenol	ug/L	ND	100	11/03/14 14:52	
2,4-Dinitrotoluene	ug/L	ND	100	11/03/14 14:52	
2-Methylphenol(o-Cresol)	ug/L	ND	100	11/03/14 14:52	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	200	11/03/14 14:52	
Hexachloro-1,3-butadiene	ug/L	ND	100	11/03/14 14:52	
Hexachlorobenzene	ug/L	ND	100	11/03/14 14:52	
Hexachloroethane	ug/L	ND	100	11/03/14 14:52	
Nitrobenzene	ug/L	ND	100	11/03/14 14:52	
Pentachlorophenol	ug/L	ND	500	11/03/14 14:52	
Pyridine	ug/L	ND	100	11/03/14 14:52	
2,4,6-Tribromophenol (S)	%	85	36-128	11/03/14 14:52	
2-Fluorobiphenyl (S)	%	81	49-120	11/03/14 14:52	
2-Fluorophenol (S)	%	67	37-120	11/03/14 14:52	
Nitrobenzene-d5 (S)	%	79	44-120	11/03/14 14:52	
Phenol-d6 (S)	%	66	36-120	11/03/14 14:52	
Terphenyl-d14 (S)	%	86	52-122	11/03/14 14:52	

METHOD BLANK: 1470895 Matrix: Water
Associated Lab Samples: 60181468001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	100	11/03/14 15:55	
2,4,5-Trichlorophenol	ug/L	ND	500	11/03/14 15:55	
2,4,6-Trichlorophenol	ug/L	ND	100	11/03/14 15:55	
2,4-Dinitrotoluene	ug/L	ND	100	11/03/14 15:55	
2-Methylphenol(o-Cresol)	ug/L	ND	100	11/03/14 15:55	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	200	11/03/14 15:55	
Hexachloro-1,3-butadiene	ug/L	ND	100	11/03/14 15:55	
Hexachlorobenzene	ug/L	ND	100	11/03/14 15:55	
Hexachloroethane	ug/L	ND	100	11/03/14 15:55	
Nitrobenzene	ug/L	ND	100	11/03/14 15:55	
Pentachlorophenol	ug/L	ND	500	11/03/14 15:55	
Pyridine	ug/L	ND	100	11/03/14 15:55	
2,4,6-Tribromophenol (S)	%	84	36-128	11/03/14 15:55	
2-Fluorobiphenyl (S)	%	86	49-120	11/03/14 15:55	
2-Fluorophenol (S)	%	75	37-120	11/03/14 15:55	
Nitrobenzene-d5 (S)	%	87	44-120	11/03/14 15:55	

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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Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: Ft. Smith AR TCLP
Pace Project No.: 60181468

METHOD BLANK: 1470895 Matrix: Water
Associated Lab Samples: 60181468001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phenol-d6 (S)	%	72	36-120	11/03/14 15:55	
Terphenyl-d14 (S)	%	92	52-122	11/03/14 15:55	

LABORATORY CONTROL SAMPLE: 1470894

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	500	372	74	47-120	
2,4,5-Trichlorophenol	ug/L	500	460J	92	51-124	
2,4,6-Trichlorophenol	ug/L	500	432	86	46-120	
2,4-Dinitrotoluene	ug/L	500	365	73	38-120	
2-Methylphenol(o-Cresol)	ug/L	500	366	73	46-120	
3&4-Methylphenol(m&p Cresol)	ug/L	1000	748	75	41-120	
Hexachloro-1,3-butadiene	ug/L	500	380	76	49-120	
Hexachlorobenzene	ug/L	500	398	80	50-120	
Hexachloroethane	ug/L	500	345	69	38-120	
Nitrobenzene	ug/L	500	369	74	49-120	
Pentachlorophenol	ug/L	500	424J	85	35-125	
Pyridine	ug/L	500	114	23	10-120	
2,4,6-Tribromophenol (S)	%			88	36-128	
2-Fluorobiphenyl (S)	%			85	49-120	
2-Fluorophenol (S)	%			68	37-120	
Nitrobenzene-d5 (S)	%			78	44-120	
Phenol-d6 (S)	%			67	36-120	
Terphenyl-d14 (S)	%			89	52-122	

MATRIX SPIKE SAMPLE: 1470896

Parameter	Units	60181363001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
1,4-Dichlorobenzene	ug/L	ND	500	443	89	48-120	
2,4,5-Trichlorophenol	ug/L	ND	500	540	108	57-120	
2,4,6-Trichlorophenol	ug/L	ND	500	498	100	48-120	
2,4-Dinitrotoluene	ug/L	ND	500	411	82	38-120	
2-Methylphenol(o-Cresol)	ug/L	ND	500	459	92	48-120	
3&4-Methylphenol(m&p Cresol)	ug/L	ND	1000	888	89	47-120	
Hexachloro-1,3-butadiene	ug/L	ND	500	465	93	49-120	
Hexachlorobenzene	ug/L	ND	500	465	93	53-120	
Hexachloroethane	ug/L	ND	500	407	81	38-120	
Nitrobenzene	ug/L	ND	500	452	90	51-120	
Pentachlorophenol	ug/L	ND	500	481J	96	34-131	
Pyridine	ug/L	ND	500	231	46	10-120	
2,4,6-Tribromophenol (S)	%				85	36-128	
2-Fluorobiphenyl (S)	%				86	49-120	

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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QUALITY CONTROL DATA

Project: Ft. Smith AR TCLP
Pace Project No.: 60181468

MATRIX SPIKE SAMPLE: 1470896

Parameter	Units	60181363001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
2-Fluorophenol (S)	%				71	37-120	
Nitrobenzene-d5 (S)	%				85	44-120	
Phenol-d6 (S)	%				71	36-120	
Terphenyl-d14 (S)	%				87	52-122	

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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Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: Ft. Smith AR TCLP
Pace Project No.: 60181468

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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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Ft. Smith AR TCLP
Pace Project No.: 60181468

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60181468001	**VACBOX-WW-20141029**	EPA 3010	MPRP/29600	EPA 6010	ICP/22204
60181468001	**VACBOX-WW-20141029**	EPA 7470	MERP/8996	EPA 7470	MERC/8949
60181468001	**VACBOX-WW-20141029**	EPA 3510	OEXT/46926	EPA 8270	MSSV/15105
60181468001	**VACBOX-WW-20141029**	EPA 8260	MSV/65485		
60181468001	**VACBOX-WW-20141029**	EPA 8260	MSV/65517		

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Pace Analytical
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Sample Condition Upon Receipt

WO#: 60181468

60181468

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: Fed Ex ☐ UPS ☐ USPS ☐ Client ☐ Commercial ☒ Pace ☐ Other ☐ N/A

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: 1.0

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JS 10/ 930

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. 1 day TAT
Sufficient volume:	☒Yes ☐No ☐N/A	8.
Correct containers used:	☐Yes ☒No ☐N/A	9. 1L ambers received for VOC + metals. Wrong containers!
Pace containers used:	☐Yes ☒No ☐N/A	
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: 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: MK / Lot # of added preservative:
Trip Blank present: Pace Trip Blank lot # (if purchased): Unused	☒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:

Test are all "TCLP" per Wendy Stevestreet - MW 10/30/14

Project Manager Review: MW Date: 10/30/14

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:		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	Project Number:	34DP2360	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

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 (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	Analysis Test Y/N	8260 client specific list	METALS TCLP	VOC TCLP	SVOC TCLP*	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	~~VACBOX-WW-10~~2HR			~~10/~~																				
2	VACBOX-WW-20141029			~~10/~~		10/29/14	1430		2	X										X	X	X		21(Am) 001
3																								
4																								
5																								
6																								
7																								
8																								
9																								
10																								
11																								
12																								

L601814168

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	[signature] / ENVIRON	10/29/14	1745	[signature]	10/29/14	121	1.0	Y	Y	Y
* TCLP per Wendy Stonestreet MW 10/30/14										

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Michael Eddings

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10/29/14

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.

Laboratory Analytical Report

ENVIRONMENTAL TESTING, INC.
4619 N. Santa Fe
Oklahoma City, OK 73118
405.488.2400 Phone
405.488.2404 Fax
www.etilab.com

15 October 2014

Mr. Don Nist

Tec-An Inc.
2517 S. Purdue Ave.
Oklahoma City, OK 73128

WO: E4J0103
RE: Whirlpool Plt. - Ft. Smith, AR

Enclosed are the results of analyses for samples received by the laboratory on 10/07/14 14:50. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Russell Britten

President

ENVIRONMENTAL TESTING, INC.

4619 N. Santa Fe
Oklahoma City, OK 73118
405.488.2400 Phone
405.488.2404 Fax
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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

1A & 1B Rolloff #1 Hole #2

E4J0103-01 (Solid) - Sampled: 10/02/14 00:00

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction by EPA 1311									
TCLP Extraction	Completed		N/A		ECJ0200	LSB	10/08/14 18:50	EPA 1311	
TCLP Metals by 6000/7000 Series Methods									
Silver	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 15:34	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 15:34	EPA 6010C	
Barium	<5.00	5.00	mg/L	1	ECJ0199	LSB	10/14/14 15:34	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 15:34	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 15:34	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0199	LSB	10/14/14 15:34	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0199	LSB	10/14/14 15:34	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0237	LSB	10/14/14 16:42	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0199	LSB	10/13/14 08:50	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0237	LSB	10/14/14 09:10	EPA 7470A	
TCLP (Total) Volatile Organic Compounds by EPA Method 8260									
Vinyl chloride	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 03:40	EPA 8260B	
1,1-Dichloroethene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 03:40	EPA 8260B	
Chloroform	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 03:40	EPA 8260B	
Carbon tetrachloride	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 03:40	EPA 8260B	
2-Butanone (MEK)	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 03:40	EPA 8260B	
Benzene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 03:40	EPA 8260B	
1,2-Dichloroethane	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 03:40	EPA 8260B	
Trichloroethene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 03:40	EPA 8260B	
Tetrachloroethene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 03:40	EPA 8260B	
Chlorobenzene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 03:40	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*105 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 03:40*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*103 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 03:40*	*EPA 8260B*	
Surrogate: Toluene-d8		*98 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 03:40*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*113 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 03:40*	*EPA 8260B*	

Environmental Testing, Inc.



Russell Britten, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document and meet all laboratory accreditation requirements unless noted otherwise. This analytical report must be reproduced in its entirety.

ENVIRONMENTAL TESTING, INC.

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

2A & 2B Rolloff #2 Hole #3

E4J0103-02 (Solid) - Sampled: 10/02/14 00:00

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction by EPA 1311									
TCLP Extraction	Completed		N/A		ECJ0200	LSB	10/08/14 18:50	EPA 1311	
TCLP Metals by 6000/7000 Series Methods									
Silver	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:20	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:20	EPA 6010C	
Barium	<5.00	5.00	mg/L	1	ECJ0199	LSB	10/14/14 16:20	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:20	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:20	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0199	LSB	10/14/14 16:20	EPA 6010C	
Selenium	**0.334**	0.200	mg/L	1	ECJ0199	LSB	10/14/14 16:20	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0237	LSB	10/14/14 16:48	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0199	LSB	10/13/14 08:50	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0237	LSB	10/14/14 09:10	EPA 7470A	
TCLP (Total) Volatile Organic Compounds by EPA Method 8260									
Vinyl chloride	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:15	EPA 8260B	
1,1-Dichloroethene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:15	EPA 8260B	
Chloroform	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:15	EPA 8260B	
Carbon tetrachloride	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:15	EPA 8260B	
2-Butanone (MEK)	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:15	EPA 8260B	
Benzene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:15	EPA 8260B	
1,2-Dichloroethane	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:15	EPA 8260B	
Trichloroethene	**0.269**	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:15	EPA 8260B	
Tetrachloroethene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:15	EPA 8260B	
Chlorobenzene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:15	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*118 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 04:15*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*110 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 04:15*	*EPA 8260B*	
Surrogate: Toluene-d8		*101 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 04:15*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*112 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 04:15*	*EPA 8260B*	

Environmental Testing, Inc.



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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

3A & 3B Rolloff #3 Hole #4

E4J0103-03 (Solid) - Sampled: 10/03/14 00:00

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction by EPA 1311									
TCLP Extraction	Completed		N/A		ECJ0200	LSB	10/08/14 18:50	EPA 1311	
TCLP Metals by 6000/7000 Series Methods									
Silver	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:23	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:23	EPA 6010C	
Barium	<5.00	5.00	mg/L	1	ECJ0199	LSB	10/14/14 16:23	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:23	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:23	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0199	LSB	10/14/14 16:23	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0199	LSB	10/14/14 16:23	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0237	LSB	10/14/14 16:50	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0199	LSB	10/13/14 08:50	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0237	LSB	10/14/14 09:10	EPA 7470A	
TCLP (Total) Volatile Organic Compounds by EPA Method 8260									
Vinyl chloride	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:51	EPA 8260B	
1,1-Dichloroethene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:51	EPA 8260B	
Chloroform	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:51	EPA 8260B	
Carbon tetrachloride	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:51	EPA 8260B	
2-Butanone (MEK)	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:51	EPA 8260B	
Benzene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:51	EPA 8260B	
1,2-Dichloroethane	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:51	EPA 8260B	
Trichloroethene	**0.165**	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:51	EPA 8260B	
Tetrachloroethene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:51	EPA 8260B	
Chlorobenzene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 04:51	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 04:51*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*105 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 04:51*	*EPA 8260B*	
Surrogate: Toluene-d8		*102 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 04:51*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*112 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 04:51*	*EPA 8260B*	

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

4A & 4B Rolloff #4 Hole #1

E4J0103-04 (Solid) - Sampled: 10/03/14 00:00

Environmental Testing, Inc.

TCLP Extraction by EPA 1311

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction	Completed		N/A		ECJ0200	LSB	10/08/14 18:50	EPA 1311	

TCLP Metals by 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
Silver	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:26	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:26	EPA 6010C	
Barium	<5.00	5.00	mg/L	1	ECJ0199	LSB	10/14/14 16:26	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:26	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:26	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0199	LSB	10/14/14 16:26	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0199	LSB	10/14/14 16:26	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0237	LSB	10/14/14 16:52	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0199	LSB	10/13/14 08:50	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0237	LSB	10/14/14 09:10	EPA 7470A	

TCLP (Total) Volatile Organic Compounds by EPA Method 8260

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
Vinyl chloride	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 05:27	EPA 8260B	
1,1-Dichloroethene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 05:27	EPA 8260B	
Chloroform	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 05:27	EPA 8260B	
Carbon tetrachloride	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 05:27	EPA 8260B	
2-Butanone (MEK)	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 05:27	EPA 8260B	
Benzene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 05:27	EPA 8260B	
1,2-Dichloroethane	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 05:27	EPA 8260B	
Trichloroethene	**0.589**	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 05:27	EPA 8260B	
Tetrachloroethene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 05:27	EPA 8260B	
Chlorobenzene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 05:27	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*119 %*		*70-130*	*ECJ0193*	MDS	*10/10/14 05:27*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*109 %*		*70-130*	*ECJ0193*	MDS	*10/10/14 05:27*	*EPA 8260B*	
Surrogate: Toluene-d8		*104 %*		*70-130*	*ECJ0193*	MDS	*10/10/14 05:27*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*111 %*		*70-130*	*ECJ0193*	MDS	*10/10/14 05:27*	*EPA 8260B*	

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

5A & 5B Rolloff #5 Hole #5

E4J0103-05 (Solid) - Sampled: 10/03/14 00:00

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction by EPA 1311									
TCLP Extraction	Completed		N/A		ECJ0200	LSB	10/08/14 18:50	EPA 1311	
TCLP Metals by 6000/7000 Series Methods									
Silver	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:29	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:29	EPA 6010C	
Barium	<5.00	5.00	mg/L	1	ECJ0199	LSB	10/14/14 16:29	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:29	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:29	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0199	LSB	10/14/14 16:29	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0199	LSB	10/14/14 16:29	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0237	LSB	10/14/14 16:54	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0199	LSB	10/13/14 08:50	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0237	LSB	10/14/14 09:10	EPA 7470A	
TCLP (Total) Volatile Organic Compounds by EPA Method 8260									
Vinyl chloride	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:03	EPA 8260B	
1,1-Dichloroethene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:03	EPA 8260B	
Chloroform	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:03	EPA 8260B	
Carbon tetrachloride	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:03	EPA 8260B	
2-Butanone (MEK)	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:03	EPA 8260B	
Benzene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:03	EPA 8260B	
1,2-Dichloroethane	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:03	EPA 8260B	
Trichloroethene	**7.51**	0.500	mg/Kg	20	ECJ0193	MDS	10/10/14 06:03	EPA 8260B	
Tetrachloroethene	**0.128**	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:03	EPA 8260B	
Chlorobenzene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:03	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*117 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 06:03*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*108 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 06:03*	*EPA 8260B*	
Surrogate: Toluene-d8		*98 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 06:03*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*114 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 06:03*	*EPA 8260B*	

Environmental Testing, Inc.



Russell Britten, President

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

6A & 6B Rolloff #6 Hole #6

E4J0103-06 (Solid) - Sampled: 10/03/14 00:00

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction by EPA 1311									
TCLP Extraction	Completed		N/A		ECJ0200	LSB	10/08/14 18:50	EPA 1311	
TCLP Metals by 6000/7000 Series Methods									
Silver	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:32	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:32	EPA 6010C	
Barium	<5.00	5.00	mg/L	1	ECJ0199	LSB	10/14/14 16:32	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:32	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:32	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0199	LSB	10/14/14 16:32	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0199	LSB	10/14/14 16:32	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0237	LSB	10/14/14 16:56	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0199	LSB	10/13/14 08:50	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0237	LSB	10/14/14 09:10	EPA 7470A	
TCLP (Total) Volatile Organic Compounds by EPA Method 8260									
Vinyl chloride	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:39	EPA 8260B	
1,1-Dichloroethene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:39	EPA 8260B	
Chloroform	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:39	EPA 8260B	
Carbon tetrachloride	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:39	EPA 8260B	
2-Butanone (MEK)	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:39	EPA 8260B	
Benzene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:39	EPA 8260B	
1,2-Dichloroethane	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:39	EPA 8260B	
Trichloroethene	**1.07**	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:39	EPA 8260B	
Tetrachloroethene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:39	EPA 8260B	
Chlorobenzene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 06:39	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*103 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 06:39*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*102 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 06:39*	*EPA 8260B*	
Surrogate: Toluene-d8		*101 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 06:39*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*110 %*	*70-130*		*ECJ0193*	MDS	*10/10/14 06:39*	*EPA 8260B*	

Environmental Testing, Inc.



