Thursday, May 15, 2014

Ray Gosack
City Administrator, City of Fort Smith, Arkansas
623 Garrison Ave
3rd Floor, Room 315
Fort Smith, AR 72901

Via Electronic Mail

RE: WHIRLPOOL FIRST QUARTER 2014 PROGRESS REPORT

Dear Mr. Gosack,

I am writing to inform you that Whirlpool Corporation submitted the quarterly progress report for the 1st Quarter of 2014 to ADEQ today, May 15, 2014, as required by the Remedial Action Decision Document (RADD) dated December 27, 2013. The complete report and all appendices and attachments are available at WhirlpoolFortSmith.com, and I have attached the main report to this letter. The report includes a description of the work completed during the 1st Quarter of 2014 and the findings of the activities during this reporting period.

In summary:

- Groundwater monitoring during the weeks of March 5 and 25, 2014 found that the TCE plume boundaries are consistent with historic results and generally stable to decreasing trends were observed for TCE concentrations both on and off the Whirlpool site.
- Continued vapor monitoring confirmed that there remains no risk of exposure to residents from vapor intrusion in the off-site groundwater.
- Key data obtained from the pre-design activities completed in January 2014 refined the site conceptual model and allowed for the quick initiation and implementation of the adaptive remedy approach.
- Bench scale testing was completed in February 2014 and tracer testing was completed in March 2014.
- Phase I ISCO of the adaptive remedy was initiated via the initial chemical oxidation treatment injections which took place in March 2014. The impact of these injections is being monitored and evaluated, and initial results will be reported in our next quarterly report.

Whirlpool Corporation and its team of consultants are very pleased with the progress that has been made and we continue to work closely with ADEQ under the “adaptive remedy” approach to make meaningful progress with the remediation of the site. Under this approach, Whirlpool works cooperatively with ADEQ to develop and implement remedial actions designed to most effectively address the current on-site and off-site conditions based on the best scientific data. The success of this process will enable us to continue to aggressively pursue the remediation goals laid out in the final RADD.

Please feel free to contact me if you have any questions as to the details of this report. We will continue to post updates and background information as it becomes available to WhirlpoolFortSmith.com.

Sincerely,



Jeff Noel, VP, Whirlpool Corporation





1st Quarter 2014 Progress Report

Whirlpool Corporation
Fort Smith, Arkansas

Prepared for:
Whirlpool Corporation

Prepared by:
ENVIRON International Corporation

Date:
May 15, 2014

Project Number:
3434399A

ENVIRON

First Quarter 2014 Progress Report
January 1, 2014 through March 31, 2014
Whirlpool, Fort Smith, AR

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. This report includes a description of the work completed during the 1st 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 ADEQ. Details regarding the discussion of Summary of Findings are provided in the attached documents.

SUMMARY OF FINDINGS

Overall

- The groundwater plume boundary remains stable both on and off-site.
- TCE concentrations in groundwater were generally stable to decreasing both on and off-site.
- Natural attenuation of TCE is occurring via biological mechanisms or other natural attenuation mechanisms in both on-site and off-site groundwater.
- Risk estimates based upon groundwater and soil vapor data for potential vapor intrusion from off-site groundwater continue to be below ADEQ's risk management limits.

Remedy Implementation

- Based upon predesign efforts the constituents of concern (COC) mass in groundwater is primarily located within the transmissive zone (Attachment C).
- Bench-scale testing demonstrated that if contact of oxidant is provided through effective delivery, the tested oxidants were capable of treating site COCs in groundwater (Attachment E).
- A "neck" area and a former ditch in the source area (Area 1) were identified during the predesign work between September 2013 and January 2014. These two features are described further in the Review of Activities Completed – 1st Quarter 2014 section of this report.
- The tracer test provided the evidence to conclude that the gradient of the potentiometric surface at Array 1 is multi-directional; however, the injected bromide plume moved preferentially to the west northwest and to the east northeast. The limiting factor in regards to the pending in-situ chemical oxidation (ISCO) activities is the limited response to the east approximately 5 feet from the well where bromide tracer was injected (IW-130). It should be noted that 3 feet of sand and gravel were present in the screened interval of the well where the tracer was injected versus the 5 to 6 feet of permeable material identified in other well locations.
- Phase I ISCO Activities:
    - For Array 1 ("neck" area), elevated pH (greater than 10.5 SU) and elevated persulfate concentrations (greater than 1,200 milligrams per liter [mg/L] or

approximately 1% of the persulfate concentration of the injected fluid) were measured in 3 of 4 wells located approximately 5 feet from the injection point, in 1 of 3 wells located approximately 10 feet from the injection point, and in 1 of 5 wells located approximately 15 feet from the injection point.

- For Array 2 (Areas 2 and 3), elevated pH and elevated persulfate concentrations were measured in 8 of 9 wells located approximately 5 to 10 feet from the injection point and in 3 of 5 wells located approximately 18 feet from of the injection point.
- For Array 3 (Area 1), elevated pH and elevated persulfate concentrations were measured in 3 of 3 wells located approximately 5 feet from the injection point and in the remaining well located approximately 10 feet from the injection point.
- A comparison of VOC results in samples collected from three wells located in Array 2 (Areas 2 and 3) approximately 11 days following injection showed a reduction in TCE concentrations of 27% at the well located approximately 5 feet from the injection point, 9% at the well located approximately 10 feet from the injection point and no decrease in the well located approximately 18 feet from the injection point.
- Pending groundwater VOC results from the injection arrays should provide a better understanding of the effectiveness of oxidant injections on VOC concentrations and these results will be addressed in the next quarterly report.

REVIEW OF ACTIVITIES COMPLETED – 1st QUARTER 2014

Extensive pre-design data were collected from September 2013 through January 2014, including MIP data, soil and groundwater analytical data, HPT data, slug tests, and bench-scale treatability results to enhance the site subsurface understanding. These new data were used to guide implementation of Phase I ISCO, part of the adaptive remedy specified in the Work Plan. Collectively, the MIP screening and analytical data identified two features that may affect the implementation of the current remedy selected by ADEQ. The first feature is a linear area of contaminated soil located in Area 1. This linear feature appears to correspond to a former ditch identified based on review of historical aerial photographs (dated 1971). The MIP screening data suggests the linear area of contaminated soils extend throughout the vadose zone soil profile to the underlying saturated transmissive zone targeted for ISCO application. MIP screening responses and co-located soil sample analytical results confirm the presence of elevated concentrations of TCE in this area at multiple depths.

The second feature is a “neck” or constrained subsurface area (i.e., a northward trending bedrock depression and relatively thicker transmissive zone) through which COC transport in groundwater appears to be occurring off-site from the source area. Through this area, field screening (ECD screening responses) results were moderate and suggest that dissolved phase transport (e.g., on the order of 1 ppm TCE) is occurring to the north through the “neck” area. The ECD screening responses have been confirmed with groundwater monitoring data from wells located in or near this “neck” area.

In February and March 2014 thirty-one (31) two-inch diameter injection wells were installed in three arrays in preparation for the pending tracer and Phase I ISCO site work.

Based upon the identification of the "neck" area during the predesign effort, a tracer test and Phase I ISCO activities were completed in this area with the intent of assessing whether treatment in this area can potentially separate or minimize transport of back-diffusing COCs from the source area to the off-site plume.