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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

7A & 7B Rolloff #7 Hole #7&8

E4J0103-07 (Solid) - Sampled: 10/03/14 00:00

Environmental Testing, Inc.

TCLP Extraction by EPA 1311

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction	Completed		N/A		ECJ0200	LSB	10/08/14 18:50	EPA 1311	
TCLP ZHE Extraction	Completed		N/A		ECJ0239	MDS	10/14/14 15:17	EPA 1311	

TCLP Metals by 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
Silver	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:35	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:35	EPA 6010C	
Barium	<5.00	5.00	mg/L	1	ECJ0199	LSB	10/14/14 16:35	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:35	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:35	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0199	LSB	10/14/14 16:35	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0199	LSB	10/14/14 16:35	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0237	LSB	10/14/14 16:58	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0199	LSB	10/13/14 08:50	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0237	LSB	10/14/14 09:10	EPA 7470A	

TCLP Volatile Organic Compounds by EPA Method 8260

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
Vinyl chloride	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:15	EPA 8260B	
1,1-Dichloroethene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:15	EPA 8260B	
Chloroform	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:15	EPA 8260B	
Carbon tetrachloride	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:15	EPA 8260B	
2-Butanone (MEK)	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:15	EPA 8260B	
Benzene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:15	EPA 8260B	
1,2-Dichloroethane	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:15	EPA 8260B	
Trichloroethene	**2.25**	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:15	EPA 8260B	
Tetrachloroethene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:15	EPA 8260B	
Chlorobenzene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:15	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*100 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 14:15*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*100 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 14:15*	*EPA 8260B*	
Surrogate: Toluene-d8		*100 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 14:15*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*106 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 14:15*	*EPA 8260B*	

Environmental Testing, Inc.



Russell Britten, President

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

8A & 8B Rolloff #8 Hole #8

E4J0103-08 (Solid) - Sampled: 10/03/14 00:00

Environmental Testing, Inc.

TCLP Extraction by EPA 1311

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction	Completed		N/A		ECJ0200	LSB	10/08/14 18:50	EPA 1311	
TCLP ZHE Extraction	Completed		N/A		ECJ0239	MDS	10/14/14 15:17	EPA 1311	

TCLP Metals by 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
Silver	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:50	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:50	EPA 6010C	
Barium	<5.00	5.00	mg/L	1	ECJ0199	LSB	10/14/14 16:50	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:50	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:50	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0199	LSB	10/14/14 16:50	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0199	LSB	10/14/14 16:50	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0237	LSB	10/14/14 17:00	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0199	LSB	10/13/14 08:50	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0237	LSB	10/14/14 09:10	EPA 7470A	

TCLP Volatile Organic Compounds by EPA Method 8260

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
Vinyl chloride	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:51	EPA 8260B	
1,1-Dichloroethene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:51	EPA 8260B	
Chloroform	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:51	EPA 8260B	
Carbon tetrachloride	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:51	EPA 8260B	
2-Butanone (MEK)	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:51	EPA 8260B	
Benzene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:51	EPA 8260B	
1,2-Dichloroethane	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:51	EPA 8260B	
Trichloroethene	**9.99**	0.500	mg/L	100	ECJ0239	MDS	10/14/14 14:51	EPA 8260B	
Tetrachloroethene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:51	EPA 8260B	
Chlorobenzene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 14:51	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*101 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 14:51*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*104 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 14:51*	*EPA 8260B*	
Surrogate: Toluene-d8		*100 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 14:51*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*108 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 14:51*	*EPA 8260B*	

Environmental Testing, Inc.



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4619 N. Santa Fe
Oklahoma City, OK 73118
405.488.2400 Phone
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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

9A & 9B Rolloff #9 Hole #9

E4J0103-09 (Solid) - Sampled: 10/04/14 00:00

Environmental Testing, Inc.

TCLP Extraction by EPA 1311

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction	Completed		N/A		ECJ0200	LSB	10/08/14 18:50	EPA 1311	

TCLP Metals by 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
Silver	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:53	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:53	EPA 6010C	
Barium	<5.00	5.00	mg/L	1	ECJ0199	LSB	10/14/14 16:53	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:53	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:53	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0199	LSB	10/14/14 16:53	EPA 6010C	
Selenium	**0.295**	0.200	mg/L	1	ECJ0199	LSB	10/14/14 16:53	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0237	LSB	10/14/14 17:02	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0199	LSB	10/13/14 08:50	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0237	LSB	10/14/14 09:10	EPA 7470A	

TCLP (Total) Volatile Organic Compounds by EPA Method 8260

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
Vinyl chloride	**0.609**	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 08:26	EPA 8260B	
1,1-Dichloroethene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 08:26	EPA 8260B	
Chloroform	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 08:26	EPA 8260B	
Carbon tetrachloride	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 08:26	EPA 8260B	
2-Butanone (MEK)	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 08:26	EPA 8260B	
Benzene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 08:26	EPA 8260B	
1,2-Dichloroethane	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 08:26	EPA 8260B	
Trichloroethene	**4.24**	0.500	mg/Kg	20	ECJ0193	MDS	10/10/14 08:26	EPA 8260B	
Tetrachloroethene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 08:26	EPA 8260B	
Chlorobenzene	<0.125	0.125	mg/Kg	5	ECJ0193	MDS	10/10/14 08:26	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*115 %*		*70-130*	*ECJ0193*	MDS	*10/10/14 08:26*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*105 %*		*70-130*	*ECJ0193*	MDS	*10/10/14 08:26*	*EPA 8260B*	
Surrogate: Toluene-d8		*100 %*		*70-130*	*ECJ0193*	MDS	*10/10/14 08:26*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*109 %*		*70-130*	*ECJ0193*	MDS	*10/10/14 08:26*	*EPA 8260B*	

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

10A & 10B Rolloff #10 Hole #10

E4J0103-10 (Solid) - Sampled: 10/04/14 00:00

Environmental Testing, Inc.

TCLP Extraction by EPA 1311

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction	Completed		N/A		ECJ0200	LSB	10/08/14 18:50	EPA 1311	

TCLP Metals by 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
Silver	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:56	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:56	EPA 6010C	
Barium	<5.00	5.00	mg/L	1	ECJ0199	LSB	10/14/14 16:56	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:56	EPA 6010C	
Chromium	**0.128**	0.100	mg/L	1	ECJ0199	LSB	10/14/14 16:56	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0199	LSB	10/14/14 16:56	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0199	LSB	10/14/14 16:56	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0237	LSB	10/14/14 17:04	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0199	LSB	10/13/14 08:50	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0237	LSB	10/14/14 09:10	EPA 7470A	

TCLP (Total) Volatile Organic Compounds by EPA Method 8260

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
Vinyl chloride	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 21:59	EPA 8260B	
1,1-Dichloroethene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 21:59	EPA 8260B	
Chloroform	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 21:59	EPA 8260B	
Carbon tetrachloride	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 21:59	EPA 8260B	
2-Butanone (MEK)	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 21:59	EPA 8260B	
Benzene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 21:59	EPA 8260B	
1,2-Dichloroethane	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 21:59	EPA 8260B	
Trichloroethene	**0.215**	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 21:59	EPA 8260B	
Tetrachloroethene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 21:59	EPA 8260B	
Chlorobenzene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 21:59	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*89 %*	*70-130*		*ECJ0228*	MDS	*10/10/14 21:59*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*97 %*	*70-130*		*ECJ0228*	MDS	*10/10/14 21:59*	*EPA 8260B*	
Surrogate: Toluene-d8		*100 %*	*70-130*		*ECJ0228*	MDS	*10/10/14 21:59*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*108 %*	*70-130*		*ECJ0228*	MDS	*10/10/14 21:59*	*EPA 8260B*	

Environmental Testing, Inc.



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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

11A & 11B Rolloff #11 Hole #11

E4J0103-11 (Solid) - Sampled: 10/04/14 00:00

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction by EPA 1311									
TCLP Extraction	Completed		N/A		ECJ0200	LSB	10/08/14 18:50	EPA 1311	
TCLP Metals by 6000/7000 Series Methods									
Silver	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 17:03	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 17:03	EPA 6010C	
Barium	<5.00	5.00	mg/L	1	ECJ0199	LSB	10/14/14 17:03	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 17:03	EPA 6010C	
Chromium	**0.119**	0.100	mg/L	1	ECJ0199	LSB	10/14/14 17:03	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0199	LSB	10/14/14 17:03	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0199	LSB	10/14/14 17:03	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0237	LSB	10/14/14 17:10	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0199	LSB	10/13/14 08:50	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0237	LSB	10/14/14 09:10	EPA 7470A	
TCLP (Total) Volatile Organic Compounds by EPA Method 8260									
Vinyl chloride	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 22:36	EPA 8260B	
1,1-Dichloroethene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 22:36	EPA 8260B	
Chloroform	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 22:36	EPA 8260B	
Carbon tetrachloride	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 22:36	EPA 8260B	
2-Butanone (MEK)	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 22:36	EPA 8260B	
Benzene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 22:36	EPA 8260B	
1,2-Dichloroethane	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 22:36	EPA 8260B	
Trichloroethene	**0.166**	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 22:36	EPA 8260B	
Tetrachloroethene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 22:36	EPA 8260B	
Chlorobenzene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 22:36	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*93 %*	*70-130*		*ECJ0228*	MDS	*10/10/14 22:36*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*93 %*	*70-130*		*ECJ0228*	MDS	*10/10/14 22:36*	*EPA 8260B*	
Surrogate: Toluene-d8		*99 %*	*70-130*		*ECJ0228*	MDS	*10/10/14 22:36*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*104 %*	*70-130*		*ECJ0228*	MDS	*10/10/14 22:36*	*EPA 8260B*	

Environmental Testing, Inc.



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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

12A & 12B Rolloff #12 Hole #11&12

E4J0103-12 (Solid) - Sampled: 10/04/14 00:00

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction by EPA 1311									
TCLP Extraction	Completed		N/A		ECJ0200	LSB	10/08/14 18:50	EPA 1311	
TCLP Metals by 6000/7000 Series Methods									
Silver	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 17:06	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 17:06	EPA 6010C	
Barium	<5.00	5.00	mg/L	1	ECJ0199	LSB	10/14/14 17:06	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 17:06	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 17:06	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0199	LSB	10/14/14 17:06	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0199	LSB	10/14/14 17:06	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0237	LSB	10/14/14 17:12	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0199	LSB	10/13/14 08:50	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0237	LSB	10/14/14 09:10	EPA 7470A	
TCLP (Total) Volatile Organic Compounds by EPA Method 8260									
Vinyl chloride	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:13	EPA 8260B	
1,1-Dichloroethene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:13	EPA 8260B	
Chloroform	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:13	EPA 8260B	
Carbon tetrachloride	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:13	EPA 8260B	
2-Butanone (MEK)	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:13	EPA 8260B	
Benzene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:13	EPA 8260B	
1,2-Dichloroethane	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:13	EPA 8260B	
Trichloroethene	**2.82**	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:13	EPA 8260B	
Tetrachloroethene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:13	EPA 8260B	
Chlorobenzene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:13	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*101 %*	*70-130*		*ECJ0228*	MDS	*10/10/14 23:13*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*101 %*	*70-130*		*ECJ0228*	MDS	*10/10/14 23:13*	*EPA 8260B*	
Surrogate: Toluene-d8		*99 %*	*70-130*		*ECJ0228*	MDS	*10/10/14 23:13*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*111 %*	*70-130*		*ECJ0228*	MDS	*10/10/14 23:13*	*EPA 8260B*	

Environmental Testing, Inc.



Russell Britten, President

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

13A Rolloff #13 Hole #12

E4J0103-13 (Solid) - Sampled: 10/04/14 00:00

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction by EPA 1311									
TCLP Extraction	Completed		N/A		ECJ0200	LSB	10/08/14 18:50	EPA 1311	
TCLP Metals by 6000/7000 Series Methods									
Silver	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 17:09	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 17:09	EPA 6010C	
Barium	<5.00	5.00	mg/L	1	ECJ0199	LSB	10/14/14 17:09	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 17:09	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0199	LSB	10/14/14 17:09	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0199	LSB	10/14/14 17:09	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0199	LSB	10/14/14 17:09	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0237	LSB	10/14/14 17:14	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0199	LSB	10/13/14 08:50	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0237	LSB	10/14/14 09:10	EPA 7470A	
TCLP (Total) Volatile Organic Compounds by EPA Method 8260									
Vinyl chloride	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:49	EPA 8260B	
1,1-Dichloroethene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:49	EPA 8260B	
Chloroform	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:49	EPA 8260B	
Carbon tetrachloride	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:49	EPA 8260B	
2-Butanone (MEK)	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:49	EPA 8260B	
Benzene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:49	EPA 8260B	
1,2-Dichloroethane	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:49	EPA 8260B	
Trichloroethene	**2.76**	0.500	mg/Kg	20	ECJ0228	MDS	10/10/14 23:49	EPA 8260B	
Tetrachloroethene	**0.159**	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:49	EPA 8260B	
Chlorobenzene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/10/14 23:49	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*104 %*	*70-130*		*ECJ0228*	MDS	*10/10/14 23:49*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*102 %*	*70-130*		*ECJ0228*	MDS	*10/10/14 23:49*	*EPA 8260B*	
Surrogate: Toluene-d8		*102 %*	*70-130*		*ECJ0228*	MDS	*10/10/14 23:49*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*105 %*	*70-130*		*ECJ0228*	MDS	*10/10/14 23:49*	*EPA 8260B*	

Environmental Testing, Inc.



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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

TCLP Extraction by EPA 1311 - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0200 - EPA 1311										
Blank (ECJ0200-BLK1)				Prepared & Analyzed: 10/08/14						
TCLP Extraction	Completed		N/A							
Batch ECJ0239 - EPA 5030 Soil MS										
Blank (ECJ0239-BLK1)				Prepared & Analyzed: 10/14/14						
TCLP ZHE Extraction	Completed		N/A							

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2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

TCLP Metals by 6000/7000 Series Methods - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0199 - EPA 3005 TCLP										
Blank (ECJ0199-BLK1)				Prepared: 10/13/14 Analyzed: 10/14/14						
Arsenic	<0.100	0.100	mg/L							
Barium	<5.00	5.00	mg/L							
Cadmium	<0.100	0.100	mg/L							
Chromium	<0.100	0.100	mg/L							
Lead	<0.500	0.500	mg/L							
Silver	<0.100	0.100	mg/L							
Selenium	<0.200	0.200	mg/L							
Metals Digestion	Completed		N/A							
LCS (ECJ0199-BS1)				Prepared: 10/13/14 Analyzed: 10/14/14						
Arsenic	10.9	0.100	mg/L	10.0		109	80-120			
Barium	10.4	5.00	mg/L	10.0		104	80-120			
Cadmium	10.7	0.100	mg/L	10.0		107	80-120			
Chromium	10.6	0.100	mg/L	10.0		106	80-120			
Lead	10.8	0.500	mg/L	10.0		108	80-120			
Silver	10.6	0.100	mg/L	10.0		106	80-120			
Selenium	10.7	0.200	mg/L	10.0		107	80-120			
Metals Digestion	Completed		N/A							
Duplicate (ECJ0199-DUP1)				**Source: E4J0103-01** Prepared: 10/13/14 Analyzed: 10/14/14						
Arsenic	<0.100	0.100	mg/L		ND				20	
Barium	1.34	5.00	mg/L		1.39			4	20	
Cadmium	<0.100	0.100	mg/L		ND				20	
Chromium	<0.100	0.100	mg/L		ND				20	
Lead	0.261	0.500	mg/L		0.253			3	20	
Silver	<0.100	0.100	mg/L		ND				20	
Selenium	<0.200	0.200	mg/L		ND				20	
Metals Digestion	Completed		N/A							

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2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

TCLP Metals by 6000/7000 Series Methods - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0199 - EPA 3005 TCLP										
Matrix Spike (ECJ0199-MS1)		**Source: E4J0103-01**		Prepared: 10/13/14 Analyzed: 10/14/14						
Arsenic	11.0	0.100	mg/L	10.0	ND	110	75-125			
Barium	12.3	5.00	mg/L	10.0	1.39	109	75-125			
Cadmium	10.9	0.100	mg/L	10.0	ND	109	75-125			
Chromium	10.8	0.100	mg/L	10.0	ND	108	75-125			
Lead	11.2	0.500	mg/L	10.0	0.253	109	75-125			
Silver	11.4	0.100	mg/L	10.0	ND	114	75-125			
Selenium	10.9	0.200	mg/L	10.0	ND	109	75-125			
Metals Digestion	Completed		N/A							
Matrix Spike Dup (ECJ0199-MSD1)		**Source: E4J0103-01**		Prepared: 10/13/14 Analyzed: 10/14/14						
Arsenic	10.8	0.100	mg/L	10.0	ND	108	75-125	1	20	
Barium	12.2	5.00	mg/L	10.0	1.39	108	75-125	0.3	20	
Cadmium	10.9	0.100	mg/L	10.0	ND	109	75-125	0.03	20	
Chromium	10.8	0.100	mg/L	10.0	ND	108	75-125	0.1	20	
Lead	11.1	0.500	mg/L	10.0	0.253	109	75-125	0.7	20	
Silver	11.4	0.100	mg/L	10.0	ND	114	75-125	0.5	20	
Selenium	11.1	0.200	mg/L	10.0	ND	111	75-125	2	20	
Metals Digestion	Completed		N/A							
Batch ECJ0237 - EPA 7470 TCLP										
Blank (ECJ0237-BLK1)				Prepared & Analyzed: 10/14/14						
Mercury	<0.00200	0.00200	mg/L							
Mercury Digestion	Completed		N/A							
LCS (ECJ0237-BS1)				Prepared & Analyzed: 10/14/14						
Mercury	0.0201	0.00200	mg/L	0.0200		100	80-120			
Mercury Digestion	Completed		N/A							

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2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

TCLP Metals by 6000/7000 Series Methods - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0237 - EPA 7470 TCLP										
Matrix Spike (ECJ0237-MS1)		**Source: E4J0103-01**		Prepared & Analyzed: 10/14/14						
Mercury	0.0210	0.00200	mg/L	0.0200	ND	105	75-125			
Mercury Digestion	Completed		N/A							
Matrix Spike Dup (ECJ0237-MSD1)		**Source: E4J0103-01**		Prepared & Analyzed: 10/14/14						
Mercury	0.0196	0.00200	mg/L	0.0200	ND	98	75-125	7	20	
Mercury Digestion	Completed		N/A							

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Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

TCLP (Total) Volatile Organic Compounds by EPA Method 8260 - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0193 - EPA 5030 Soil MS										
Blank (ECJ0193-BLK1)				Prepared & Analyzed: 10/09/14						
Vinyl chloride	<0.0250	0.0250	mg/Kg							
1,1-Dichloroethene	<0.0250	0.0250	mg/Kg							
Chloroform	<0.0250	0.0250	mg/Kg							
Carbon tetrachloride	<0.0250	0.0250	mg/Kg							
Benzene	<0.0250	0.0250	mg/Kg							
1,2-Dichloroethane	<0.0250	0.0250	mg/Kg							
Trichloroethene	<0.0250	0.0250	mg/Kg							
Tetrachloroethene	<0.0250	0.0250	mg/Kg							
Chlorobenzene	<0.0250	0.0250	mg/Kg							
Surrogate: 1,2-Dichloroethane-d4	*0.278*		mg/Kg	*0.250*		*111*	*70-130*			
Surrogate: Dibromofluoromethane	*0.245*		mg/Kg	*0.250*		*98*	*70-130*			
Surrogate: Toluene-d8	*0.243*		mg/Kg	*0.250*		*97*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.287*		mg/Kg	*0.250*		*115*	*70-130*			
LCS (ECJ0193-BS1)				Prepared & Analyzed: 10/09/14						
Vinyl chloride	0.411	0.0250	mg/Kg	0.400		103	80-120			
1,1-Dichloroethene	0.436	0.0250	mg/Kg	0.400		109	80-120			
Chloroform	0.454	0.0250	mg/Kg	0.400		113	80-120			
Carbon tetrachloride	0.448	0.0250	mg/Kg	0.400		112	80-120			
Benzene	0.433	0.0250	mg/Kg	0.400		108	80-120			
1,2-Dichloroethane	0.433	0.0250	mg/Kg	0.400		108	80-120			
Trichloroethene	0.417	0.0250	mg/Kg	0.400		104	80-120			
Tetrachloroethene	0.436	0.0250	mg/Kg	0.400		109	80-120			
Chlorobenzene	0.404	0.0250	mg/Kg	0.400		101	80-120			
Surrogate: 1,2-Dichloroethane-d4	*0.283*		mg/Kg	*0.250*		*113*	*70-130*			
Surrogate: Dibromofluoromethane	*0.271*		mg/Kg	*0.250*		*109*	*70-130*			
Surrogate: Toluene-d8	*0.241*		mg/Kg	*0.250*		*96*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.271*		mg/Kg	*0.250*		*108*	*70-130*			

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Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

TCLP (Total) Volatile Organic Compounds by EPA Method 8260 - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0193 - EPA 5030 Soil MS										
Matrix Spike (ECJ0193-MS1)		**Source: E4J0103-01RE1**		Prepared: 10/09/14 Analyzed: 10/10/14						
Vinyl chloride	1.99	0.125	mg/Kg	2.00	ND	99	70-130			
1,1-Dichloroethene	2.09	0.125	mg/Kg	2.00	ND	105	70-130			
Chloroform	2.28	0.125	mg/Kg	2.00	ND	114	70-130			
Carbon tetrachloride	2.22	0.125	mg/Kg	2.00	ND	111	70-130			
Benzene	2.11	0.125	mg/Kg	2.00	ND	106	70-130			
1,2-Dichloroethane	2.17	0.125	mg/Kg	2.00	ND	108	70-130			
Trichloroethene	2.38	0.125	mg/Kg	2.00	ND	119	70-130			
Tetrachloroethene	2.27	0.125	mg/Kg	2.00	ND	114	70-130			
Chlorobenzene	2.31	0.125	mg/Kg	2.00	ND	115	70-130			
Surrogate: 1,2-Dichloroethane-d4	*1.37*		mg/Kg	*1.25*		*109*	*70-130*			
Surrogate: Dibromofluoromethane	*1.25*		mg/Kg	*1.25*		*100*	*70-130*			
Surrogate: Toluene-d8	*1.25*		mg/Kg	*1.25*		*100*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*1.42*		mg/Kg	*1.25*		*114*	*70-130*			
Matrix Spike Dup (ECJ0193-MSD1)		**Source: E4J0103-01RE1**		Prepared: 10/09/14 Analyzed: 10/10/14						
Vinyl chloride	2.14	0.125	mg/Kg	2.00	ND	107	70-130	7	20	
1,1-Dichloroethene	2.20	0.125	mg/Kg	2.00	ND	110	70-130	5	20	
Chloroform	2.32	0.125	mg/Kg	2.00	ND	116	70-130	2	20	
Carbon tetrachloride	2.30	0.125	mg/Kg	2.00	ND	115	70-130	4	20	
Benzene	2.19	0.125	mg/Kg	2.00	ND	109	70-130	3	20	
1,2-Dichloroethane	2.27	0.125	mg/Kg	2.00	ND	114	70-130	5	20	
Trichloroethene	2.39	0.125	mg/Kg	2.00	ND	119	70-130	0.2	20	
Tetrachloroethene	2.29	0.125	mg/Kg	2.00	ND	115	70-130	0.9	20	
Chlorobenzene	2.33	0.125	mg/Kg	2.00	ND	117	70-130	1	20	
Surrogate: 1,2-Dichloroethane-d4	*1.30*		mg/Kg	*1.25*		*104*	*70-130*			
Surrogate: Dibromofluoromethane	*1.28*		mg/Kg	*1.25*		*102*	*70-130*			
Surrogate: Toluene-d8	*1.25*		mg/Kg	*1.25*		*100*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*1.46*		mg/Kg	*1.25*		*117*	*70-130*			

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2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

TCLP (Total) Volatile Organic Compounds by EPA Method 8260 - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0228 - EPA 5030 Soil MS										
Blank (ECJ0228-BLK1)				Prepared & Analyzed: 10/10/14						
Vinyl chloride	<0.0250	0.0250	mg/Kg							
1,1-Dichloroethene	<0.0250	0.0250	mg/Kg							
Chloroform	<0.0250	0.0250	mg/Kg							
Carbon tetrachloride	<0.0250	0.0250	mg/Kg							
Benzene	<0.0250	0.0250	mg/Kg							
1,2-Dichloroethane	<0.0250	0.0250	mg/Kg							
Trichloroethene	<0.0250	0.0250	mg/Kg							
Tetrachloroethene	<0.0250	0.0250	mg/Kg							
Chlorobenzene	<0.0250	0.0250	mg/Kg							
Surrogate: 1,2-Dichloroethane-d4	*0.262*		mg/Kg	*0.250*		*105*	*70-130*			
Surrogate: Dibromofluoromethane	*0.260*		mg/Kg	*0.250*		*104*	*70-130*			
Surrogate: Toluene-d8	*0.250*		mg/Kg	*0.250*		*100*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.264*		mg/Kg	*0.250*		*106*	*70-130*			
LCS (ECJ0228-BS1)				Prepared & Analyzed: 10/10/14						
Vinyl chloride	0.386	0.0250	mg/Kg	0.400		96	80-120			
1,1-Dichloroethene	0.391	0.0250	mg/Kg	0.400		98	80-120			
Chloroform	0.439	0.0250	mg/Kg	0.400		110	80-120			
Carbon tetrachloride	0.432	0.0250	mg/Kg	0.400		108	80-120			
Benzene	0.436	0.0250	mg/Kg	0.400		109	80-120			
1,2-Dichloroethane	0.413	0.0250	mg/Kg	0.400		103	80-120			
Trichloroethene	0.426	0.0250	mg/Kg	0.400		107	80-120			
Tetrachloroethene	0.429	0.0250	mg/Kg	0.400		107	80-120			
Chlorobenzene	0.412	0.0250	mg/Kg	0.400		103	80-120			
Surrogate: 1,2-Dichloroethane-d4	*0.262*		mg/Kg	*0.250*		*105*	*70-130*			
Surrogate: Dibromofluoromethane	*0.269*		mg/Kg	*0.250*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.252*		mg/Kg	*0.250*		*101*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.249*		mg/Kg	*0.250*		*100*	*70-130*			

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Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

TCLP (Total) Volatile Organic Compounds by EPA Method 8260 - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0228 - EPA 5030 Soil MS										
Matrix Spike (ECJ0228-MS1)		**Source: E4J0103-10**		Prepared & Analyzed: 10/10/14						
Vinyl chloride	1.89	0.125	mg/Kg	2.00	ND	94	70-130			
1,1-Dichloroethene	2.02	0.125	mg/Kg	2.00	ND	101	70-130			
Chloroform	2.34	0.125	mg/Kg	2.00	ND	117	70-130			
Carbon tetrachloride	2.17	0.125	mg/Kg	2.00	ND	109	70-130			
Benzene	2.12	0.125	mg/Kg	2.00	ND	106	70-130			
1,2-Dichloroethane	2.16	0.125	mg/Kg	2.00	ND	108	70-130			
Trichloroethene	2.45	0.125	mg/Kg	2.00	0.215	112	70-130			
Tetrachloroethene	2.19	0.125	mg/Kg	2.00	ND	110	70-130			
Chlorobenzene	2.30	0.125	mg/Kg	2.00	ND	115	70-130			
Surrogate: 1,2-Dichloroethane-d4	*1.32*		mg/Kg	*1.25*		*106*	*70-130*			
Surrogate: Dibromofluoromethane	*1.35*		mg/Kg	*1.25*		*108*	*70-130*			
Surrogate: Toluene-d8	*1.28*		mg/Kg	*1.25*		*102*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*1.26*		mg/Kg	*1.25*		*101*	*70-130*			
Matrix Spike Dup (ECJ0228-MSD1)		**Source: E4J0103-10**		Prepared & Analyzed: 10/10/14						
Vinyl chloride	1.94	0.125	mg/Kg	2.00	ND	97	70-130	3	20	
1,1-Dichloroethene	1.96	0.125	mg/Kg	2.00	ND	98	70-130	3	20	
Chloroform	2.23	0.125	mg/Kg	2.00	ND	111	70-130	5	20	
Carbon tetrachloride	2.14	0.125	mg/Kg	2.00	ND	107	70-130	1	20	
Benzene	2.08	0.125	mg/Kg	2.00	ND	104	70-130	2	20	
1,2-Dichloroethane	2.04	0.125	mg/Kg	2.00	ND	102	70-130	6	20	
Trichloroethene	2.78	0.125	mg/Kg	2.00	0.215	128	70-130	13	20	
Tetrachloroethene	2.30	0.125	mg/Kg	2.00	ND	115	70-130	5	20	
Chlorobenzene	2.28	0.125	mg/Kg	2.00	ND	114	70-130	1	20	
Surrogate: 1,2-Dichloroethane-d4	*1.23*		mg/Kg	*1.25*		*98*	*70-130*			
Surrogate: Dibromofluoromethane	*1.24*		mg/Kg	*1.25*		*99*	*70-130*			
Surrogate: Toluene-d8	*1.25*		mg/Kg	*1.25*		*100*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*1.32*		mg/Kg	*1.25*		*106*	*70-130*			

Environmental Testing, Inc.



Russell Britten, President

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ENVIRONMENTAL TESTING, INC.

4619 N. Santa Fe
Oklahoma City, OK 73118
405.488.2400 Phone
405.488.2404 Fax
www.etilab.com

Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

TCLP Volatile Organic Compounds by EPA Method 8260 - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0239 - EPA 5030 Soil MS										
Blank (ECJ0239-BLK1)				Prepared & Analyzed: 10/14/14						
Vinyl chloride	<0.00500	0.00500	mg/L							
1,1-Dichloroethene	<0.00500	0.00500	mg/L							
Chloroform	<0.00500	0.00500	mg/L							
Carbon tetrachloride	<0.00500	0.00500	mg/L							
Benzene	<0.00500	0.00500	mg/L							
1,2-Dichloroethane	<0.00500	0.00500	mg/L							
Trichloroethene	<0.00500	0.00500	mg/L							
Tetrachloroethene	<0.00500	0.00500	mg/L							
Chlorobenzene	<0.00500	0.00500	mg/L							
Surrogate: 1,2-Dichloroethane-d4	*0.0518*		mg/L	*0.0500*		*104*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0503*		mg/L	*0.0500*		*101*	*70-130*			
Surrogate: Toluene-d8	*0.0510*		mg/L	*0.0500*		*102*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0521*		mg/L	*0.0500*		*104*	*70-130*			
LCS (ECJ0239-BS1)				Prepared & Analyzed: 10/14/14						
Vinyl chloride	0.0733	0.00500	mg/L	0.0800		92	80-120			
1,1-Dichloroethene	0.0819	0.00500	mg/L	0.0800		102	80-120			
Chloroform	0.0855	0.00500	mg/L	0.0800		107	80-120			
Carbon tetrachloride	0.0859	0.00500	mg/L	0.0800		107	80-120			
Benzene	0.0820	0.00500	mg/L	0.0800		102	80-120			
1,2-Dichloroethane	0.0827	0.00500	mg/L	0.0800		103	80-120			
Trichloroethene	0.0812	0.00500	mg/L	0.0800		102	80-120			
Tetrachloroethene	0.0893	0.00500	mg/L	0.0800		112	80-120			
Chlorobenzene	0.0823	0.00500	mg/L	0.0800		103	80-120			
Surrogate: 1,2-Dichloroethane-d4	*0.0528*		mg/L	*0.0500*		*106*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0532*		mg/L	*0.0500*		*106*	*70-130*			
Surrogate: Toluene-d8	*0.0487*		mg/L	*0.0500*		*97*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0525*		mg/L	*0.0500*		*105*	*70-130*			

Environmental Testing, Inc.



Russell Britten, President

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

TCLP Volatile Organic Compounds by EPA Method 8260 - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0239 - EPA 5030 Soil MS										
Matrix Spike (ECJ0239-MS1)		**Source: E4J0103-07**		Prepared & Analyzed: 10/14/14						
Vinyl chloride	3.04	0.200	mg/L	3.20	ND	95	70-130			
1,1-Dichloroethene	3.41	0.200	mg/L	3.20	ND	107	70-130			
Chloroform	3.52	0.200	mg/L	3.20	ND	110	70-130			
Carbon tetrachloride	3.72	0.200	mg/L	3.20	ND	116	70-130			
Benzene	3.34	0.200	mg/L	3.20	ND	104	70-130			
1,2-Dichloroethane	3.16	0.200	mg/L	3.20	ND	99	70-130			
Trichloroethene	6.05	0.200	mg/L	3.20	2.25	119	70-130			
Tetrachloroethene	4.02	0.200	mg/L	3.20	ND	126	70-130			
Chlorobenzene	3.62	0.200	mg/L	3.20	ND	113	70-130			
Surrogate: 1,2-Dichloroethane-d4	*1.92*		mg/L	*2.00*		*96*	*70-130*			
Surrogate: Dibromofluoromethane	*1.92*		mg/L	*2.00*		*96*	*70-130*			
Surrogate: Toluene-d8	*1.93*		mg/L	*2.00*		*96*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*2.31*		mg/L	*2.00*		*116*	*70-130*			
Matrix Spike Dup (ECJ0239-MSD1)		**Source: E4J0103-07**		Prepared & Analyzed: 10/14/14						
Vinyl chloride	3.08	0.200	mg/L	3.20	ND	96	70-130	2	20	
1,1-Dichloroethene	3.50	0.200	mg/L	3.20	ND	109	70-130	3	20	
Chloroform	3.54	0.200	mg/L	3.20	ND	111	70-130	0.6	20	
Carbon tetrachloride	3.50	0.200	mg/L	3.20	ND	109	70-130	6	20	
Benzene	3.38	0.200	mg/L	3.20	ND	106	70-130	1	20	
1,2-Dichloroethane	3.03	0.200	mg/L	3.20	ND	95	70-130	4	20	
Trichloroethene	6.12	0.200	mg/L	3.20	2.25	121	70-130	1	20	
Tetrachloroethene	3.93	0.200	mg/L	3.20	ND	123	70-130	2	20	
Chlorobenzene	3.73	0.200	mg/L	3.20	ND	117	70-130	3	20	
Surrogate: 1,2-Dichloroethane-d4	*1.89*		mg/L	*2.00*		*94*	*70-130*			
Surrogate: Dibromofluoromethane	*1.98*		mg/L	*2.00*		*99*	*70-130*			
Surrogate: Toluene-d8	*2.04*		mg/L	*2.00*		*102*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*2.28*		mg/L	*2.00*		*114*	*70-130*			

Environmental Testing, Inc.



Russell Britten, President

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Oklahoma City, OK 73118
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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

Non-Certified Analyses included in this Report

Analyte

Certifications

Code	Description	Number	Expires
KDHE	Kansas Accredited	E-10401	01/31/2015
NDSDH	North Dakota Accredited	R-191	06/30/2015
NELAP	NELAP Accredited (LDEQ)	10002	06/30/2015
ODEQ	Oklahoma Accredited	2013-063	08/31/2015
TCEQ	Texas Accredited	T104704498-13-3	03/31/2015

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2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/15/14 14:16

Qualifiers and Definitions

COM	Completed
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
x	Non-Certified analyte

Environmental Testing, Inc.



Russell Britten, President

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CHAIN OF CUSTODY RECORD

ENVIRONMENTAL TESTING, INC.