On March 11, 2014 baseline bromide sampling was completed at wells IW-101, IW-103, IW-105, IW-107, IW-109, and IW-111. The application of a bromide tracer was completed on March 12, 2014 and post-application monitoring was performed through March 23, 2014. Six hundred gallons of an approximately 2,000 mg/L potassium bromide tracer solution was injected into well IW-130 at pressures ranging from 0.9 to 2 gallons per minute (gpm).

ISCO Phase I Baseline sampling for VOCs and, at select locations, for metals, was completed at wells IW-101 to IW-131 on March 23rd through March 25th. On March 24th through March 26th a base activated sodium persulfate (BASP) oxdiant consisting of 12% sodium persulfate solution with sodium hydroxide activator was injected by In-Situ Oxidative Technologies, Inc. (ISOTEC) into three different areas at a pressure range of 0.5 to 3 gpm. Eight hundred gallons of oxidant were injected into Array 1 ("neck" area), 600 gallons were injected into Array 2 (Areas 2 and 3), and 200 gallons were injected into Array 3 (Area 1).

During the 1st Quarter of 2014, groundwater samples were collected via low flow sampling. Groundwater samples were collected from 55 wells during the weeks of March 5 and 25, 2014 and were analyzed for the parameters as outlined in the RADD. The Groundwater Monitoring Report for this quarter is included as Attachment A.

During the 1st Quarter of 2014, soil vapor samples were collected from two locations (three samples) on March 6 and March 7, 2014. A Soil Vapor Monitoring/Vapor Intrusion Report is included in this quarterly report as Attachment B.

DATA AVAILABLE IN THIS QUARTER

Soil and groundwater results from the January predesign activities as well as boring logs are included as Attachment C.

Bromide data collected for the tracer test is included as Attachment D along with a figure identifying well locations and the tracer injection well. This is preliminary information. Data analysis is ongoing and additional information will be provided in the 2nd Quarter 2014 Progress Report.

Analytical data available to date for the Phase I ISCO injection (primarily baseline sampling and additional sampling in Array 2) is included as Attachment E. Groundwater samples are being collected in wells as monitoring data indicates that persulfate levels have reduced to levels sufficient to warrant VOC sample collection. Additional data will be provided to ADEQ in subsequent reports. Figure 1 in Attachment E depicts well locations and corresponding injection arrays.

Analytical data for the 55 wells sampled, including water levels from this sampling event, is included in the Groundwater Monitoring Report included as Attachment A.

Analytical data for the three (3) soil vapor monitoring point samples are included in the Soil Vapor Monitoring/Vapor Intrusion Report included as Attachment B.

ISSUES ENCOUNTERED & 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 off-site areas. These locations included those installed in 2012. However, during the 4th Quarter 2013 monitoring event the soil vapor point screens were filled with water. Therefore, the geology in the location of these two points was reevaluated and new monitoring points were installed.

No sample was collected from the shallow port of VP-2 because the screen, which is 5 ft below ground surface and 5 feet above the deeper port, was saturated. Sample collection will be attempted during the next monitoring event.

Two additional soil vapor monitoring points (VP-3 and VP-4) were attempted north of Ingersoll Avenue. Shallow seams of water that would have saturated the screens were observed during the drilling at both of these locations. Therefore, these boreholes were not completed as soil vapor monitoring points.

The RADD identified two additional locations for soil vapor monitoring wells on Jacobs Avenue. However, one location could not be installed within the road right-of-way given the number of utilities beneath and over the road, and access to individual properties has not yet been obtained to install the second location. Therefore, soil vapor monitoring points were not installed at these locations. Whirlpool will continue to attempt to gain access to suitable off-site locations to install additional points.

SCHEDULE

There are no schedule deviations to report in the 1st 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 – 1st Quarter 2014 Groundwater Monitoring Report
Attachment B – 1st Quarter 2014 Soil Vapor Monitoring/Vapor Intrusion Report
Attachment C – January Predesign Analytical Results and Boring Logs
Attachment D – Tracer Test Analytical Results and Figure
Attachment E - Phase I ISCO Analytical Results to Date and Figure





ATTACHMENT A
1st Quarter 2014 Groundwater Monitoring Report
Whirlpool Corporation
Fort Smith, AR

Prepared for:
Whirlpool Corporation

Prepared by:
ENVIRON International Corporation

Date:
May 15, 2014

Project Number:
3434399A



ENVIRON

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1 Introduction

ENVIRON International Corporation (ENVIRON) has prepared this 1st 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).

Whirlpool has been monitoring the groundwater at the Site since 1989. This report is Attachment A of the 1st Quarter 2014 Progress Report for the Site.

2 Groundwater Sample Collection & On-site Activities

ENVIRON performed the 1st Quarter 2014 Groundwater Monitoring Event (1st Quarter event) on behalf of Whirlpool in March of 2014 during the weeks of March 5th through March 9th and March 25th through March 31st. Activities performed during the monitoring event included water level measurements and collection of groundwater samples for analysis of volatile organic compounds (VOCs), monitored natural attenuation (MNA) parameters (i.e. Remedial Action Decision Document (RADD) Table 2, and additional water quality constituents on Table 3. Constituents of concern in groundwater include trichloroethene (TCE) and related daughter products. The COCs and additional geochemical parameters were analyzed in collected groundwater samples to evaluate the effectiveness of natural attenuation, per the RADD (Table 1). The following sections describe the on-site activities completed.

2.1 Static Water Level Measurements

Prior to groundwater sample collection, static groundwater levels were measured in the plume boundary wells, on-site wells, and off-site wells as required by the RADD (Table 2). On March 5, 2014 and March 25, 2014, static water levels were measured in 55 of the 56 monitoring wells. ENVIRON could not obtain access to MW-58 on March 5, 2014 due to a locked residential gate (although access was granted later in the week) and MW-55 on March 25, 2014 due to access refusal by the property owner. 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 manufacture 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 1st Quarter event static water level measurements are presented in Table 3 along with historic water level measurements from 2012 to 2014.

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 (US EPA) Low Stress (low flow) purging procedures (US EPA, 1996); at a rate generally less than 0.1 liters 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 on-site water holding tank for ultimate proper disposal.

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. Readings were recorded approximately every five minutes until

the parameters stabilized. Stabilization was considered obtained when three consecutive rounds of parameter readings met the following:

- Turbidity: +/- 10% for values greater than 10 NTU, or less than 10 NTU
- Dissolved Oxygen: +/- 10% for values greater than 0.5 mg/l
- Specific Conductance: +/- 3%
- Temperature: +/- 1° Celsius
- pH: within +/- 0.1 standard units
- Oxidation Reduction Potential: within +/- 10 millivolts

Table 4 presents a summary of field parameters from field data sheets for the 2014 1st Quarter event. The field sheets are included in Appendix A.

The groundwater samples were obtained by directly filling the laboratory provided sampling bottles from the pump discharge. Volatile Organic Compounds (VOCs) were collected in three 40-ml glass vials that were preserved with hydrochloric acid. Quality Assurance/Quality Control (QA/QC) samples 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 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. Hydrogen samples were collected by the Microseeps gas stripping procedure.