4619 NORTH SANTA FE AVE.
OKLAHOMA CITY, OK 73118
(405) 488-2400
FAX: (405) 488-2404

Oilab

SAMPLE SERIES #: E4J30103

SHADED AREAS FOR LABORATORY USE ONLY

COMPANY: TEC-AN, Inc.
ADDRESS: 2517 S. PURDUE AVE
OKC, OK 73128
PHONE #: 405-681-7076
EMAIL: DONNIST@COXINET.NET
P.O. #:
CLIENT CONTACT: DON WIST
PROJECT #: 1409-25 /MANAGER:
SITE LOCATION: WHIRLPOOL PLT. - FT. SMITH, AR

SAMPLE TYPE
1. WATER
2. SOIL
3. SLUDGE
4. OIL
5. OTHER

CONTAINER TYPE
P-PLASTIC
G-GLASS
V-VOA
O-OTHER
T-TEFLON

ETI SAMPLE #	CLIENT SAMPLE IDENTIFICATION	SAMPLE TYPE	CONTAINER SIZE	CONTAINER TYPE	CONTAINER #	SAMPLING DATE	SAMPLING TIME	PRESERVATIVES	ANALYSIS: TCLP METALS	ANALYSIS: TCLP VOLATILE	ANALYSIS: -	LAB COMMENTS
1	1A ROLLOFF #1 HOLE #2	2	4-8 oz	G	1	10/2		NONE	X			
1	1B " "					10/2				X		
2	2A ROLLOFF #2 HOLE #3					10/2			X			
2	2B " "					10/2				X		
3	3A ROLLOFF #3 HOLE #4					10/3			X			
3	3B " "					10/3				X		
4	4A ROLLOFF #4 HOLE #1					10/3			X			
4	4B " "					10/3				X		
5	5A ROLLOFF #5 HOLE #5					10/3			X			
5	5B " "	2	4-8 oz	G	↓	10/3		↓		X		

RECEIVED ON ICE: [X] Y [ ] N @ 3.0 °C
EQUIPMENT #: EC0184

SAMPLER: KENNY NUBINE

FIELD PH:
TEMP:
TIME:
COND:
CALIB: [ ] 4 [ ] 7 [ ] 10

REQUESTED TURNAROUND TIME:
[X] REGULAR (5 DAYS)

RUSH REQUIRED: (ADDITIONAL FEES MAY APPLY)
[ ] 3 DAYS [ ] 2 DAYS [ ] 1 DAY

RELINQUISHED BY:	DATE: 10/7/14 TIME: 1450	RECEIVED BY: CWoody	DATE: 10/7/14 TIME: 1450	COMMENTS:
RELINQUISHED BY:	DATE: TIME:	RECEIVED BY:	DATE: TIME:	
RELINQUISHED BY:	DATE: TIME:	RECEIVED BY:	DATE: TIME:	

CHAIN OF CUSTODY RECORD

ENVIRONMENTAL TESTING, INC.

4619 NORTH SANTA FE AVE.
OKLAHOMA CITY, OK 73118
(405) 488-2400
FAX: (405) 488-2404

Oilab

SAMPLE SERIES #: EHJ0103

SHADED AREAS FOR LABORATORY USE ONLY

COMPANY: TEC-AN, INC.
ADDRESS: 2517 S. PURDUE AVE
OKC, OK 73128
PHONE #: 405-681-7076
EMAIL: DONWIST@COXINET.NET
P.O. #:
CLIENT CONTACT: DON WEST
PROJECT #: 1409-25 /MANAGER:
SITE LOCATION: WHIRLPOOL PLT. - FT. SMITH, AR

SAMPLE TYPE
1. WATER
2. SOIL
3. SLUDGE
4. OIL
5. OTHER

CONTAINER TYPE
P-PLASTIC
G-GLASS
V-VOA
O-OTHER
T-TEFLON

ETI SAMPLE #	CLIENT SAMPLE IDENTIFICATION	SAMPLE TYPE	CONTAINER SIZE	CONTAINER TYPE	CONTAINER #	SAMPLING DATE	SAMPLING TIME	PRESERVATIVES	ANALYSIS: TCLP METALS	ANALYSIS: TCLP VOLATILE	LAB COMMENTS
6	6A ROLLOFF #6 HOLE #6	2	4-8oz	G	1	10/3		NONE	X		
6	6B " "	"	"	"	"	10/3		"		X	
7	7A ROLLOFF #7 HOLE #7&8	"	"	"	"	10/3		"	X		
7	7B " "	"	"	"	"	10/3		"		X	
8	8A ROLLOFF #8 HOLE #8	"	"	"	"	10/3		"	X		
8	8B " "	"	"	"	"	10/3		"		X	
9	9A ROLLOFF #9 HOLE #9	"	"	"	"	10/4		"	X		
9	9B " "	"	"	"	"	10/4		"		X	
10	10A ROLLOFF #10 HOLE #10	"	"	"	"	10/4		"	X		
10	10B " "	2	1-8oz	G	↓	10/4		↓		X	

RECEIVED ON ICE: [X] Y [ ] N @ 3.0 °C
EQUIPMENT #: EC0184

SAMPLER: KENNY NUBINE

FIELD PH:
TEMP:
TIME:
COND:
CALIB: [ ] 4 [ ] 7 [ ] 10

REQUESTED TURNAROUND TIME:
[ ] REGULAR (5 DAYS)

RUSH REQUIRED: (ADDITIONAL FEES MAY APPLY)
[ ] 3 DAYS [ ] 2 DAYS [ ] 1 DAY

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:
	10/7/14	1450	CWoody	10/7/14	1450
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:

COMMENTS:

CHAIN OF CUSTODY RECORD

ENVIRONMENTAL TESTING, INC.

4619 NORTH SANTA FE AVE.
OKLAHOMA CITY, OK 73118
(405) 488-2400
FAX: (405) 488-2404

Oilab

SAMPLE SERIES #: EL50103

SHADED AREAS FOR LABORATORY USE ONLY

COMPANY: TEC-AN, INC.
ADDRESS: 2517 S. PURDUE AVE
OKC, OK 73128
PHONE #: 405-681-7076
EMAIL: DONNIST@COXINET.NET
P.O. #:
CLIENT CONTACT: DON NIST
PROJECT #: 1409-25 /MANAGER:
SITE LOCATION: WHIRLPOOL PLT. - FT. SMITH, AR

SAMPLE TYPE
1. WATER
2. SOIL
3. SLUDGE
4. OIL
5. OTHER

CONTAINER TYPE
P-PLASTIC
G-GLASS
V-VOA
O-OTHER
T-TEFLON

ETI SAMPLE #	CLIENT SAMPLE IDENTIFICATION	SAMPLE TYPE	CONTAINER SIZE	CONTAINER TYPE	CONTAINER #	SAMPLING DATE	SAMPLING TIME	PRESERVATIVES	ANALYSIS: TCLP METALS	ANALYSIS: TCLP VOLATILES	LAB COMMENTS
11	11A ROLLOFF #11 HOLE #11	2	4-8oz	G	1	10/4		None	X		
11	11B " "	"	"	"	"	10/4		"		X	
12	12A ROLLOFF #12 HOLE #1 & 12	"	"	"	"	10/4		"	X		
12	12B " "	"	"	"	"	10/4		"		X	
13	13A ROLLOFF #13 HOLE #12	"	4-8oz	"	✓	10/4		✓	X		
		2		G							

RECEIVED ON ICE: [X] Y [ ] N @ 3.0 °C
EQUIPMENT #: E60184

SAMPLER: KENNY NUBINE

FIELD PH:
TEMP:
TIME:
COND:
CALIB: [ ] 4 [ ] 7 [ ] 10

REQUESTED TURNAROUND TIME:
[ ] REGULAR (5 DAYS)

RUSH REQUIRED: (ADDITIONAL FEES MAY APPLY)
[ ] 3 DAYS [ ] 2 DAYS [ ] 1 DAY

RELINQUISHED BY:	DATE: 10/7/14 TIME: 1450	RECEIVED BY: A Woody	DATE: 10/7/14 TIME: 1450	COMMENTS:
RELINQUISHED BY:	DATE: TIME:	RECEIVED BY:	DATE: TIME:	
RELINQUISHED BY:	DATE: TIME:	RECEIVED BY:	DATE: TIME:	

ENVIRONMENTAL TESTING, INC.

F039.008

Sample/Cooler Receipt Form

Sample Series # E4J0103

1. Were samples received on ice? YES NO
2. Temperature of representative sample or temperature blank 3.0 °C
3. If the temperature is ≤ 0°C , was the representative sample or temp blank frozen? YES NO NA
4. Did all containers arrive in good condition (unbroken)? YES NO
5. Were VOA vials received? YES NO
   a. Was there any observable headspace present in any VOA vial? YES NO NA
6. Were the correct containers used for the analysis requested? YES NO
7. Was there sufficient amount of sample to perform the requested tests in each container? YES NO
8. Were the samples received with sufficient time left to meet holding time requirements? YES NO
9. On preserved containers, did pH strips suggest preservation reached the correct pH level? YES NO NA
   (DO NOT OPEN VOA VIALS TO CHECK pH)

   Acid Preserved ≤2 Other _____ Base Preserved ≥12 Other _____
10. Did the containers indicate the correct preservatives were used for the requested analysis? YES NO NA
11. Were chain-of-custody forms properly filled out (conforms to ETI Sample Acceptance Policy)? YES NO
12. If samples were not in compliance, was the client notified of the nonconformity? YES Date:_____ Initial: _____
    a. If yes, does the client wish to proceed with analysis? YES NO
13. Was the client notified of the intent to subcontract work that will NOT be performed by ETI? YES Date:_____ Initial: _____

Preservative ID(s) _____, _____, _____, _____

I certify that all of the above checks were completed. (Initial) CW

I certify the project was entered into the LIMS, and a label with the unique LIMS number was attached to each container. (Initial) CW

Notes:

_____

_____

_____

Report and Accompanying Data Reviewed by: _____ Date: _____

Laboratory Analytical Report

ENVIRONMENTAL TESTING, INC.
4619 N. Santa Fe
Oklahoma City, OK 73118
405.488.2400 Phone
405.488.2404 Fax
www.etilab.com

20 October 2014

Mr. Don Nist

Tec-An Inc.
2517 S. Purdue Ave.
Oklahoma City, OK 73128

WO: E4J0162
RE: Whirlpool Plt. - Ft. Smith, AR

Enclosed are the results of analyses for samples received by the laboratory on 10/09/14 10:54. If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Russell Britten

President

ENVIRONMENTAL TESTING, INC.

4619 N. Santa Fe
Oklahoma City, OK 73118
405.488.2400 Phone
405.488.2404 Fax
www.etilab.com

Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

14A & 14B Rolloff #14 Hole #12 & 11

E4J0162-01 (Solid) - Sampled: 10/04/14 00:00

Environmental Testing, Inc.

TCLP Extraction by EPA 1311

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction	Completed		N/A		ECJ0246	LSB	10/13/14 19:15	EPA 1311	
TCLP ZHE Extraction	Completed		N/A		ECJ0239	MDS	10/14/14 15:17	EPA 1311	

TCLP Metals by 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
Silver	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:49	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:49	EPA 6010C	
Barium	**1.18**	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:49	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:49	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:49	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0244	LSB	10/14/14 18:49	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0244	LSB	10/14/14 18:49	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0281	LSB	10/16/14 14:28	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0244	LSB	10/14/14 13:10	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0281	LSB	10/16/14 08:15	EPA 7470A	

TCLP Volatile Organic Compounds by EPA Method 8260

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
Vinyl chloride	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 15:27	EPA 8260B	
1,1-Dichloroethene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 15:27	EPA 8260B	
Chloroform	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 15:27	EPA 8260B	
Carbon tetrachloride	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 15:27	EPA 8260B	
2-Butanone (MEK)	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 15:27	EPA 8260B	
Benzene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 15:27	EPA 8260B	
1,2-Dichloroethane	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 15:27	EPA 8260B	
Trichloroethene	**0.475**	0.200	mg/L	40	ECJ0239	MDS	10/14/14 15:27	EPA 8260B	
Tetrachloroethene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 15:27	EPA 8260B	
Chlorobenzene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 15:27	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*97 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 15:27*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*100 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 15:27*	*EPA 8260B*	
Surrogate: Toluene-d8		*98 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 15:27*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*113 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 15:27*	*EPA 8260B*	

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

15A & 15B Rolloff #15 Hole #12

E4J0162-02 (Solid) - Sampled: 10/04/14 00:00

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction by EPA 1311									
TCLP Extraction	Completed		N/A		ECJ0246	LSB	10/13/14 19:15	EPA 1311	
TCLP ZHE Extraction	Completed		N/A		ECJ0239	MDS	10/14/14 15:17	EPA 1311	
TCLP Metals by 6000/7000 Series Methods									
Silver	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:52	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:52	EPA 6010C	
Barium	**0.815**	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:52	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:52	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:52	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0244	LSB	10/14/14 18:52	EPA 6010C	
Selenium	**0.231**	0.200	mg/L	1	ECJ0244	LSB	10/14/14 18:52	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0281	LSB	10/16/14 14:34	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0244	LSB	10/14/14 13:10	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0281	LSB	10/16/14 08:15	EPA 7470A	
TCLP Volatile Organic Compounds by EPA Method 8260									
Vinyl chloride	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 16:39	EPA 8260B	
1,1-Dichloroethene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 16:39	EPA 8260B	
Chloroform	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 16:39	EPA 8260B	
Carbon tetrachloride	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 16:39	EPA 8260B	
2-Butanone (MEK)	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 16:39	EPA 8260B	
Benzene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 16:39	EPA 8260B	
1,2-Dichloroethane	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 16:39	EPA 8260B	
Trichloroethene	**0.407**	0.200	mg/L	40	ECJ0239	MDS	10/14/14 16:39	EPA 8260B	
Tetrachloroethene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 16:39	EPA 8260B	
Chlorobenzene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 16:39	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*105 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 16:39*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*107 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 16:39*	*EPA 8260B*	
Surrogate: Toluene-d8		*100 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 16:39*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*109 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 16:39*	*EPA 8260B*	

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

16A & 16B Rolloff #16 Hole #13

E4J0162-03 (Solid) - Sampled: 10/06/14 00:00

Environmental Testing, Inc.

TCLP Extraction by EPA 1311

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction	Completed		N/A		ECJ0246	LSB	10/13/14 19:15	EPA 1311	
TCLP ZHE Extraction	Completed		N/A		ECJ0239	MDS	10/14/14 15:17	EPA 1311	

TCLP Metals by 6000/7000 Series Methods

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
Silver	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:55	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:55	EPA 6010C	
Barium	**1.01**	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:55	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:55	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:55	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0244	LSB	10/14/14 18:55	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0244	LSB	10/14/14 18:55	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0281	LSB	10/16/14 14:36	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0244	LSB	10/14/14 13:10	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0281	LSB	10/16/14 08:15	EPA 7470A	

TCLP Volatile Organic Compounds by EPA Method 8260

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
Vinyl chloride	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 17:15	EPA 8260B	
1,1-Dichloroethene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 17:15	EPA 8260B	
Chloroform	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 17:15	EPA 8260B	
Carbon tetrachloride	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 17:15	EPA 8260B	
2-Butanone (MEK)	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 17:15	EPA 8260B	
Benzene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 17:15	EPA 8260B	
1,2-Dichloroethane	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 17:15	EPA 8260B	
Trichloroethene	**0.997**	0.200	mg/L	40	ECJ0239	MDS	10/14/14 17:15	EPA 8260B	
Tetrachloroethene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 17:15	EPA 8260B	
Chlorobenzene	<0.200	0.200	mg/L	40	ECJ0239	MDS	10/14/14 17:15	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*101 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 17:15*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*104 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 17:15*	*EPA 8260B*	
Surrogate: Toluene-d8		*101 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 17:15*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*110 %*		*70-130*	*ECJ0239*	MDS	*10/14/14 17:15*	*EPA 8260B*	

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

17A & 17B Rolloff #17 Hole #14

E4J0162-04 (Solid) - Sampled: 10/06/14 00:00

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction by EPA 1311									
TCLP Extraction	Completed		N/A		ECJ0246	LSB	10/13/14 19:15	EPA 1311	
TCLP ZHE Extraction	Completed		N/A		ECJ0294	MDS	10/16/14 15:16	EPA 1311	
TCLP Metals by 6000/7000 Series Methods									
Silver	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:59	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:59	EPA 6010C	
Barium	**0.834**	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:59	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:59	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 18:59	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0244	LSB	10/14/14 18:59	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0244	LSB	10/14/14 18:59	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0281	LSB	10/16/14 14:38	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0244	LSB	10/14/14 13:10	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0281	LSB	10/16/14 08:15	EPA 7470A	
TCLP Volatile Organic Compounds by EPA Method 8260									
Vinyl chloride	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:08	EPA 8260B	
1,1-Dichloroethene	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:08	EPA 8260B	
Chloroform	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:08	EPA 8260B	
Carbon tetrachloride	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:08	EPA 8260B	
2-Butanone (MEK)	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:08	EPA 8260B	
Benzene	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:08	EPA 8260B	
1,2-Dichloroethane	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:08	EPA 8260B	
Trichloroethene	**0.517**	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:08	EPA 8260B	
Tetrachloroethene	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:08	EPA 8260B	
Chlorobenzene	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:08	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*91 %*	*70-130*		*ECJ0294*	MDS	*10/15/14 16:08*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*97 %*	*70-130*		*ECJ0294*	MDS	*10/15/14 16:08*	*EPA 8260B*	
Surrogate: Toluene-d8		*96 %*	*70-130*		*ECJ0294*	MDS	*10/15/14 16:08*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*116 %*	*70-130*		*ECJ0294*	MDS	*10/15/14 16:08*	*EPA 8260B*	

Environmental Testing, Inc.



Russell Britten, President

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

18A & 18B Rolloff #18 Hole #14 & 17

E4J0162-05 (Solid) - Sampled: 10/06/14 00:00

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction by EPA 1311									
TCLP Extraction	Completed		N/A		ECJ0246	LSB	10/13/14 19:15	EPA 1311	
TCLP Metals by 6000/7000 Series Methods									
Silver	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:02	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:02	EPA 6010C	
Barium	**0.991**	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:02	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:02	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:02	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0244	LSB	10/14/14 19:02	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0244	LSB	10/14/14 19:02	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0281	LSB	10/16/14 14:40	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0244	LSB	10/14/14 13:10	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0281	LSB	10/16/14 08:15	EPA 7470A	
TCLP (Total) Volatile Organic Compounds by EPA Method 8260									
Vinyl chloride	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 04:42	EPA 8260B	
1,1-Dichloroethene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 04:42	EPA 8260B	
Chloroform	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 04:42	EPA 8260B	
Carbon tetrachloride	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 04:42	EPA 8260B	
2-Butanone (MEK)	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 04:42	EPA 8260B	
Benzene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 04:42	EPA 8260B	
1,2-Dichloroethane	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 04:42	EPA 8260B	
Trichloroethene	**3.76**	0.500	mg/Kg	20	ECJ0228	MDS	10/11/14 04:42	EPA 8260B	
Tetrachloroethene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 04:42	EPA 8260B	
Chlorobenzene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 04:42	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*95 %*	*70-130*		*ECJ0228*	MDS	*10/11/14 04:42*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*98 %*	*70-130*		*ECJ0228*	MDS	*10/11/14 04:42*	*EPA 8260B*	
Surrogate: Toluene-d8		*101 %*	*70-130*		*ECJ0228*	MDS	*10/11/14 04:42*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*104 %*	*70-130*		*ECJ0228*	MDS	*10/11/14 04:42*	*EPA 8260B*	

Environmental Testing, Inc.