A total of 55 groundwater samples, six field duplicate samples, three matrix spike/matrix spike duplicate (MS/MSD) samples, and four equipment blanks were collected during the 2014 1st Quarter event. Duplicate samples were taken at a frequency of one duplicate sample per ten groundwater monitoring samples. Duplicate samples were collected from wells ITMW-2, ITMW-12, ITMW-17, ITMW-18, ITMW-19, and IW-74. Well access was denied by the property owner at MW-55, therefore samples were not collected during this sampling event.

Since 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. To check field decontamination procedures, equipment rinsate blanks were collected after each water level meter was decontaminated. 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. Equipment rinsate blanks were collected for each of the four water level meters used during this monitoring event. The rinsate blanks were collected after decontamination procedures at wells MW-38 (EB-1-201403 at 13:20), ITMW-17 (EB-2-201403 at 17:10), MW-25 (EB-3-201403 at 17:15) and ITMW-18 (EB-4-201403 at 15:26). The preservation and analysis of the equipment rinsate blanks was identical to those of the associated environmental samples.

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

exception of ferrous iron from MW-50, MW-56, MW-57, MW-60 and MW-61 and microbial analysis from MW-56 and MW-57.

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) 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 US EPA "Manual for the Certification of Laboratories Analyzing Drinking Water" fifth edition.

2.3 Other On-Site Activities

As documented in the previous groundwater reports, monitoring wells MW-42 and MW-43 were damaged sometime between the April 2009 and October 2009 sampling events. The wells were capped and sealed to prevent further damage and are not able to be sampled. These wells have been abandoned in accordance with applicable ADEQ well standards and the surface completion will be in accordance with the applicable City of Fort Smith requirements. Hot mix asphalt is required for surface completion to complete the respective well abandonments in accordance with City of Fort Smith requirements, however hot mix asphalt was not available during the 1st Quarter event. Therefore the wells will be abandoned during a warmer monitoring event. The wells do not provide information critical to the planned remediation activities or associated monitoring; therefore replacement of these wells is not planned.

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 (ITMW-1 through 21, MW-22 through 41, MW-46R, MW-50, MW-55 through 71, and IW-72 through 80) at the Site were measured twice during the first quarter of 2014. Wells were gauged on March 5th and March 25th during two separate mobilizations; the first to conduct the quarterly groundwater sample collection and the second to perform additional sampling for MNA parameters. Two wells were not measured during both events. Well MW-55 was not able to be measured during the March 5th event due to the property owner refusing access. Well MW-58 will continue to be evaluated during subsequent monitoring events due to standing water within the surface casing and a potentially compromised well cap on the inner casing. Future repair or abandonment of MW-58 may be necessary.

The static water level measured in the wells ranged from approximately 3 feet to 22 feet below top of the well casing (btwc) during both events (the depth to water measurements in MW-58 ranged from 0 to 0.5 feet during the March monitoring events and have been excluded from assessment of water levels based upon the discussion above). Figures 1 and 2 show contours of the groundwater elevations measured on March 5th and March 25th, 2014 respectively. Based on the recent 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 figures, the hydraulic gradient is near zero in the area that extends from the eastern 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.

The hydraulic gradient is consistent with those historical observed. North of the flat potentiometric surface at the site the groundwater gradient increases to approximately 0.016 feet/foot (March 5th) and 0.013 feet/foot (March 25th) between wells MW-68 and MW-61. In the southerly direction the hydraulic gradient is much more gradual at approximately 0.002 feet/foot (March 5th and 25th) between wells ITMW-16 and ITMW-6.

3.2 Analytical Methods

Fifty-five groundwater samples were collected from the plume boundary wells, on-site wells, and off-site 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

These methods are contained in the US EPA's Test Methods for Evaluating Solid Waste (SW-846 3rd 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 21st 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 US EPA.

3.3 Analytical Results

All VOC analytical data were subjected to data validation in accordance with the US EPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Review (June 2008). The laboratory analytical data sheets for the samples are presented in Appendix A. Summaries of analytical results (i.e. detected compounds) for samples collected during the 1st 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

Plume Boundary Wells

In accordance with the RADD, 23 monitoring wells are identified as plume boundary wells. In two of the 23 samples collected from plume boundary wells, VOC concentrations were detected above the RADD remedial action levels (RALs) (Table 1). Concentration ranges for tetrachloroethene (PCE), TCE, and daughter products are given below.

ANALYTE	NUMBER OF DETECTIONS ABOVE RAL's	NUMBER OF DETECTIONS	DETECTED CONCENTRATION RANGE
Tetrachloroethene	0	1 of 23 samples	0.26 J µg/L
Trichloroethene	1	11 of 23 samples	0.18 J to 9.4 µg/L
cis-1,2-Dichloroethene	0	4 of 23 samples	0.40 J to 4.9J µg/L
trans-1,2-Dichloroethene	0	0 of 23 samples	NA
Vinyl Chloride	0	3 of 23 samples	0.15 J to 0.19 J µg/L
1,1-Dichloroethene	0	1 of 23 samples	0.36 J µg/L
1.1-Dichloroethane	1	1 of 23 samples	4.4 J µg/L

Consistent with historical analytical results for the Site, the plume boundary well VOC results were reported at low concentrations or as non-detect. TCE results are depicted on Figure 3. The highest concentration of TCE at 9.4 µg/L was detected in the sample from well MW-63 located south of Jacobs Avenue. This result is consistent with historical TCE concentrations in the well. Tabulated VOC concentrations measured in plume boundary wells during the 2014 1st Quarter event are presented in Table 5.

Off-Site Wells

A discussion of the parameters detected in groundwater samples collected from 11 of the 12 off-site monitoring wells identified in the RADD is presented below (MW-55 was not sampled due to property access restriction by the property owner). The off-site wells include those installed at off-site properties to the north and northeast of the Whirlpool northern property boundary.

Concentration ranges for PCE, TCE, and daughter products in off-site wells are presented below.

ANALYTE	NUMBER OF DETECTIONS ABOVE RAL's	NUMBER OF DETECTIONS	DETECTED CONCENTRATION RANGE
Tetrachloroethene	0	1 of 11 samples	0.15 J µg/L
Trichloroethene	11	11 of 11 samples	105 to 618 µg/L
cis-1,2-Dichloroethene	0	11 of 11 samples	1.5 J to 24.4 µg/L
trans-1,2-Dichloroethene	0	8 of 11 samples	0.27J to 0.95 J µg/L
Vinyl Chloride	2	10 of 11 samples	0.14 J to 4.6 µg/L
1,1-Dichloroethene	0	10 of 11 samples	0.23 J to 2.6 J µg/L

TCE concentrations in the off-site wells continue to exhibit generally stable trends based upon comparison of the TCE isoconcentration map (Figure 3) with historic TCE isoconcentration

maps depicting the north portion of the plume. Tabulated VOC concentrations measured in off-site wells during the 1st Quarter event are presented in Table 5.

On-Site Wells

Twenty-one monitoring wells are identified as on-site wells within the RADD. On-site wells include three wells north of Ingersoll Avenue and two wells south of Ingersoll Avenue which are north of the Whirlpool northern property boundary. The remaining on-site 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.