Russell Britten, President

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

19A & 19B Rolloff #19 Hole #17

E4J0162-06 (Solid) - Sampled: 10/06/14 00:00

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction by EPA 1311									
TCLP Extraction	Completed		N/A		ECJ0246	LSB	10/13/14 19:15	EPA 1311	
TCLP Metals by 6000/7000 Series Methods									
Silver	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:05	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:05	EPA 6010C	
Barium	**0.702**	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:05	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:05	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:05	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0244	LSB	10/14/14 19:05	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0244	LSB	10/14/14 19:05	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0281	LSB	10/16/14 14:43	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0244	LSB	10/14/14 13:10	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0281	LSB	10/16/14 08:15	EPA 7470A	
TCLP (Total) Volatile Organic Compounds by EPA Method 8260									
Vinyl chloride	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 05:18	EPA 8260B	
1,1-Dichloroethene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 05:18	EPA 8260B	
Chloroform	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 05:18	EPA 8260B	
Carbon tetrachloride	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 05:18	EPA 8260B	
2-Butanone (MEK)	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 05:18	EPA 8260B	
Benzene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 05:18	EPA 8260B	
1,2-Dichloroethane	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 05:18	EPA 8260B	
Trichloroethene	**0.830**	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 05:18	EPA 8260B	
Tetrachloroethene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 05:18	EPA 8260B	
Chlorobenzene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 05:18	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*97 %*	*70-130*		*ECJ0228*	MDS	*10/11/14 05:18*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*99 %*	*70-130*		*ECJ0228*	MDS	*10/11/14 05:18*	*EPA 8260B*	
Surrogate: Toluene-d8		*98 %*	*70-130*		*ECJ0228*	MDS	*10/11/14 05:18*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*116 %*	*70-130*		*ECJ0228*	MDS	*10/11/14 05:18*	*EPA 8260B*	

Environmental Testing, Inc.



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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

20A & 20B Rolloff #20 Hole #15 & 16

E4J0162-07 (Solid) - Sampled: 10/07/14 00:00

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction by EPA 1311									
TCLP Extraction	Completed		N/A		ECJ0246	LSB	10/13/14 19:15	EPA 1311	
TCLP ZHE Extraction	Completed		N/A		ECJ0294	MDS	10/16/14 15:16	EPA 1311	
TCLP Metals by 6000/7000 Series Methods									
Silver	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:08	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:08	EPA 6010C	
Barium	**0.964**	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:08	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:08	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:08	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0244	LSB	10/14/14 19:08	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0244	LSB	10/14/14 19:08	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0281	LSB	10/16/14 14:45	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0244	LSB	10/14/14 13:10	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0281	LSB	10/16/14 08:15	EPA 7470A	
TCLP Volatile Organic Compounds by EPA Method 8260									
Vinyl chloride	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:44	EPA 8260B	
1,1-Dichloroethene	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:44	EPA 8260B	
Chloroform	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:44	EPA 8260B	
Carbon tetrachloride	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:44	EPA 8260B	
2-Butanone (MEK)	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:44	EPA 8260B	
Benzene	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:44	EPA 8260B	
1,2-Dichloroethane	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:44	EPA 8260B	
Trichloroethene	**0.380**	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:44	EPA 8260B	
Tetrachloroethene	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:44	EPA 8260B	
Chlorobenzene	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 16:44	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*102 %*		*70-130*	*ECJ0294*	MDS	*10/15/14 16:44*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*102 %*		*70-130*	*ECJ0294*	MDS	*10/15/14 16:44*	*EPA 8260B*	
Surrogate: Toluene-d8		*97 %*		*70-130*	*ECJ0294*	MDS	*10/15/14 16:44*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*121 %*		*70-130*	*ECJ0294*	MDS	*10/15/14 16:44*	*EPA 8260B*	

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

21A & 21B Rolloff #21 Hole #18

E4J0162-08 (Solid) - Sampled: 10/08/14 00:00

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction by EPA 1311									
TCLP Extraction	Completed		N/A		ECJ0246	LSB	10/13/14 19:15	EPA 1311	
TCLP Metals by 6000/7000 Series Methods									
Silver	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:11	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:11	EPA 6010C	
Barium	**1.09**	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:11	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:11	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:11	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0244	LSB	10/14/14 19:11	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0244	LSB	10/14/14 19:11	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0281	LSB	10/16/14 14:47	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0244	LSB	10/14/14 13:10	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0281	LSB	10/16/14 08:15	EPA 7470A	
TCLP (Total) Volatile Organic Compounds by EPA Method 8260									
Vinyl chloride	**0.181**	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 06:32	EPA 8260B	
1,1-Dichloroethene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 06:32	EPA 8260B	
Chloroform	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 06:32	EPA 8260B	
Carbon tetrachloride	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 06:32	EPA 8260B	
2-Butanone (MEK)	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 06:32	EPA 8260B	
Benzene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 06:32	EPA 8260B	
1,2-Dichloroethane	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 06:32	EPA 8260B	
Trichloroethene	**2.28**	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 06:32	EPA 8260B	
Tetrachloroethene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 06:32	EPA 8260B	
Chlorobenzene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 06:32	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*89 %*	*70-130*		*ECJ0228*	MDS	*10/11/14 06:32*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*96 %*	*70-130*		*ECJ0228*	MDS	*10/11/14 06:32*	*EPA 8260B*	
Surrogate: Toluene-d8		*98 %*	*70-130*		*ECJ0228*	MDS	*10/11/14 06:32*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*114 %*	*70-130*		*ECJ0228*	MDS	*10/11/14 06:32*	*EPA 8260B*	

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

22A & 22B Rolloff #22 Hole #19 & 18

E4J0162-09 (Solid) - Sampled: 10/08/14 00:00

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction by EPA 1311									
TCLP Extraction	Completed		N/A		ECJ0246	LSB	10/13/14 19:15	EPA 1311	
TCLP ZHE Extraction	Completed		N/A		ECJ0294	MDS	10/16/14 15:16	EPA 1311	
TCLP Metals by 6000/7000 Series Methods									
Silver	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:26	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:26	EPA 6010C	
Barium	**0.666**	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:26	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:26	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:26	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0244	LSB	10/14/14 19:26	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0244	LSB	10/14/14 19:26	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0281	LSB	10/16/14 14:49	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0244	LSB	10/14/14 13:10	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0281	LSB	10/16/14 08:15	EPA 7470A	
TCLP Volatile Organic Compounds by EPA Method 8260									
Vinyl chloride	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:19	EPA 8260B	
1,1-Dichloroethene	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:19	EPA 8260B	
Chloroform	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:19	EPA 8260B	
Carbon tetrachloride	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:19	EPA 8260B	
2-Butanone (MEK)	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:19	EPA 8260B	
Benzene	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:19	EPA 8260B	
1,2-Dichloroethane	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:19	EPA 8260B	
Trichloroethene	**4.65**	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:19	EPA 8260B	
Tetrachloroethene	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:19	EPA 8260B	
Chlorobenzene	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:19	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*100 %*	*70-130*		*ECJ0294*	MDS	*10/15/14 17:19*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*99 %*	*70-130*		*ECJ0294*	MDS	*10/15/14 17:19*	*EPA 8260B*	
Surrogate: Toluene-d8		*95 %*	*70-130*		*ECJ0294*	MDS	*10/15/14 17:19*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*115 %*	*70-130*		*ECJ0294*	MDS	*10/15/14 17:19*	*EPA 8260B*	

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

23A & 23B Rolloff #23 Hole #18 & 19

E4J0162-10 (Solid) - Sampled: 10/08/14 00:00

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction by EPA 1311									
TCLP Extraction	Completed		N/A		ECJ0246	LSB	10/13/14 19:15	EPA 1311	
TCLP Metals by 6000/7000 Series Methods									
Silver	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:29	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:29	EPA 6010C	
Barium	**1.52**	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:29	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:29	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:29	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0244	LSB	10/14/14 19:29	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0244	LSB	10/14/14 19:29	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0281	LSB	10/16/14 14:51	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0244	LSB	10/14/14 13:10	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0281	LSB	10/16/14 08:15	EPA 7470A	
TCLP (Total) Volatile Organic Compounds by EPA Method 8260									
Vinyl chloride	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 07:45	EPA 8260B	
1,1-Dichloroethene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 07:45	EPA 8260B	
Chloroform	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 07:45	EPA 8260B	
Carbon tetrachloride	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 07:45	EPA 8260B	
2-Butanone (MEK)	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 07:45	EPA 8260B	
Benzene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 07:45	EPA 8260B	
1,2-Dichloroethane	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 07:45	EPA 8260B	
Trichloroethene	**0.548**	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 07:45	EPA 8260B	
Tetrachloroethene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 07:45	EPA 8260B	
Chlorobenzene	<0.125	0.125	mg/Kg	5	ECJ0228	MDS	10/11/14 07:45	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*99 %*	*70-130*		*ECJ0228*	MDS	*10/11/14 07:45*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*98 %*	*70-130*		*ECJ0228*	MDS	*10/11/14 07:45*	*EPA 8260B*	
Surrogate: Toluene-d8		*95 %*	*70-130*		*ECJ0228*	MDS	*10/11/14 07:45*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*108 %*	*70-130*		*ECJ0228*	MDS	*10/11/14 07:45*	*EPA 8260B*	

Environmental Testing, Inc.



Russell Britten, President

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

13B Rolloff #13 Hole #12

E4J0162-11 (Solid) - Sampled: 10/04/14 00:00

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Dilution	Batch	Analyst	Analyzed	Method	Qualifiers
TCLP Extraction by EPA 1311									
TCLP Extraction	Completed		N/A		ECJ0246	LSB	10/13/14 19:15	EPA 1311	
TCLP ZHE Extraction	Completed		N/A		ECJ0294	MDS	10/16/14 15:16	EPA 1311	
TCLP Metals by 6000/7000 Series Methods									
Silver	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:32	EPA 6010C	
Arsenic	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:32	EPA 6010C	
Barium	**0.887**	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:32	EPA 6010C	
Cadmium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:32	EPA 6010C	
Chromium	<0.100	0.100	mg/L	1	ECJ0244	LSB	10/14/14 19:32	EPA 6010C	
Lead	<0.500	0.500	mg/L	1	ECJ0244	LSB	10/14/14 19:32	EPA 6010C	
Selenium	<0.200	0.200	mg/L	1	ECJ0244	LSB	10/14/14 19:32	EPA 6010C	
Mercury	<0.00200	0.00200	mg/L	1	ECJ0281	LSB	10/16/14 14:57	EPA 7470A	
Metals Digestion	Completed		N/A		ECJ0244	LSB	10/14/14 13:10	EPA 3010A	
Mercury Digestion	Completed		N/A		ECJ0281	LSB	10/16/14 08:15	EPA 7470A	
TCLP Volatile Organic Compounds by EPA Method 8260									
Vinyl chloride	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:55	EPA 8260B	
1,1-Dichloroethene	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:55	EPA 8260B	
Chloroform	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:55	EPA 8260B	
Carbon tetrachloride	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:55	EPA 8260B	
2-Butanone (MEK)	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:55	EPA 8260B	
Benzene	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:55	EPA 8260B	
1,2-Dichloroethane	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:55	EPA 8260B	
Trichloroethene	**0.540**	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:55	EPA 8260B	
Tetrachloroethene	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:55	EPA 8260B	
Chlorobenzene	<0.200	0.200	mg/L	40	ECJ0294	MDS	10/15/14 17:55	EPA 8260B	
Surrogate: 1,2-Dichloroethane-d4		*93 %*	*70-130*		*ECJ0294*	MDS	*10/15/14 17:55*	*EPA 8260B*	
Surrogate: Dibromofluoromethane		*97 %*	*70-130*		*ECJ0294*	MDS	*10/15/14 17:55*	*EPA 8260B*	
Surrogate: Toluene-d8		*95 %*	*70-130*		*ECJ0294*	MDS	*10/15/14 17:55*	*EPA 8260B*	
Surrogate: 4-Bromofluorobenzene		*120 %*	*70-130*		*ECJ0294*	MDS	*10/15/14 17:55*	*EPA 8260B*	

Environmental Testing, Inc.



Russell Britten, President

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

TCLP Extraction by EPA 1311 - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0239 - EPA 5030 Soil MS										
Blank (ECJ0239-BLK1)				Prepared & Analyzed: 10/14/14						
TCLP ZHE Extraction	Completed		N/A							
Batch ECJ0246 - EPA 1311										
Blank (ECJ0246-BLK1)				Prepared & Analyzed: 10/13/14						
TCLP Extraction	Completed		N/A							
Batch ECJ0294 - EPA 5030 Soil MS										
Blank (ECJ0294-BLK1)				Prepared: 10/15/14 Analyzed: 10/16/14						
TCLP ZHE Extraction	Completed		N/A							

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

TCLP Metals by 6000/7000 Series Methods - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0244 - EPA 3005 TCLP										
Blank (ECJ0244-BLK1)				Prepared & Analyzed: 10/14/14						
Arsenic	<0.100	0.100	mg/L							
Barium	<0.100	0.100	mg/L							
Cadmium	<0.100	0.100	mg/L							
Chromium	<0.100	0.100	mg/L							
Lead	<0.500	0.500	mg/L							
Silver	<0.100	0.100	mg/L							
Selenium	<0.200	0.200	mg/L							
Metals Digestion	Completed		N/A							
LCS (ECJ0244-BS1)				Prepared & Analyzed: 10/14/14						
Arsenic	11.1	0.100	mg/L	10.0		111	80-120			
Barium	9.83	0.100	mg/L	10.0		98	80-120			
Cadmium	10.4	0.100	mg/L	10.0		104	80-120			
Chromium	10.2	0.100	mg/L	10.0		102	80-120			
Lead	10.3	0.500	mg/L	10.0		103	80-120			
Silver	10.1	0.100	mg/L	10.0		101	80-120			
Selenium	10.4	0.200	mg/L	10.0		104	80-120			
Metals Digestion	Completed		N/A							
Duplicate (ECJ0244-DUP1)				**Source: E4J0191-01**	Prepared & Analyzed: 10/14/14					
Arsenic	<0.100	0.100	mg/L		ND				20	
Barium	<0.100	0.100	mg/L		ND				20	
Cadmium	<0.100	0.100	mg/L		ND				20	
Chromium	<0.100	0.100	mg/L		ND				20	
Lead	1.07	0.500	mg/L		0.535			66	20	R-01
Silver	<0.100	0.100	mg/L		ND				20	
Selenium	<0.200	0.200	mg/L		ND				20	
Metals Digestion	Completed		N/A							

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

TCLP Metals by 6000/7000 Series Methods - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0244 - EPA 3005 TCLP										
Matrix Spike (ECJ0244-MS1)		**Source: E4J0191-01**		Prepared & Analyzed: 10/14/14						
Arsenic	11.0	0.100	mg/L	10.0	ND	110	75-125			
Barium	10.5	0.100	mg/L	10.0	ND	105	75-125			
Cadmium	10.4	0.100	mg/L	10.0	ND	104	75-125			
Chromium	10.5	0.100	mg/L	10.0	ND	105	75-125			
Lead	11.4	0.500	mg/L	10.0	0.535	108	75-125			
Silver	11.1	0.100	mg/L	10.0	ND	111	75-125			
Selenium	10.6	0.200	mg/L	10.0	ND	106	75-125			
Metals Digestion	Completed		N/A							
Matrix Spike Dup (ECJ0244-MSD1)		**Source: E4J0191-01**		Prepared & Analyzed: 10/14/14						
Arsenic	10.8	0.100	mg/L	10.0	ND	108	75-125	2	20	
Barium	10.2	0.100	mg/L	10.0	ND	102	75-125	2	20	
Cadmium	10.2	0.100	mg/L	10.0	ND	102	75-125	2	20	
Chromium	10.2	0.100	mg/L	10.0	ND	102	75-125	2	20	
Lead	11.1	0.500	mg/L	10.0	0.535	105	75-125	3	20	
Silver	10.8	0.100	mg/L	10.0	ND	108	75-125	3	20	
Selenium	10.5	0.200	mg/L	10.0	ND	105	75-125	1	20	
Metals Digestion	Completed		N/A							
Batch ECJ0281 - EPA 7470 TCLP										
Blank (ECJ0281-BLK1)				Prepared & Analyzed: 10/16/14						
Mercury	<0.00200	0.00200	mg/L							
Mercury Digestion	Completed		N/A							
LCS (ECJ0281-BS1)				Prepared & Analyzed: 10/16/14						
Mercury	0.0204	0.00200	mg/L	0.0200		102	80-120			
Mercury Digestion	Completed		N/A							

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2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

TCLP Metals by 6000/7000 Series Methods - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0281 - EPA 7470 TCLP										
Matrix Spike (ECJ0281-MS1)		**Source: E4J0162-01**		Prepared & Analyzed: 10/16/14						
Mercury	0.0202	0.00200	mg/L	0.0200	ND	101	75-125			
Mercury Digestion	Completed		N/A							
Matrix Spike Dup (ECJ0281-MSD1)		**Source: E4J0162-01**		Prepared & Analyzed: 10/16/14						
Mercury	0.0201	0.00200	mg/L	0.0200	ND	100	75-125	0.5	20	
Mercury Digestion	Completed		N/A							

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2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

TCLP (Total) Volatile Organic Compounds by EPA Method 8260 - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0228 - EPA 5030 Soil MS										
Blank (ECJ0228-BLK1)				Prepared & Analyzed: 10/10/14						
Vinyl chloride	<0.0250	0.0250	mg/Kg							
1,1-Dichloroethene	<0.0250	0.0250	mg/Kg							
Chloroform	<0.0250	0.0250	mg/Kg							
Carbon tetrachloride	<0.0250	0.0250	mg/Kg							
Benzene	<0.0250	0.0250	mg/Kg							
1,2-Dichloroethane	<0.0250	0.0250	mg/Kg							
Trichloroethene	<0.0250	0.0250	mg/Kg							
Tetrachloroethene	<0.0250	0.0250	mg/Kg							
Chlorobenzene	<0.0250	0.0250	mg/Kg							
Surrogate: 1,2-Dichloroethane-d4	*0.262*		mg/Kg	*0.250*		*105*	*70-130*			
Surrogate: Dibromofluoromethane	*0.260*		mg/Kg	*0.250*		*104*	*70-130*			
Surrogate: Toluene-d8	*0.250*		mg/Kg	*0.250*		*100*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.264*		mg/Kg	*0.250*		*106*	*70-130*			
LCS (ECJ0228-BS1)				Prepared & Analyzed: 10/10/14						
Vinyl chloride	0.386	0.0250	mg/Kg	0.400		96	80-120			
1,1-Dichloroethene	0.391	0.0250	mg/Kg	0.400		98	80-120			
Chloroform	0.439	0.0250	mg/Kg	0.400		110	80-120			
Carbon tetrachloride	0.432	0.0250	mg/Kg	0.400		108	80-120			
Benzene	0.436	0.0250	mg/Kg	0.400		109	80-120			
1,2-Dichloroethane	0.413	0.0250	mg/Kg	0.400		103	80-120			
Trichloroethene	0.426	0.0250	mg/Kg	0.400		107	80-120			
Tetrachloroethene	0.429	0.0250	mg/Kg	0.400		107	80-120			
Chlorobenzene	0.412	0.0250	mg/Kg	0.400		103	80-120			
Surrogate: 1,2-Dichloroethane-d4	*0.262*		mg/Kg	*0.250*		*105*	*70-130*			
Surrogate: Dibromofluoromethane	*0.269*		mg/Kg	*0.250*		*107*	*70-130*			
Surrogate: Toluene-d8	*0.252*		mg/Kg	*0.250*		*101*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.249*		mg/Kg	*0.250*		*100*	*70-130*			

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Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

TCLP (Total) Volatile Organic Compounds by EPA Method 8260 - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0228 - EPA 5030 Soil MS										
Matrix Spike (ECJ0228-MS1)		**Source: E4J0103-10**		Prepared & Analyzed: 10/10/14						
Vinyl chloride	1.89	0.125	mg/Kg	2.00	ND	94	70-130			
1,1-Dichloroethene	2.02	0.125	mg/Kg	2.00	ND	101	70-130			
Chloroform	2.34	0.125	mg/Kg	2.00	ND	117	70-130			
Carbon tetrachloride	2.17	0.125	mg/Kg	2.00	ND	109	70-130			
Benzene	2.12	0.125	mg/Kg	2.00	ND	106	70-130			
1,2-Dichloroethane	2.16	0.125	mg/Kg	2.00	ND	108	70-130			
Trichloroethene	2.45	0.125	mg/Kg	2.00	0.215	112	70-130			
Tetrachloroethene	2.19	0.125	mg/Kg	2.00	ND	110	70-130			
Chlorobenzene	2.30	0.125	mg/Kg	2.00	ND	115	70-130			
Surrogate: 1,2-Dichloroethane-d4	*1.32*		mg/Kg	*1.25*		*106*	*70-130*			
Surrogate: Dibromofluoromethane	*1.35*		mg/Kg	*1.25*		*108*	*70-130*			
Surrogate: Toluene-d8	*1.28*		mg/Kg	*1.25*		*102*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*1.26*		mg/Kg	*1.25*		*101*	*70-130*			
Matrix Spike Dup (ECJ0228-MSD1)		**Source: E4J0103-10**		Prepared & Analyzed: 10/10/14						
Vinyl chloride	1.94	0.125	mg/Kg	2.00	ND	97	70-130	3	20	
1,1-Dichloroethene	1.96	0.125	mg/Kg	2.00	ND	98	70-130	3	20	
Chloroform	2.23	0.125	mg/Kg	2.00	ND	111	70-130	5	20	
Carbon tetrachloride	2.14	0.125	mg/Kg	2.00	ND	107	70-130	1	20	
Benzene	2.08	0.125	mg/Kg	2.00	ND	104	70-130	2	20	
1,2-Dichloroethane	2.04	0.125	mg/Kg	2.00	ND	102	70-130	6	20	
Trichloroethene	2.78	0.125	mg/Kg	2.00	0.215	128	70-130	13	20	
Tetrachloroethene	2.30	0.125	mg/Kg	2.00	ND	115	70-130	5	20	
Chlorobenzene	2.28	0.125	mg/Kg	2.00	ND	114	70-130	1	20	
Surrogate: 1,2-Dichloroethane-d4	*1.23*		mg/Kg	*1.25*		*98*	*70-130*			
Surrogate: Dibromofluoromethane	*1.24*		mg/Kg	*1.25*		*99*	*70-130*			
Surrogate: Toluene-d8	*1.25*		mg/Kg	*1.25*		*100*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*1.32*		mg/Kg	*1.25*		*106*	*70-130*			

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2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

TCLP Volatile Organic Compounds by EPA Method 8260 - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0239 - EPA 5030 Soil MS										
Blank (ECJ0239-BLK1)				Prepared & Analyzed: 10/14/14						
Vinyl chloride	<0.00500	0.00500	mg/L							
1,1-Dichloroethene	<0.00500	0.00500	mg/L							
Chloroform	<0.00500	0.00500	mg/L							
Carbon tetrachloride	<0.00500	0.00500	mg/L							
Benzene	<0.00500	0.00500	mg/L							
1,2-Dichloroethane	<0.00500	0.00500	mg/L							
Trichloroethene	<0.00500	0.00500	mg/L							
Tetrachloroethene	<0.00500	0.00500	mg/L							
Chlorobenzene	<0.00500	0.00500	mg/L							
Surrogate: 1,2-Dichloroethane-d4	*0.0518*		mg/L	*0.0500*		*104*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0503*		mg/L	*0.0500*		*101*	*70-130*			
Surrogate: Toluene-d8	*0.0510*		mg/L	*0.0500*		*102*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0521*		mg/L	*0.0500*		*104*	*70-130*			
LCS (ECJ0239-BS1)				Prepared & Analyzed: 10/14/14						
Vinyl chloride	0.0733	0.00500	mg/L	0.0800		92	80-120			
1,1-Dichloroethene	0.0819	0.00500	mg/L	0.0800		102	80-120			
Chloroform	0.0855	0.00500	mg/L	0.0800		107	80-120			
Carbon tetrachloride	0.0859	0.00500	mg/L	0.0800		107	80-120			
Benzene	0.0820	0.00500	mg/L	0.0800		102	80-120			
1,2-Dichloroethane	0.0827	0.00500	mg/L	0.0800		103	80-120			
Trichloroethene	0.0812	0.00500	mg/L	0.0800		102	80-120			
Tetrachloroethene	0.0893	0.00500	mg/L	0.0800		112	80-120			
Chlorobenzene	0.0823	0.00500	mg/L	0.0800		103	80-120			
Surrogate: 1,2-Dichloroethane-d4	*0.0528*		mg/L	*0.0500*		*106*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0532*		mg/L	*0.0500*		*106*	*70-130*			
Surrogate: Toluene-d8	*0.0487*		mg/L	*0.0500*		*97*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0525*		mg/L	*0.0500*		*105*	*70-130*			

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Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0239 - EPA 5030 Soil MS										
Matrix Spike (ECJ0239-MS1)		**Source: E4J0103-07**		Prepared & Analyzed: 10/14/14						
Vinyl chloride	3.04	0.200	mg/L	3.20	ND	95	70-130			
1,1-Dichloroethene	3.41	0.200	mg/L	3.20	ND	107	70-130			
Chloroform	3.52	0.200	mg/L	3.20	ND	110	70-130			
Carbon tetrachloride	3.72	0.200	mg/L	3.20	ND	116	70-130			
Benzene	3.34	0.200	mg/L	3.20	ND	104	70-130			
1,2-Dichloroethane	3.16	0.200	mg/L	3.20	ND	99	70-130			
Trichloroethene	6.05	0.200	mg/L	3.20	2.25	119	70-130			
Tetrachloroethene	4.02	0.200	mg/L	3.20	ND	126	70-130			
Chlorobenzene	3.62	0.200	mg/L	3.20	ND	113	70-130			
Surrogate: 1,2-Dichloroethane-d4	*1.92*		mg/L	*2.00*		*96*	*70-130*			
Surrogate: Dibromofluoromethane	*1.92*		mg/L	*2.00*		*96*	*70-130*			
Surrogate: Toluene-d8	*1.93*		mg/L	*2.00*		*96*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*2.31*		mg/L	*2.00*		*116*	*70-130*			
Matrix Spike Dup (ECJ0239-MSD1)		**Source: E4J0103-07**		Prepared & Analyzed: 10/14/14						
Vinyl chloride	3.08	0.200	mg/L	3.20	ND	96	70-130	2	20	
1,1-Dichloroethene	3.50	0.200	mg/L	3.20	ND	109	70-130	3	20	
Chloroform	3.54	0.200	mg/L	3.20	ND	111	70-130	0.6	20	
Carbon tetrachloride	3.50	0.200	mg/L	3.20	ND	109	70-130	6	20	
Benzene	3.38	0.200	mg/L	3.20	ND	106	70-130	1	20	
1,2-Dichloroethane	3.03	0.200	mg/L	3.20	ND	95	70-130	4	20	
Trichloroethene	6.12	0.200	mg/L	3.20	2.25	121	70-130	1	20	
Tetrachloroethene	3.93	0.200	mg/L	3.20	ND	123	70-130	2	20	
Chlorobenzene	3.73	0.200	mg/L	3.20	ND	117	70-130	3	20	
Surrogate: 1,2-Dichloroethane-d4	*1.89*		mg/L	*2.00*		*94*	*70-130*			
Surrogate: Dibromofluoromethane	*1.98*		mg/L	*2.00*		*99*	*70-130*			
Surrogate: Toluene-d8	*2.04*		mg/L	*2.00*		*102*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*2.28*		mg/L	*2.00*		*114*	*70-130*			

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Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

TCLP Volatile Organic Compounds by EPA Method 8260 - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0294 - EPA 5030 Soil MS										
Blank (ECJ0294-BLK1)				Prepared & Analyzed: 10/15/14						
Vinyl chloride	<0.00500	0.00500	mg/L							
1,1-Dichloroethene	<0.00500	0.00500	mg/L							
Chloroform	<0.00500	0.00500	mg/L							
Carbon tetrachloride	<0.00500	0.00500	mg/L							
Benzene	<0.00500	0.00500	mg/L							
1,2-Dichloroethane	<0.00500	0.00500	mg/L							
Trichloroethene	<0.00500	0.00500	mg/L							
Tetrachloroethene	<0.00500	0.00500	mg/L							
Chlorobenzene	<0.00500	0.00500	mg/L							
Surrogate: 1,2-Dichloroethane-d4	*0.0539*		mg/L	*0.0500*		*108*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0526*		mg/L	*0.0500*		*105*	*70-130*			
Surrogate: Toluene-d8	*0.0477*		mg/L	*0.0500*		*95*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0550*		mg/L	*0.0500*		*110*	*70-130*			
LCS (ECJ0294-BS1)				Prepared & Analyzed: 10/15/14						
Vinyl chloride	0.0845	0.00500	mg/L	0.0800		106	80-120			
1,1-Dichloroethene	0.0777	0.00500	mg/L	0.0800		97	80-120			
Chloroform	0.0770	0.00500	mg/L	0.0800		96	80-120			
Carbon tetrachloride	0.0804	0.00500	mg/L	0.0800		101	80-120			
Benzene	0.0737	0.00500	mg/L	0.0800		92	80-120			
1,2-Dichloroethane	0.0749	0.00500	mg/L	0.0800		94	80-120			
Trichloroethene	0.0789	0.00500	mg/L	0.0800		99	80-120			
Tetrachloroethene	0.0870	0.00500	mg/L	0.0800		109	80-120			
Chlorobenzene	0.0817	0.00500	mg/L	0.0800		102	80-120			
Surrogate: 1,2-Dichloroethane-d4	*0.0469*		mg/L	*0.0500*		*94*	*70-130*			
Surrogate: Dibromofluoromethane	*0.0464*		mg/L	*0.0500*		*93*	*70-130*			
Surrogate: Toluene-d8	*0.0475*		mg/L	*0.0500*		*95*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*0.0530*		mg/L	*0.0500*		*106*	*70-130*			

Environmental Testing, Inc.



Russell Britten, President

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ENVIRONMENTAL TESTING, INC.

4619 N. Santa Fe
Oklahoma City, OK 73118
405.488.2400 Phone
405.488.2404 Fax
www.etilab.com

Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

TCLP Volatile Organic Compounds by EPA Method 8260 - Quality Control

Environmental Testing, Inc.

Analyte	Result	Reporting Limit	Units	Spike Level	Source Result	%REC	%REC Limits	RPD	RPD Limit	Qualifiers
Batch ECJ0294 - EPA 5030 Soil MS										
Matrix Spike (ECJ0294-MS1)		**Source: E4J0162-04**		Prepared & Analyzed: 10/15/14						
Vinyl chloride	4.11	0.200	mg/L	3.20	ND	128	70-130			
1,1-Dichloroethene	3.75	0.200	mg/L	3.20	ND	117	70-130			
Chloroform	3.42	0.200	mg/L	3.20	ND	107	70-130			
Carbon tetrachloride	3.70	0.200	mg/L	3.20	ND	116	70-130			
Benzene	3.26	0.200	mg/L	3.20	ND	102	70-130			
1,2-Dichloroethane	2.90	0.200	mg/L	3.20	ND	91	70-130			
Trichloroethene	3.98	0.200	mg/L	3.20	0.517	108	70-130			
Tetrachloroethene	3.86	0.200	mg/L	3.20	ND	121	70-130			
Chlorobenzene	3.36	0.200	mg/L	3.20	ND	105	70-130			
Surrogate: 1,2-Dichloroethane-d4	*1.83*		mg/L	*2.00*		*91*	*70-130*			
Surrogate: Dibromofluoromethane	*1.93*		mg/L	*2.00*		*96*	*70-130*			
Surrogate: Toluene-d8	*1.93*		mg/L	*2.00*		*96*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*2.24*		mg/L	*2.00*		*112*	*70-130*			
Matrix Spike Dup (ECJ0294-MSD1)		**Source: E4J0162-04**		Prepared & Analyzed: 10/15/14						
Vinyl chloride	3.89	0.200	mg/L	3.20	ND	121	70-130	6	20	
1,1-Dichloroethene	3.75	0.200	mg/L	3.20	ND	117	70-130	0.06	20	
Chloroform	3.58	0.200	mg/L	3.20	ND	112	70-130	5	20	
Carbon tetrachloride	3.83	0.200	mg/L	3.20	ND	120	70-130	4	20	
Benzene	3.36	0.200	mg/L	3.20	ND	105	70-130	3	20	
1,2-Dichloroethane	2.82	0.200	mg/L	3.20	ND	88	70-130	3	20	
Trichloroethene	4.17	0.200	mg/L	3.20	0.517	114	70-130	5	20	
Tetrachloroethene	4.06	0.200	mg/L	3.20	ND	127	70-130	5	20	
Chlorobenzene	3.46	0.200	mg/L	3.20	ND	108	70-130	3	20	
Surrogate: 1,2-Dichloroethane-d4	*1.62*		mg/L	*2.00*		*81*	*70-130*			
Surrogate: Dibromofluoromethane	*1.86*		mg/L	*2.00*		*93*	*70-130*			
Surrogate: Toluene-d8	*1.93*		mg/L	*2.00*		*96*	*70-130*			
Surrogate: 4-Bromofluorobenzene	*2.28*		mg/L	*2.00*		*114*	*70-130*			

Environmental Testing, Inc.



Russell Britten, President

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ENVIRONMENTAL TESTING, INC.

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Oklahoma City, OK 73118
405.488.2400 Phone
405.488.2404 Fax
www.etilab.com

Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

Non-Certified Analyses included in this Report

Analyte

Certifications

Code	Description	Number	Expires
KDHE	Kansas Accredited	E-10401	01/31/2015
NDSDH	North Dakota Accredited	R-191	06/30/2015
NELAP	NELAP Accredited (LDEQ)	10002	06/30/2015
ODEQ	Oklahoma Accredited	2013-063	08/31/2015
TCEQ	Texas Accredited	T104704498-13-3	03/31/2015

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Tec-An Inc.	Project: Whirlpool Plt. - Ft. Smith, AR	
2517 S. Purdue Ave.	Project Number: 1409-25	**Reported:**
Oklahoma City OK, 73128	Project Manager: Mr. Don Nist	10/20/14 08:38

Qualifiers and Definitions

COM	Completed
R-01	The RPD between sample duplicates exceeded the method or laboratory control limit. This may indicate the results are not as precise as expected.
DET	Analyte DETECTED
ND	Analyte NOT DETECTED at or above the reporting limit
NR	Not Reported
dry	Sample results reported on a dry weight basis
RPD	Relative Percent Difference
x	Non-Certified analyte

Environmental Testing, Inc.



Russell Britten, President

The results in this report apply to the samples analyzed in accordance with the chain of custody document and meet all laboratory accreditation requirements unless noted otherwise. This analytical report must be reproduced in its entirety.

CHAIN OF CUSTODY RECORD

ENVIRONMENTAL TESTING, INC.
4619 NORTH SANTA FE AVE.
OKLAHOMA CITY, OK 73118
(405) 488-2400
FAX: (405) 488-2404

Oilab

SAMPLE SERIES #: 14T0162

SHADED AREAS FOR LABORATORY USE ONLY

COMPANY: TEC-AN, INC.
ADDRESS: 2517 S. PURDUE AVE
OKC, OK 73128
PHONE #: 405-681-7076
EMAIL: DONNIST@COXINET.NET
P.O. #:
CLIENT CONTACT: DON NIST
PROJECT #: 1409-25 /MANAGER:
SITE LOCATION: WHIRLPOOL PLT. - FT. SMITH, AR

SAMPLE TYPE
1. WATER
2. SOIL
3. SLUDGE
4. OIL
5. OTHER

CONTAINER TYPE
P-PLASTIC
G-GLASS
V-VOA
O-OTHER
T-TEFLON

ETI SAMPLE #	CLIENT SAMPLE IDENTIFICATION	SAMPLE TYPE	CONTAINER SIZE	CONTAINER TYPE	CONTAINER #	SAMPLING DATE	SAMPLING TIME	PRESERVATIVES	ANALYSIS: TCLP METALS	ANALYSIS: TCLP VOLATILES	LAB COMMENTS
1	14A ROLLOFF #14 HOLE #12	2	4-8oz	G		10/4			X		
21	14B " #12	"	"	"	"	10/4				X	
2	15A ROLLOFF #15 HOLE #12	"	"	"	"	10/4			X		
2	15B " "	"	"	"	"	10/4				X	
3	16A ROLLOFF #16 HOLE #13	"	"	"	"	10/6			X		
3	16B " "	"	"	"	"	10/6				X	
4	17A ROLLOFF #17 HOLE #14	"	"	"	"	10/6			X		
4	17B " "	"	"	"	"	10/6				X	
5	18A ROLLOFF #18 HOLE #14	"	"	"	"	10/6			X		
5	18B " " #17	2	4oz	G		10/6				X	

RECEIVED ON ICE: [X] Y [ ] N @ 1.2 °C
EQUIPMENT #: 400784

SAMPLER: KENNY NUBLINE

FIELD PH:
TEMP:
TIME:
COND:
CALIB: [ ] 4 [ ] 7 [ ] 10

REQUESTED TURNAROUND TIME:
[X] REGULAR (5 DAYS)

RUSH REQUIRED: (ADDITIONAL FEES MAY APPLY)
[ ] 3 DAYS [ ] 2 DAYS [ ] 1 DAY

RELINQUISHED BY: Kenny Nubline	DATE: 10/9/14	RECEIVED BY:	DATE: 10/9/14	COMMENTS:
	TIME: 1054		TIME: 1054	
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:	
	TIME:		TIME:	
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:	
	TIME:		TIME:	

CHAIN OF CUSTODY RECORD

ENVIRONMENTAL TESTING, INC.