VOCs were detected above the RADD RALs in all 21 groundwater samples collected from the on-site wells. Parameters exceeding RALs include: TCE in all on-site wells, cis-1,2-dichloroethene in seven wells, 1,1-dichloroethene in four wells, vinyl chloride in five wells, and PCE in one well. Concentration ranges for all detected analytes are presented below:

ANALYTE	NUMBER OF DETECTIONS ABOVE RAL's	NUMBER OF DETECTIONS	DETECTED CONCENTRATION RANGE
Tetrachloroethene	1	9 of 21 samples	0.16 J to 27.8 µg/L
Trichloroethene	21	21 of 21 samples	6.1 to 14,500 µg/L
cis-1,2-Dichloroethene	7	20 of 21 samples	0.61 J to 625 µg/L
trans-1,2-Dichloroethene	0	12 of 21 samples	0.28 J to 13.2 µg/L
Vinyl Chloride	5	10 of 21 samples	0.15 J to 68.4 µg/L
1,1-Dichloroethene	4	14 of 21 samples	0.42 J to 81.8 J µg/L

Tabulated VOC concentrations measured in on-site wells during the 1st Quarter event are presented in Table 5. During the 2014 1st Quarter event, the maximum on-site TCE concentration of 14, 500 µg/L was detected in MW-25 which is consistent with historical results. The highest on-site TCE concentration has historically been detected in MW-25 (270,000 µg/L in September 2011). The concentration of daughter products (cis-1,2-DCE, 1,1-DCE, and vinyl chloride) are also highest in the source area wells.

Figures 5 and 6 depict trends in TCE concentration at select on-site wells. Figure 5 depicts source area TCE concentrations at ITMW-17, ITMW-19, and MW-25 over time. TCE linear trends in the source area are generally stable to decreasing at wells ITMW-17 and ITMW-19, and a slightly increasing linear trend is depicted for MW-25. Figure 6 depicts TCE concentrations at the northern on-site wells (MW-33, MW-34, and MW-35R along Ingersoll Ave.) over time. Wells MW-34 and MW-35R exhibit stable to decreasing linear trends based upon Figure 6. As can be observed on Figure 6, monitoring well MW-33 exhibits a decreasing TCE trend since the peak concentration of 1,700 µg/L was identified in September of 2007.

3.3.2 MNA Results

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

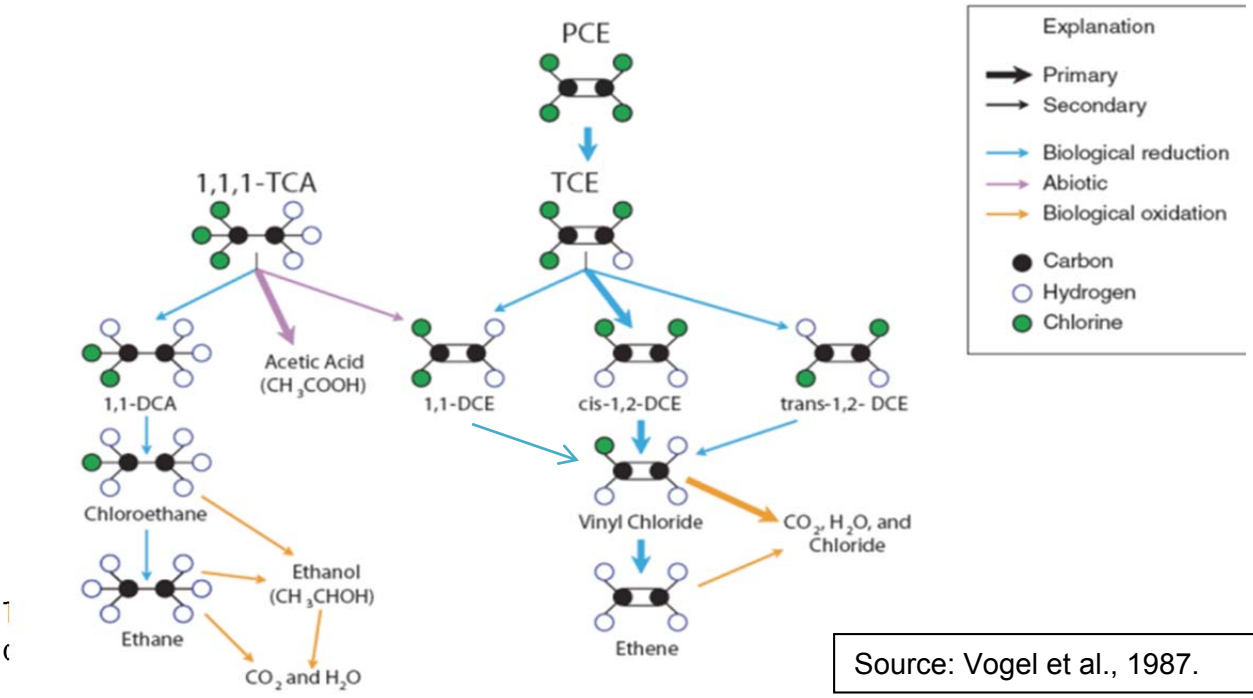
- Historical ground water and/or soil chemistry data that clearly demonstrate a significant trend of decreasing contaminant mass and/or concentration over time at appropriate monitoring points (US EPA, 1998).
- Hydrogeologic and geochemical data that can be used to establish indirectly the type(s) of natural attenuation processes occurring at the site, and the rate at which the processes will reduce contaminant concentrations to the cleanup goal (US EPA, 1998).
- 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 (US EPA, 1998).

This section presents an evaluation of the natural attenuation data that were collected from the Site during the 2014 1st Quarter event.

Chemical Lines of Evidence

Chlorinated ethenes are degraded by both biological and abiotic (non-biological) mechanisms. Figure 4 below shows the biological (aerobic and anaerobic) and abiotic transformation pathways for chlorinated ethenes. This figure does not include other chemically induced aerobic (e.g.in situ chemical oxidation) and anaerobic (e.g. zero valent iron) pathways that can promote degradation of chlorinated compounds.

Figure 4. Abiotic and Biotic Pathways for Chlorinated Ethenes and Ethane



Source: Vogel et al., 1987.

Table 5 presents a summary of analytical results for VOCs in groundwater. These data demonstrate that natural attenuation of TCE is occurring via biological mechanisms in both on-site and off-site groundwater. Groundwater samples from on-site monitoring wells ITMW-11, ITMW-12, ITMW-15, ITMW-18, MW-25, and MW-38 displayed elevated (>100 µg/L) concentrations of cis-1,2-dichloroethene (cis-1,2-DCE), a biodegradation daughter product of TCE. Vinyl chloride (VC), a biodegradation product of cis-1,2-DCE has been observed sporadically in groundwater samples from on-site monitoring wells. During this quarter, VC was detected at concentrations greater than 10 µg/L in monitoring wells ITMW-11, ITMW-15, and MW-38, indicating that microbes capable of reductive dechlorination are present in the aquifer. Figures 5 and 6 depict TCE concentrations over time for the source area wells and northern on-site wells. These figures demonstrate that the TCE concentrations are decreasing or remaining generally consistent. However, it is important to note that cis-1,2-DCE concentrations have been increasing in some of the source wells demonstrating that bioattenuation of TCE is occurring in Site groundwater. Figure 7 depicts TCE and cis-1,2-DCE trends with time at well MW-25. Increasing cis-1,2-DCE concentrations are apparent while TCE concentrations appear to be stable to decreasing with time. In addition, low levels of ethene, which is the non-harmful final reductive dechlorination byproduct, were observed in monitoring wells: ITMW-2, ITMW-4, ITMW-6, ITMW-7, ITMW-9, ITMW-15, ITMW-20, MW-35R, MW-38, MW-57, MW-58, and RW-69, which provides further support that complete reductive dechlorination is occurring in some locations.