4619 NORTH SANTA FE AVE.
OKLAHOMA CITY, OK 73118
(405) 488-2400
FAX: (405) 488-2404

Oilab

SAMPLE SERIES #: GAJ0107

SHADED AREAS FOR LABORATORY USE ONLY

COMPANY: TEC-AN, INC.
ADDRESS: 2517 S. PURDUE AVE
OKC, OK 73128
PHONE #: 405-681-7076
EMAIL: DONNIST@CORINET.NET
P.O. #:
CLIENT CONTACT: DON NIST
PROJECT #: 1409-25 /MANAGER:
SITE LOCATION: WHIRLPOOL PLT. - FT. SMITH, AR

SAMPLE TYPE
1. WATER
2. SOIL
3. SLUDGE
4. OIL
5. OTHER

CONTAINER TYPE
P-PLASTIC
G-GLASS
V-VOA
O-OTHER
T-TEFLON

ETI SAMPLE #	CLIENT SAMPLE IDENTIFICATION	SAMPLE TYPE	CONTAINER SIZE	CONTAINER TYPE	CONTAINER #	SAMPLING DATE	SAMPLING TIME	PRESERVATIVES	ANALYSIS: TCLP METALS	ANALYSIS: TCLP VOLATILES	LAB COMMENTS
6	19A ROLLOFF #19 HOLE #17	2	4-8oz	G		10/6			X		
6	19B " "					10/6				X	
7	20A ROLLOFF #20 HOLE #15					10/7			X		
7	20B ROLLOFF #20 HOLE #16					10/7				X	
8	21A ROLLOFF #21 HOLE #18					10/8			X		
8	21B " "					10/8				X	
9	22A ROLLOFF #22 HOLE #19					10/8			X		
9	22B ROLLOFF #22 HOLE #18					10/8				X	
10	23A ROLLOFF #23 HOLE #18					10/8			X		
10	23B ROLLOFF #23 HOLE #19	2	4-8oz	G		10/8				X	

RECEIVED ON ICE: [X] Y [ ] N @ 1.2 °C
EQUIPMENT #: WD0089

SAMPLER: KENNY NUBLINE

FIELD PH: TEMP:
TIME: COND:
CALIB: [ ] 4 [ ] 7 [ ] 10

REQUESTED TURNAROUND TIME:
[X] REGULAR (5 DAYS)

RUSH REQUIRED: (ADDITIONAL FEES MAY APPLY)
[ ] 3 DAYS [ ] 2 DAYS [ ] 1 DAY

RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:
Don Nist	10/9/14	1054		10/9/14	1054
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:
RELINQUISHED BY:	DATE:	TIME:	RECEIVED BY:	DATE:	TIME:

COMMENTS:

CHAIN OF CUSTODY RECORD

ENVIRONMENTAL TESTING, INC.

4619 NORTH SANTA FE AVE.
OKLAHOMA CITY, OK 73118
(405) 488-2400
FAX: (405) 488-2404

Oilab

PAGE: 3 OF 3
SAMPLE SERIES #: 1410102
SHADED AREAS FOR LABORATORY USE ONLY

COMPANY: TEC-AN, INC.
ADDRESS: 2517 S. PURDUE AVE
OKC, OK 73128
PHONE #: 405-601-7076
EMAIL: DONIST@CORINET.NET
P.O. #:
CLIENT CONTACT: DON NIST
PROJECT #: 1409-25 /MANAGER:
SITE LOCATION: WHIRLPOOL PLT. - FT. SMITH, AR

SAMPLE TYPE
1. WATER
2. SOIL
3. SLUDGE
4. OIL
5. OTHER

CONTAINER TYPE
P-PLASTIC
G-GLASS
V-VOA
O-OTHER
T-TEFLON

ETI SAMPLE #	CLIENT SAMPLE IDENTIFICATION	SAMPLE TYPE	CONTAINER SIZE	CONTAINER TYPE	CONTAINER #	SAMPLING DATE	SAMPLING TIME	PRESERVATIVES	ANALYSIS: TCLP METALS	ANALYSIS: TCLP VOLATILES	LAB COMMENTS
		2	4-8oz	G		10/			X		
11	13 B ROLLOFF #13 HOLE #12					10/4				X	
						10/			X		
						10/				X	
						10/			X		
						10/				X	
						10/			X		
						10/				X	
						10/			X		
		2	4-8oz	G		10/				X	

RECEIVED ON ICE: [X] Y [ ] N @ 1.2 °C
EQUIPMENT #: UD0184

SAMPLER: KENNY NUBLINE

FIELD PH:
TEMP:
TIME:
COND:
CALIB: [ ] 4 [ ] 7 [ ] 10

REQUESTED TURNAROUND TIME:
[X] REGULAR (5 DAYS)

RUSH REQUIRED: (ADDITIONAL FEES MAY APPLY)
[ ] 3 DAYS [ ] 2 DAYS [ ] 1 DAY

RELINQUISHED BY:	DATE: 10/9/14	RECEIVED BY:	DATE: 10/9/14	COMMENTS:
	TIME: 1054		TIME: 1054	
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:	
	TIME:		TIME:	
RELINQUISHED BY:	DATE:	RECEIVED BY:	DATE:	
	TIME:		TIME:	

ENVIRONMENTAL TESTING, INC.

F039.008

Sample/Cooler Receipt Form

Sample Series # 94J0162

1. Were samples received on ice? (YES) NO
2. Temperature of representative sample or temperature blank 1.2 °C
3. If the temperature is ≤ 0°C, was the representative sample or temp blank frozen? YES NO (NA)
4. Did all containers arrive in good condition (unbroken)? (YES) NO
5. Were VOA vials received? YES (NO)
   a. Was there any observable headspace present in any VOA vial? YES NO (NA)
6. Were the correct containers used for the analysis requested? (YES) NO
7. Was there sufficient amount of sample to perform the requested tests in each container? (YES) NO
8. Were the samples received with sufficient time left to meet holding time requirements? (YES) NO
9. On preserved containers, did pH strips suggest preservation reached the correct pH level? YES NO (NA)
   (DO NOT OPEN VOA VIALS TO CHECK pH)

   Acid Preserved ≤2 Other _____ Base Preserved ≥12 Other _____
10. Did the containers indicate the correct preservatives were used for the requested analysis? YES NO (NA)
11. Were chain-of-custody forms properly filled out (conforms to ETI Sample Acceptance Policy)? (YES) NO
12. If samples were not in compliance, was the client notified of the nonconformity? YES Date:_____ Initial: _____
    a. If yes, does the client wish to proceed with analysis? YES NO
13. Was the client notified of the intent to subcontract work that will NOT be performed by ETI? YES Date:_____ Initial: _____

Preservative ID(s) _____, _____, _____, _____

I certify that all of the above checks were completed. (Initial) DH

I certify the project was entered into the LIMS, and a label with the unique LIMS number was attached to each container. (Initial) DH

Notes:

_____

_____

_____

Report and Accompanying Data Reviewed by: _____ Date: _____

Appendix C

Large Diameter Boring Waste Disposal Records

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: ARD042755389
2. Page 1 of: 1
3. Emergency Response Phone: 405-590-3127
4. Manifest Tracking Number: 011455693 JJK

GENERATOR

5. Generator's Name and Mailing Address
Whirlpool Corporation
6400 Jenny Lind Rd
Fort Smith AR 72908
Generator's Phone: 918 424-5100

Attn: Mark Wilkett

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Action Environmental
U.S. EPA ID Number: ALR000050680

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Harbors Lone Mountain Landfill
40355 S. County Road 236
Waynoka OK 73860
Facility's Phone: 580 697-3500
U.S. EPA ID Number: OKD065438378

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NA3077,Hazardous WASTE Solid,n.o.s.,(Trichloroethylene) 9, PGIII (BOX # 25403)	001	CM	00025	Y	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
T(E) PROFILE # CH897831 ERG # 171 S/O # 1403222363

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jerome H Hodgens for Whirlpool
Signature: Jerome H Hodgens
Month: 12 Day: 15 Year: 14

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Robert Landreth
Signature:
Month: 12 Day: 15 Year: 14

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			H061

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Brandon Lane
Signature:
Month: 12 Day: 15 Year: 14

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: ARD042755389
2. Page 1 of: 1
3. Emergency Response Phone: 405-530-3127
4. Manifest Tracking Number: 011455694 JJK

GENERATOR

5. Generator's Name and Mailing Address
Whirlpool Corporation
6400 Jenny Lind Rd
Fort Smith AR 72908
Att: Mark Wilket
Generator's Phone: 918 424-6100
Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Action Environmental
U.S. EPA ID Number: ALR000056689

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Harbors Lone Mountain Landfill
40355 S. County Road 239
Waynoka OK 73860
Facility's Phone: 580 697-3500
U.S. EPA ID Number: OKD065438376

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NA3077, Hazardous WASTE,Solid,n.o.s.(Trichloroethylene) 9, PGIII (BOX # 25551)	001	CM	00025	Y	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1)(E) PROFILE # CH897931 ERG # 171 S/O # 1403222363

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jerome H Hodgens for Whirlpool
Signature: Jerome H Hodgens
Month: 12 Day: 5 Year: 14

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Brad Mathis
Signature:
Month: 12 Day: 5 Year: 14

Transporter 2 Printed/Typed Name
Signature
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			14-6563

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Randy Kerr
Signature: Randy Kerr
Month: 12 Day: 5 Year: 14

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

CleanHarbors
ENVIRONMENTAL SERVICES®

Land Disposal Restriction Notification Form

Printed Date :Nov 25, 2014

MANIFEST INFORMATION

Generator : Whirlpool Corporation

Address: 6400 Jenny Lind Rd
Fort Smith,AR 72908

EPA ID #: ARD042755389

Manifest Tracking Info.

011455694 JJK

Sales Order No: 1403222363

LINE ITEM INFORMATION

Line Item:	Page No:	Profile No:	Treatability Group:	LDR Disposal Category
1.	1	CH897931	NON-WASTEWATER	6 (Alternate Soil Std-meets std. (with characteristic hazardous waste only))

EPA Waste Code
D040

EPA Waste SubCategory
NONE

Certification	Applies to Manifest Line Items
This contaminated soil does not contain listed hazardous waste and does exhibit a characteristic of hazardous waste and complies with the soil treatment standards as provided by 40 CFR 268.49(c) or the universal treatment standards. I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR part 268 subpart D. I believe that the information I submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.	1.

Waste analysis data, where available, is attached.

Signature : Jerome H Hodgens Print Name Jerome H Hodgens

Title : Facility Manager Date : 12-8-2014

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: ARD042755389
2. Page 1 of: 1
3. Emergency Response Phone: 405-590-3127
4. Manifest Tracking Number: 011455693 JJK

GENERATOR

5. Generator's Name and Mailing Address
Whirlpool Corporation
6400 Jenny Lind Rd
Fort Smith AR 72908
Generator's Phone: 918 424-5100

Attn: Mark Wilkett

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Action Environmental
U.S. EPA ID Number: ALR000050680

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Harbors Lone Mountain Landfill
40355 S. County Road 236
Waynoka OK 73860
Facility's Phone: 580 697-3500
U.S. EPA ID Number: OKD065438378

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NA3077,Hazardous WASTE Solid,n.o.s.,(Trichloroethylene) 9, PGIII (BOX # 25403)	001	CM	00025	Y	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
T(E) PROFILE # CH897831 ERG # 171 S/O # 1403222363

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jerome H Hodgens for Whirlpool
Signature: Jerome H Hodgens
Month: 12 Day: 15 Year: 14

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Robert Landreth
Signature:
Month: 12 Day: 15 Year: 14

Transporter 2 Printed/Typed Name
Signature
Month Day Year

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month Day Year

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			H061

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Brandon Lane
Signature:
Month: 12 Day: 15 Year: 14

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: ARD042755389
2. Page 1 of: 1
3. Emergency Response Phone: 405-530-3127
4. Manifest Tracking Number: 011455694 JJK

GENERATOR

5. Generator's Name and Mailing Address
Whirlpool Corporation
6400 Jenny Lind Rd
Fort Smith AR 72908
Att: Mark Wilket
Generator's Phone: 918 424-6100
Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Action Environmental
U.S. EPA ID Number: ALR000056689

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Harbors Lone Mountain Landfill
40355 S. County Road 239
Waynoka OK 73860
Facility's Phone: 580 697-3500
U.S. EPA ID Number: OKD065438376

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
	1. NA3077, Hazardous WASTE,Solid,n.o.s.(Trichloroethylene) 9, PGIII (BOX # 25551)	001	CM	00025	Y	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1)(E) PROFILE # CH897931 ERG # 171 S/O # 1403222363

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jerome H Hodgens for Whirlpool
Signature: Jerome H Hodgens
Month: 12 Day: 5 Year: 14

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Brad Mathis
Signature:
Month: 12 Day: 5 Year: 14

Transporter 2 Printed/Typed Name
Signature
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			14-6563

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Randy Kerr
Signature: Randy Kerr
Month: 12 Day: 5 Year: 14

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

CleanHarbors
ENVIRONMENTAL SERVICES®

Land Disposal Restriction Notification Form

Printed Date :Nov 25, 2014

MANIFEST INFORMATION

Generator : Whirlpool Corporation

Address: 6400 Jenny Lind Rd
Fort Smith,AR 72908

EPA ID #: ARD042755389

Manifest Tracking Info.

011455694 JJK

Sales Order No: 1403222363

LINE ITEM INFORMATION

Line Item:	Page No:	Profile No:	Treatability Group:	LDR Disposal Category
1.	1	CH897931	NON-WASTEWATER	6 (Alternate Soil Std-meets std. (with characteristic hazardous waste only))

EPA Waste Code
D040

EPA Waste SubCategory
NONE

Certification	Applies to Manifest Line Items
This contaminated soil does not contain listed hazardous waste and does exhibit a characteristic of hazardous waste and complies with the soil treatment standards as provided by 40 CFR 268.49(c) or the universal treatment standards. I certify under penalty of law that I personally have examined and am familiar with the waste through analysis and testing or through knowledge of the waste to support this certification that the waste complies with the treatment standards specified in 40 CFR part 268 subpart D. I believe that the information I submitted is true, accurate, and complete. I am aware that there are significant penalties for submitting a false certification, including the possibility of a fine and imprisonment.	1.

Waste analysis data, where available, is attached.

Signature : Jerome H Hodgens Print Name Jerome H Hodgens

Title : Facility Manager Date : 12-8-2014

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: ARD042755389
2. Page 1 of: 1
3. Emergency Response Phone: 405-590-3127
4. Manifest Tracking Number: 011455689 JJK

GENERATOR

5. Generator's Name and Mailing Address
Whirlpool Corporation
6400 Jenny Lind Rd
Fort Smith AR 72908
Att: Mark Wilkett
Generator's Phone: 918 424-5100
Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Action Environmental
U.S. EPA ID Number: ALR000056689

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Clean Harbors Lone Mountain Landfill
40365 S. County Road 236
Waynoka OK 73860
Facility's Phone: 580 697-3500
U.S. EPA ID Number: OKD065438376

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. NA3077, Hazardous WASTE Solid, n.o.s., (Trichloroethylene) 9, PGIII (BOX # 25479)	001	CM	00025	Y	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1)(E) PROFILE # CH897931 ERG # 171 S/O # 1403222363
25479

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jerome H Hodges For Whirlpool
Signature: Jerome H Hodges
Month: 12 Day: 5 Year: 14

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Action Phil Harris
Signature: Phil Harris
Month: 12 Day: 23 Year: 14

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H132			

14.1249

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Randy Carr
Signature: Randy Carr
Month: 12 Day: 23 Year: 14

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

Please print or type. (Form designed for use on elite (12-pitch) typewriter.)

Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number: ARD042755389
2. Page 1 of: 1
3. Emergency Response Phone: 405-590-9127
4. Manifest Tracking Number: 011455695 JJK

GENERATOR

5. Generator's Name and Mailing Address
Whirlpool Corporation
6400 Jenny Lind Rd
Fort Smith AR 72908
Attn: Mark Wilket
Generator's Phone: 918 424-5100
Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Action Environmental
U.S. EPA ID Number: ALR000056689

7. Transporter 2 Company Name:
U.S. EPA ID Number:

8. Designated Facility Name and Site Address
Clean Harbors Lone Mountain Landfill
40365 S. County Road 29B
Waynoka OK 73860
Facility's Phone: 580 697-3500
U.S. EPA ID Number: OKD065438376

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. NA3077, Hazardous WASTE Solid, n.o.s., (Trichloroethylene) 9, PGIII (BOX # 25484)	001	CM	00025	Y	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1)(E) PROFILE # CH887931 ERG # 171 S/O # 1403222363
25484

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jerom H Hodgens for Whirlpool
Signature: Jerome H Hodgens
Month: 12 Day: 5 Year: 14

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: ACTION DAVID ADAMS
Signature: David Adams
Month: 12 Day: 23 Year: 14

Transporter 2 Printed/Typed Name:
Signature:
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection
Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number:
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
H135			H075

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Randy Lee
Signature: Randy Lee
Month: 12 Day: 29 Year: 14

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
ARD042755389	1	405-590-3127	011455690 JJK

GENERATOR

5. Generator's Name and Mailing Address
Whirlpool Corporation
5400 Jenny Lind Rd
Fort Smith AR 72908
Attn: Mark Wilkes
Generator's Phone: 918 424-5100

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Action Environmental
U.S. EPA ID Number: ALR000056689

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Harbors Lone Mountain Landfill
40365 S. County Road 235
Waynoka OK 73860
Facility's Phone: 580 697-3500
U.S. EPA ID Number: OKD065438376

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. NA3077, Hazardous Waste,Solid,n.o.s.,(Trichloroethylene) 9, PGIII (BOX # 300526)	001	CM	00025	Y	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1)(E) PROFILE # CH897831 ERG # 171 S/O # 1403222363

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jerome H Hodgens For Whirlpool
Signature: Jerome H Hodgens
Month: 12 Day: 5 Year: 14

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Brad Mathis
Signature:
Month: 12 Day: 17 Year: 14

Transporter 2 Printed/Typed Name
Signature
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.
			14 7107

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Cindy Bradford
Signature: Cindy Bradford
Month: 12 Day: 18 Year: 14

Please print or type. (Form designed for use on elite (12-pitch) typewriter.) Form Approved. OMB No. 2050-0039

UNIFORM HAZARDOUS WASTE MANIFEST

1. Generator ID Number	2. Page 1 of	3. Emergency Response Phone	4. Manifest Tracking Number
ARD042755389	1	405-590-9127	011455692 JJK

GENERATOR

5. Generator's Name and Mailing Address
Whirlpool Corporation
3400 Jenny Lind Rd
Fort Smith AR 72908
Att: Mark Wilket
Generator's Phone: 918 424-5100

Generator's Site Address (if different than mailing address)

6. Transporter 1 Company Name: Action Environmental
U.S. EPA ID Number: ALR000056689

7. Transporter 2 Company Name
U.S. EPA ID Number

8. Designated Facility Name and Site Address
Clean Harbors Lone Mountain Landfill
40355 S. County Road 236
Waynoka OK 73860
Facility's Phone: 580 697-3500
U.S. EPA ID Number: OKD065438376

9a. HM	9b. U.S. DOT Description (including Proper Shipping Name, Hazard Class, ID Number, and Packing Group (if any))	10. Containers No.	10. Containers Type	11. Total Quantity	12. Unit Wt./Vol.	13. Waste Codes
X	1. NA3077, Hazardous WASTE, Solid, n.o.s., (Trichloroethylene) 9, PGIII (BOX # 25498)	001	CM	00025	Y	D040
	2.					
	3.					
	4.					

14. Special Handling Instructions and Additional Information
1)(E) PROFILE # CH887931 ERG # 171 S/O # 1403222363

15. **GENERATOR'S/OFFEROR'S CERTIFICATION:** I hereby declare that the contents of this consignment are fully and accurately described above by the proper shipping name, and are classified, packaged, marked and labeled/placarded, and are in all respects in proper condition for transport according to applicable international and national governmental regulations. If export shipment and I am the Primary Exporter, I certify that the contents of this consignment conform to the terms of the attached EPA Acknowledgment of Consent.
I certify that the waste minimization statement identified in 40 CFR 262.27(a) (if I am a large quantity generator) or (b) (if I am a small quantity generator) is true.

Generator's/Offeror's Printed/Typed Name: Jerome N Hodgens for Whirlpool
Signature: Jerome N Hodgens
Month: 12 Day: 5 Year: 14

INT'L

16. International Shipments ☐ Import to U.S. ☐ Export from U.S. Port of entry/exit:
Transporter signature (for exports only): Date leaving U.S.:

TRANSPORTER

17. Transporter Acknowledgment of Receipt of Materials

Transporter 1 Printed/Typed Name: Action Phil Harris
Signature: Phil Harris
Month: 12 Day: 18 Year: 14

Transporter 2 Printed/Typed Name
Signature
Month: Day: Year:

DESIGNATED FACILITY

18. Discrepancy

18a. Discrepancy Indication Space ☐ Quantity ☐ Type ☐ Residue ☐ Partial Rejection ☐ Full Rejection

Manifest Reference Number:

18b. Alternate Facility (or Generator)
U.S. EPA ID Number
Facility's Phone:

18c. Signature of Alternate Facility (or Generator)
Month: Day: Year:

19. Hazardous Waste Report Management Method Codes (i.e., codes for hazardous waste treatment, disposal, and recycling systems)

1.	2.	3.	4.

20. Designated Facility Owner or Operator: Certification of receipt of hazardous materials covered by the manifest except as noted in Item 18a

Printed/Typed Name: Cindy Bradford
Signature: Cindy Bradford
Month: 12 Day: 18 Year: 14

14 7108

EPA Form 8700-22 (Rev. 3-05) Previous editions are obsolete.

DESIGNATED FACILITY TO GENERATOR

TABLE 1
SUMMARY SOIL ANALYTICAL RESULTS - December 2014
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 (ft bgs)		5.5	10.5	14.5	14	14	14.5	14.5
Sample Method								
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 <u>double underlined</u>.

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Reporting Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of
mg/kg -- miligram per kilogram
NE -- Not Established.
NS -- Not Sampled



FILE: D:\GIS\PROJECT\WHIRLPOOL\DOCS\20141028_ShallowOffsiteCWork\plan\Figure 1 - Location of Initial Soil Borings - 20140202.mxd

ENVIRON

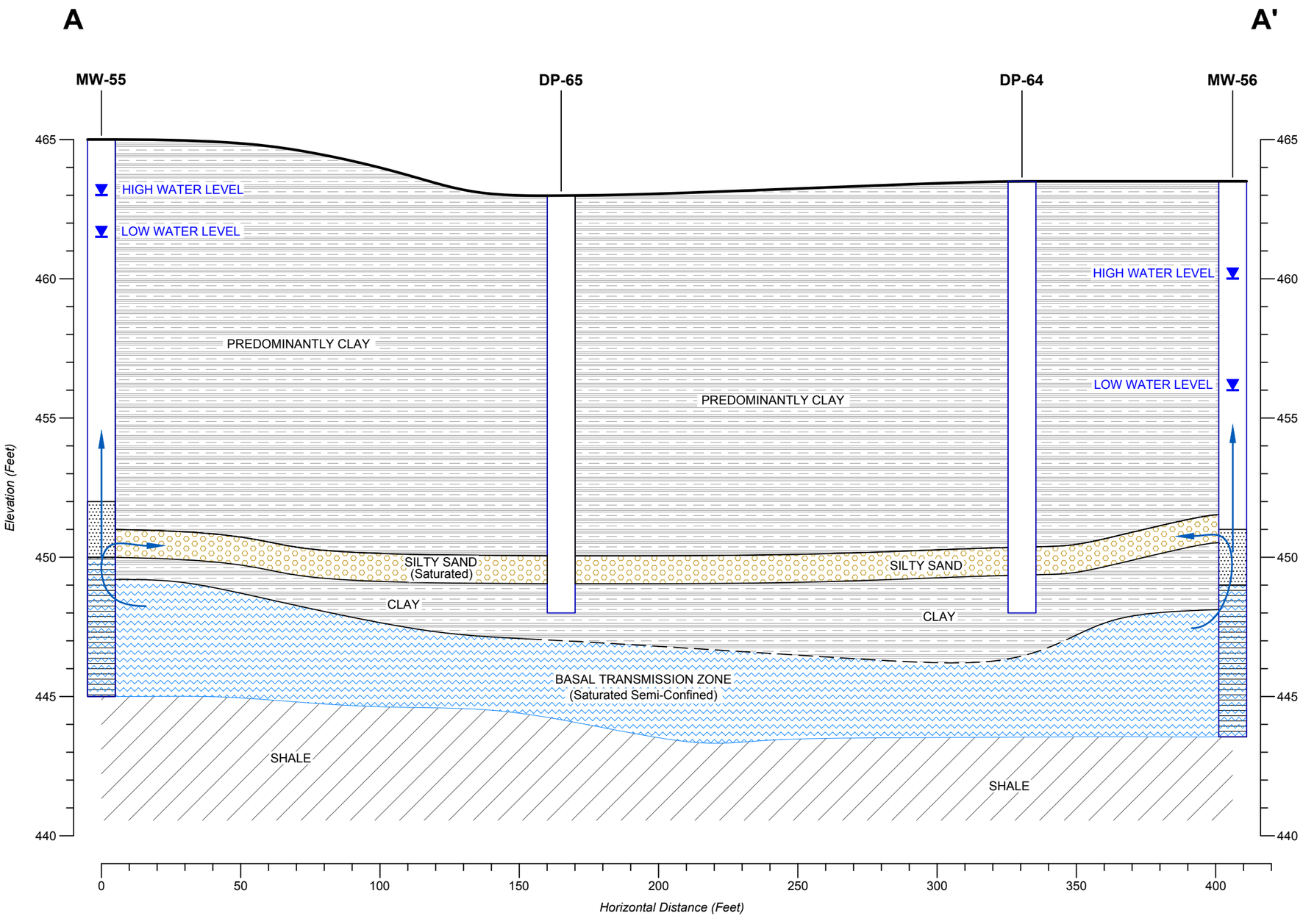
DRAFTED BY: KTS | DATE: 02/02/2015

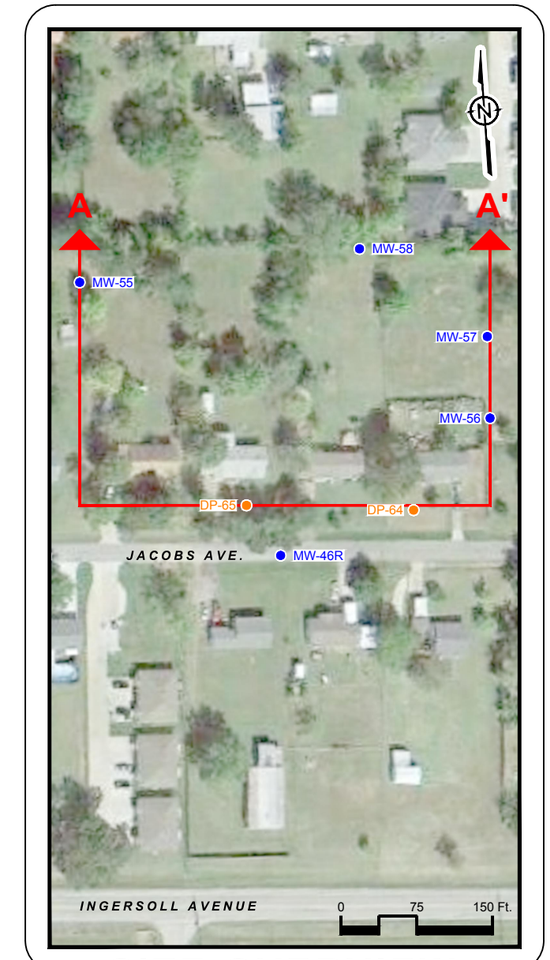
LOCATION OF INITIAL SOIL BORINGS

Whirlpool Facility - Fort Smith, Arkansas

Figure 1

PROJECT: 2131344B





SITE OVERVIEW

LEGEND

- SAND PACK ABOVE SCREEN
- SCREENED INTERVAL
- WATER SEMI-CONFINED ZONE

HORIZONTAL SCALE (Ft.)
0 40

VERTICAL SCALE (Ft.)
0 4

VERTICAL EXAGGERATION = 10

CROSS-SECTION A-A'
WHIRLPOOL FACILITY
FORT SMITH, ARKANSAS

ENVIRON

FIGURE
2

DRAFTED BY: ELS	DATE: 2/6/15	3433233A

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TABLE 1
THICKNESS OF SATURATED SOILS IN PLUMES
Whirlpool Facility - Fort Smith, Arkansas

Plume	Well ID	Ground Elevation	Top of Saturated Soils	Bottom of Saturated Soils	Saturated Soil Interval
North	IW-72	472.2	450.2	446.4	3.8
North	IW-73	472.1	NA[2]	NA[2]	NA[2]
North	IW-74	472.3	454.3	446.3	8.0
North	IW-75	472.8	NA[2]	NA[2]	NA[2]
North	IW-76	473.2	NA[2]	NA[2]	NA[2]
North	IW-77	473.8	454.8	445.8	9.0
North	IW-78	474.2	NA[2]	NA[2]	NA[2]
North	IW-79	474.1	NA[2]	NA[2]	NA[2]
North	IW-80	473.7	454.7	446.7	8.0
North	MW-23	475.8	453.8	447.8	6.0
North	MW-24	476.6	453.6	447.1	6.5
North	MW-27	475.7	451.7	447.4	4.3
North	MW-28	470.6	447.1	445.9	1.2
North	MW-31	476.1	448.1	447.1	1.0
North	MW-32	475.7	NA[2]	NA[2]	NA[2]
North	MW-33	474.9	NA[2]	NA[2]	NA[2]
North	MW-35R	474.0	NA[2]	NA[2]	NA[2]
North	MW-36	473.4	NA[2]	NA[2]	NA[2]
North	MW-39	475.6	450.1	447.6	2.5
North	MW-40	473.4	450.1	447.1	3.0
North	MW-41	472.3	453.3	445.8	7.5
North	MW-42B	471.8	449.8	446.3	3.5
North	MW-43	471.0	451.0	446.3	4.7
North	MW-46R	466.5	450.5	445.8	4.7
North	MW-50	463.2	451.2	445.6	5.6
North	MW-55	465.5	447.5	446.8	0.7
North	MW-56	463.4	445.4	444.9	0.5
North	MW-57	463.1	447.1	446.5	0.6
North	MW-58	462.9	446.3	445.9	0.4
North	MW-60	461.0	447.2	445.6	1.6[3]
North	MW-61	459.8	445.5	444.7	0.8[3]
North	MW-62	464.5	446.0	444.2	1.8
North	MW-63	464.0	444.7	444.5	0.2[3]
North	MW-65	474.1	453.6	445.7	7.9
North	MW-66	462.7	450.7	446.5	4.2[3]
North	MW-67	459.4	448.4	445.2	3.2[3]
North	MW-68	470.0	448.0	446.5	1.5
North	MW-70	471.7	NA[2]	NA[2]	NA[2]
North	MW-71	471.5	NA[2]	NA[2]	NA[2]
North	RW-69	471.5	449.5	445.5	4.0
				Average Thickness (ft)	**3.7**

Notes:
1. Saturated thickness calculated from soil description in boring log.
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 1
THICKNESS OF SATURATED SOILS IN PLUMES
Whirlpool Facility - Fort Smith, Arkansas

Plume	Well ID	Ground Elevation	Top of Saturated Soils	Bottom of Saturated Soils	Saturated Soil Interval
South	ITMW-1	474.6	450.6	444.1	6.5
South	ITMW-10	478.6	451.6	446.1	5.5
South	ITMW-11	474.0	457.5	444.5	13.0
South	ITMW-12	474.7	456.7	444.7	12.0
South	ITMW-13	475.4	450.4	446.4	4.0
South	ITMW-14	475.7	455.7	445.7	10.0
South	ITMW-15	474.8	454.0	444.8	9.2
South	ITMW-16	476.5	458.5	445.3	13.2
South	ITMW-17	476.1	454.1	447.1	7.0
South	ITMW-18	473.9	457.9	444.9	13.0
South	ITMW-19	474.3	457.8	445.3	12.5
South	ITMW-2	475.1	457.1	445.6	11.5
South	ITMW-20	475.7	453.2	447.4	5.8
South	ITMW-21	474.4	449.4	446.4	3.0
South	ITMW-3	472.8	451.6	444.6	7.0
South	ITMW-4	477.6	458.1	447.1	11.0
South	ITMW-5	476.6	452.1	446.1	6.0
South	ITMW-6	481.1	455.4	445.6	9.8
South	ITMW-7	479.7	NA[2]	NA[2]	NA[2]
South	ITMW-9	479.5	460.2	446.3	13.9
South	MW-22	473.9	450.9	449.9	1.0
South	MW-25	474.7	446.7	445.0	1.8
South	MW-26	476.1	451.1	446.9	4.2
South	MW-29	475.1	452.1	447.1	5.0
South	MW-30	479.2	446.7	443.7	3.0
South	MW-37	474.0	457.0	445.5	11.5
South	MW-38	474.9	NA[2]	NA[2]	NA[2]
South	MW-92	473.9	451.9	444.9	7.0
South	MW-93	478.0	456.0	443.5	12.5
South	MW-94	478.0	455.0	445.0	10.0
South	MW-95	478.0	452.0	445.0	7.0
South	MW-172	473.4	459.4	445.8	13.6
				Average Thickness (ft)	**8.3**

Notes:
1. Saturated thickness calculated from soil description in boring log.
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 1
THICKNESS OF SATURATED SOILS IN PLUMES
Whirlpool Facility - Fort Smith, Arkansas

Plume	Well ID	Ground Elevation	Top of Saturated Soils	Bottom of Saturated Soils	Saturated Soil Interval
NE Corner	MW-87	471.0	451.0	447.8	3.2
NE Corner	MW-88	469.1	453.6	449.1	4.5
NE Corner	MW-89	467.1	451.6	449.5	2.1
NE Corner	MW-90	467.0	452.0	447.0	5.0
NE Corner	MW-91	469.2	451.7	449.2	2.5
NE Corner	MW-96	458.3	449.8	444.0	5.8
NE Corner	MW-97	459.9	451.9	445.9	6.0
NE Corner	MW-98	462.0	451.0	444.4	6.6
NE Corner	MW-99	467.1	449.3	445.1	4.2
				Average Thickness (ft)	**4.4**

Notes:
1. Saturated thickness calculated from soil description in boring log.
2. NA - Boring log not available
3. No saturated soil observation recorded in boring log during drilling. Interval inferred based on soil description.

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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 Area (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 ug/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 ug/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 ug/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 ug/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 ug/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 ug/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 ug/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 ug/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 ug/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 ug/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 ug/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 ug/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
South Plume												
October 2014 - 5 to 100 ug/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 ug/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 ug/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
Northeast Plume												
October 2014 - 5 to 100 ug/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 ug/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 ug/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

Notes:
1 - Saturated Thickness estimated from 4th Quarter 2014 RADD sampled wells and new 4th Quarter well completions (see Table 1).
2 - Total Porosity estimated from Freeze and Cherry (1979).
TCE - Trichloroethylene
µg/L - Micrograms per liter

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