Geochemical Lines of Evidence

In conjunction with chemical and microbial analyses, monitoring geochemical conditions can provide an indirect measure of the predominant microbial processes occurring in the groundwater. The presence of cis-1,2-DCE in groundwater at this site clearly indicates that conditions are favorable for reductive dechlorination. Other key factors that affect the success of natural attenuation include hydrogeology, temperature, electron acceptors (dissolved oxygen, nitrate, iron, manganese and sulfate), aquifer minerals, nutrients (nitrogen and phosphorus), bioavailability of COCs, and pH.

Table 4 presents the groundwater field parameters. The key items on this table are discussed below.

- Groundwater was generally under aerobic conditions, with more than 90 percent of the wells showing dissolved oxygen (DO) concentrations greater than 1 milligram per liter (mg/L). Less than 1.5 mg/L may be considered microaerophilic conditions and approximately 21 percent of the wells displayed microaerophilic to anaerobic conditions. DO concentrations ranged from a high of 7.97 milligram per liter (mg/L) in MW-56 to a low of 0.13 mg/L in MW-41. Although the DO of most of groundwater samples displayed aerobic conditions, there appears to be anaerobic microniches within the area around the wells, as indicated by the elevated levels of the reductive dechlorination byproduct cis-1,2-DCE, which was observed in numerous wells that showed aerobic conditions. These types of processes have been documented in the literature (Enzien et al., 1994).
- The oxidation reduction potential (ORP) of the groundwater samples ranged from a low of -194.2 millivolts (mV) in MW-58 to a high of 690 mV in IW-72. In general the ORP levels were less than 500 mV in most of the Site monitoring wells, which indicates that the groundwater is under manganese reducing to sulfate reducing conditions.

- The pH of the groundwater ranged from a low of 4.5 to a high of 6.7. Most microbial enzymatic reactions prefer a neutral range for pH from 6 to 8, which is conducive to a wide group of microorganisms, including those microbes that are able to biodegrade TCE and the daughter products.
- The temperature of the groundwater ranged from about 11.9 to 20.9 degrees Celsius, which is a range that is favorable for most microbial enzymatic reactions.
- The major competing electron acceptors nitrate, manganese, iron and sulfate were evaluated in site groundwater samples (Table 4). Nitrate levels were generally present at less than 1 mg/L in groundwater samples from most of the monitoring wells, only a few samples showed nitrate levels above 1.5 mg/L, and samples from only two wells, MW-68 and ITMW-9, showed elevated levels of nitrate at 25.4 mg/L and 15.9 mg/L, respectively. Manganese concentrations ranged from 0.0053 mg/L in ITMW-2 to 9.070 mg/L in IW-72. Samples from the majority of the wells showed manganese concentrations less than 1 mg/L. Ferric iron was present in the majority of the groundwater samples at less than 4 mg/L, which was consistent with the low levels of ferrous iron observed in groundwater (<3.4 mg/L). MW-61, which is outside the area of the TCE plume, showed 9.65 mg/L total iron. Sulfate concentrations were generally less than 50 mg/L with the exception of monitoring wells MW-29 (67.3 mg/L) and ITMW-6 (87.1 mg/L. The first quarter 2014 groundwater sampling results indicate that competing electron acceptors: nitrate, manganese, iron and sulfate do not appear to be present at concentrations that that would significantly inhibit reductive dechlorination of TCE. These data are further supported by the presence of the reductive dechlorination byproduct, cis-1,2-DCE.
- The dissolved hydrogen concentrations ranged from 0.63 nanomolar (nM) in MW-27 to 0.92 nM in MW-67. The majority of the wells were near 0.8 nM dissolved hydrogen, which is in the transition range from iron reducing to sulfate reducing conditions (Wiedemeier et al., 1999). These data are consistent with the sulfate and iron levels observed in the groundwater.
- Total organic carbon (TOC) levels ranged from less than 1 mg/L to a high of 32.7 mg/L in MW-58. The majority of the wells displayed TOC levels less than 1 mg/L.
- Methane, ethane and ethene were detected at low concentrations or were non-detect in groundwater samples throughout the site (Table 5).
- The alkalinity of the groundwater is relatively low with the many of the groundwater samples showing alkalinity concentrations less than 100 mg/L.
- Major nutrients, ammonia and phosphate, were evaluated in the groundwater and the results in Table 5 indicate that the groundwater contains non-detectable or low levels of ammonia (<50 µg/L). Phosphate was detected at concentrations ranging from non-detect (< 30 µg/L) to a high of 5,200 µg/L, which indicates that phosphate is present in non-limiting concentrations to the indigenous microbial community.

Microbial Lines of Evidence

Quantitative polymerase chain reaction (qPCR) is a molecular biological tool that is used to quantify targeted members of the microbial community deemed critical for site remediation. While a number of bacterial cultures capable of utilizing PCE and TCE as growth supporting electron acceptors have been isolated (Gerritse et al., 1999; and Loffler et al., 1996),

Dehalococcoides spp. are the only bacterial group that has been isolated to date which is capable of complete reductive dechlorination of PCE to ethene (Maymó et al., 1999). The presence of Dehalococcoides spp. has been associated with complete reductive dechlorination of PCE to ethene at sites across North America and Europe (Hendrickson et al., 2002). Thus, qPCR quantification of Dehalococcoides can be used to evaluate the likelihood of complete reductive dechlorination of PCE and TCE under MNA conditions.

Table 5 shows the microbial results for the genus *Dehalococcoides* (DHC), the functional genes, tceA reductase (tceA), BAV1vinyl chloride reductase (BVC) and vinyl chloride reductase (VCR). The presence of TCE reductase indicates the ability to reduce TCE to DCE and VC. The presence of the vinyl chloride reductases (qVC and qBVC) indicates the potential for reductive dechlorination of VC to ethene. The *Dehalococcoides* were detected at significant concentration in MW-38, which is relatively close to the source area. In addition to *Dehalococcoides*, the BAV1 vinyl chloride reductase gene was detected at elevated levels (>36,000 cells/ml) in MW-38, which indicates the potential for complete reductive dechlorination in this area. Only a few wells showed the presence of DHC at low levels, while the majority of the wells showed non-detect levels for DHC, tceA, BVC, and VCR. These results are not surprising since the types of samples submitted to microbial insights were one-liter or less groundwater. In general microbes preferred to be attached to the aquifer sediments; therefore, groundwater sampling results may significantly under represent the indigenous microbes. In-well sampling tools, known as the Bio-Trap® (or similar devices) will be considered for future sampling events.

The Bio-Trap® (MICRO) sampler contains an innovative sampling matrix, Bio-Sep® beads, which are readily colonized by subsurface bacteria (Sublette et al., 2006). This type of sampling equipment is expected to provide more representative data of the indigenous microbial population. The Bio-Trap® samplers are installed in the monitoring wells and are recovered after approximately four to six weeks of incubation. The Bio-Sep® beads can then be analyzed for key dechlorinating bacteria (e.g. *Dehalococcoides*) and reductive dehalogenase genes responsible for reductive dechlorination.

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 full data validation by an ENVIRON Project Chemist. During the data validation process, data validation qualifiers were assigned to the results per *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Review* (June 2008), as necessary, to indicate potential limitation on use of the data. In addition, data qualifier codes were added to the results to indicate the reason(s) for qualification and the associated bias direction, if discernable. The following sections provide a summary of the data validation results. Complete copies of the validation reports are provided in Appendix C.

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 full deliverables for validation.

The data quality for VOCs was generally acceptable. Certain reported results for VOC samples were qualified as non-detect "U" due to the presence of contaminant in associated method, equipment or trip blanks. Specifically, acetone, a common laboratory contaminant, carbon disulfide and chloromethane were routinely found in the associated method blank. Analytical data that were reported at concentrations less than five times (5X) the associated blank concentration (10X for common laboratory contaminants) were qualified as non-detect.

Additionally, several volatile organic results were qualified as estimated due to calibration issues or matrix spike/matrix spike duplicate (MS/MSD) recoveries above quality control limits.

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 the analytes at the RAL of 0.41 µg/L for 1,3-dichloropropene and 0.066 µg/L for 1,1,2,2-tetrachloroethene as prescribed by the RADD. The method detection limit (MDL) for 1,3-dichloropropene at 0.14 µg/L was below the RAL and the MDL for 1,1,2,2-tetrachloroethene was 0.15 µg/L. ADEQ was informed of the limitations of the laboratory instrument prior to this sampling event.

  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. The laboratory reported results at concentrations between the MDL and RL. To reflect the uncertainty associated with values reported between the MDL and RL, these results were qualified as estimated ("J").

- **Precision:** The MS/MSD results for VOCs and the field duplicate relative percent difference (RPD) results satisfied applicable precision criteria. As such, the overall level of precision demonstrated is considered to be acceptable.
- **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 1st Quarter event is **100.0%.**
- **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 Summary and Conclusion

ENVIRON performed the 1st Quarter 2014 Groundwater Monitoring Event (1st Quarter event) on behalf of Whirlpool in March of 2014 during the weeks of March 5th through March 9th and March 26th through March 31st. The first week of quarterly monitoring was generally conducted for collection of groundwater samples for analysis of volatile organic compounds (VOCs) and limited monitored natural attenuation (MNA) parameters (i.e. RADD Table 2 and limited constituents on Table 3) and the subsequent week of additional monitoring included sampling for the remainder of the MNA parameters in the RADD (RADD Table 3).

- The groundwater potentiometric surface observed during the 1st Quarter of 2014 is consistent with that historically observed at the Site.
- Hydraulic gradient continues to be split by a divide located just south of Ingersoll Avenue
  - Groundwater north of the divide is flowing in a northeasterly direction
  - Groundwater south of the divide is flowing in a southern direction.
- The approximate location of the plume boundary is consistent with previous Spring reporting periods and historic results.
- 1st Quarter 2014 groundwater monitoring shows generally stable to decreasing trends for TCE concentration.
  - Plume boundary well data continues to show results consistent with historical TCE concentrations.
  - Off-site well data is similar to previous monitoring events and continues to show generally stable TCE concentration trends.
  - On-site well data continues to show generally stable to decreasing TCE concentration trends.
- 1st Quarter 2014 groundwater monitoring data in conjunction with historical data demonstrate that natural attenuation of TCE is occurring via biological mechanisms in both on-site and off-site groundwater.

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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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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

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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
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
MW-70	591162	369693	471.53	NA	NA	NA	NA	463.31	462.92	463.28	462.70	462.52
MW-71	591170	369695	471.35	NA	NA	NA	NA	463.36	462.93	463.33	462.70	462.55
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
IW-73	591060	369503	471.48	NA	NA	NA	NA	463.38	462.88	463.43	462.73	462.61
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
IW-75	591072	369605	472.17	NA	NA	NA	NA	463.65	462.83	463.58	462.63	462.47
IW-76	591050	369426	472.26	NA	NA	NA	NA	463.26	462.86	463.20	462.54	462.37
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
IW-78	590984	369338	473.49	NA	NA	NA	NA	463.44	463.27	463.19	463.24	462.65
IW-79	591018	369335	473.84	NA	NA	NA	NA	463.45	463.41	463.39	462.71	462.65
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

Notes:

NA -- Not available or not installed

NM -- Not measured

Horizontal and vertical coordinates converted to Arkansas State Plane, North Zone (NAD83) and North American Vertical Datum of 1988 (NAVD88) based on information provided in historic site file. Casing elevations for ITMW-1 through ITMW-21 and MW-22 extracted from 2011/2012 Annual Ground Water Monitoring Report dated June 28, 2012. Casing elevations for remaining wells extracted from survey data provided by Philip J. Leraris, P.E., L.S., dated May 12, 2009.

Well screen intervals and depths adapted from monitoring well construction diagrams.

1 - Construction diagram notes use of pre-packed stainless steel screen.

2 - Construction diagram text and graphical representation differ on construction details. Graphical representation used to infer elevations.

3 - Construction diagram notes presence of sedimentation sump below screened interval.

TABLE 4
SUMMARY OF FINAL WELL GROUND WATER FIELD PARAMETERS MEASUREMENTS - MARCH 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	Analytical Parameter List
ITMW-1	4	3/8/2014	15.78	34.10	29.1	11:45	15.82	1	100	16.12	624	5.99	2.28	9.6	0.14	NM	Clear	ITMW-1-201403	A
ITMW-1	4	3/28/2014	15.55	34.10	29.1	15:00	15.59	1.5	100	17.04	547	5.83	2.05	215.7	0.00*	0.00	Clear	ITMW-1-201403	C
ITMW-10	4	3/6/2014	19.78	34.15	29.0	17:55	19.83	1.5	100	17.57	673	6.12	2.30	578.7	0.00*	0.00	Clear	ITMW-10-201403	A
ITMW-10	4	3/30/2014	20.05	34.15	29.2	09:40	20.12	2.5	100	15.06	735	5.91	2.71	563.7	0.00*	0.00	Clear	ITMW-10-201403	C
ITMW-11	4	3/8/2014	12.30	29.31	24.3	15:05	12.35	0.8	100	17.32	282	6.56	1.99	515.3	2.72	0.00	Clear	ITMW-11-201403	A
ITMW-11	4	3/30/2014	11.35	29.31	24.3	11:50	11.38	2	100	18.65	260	6.33	1.50	255	1.88	0.03	Clear	ITMW-11-201403	C
ITMW-12	4	3/8/2014	14.17	32.63	27.5	15:20	14.21	1.6	100	16.22	246	6.12	1.85	581.4	0.18	NM	Clear	ITMW-12-201403	A
ITMW-12	4	3/30/2014	14.17	32.63	27.6	11:00	14.22	1	100	18.78	249	6.03	1.50	77.7	0.77	0.00	Clear	ITMW-12-201403	C
ITMW-13	4	3/8/2014	15.33	31.95	26.0	12:40	15.37	1.5	100	16.85	239	6.10	2.34	565.3	0.78	NM	Clear	ITMW-13-201403	A
ITMW-13	4	3/28/2014	14.90	31.95	27.0	15:10	15.04	1.5	100	17.83	222	6.12	1.96	563.6	0.95	0.00	Clear	ITMW-13-201403	C
ITMW-14	4	3/8/2014	14.89	31.80	27.0	13:45	14.98	1	100	16.63	185	6.33	1.69	465.6	2.67	NM	Clear	ITMW-14-201403	A
ITMW-14	4	3/28/2014	14.50	31.80	26.8	14:55	14.61	1	100	17.43	191	5.78	1.50	96.7	2.69	NM	Clear	ITMW-14-201403	C
ITMW-15	4	3/8/2014	11.76	30.31	25.3	14:57	11.81	1	100	17.33	2195	11.99	5.28	-105.4	8.96	NM	Clear	ITMW-15-201403	A
ITMW-15	4	3/30/2014	11.64	30.31	25.3	13:45	11.66	1	100	20.91	1620	11.73	4.67	15.1	1.32	0.59	Clear	ITMW-15-201403	C
ITMW-16	4	3/7/2014	16.02	34.36	29.4	10:45	16.68	0.9	100	16.14	170	6.66	3.33	256.8	69.3	0.46	Yellow	ITMW-16-201403	B
ITMW-17	4	3/8/2014	16.48	30.10	25.1	16:30	16.38	0.9	100	15.53	1015	5.34	5.58	584.4	1.42	NM	Clear	ITMW-17-201403	A
ITMW-17	4	3/30/2014	15.28	30.10	25.1	14:00	15.24	2.5	100	19.68	1051	5.11	3.38	311.8	0.53	0.00	Clear	ITMW-17-201403	C
ITMW-18	4	3/8/2014	11.09	39.67	25.0	15:00	11.15	1.5	100	16.36	556	5.57	1.91	510.3	0.53	NM	Clear	ITMW-18-201403	A
ITMW-18	4	3/30/2014	11.11	29.50	24.5	12:20	11.14	1	100	16.86	794	5.42	2.49	86.1	0.61	0.00	Clear	ITMW-18-201403	C
ITMW-19	4	3/8/2014	13.72	33.20	28.3	15:53	13.92	1.1	100	14.36	1207	6.62	5.09	56.5	0.64	NM	Clear	ITMW-19-201403	A
ITMW-19	4	3/30/2014	13.57	33.20	28.2	14:45	13.73	1	100	19.42	1119	6.46	3.82	81.8	0.05	0.04	Clear	ITMW-19-201403	C
ITMW-2	4	3/6/2014	12.78	26.80	21.8	12:35	12.89	2	100	18.93	473	6.03	2.16	475.3	0.14	0.05	Clear	ITMW-2-201403	B
ITMW-20	4	3/5/2014	15.03	31.17	26.2	13:27	14.94	1.4	100	15.62	306	9.93	4.58	111.9	0.71	0.00	Clear	ITMW-20-201403	B
ITMW-21	4	3/6/2014	13.57	33.00	28.0	17:35	13.87	0.75	100	16.70	2338	5.11	3.76	199.1	0.06	NM	Clear	ITMW-21-201403	A
ITMW-21	4	3/28/2014	13.12	33.00	28.0	16:45	13.44	1.5	75	16.49	2179	5.00	3.71	291.2	0.00*	0.00	Clear	ITMW-21-201403	C
ITMW-4	4	3/6/2014	17.09	32.80	12.1	10:40	17.14	1.5	100	18.09	269	6.60	0.29	38.3	9.54	0.93	Clear	ITMW-4-201403	B
ITMW-6	4	3/6/2014	22.22	39.40	17.2	08:30	22.25	1.25	100	14.99	1192	6.15	2.17	534.1	0.51	0.11	Clear	ITMW-6-201403	B
ITMW-7	4	3/8/2014	20.17	36.95	25.2	10:39	20.28	1	100	17.46	1152	4.98	0.90	16	0.18	NM	Clear	ITMW-7-201403	A
ITMW-7	4	3/30/2014	20.09	36.97	25.1	09:25	20.23	1.1	100	14.14	1040	4.79	0.63	74.9	0.09	0.00	Clear	ITMW-7-201403	C
ITMW-9	4	3/8/2014	20.82	35.10	30.1	09:32	20.87	1.1	100	17.15	715	5.97	4.42	48.2	0.90	NM	Clear	ITMW-9-201403	A
ITMW-9	4	3/30/2014	21.03	35.10	30.1	09:35	21.04	1	100	18.21	673	5.96	3.28	464.7	0.22	0.00	Clear	ITMW-9-201403	C
IW-72	2	3/6/2014	9.10	26.90	21.9	14:05	9.13	1.4	100	15.80	860	6.06	4.21	690	6.46	0.04	Pink	IW-72-201403	B
IW-73	2	3/7/2014	9.45	26.84	21.8	17:55	8.51	1.1	100	15.89	1085	5.94	2.50	256.6	14.9	NM	Clear	IW-73-201403	A
IW-73	2	3/27/2014	8.11	26.84	21.8	18:00	8.13	2	100	16.19	1175	5.75	0.35	166.7	12.7	0.99	Clear	IW-73-201403	C
IW-74	2	3/7/2014	9.20	27.35	22.4	16:30	9.20	0.9	100	17.02	1059	5.88	1.82	288.1	2.06	NM	Clear	IW-74-201403	A
IW-74	2	3/28/2014	9.04	27.35	22.4	10:15	9.09	1.25	100	15.80	900	5.80	1.44	246.1	2.06	0.04	Clear	IW-74-201403	C
IW-76	2	3/8/2014	8.64	28.12	23.1	09:15	9.65	2.5	100	15.72	970	5.46	1.39	683.1	1.15	NM	V. Sl. Purple	IW-76-201403	A
IW-76	2	3/27/2014	9.24	28.12	23.1	09:40	9.18	2.5	100	14.55	992	5.33	1.50	680.4	1.85	0.00	Pink	IW-76-201403	C
IW-77	2	3/8/2014	10.25	27.62	22.0	10:30	10.27	1.5	100	16.77	741	5.52	1.43	512.1	2.55	NM	Clear	IW-77-201403	A
IW-77	2	3/26/2014	10.09	27.62	22.6	15:30	10.09	1	100	16.12	827	4.91	1.30	91.2	1.80	NM	Clear	IW-77-201403	C
IW-80	2	3/8/2014	10.43	29.48	24.5	12:50	10.71	1.5	100	16.84	581	5.78	1.32	633.9	2.94	NM	Pink	IW-80-201403	A
IW-80	2	3/26/2014	10.54	29.48	24.5	15:40	10.57	2.5	100	14.82	639	5.99	2.42	551.3	4.14	0.43	Clear	IW-80-201403	C
MW-22	4	3/5/2014	12.45	29.19	24.2	16:35	12.54	1	100	14.79	170	5.58	1.09	184.8	0.15	0.00	Clear	MW-22-201403	B
MW-25	4	3/8/2014	14.04	34.59	29.5	16:50	14.13	1.6	100	14.62	1343	4.83	1.36	413.2	0.33	NM	Clear	MW-25-201403	A
MW-25	4	3/30/2014	13.85	34.59	29.6	15:45	13.94	2	100	20.09	1278	5.03	0.99	339.6	1.63	0.00	Clear	MW-25-201403	C

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		

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

A - Parameter A: VOCs
B - Parameter B: VOCs, Ethene, Ethane, Methane, Manganese, Nitrate, Nitrite, Ferric Iron, Sulfate, Sulfide, Total Organic Carbon, Carbon Dioxide, Acetylene, Chloroethanol, Alkalinity, Chloride, Hydrogen, Volatile Fatty Acids,
C - Parameter C: Ethene, Ethane, Methane, Manganese, Nitrate, Nitrite, Ferric Iron, Sulfate, Sulfide, Total Organic Carbon, Carbon Dioxide, Acetylene, Chloroethanol, Alkalinity, Chloride, Hydrogen, Volatile Fatty Acids,

* - Turbidity reading initially recorded as a negative value in the field. Negative readings are recorded on sample collection field sheets but presented as 0.00.
Tubing inlet depths based on estimated distance from total depth.

TABLE 4
SUMMARY OF FINAL WELL GROUND WATER FIELD PARAMETERS MEASUREMENTS - MARCH 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	Analytical Parameter List
MW-26	4	3/5/2014	14.80	35.14	30.0	16:16	14.96	2.5	100	16.90	1025	5.23	1.42	297.4	0.00*	0.00	Clear	MW-26-201403	B
MW-27	2	3/7/2014	12.64	30.08	25.1	8:50	12.66	1.1	100	13.83	103	5.96	5.77	231.1	41.0	0.08	Cloudy	MW-27-210403	B
MW-28	2	3/6/2014	7.98	27.48	22.5	15:54	8.31	2	100	18.27	369	6.22	0.85	478.3	2.87	0.00	Clear	MW-28-201403	B
MW-29	2	3/5/2014	12.25	30.30	25.3	16:00	12.27	1.75	100	15.00	675	4.91	0.69	16.9	0.58	0.06	Clear	MW-29-201403	B
MW-31	0.75	3/6/2014	13.25	26.11	21.0	16:00	15.91	1.5	75	18.38	443	5.55	0.18	220.3	1.42	0.19	Clear	MW-31-201403	B
MW-32	0.75	3/8/2014	12.89	24.30	19.5	10:05	12.96	1.5	100	17.21	1323	4.76	0.42	300.1	3.44	NM	Clear	MW-32-201403	A
MW-32	0.75	3/28/2014	12.57	24.30	19.3	10:20	12.65	1.5	100	18.25	1209	4.54	0.34	76.3	5.60	0.02	Clear	MW-32-201403	C
MW-33	0.75	3/8/2014	12.43	25.62	20.6	9:10	12.60	1.1	100	16.42	620	5.13	7.90	248.2	19.4	NM	Clear	MW-33-201403	A
MW-33	0.75	3/28/2014	11.79	25.62	20.6	12:05	12.57	1	100	18.63	685	4.76	0.47	84	7.36	0.00	Sl. Turbid	MW-33-201403	C
MW-34	0.75	3/8/2014	11.46	27.97	23.0	13:30	11.49	2	100	17.07	1009	4.86	0.15	264.7	12.37	NM	Clear	MW-34-201403	A
MW-34	0.75	3/27/2014	10.91	27.97	23.0	11:15	11.08	2	100	16.27	838	4.73	0.29	80.3	15.7	0.51	Clear	MW-34-201403	C
MW-35R	4	3/8/2014	10.40	31.85	26.9	10:55	11.19	1	100	17.62	1202	5.63	2.64	255.2	0.37	NM	Clear	MW-35R-201403	A
MW-35R	4	3/26/2014	10.92	31.85	26.9	12:20	10.91	1	100	16.88	1093	5.34	0.44	90.6	6.06	0.04	Clear	MW-35R-201403	C
MW-36	0.75	3/6/2014	10.42	35.58	30.6	15:55	10.45	1.1	100	16.13	791	5.21	0.27	313	7.21	0.24	Cloudy	MW-36-201403	B
MW-38	0.75	3/8/2014	12.00	29.80	24.8	13:13	12.03	2	100	18.16	422	6.27	1.40	57.2	2.65	NM	Clear	MW-38-201403	A
MW-38	0.75	3/30/2014	11.84	29.80	24.8	11:55	11.96	1.5	100	20.02	372	6.24	0.60	83.1	1.50	1.66	Clear	MW-38-201403	C
MW-39	0.75	3/6/2014	14.55	29.42	24.4	17:35	13.74	1.1	100	16.02	992	5.02	0.26	362.2	0.10	0.04	Clear	MW-39-201403	B
MW-40	0.75	3/6/2014	10.68	23.15	18.2	11:35	10.78	1.4	100	16.38	774	5.17	0.39	325.2	2.46	0.00	Clear	MW-40-201403	B
MW-41	0.75	3/7/2014	9.07	28.32	23.0	18:16	9.10	0.5	100	15.58	1300	5.49	0.34	98.2	1.97	NM	Clear	MW-41-201403	A
MW-41	0.75	3/27/2014	8.80	28.32	23.3	12:15	8.83	1.5	100	14.87	1345	5.40	0.16	175.7	0.83	3.30	Clear	MW-41-201403	C
MW-46R	2	3/7/2014	3.45	22.00	17.0	15:15	3.49	0.9	100	16.13	848	5.05	0.26	282.4	3.24	NM	Clear	MW-46R-201403	A
MW-46R	2	3/27/2014	2.88	22.00	17.0	16:05	3.35	1.5	100	16.36	826	5.04	0.13	329	0.09	0.00	Clear	MW-46R-201403	C
MW-50	0.75	3/6/2014	7.76	18.05	18.0	10:30	8.39	1	100	15.21	1168	6.84	2.60	80.8	38.6	NM	Clear	MW-50-201403	B
MW-55	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
MW-56	0.75	3/7/2014	5.46	19.48	14.5	13:54	15.00	0.1	100	15.07	652	5.27	5.63	263.6	10.58	NM	Clear	MW-56-201403	A
MW-56	0.75	3/27/2014	9.08	19.48	14.5	17:50	14.11	0.5	100	14.31	431	5.19	7.97	335.6	40.2	NM	Sl. Turbid	MW-56-201403	C
MW-57	0.75	3/7/2014	3.92	19.19	15.2	14:05	16.05	0.25	100	15.34	1066	5.33	2.30	4.5	26.5	NM	Sl. Haze	MW-57-201403	A
MW-57	0.75	3/27/2014	4.51	19.19	14.2	18:30	15.88	<0.25	50	14.09	1051	5.36	3.72	324.9	40.1	NM	Sl. Turbid	MW-57-201403	C
MW-58	0.75	3/7/2014	0.54	17.67	12.7	15:15	2.34	1	75	15.17	815	5.51	0.35	-194.2	27.7	NM	White Haze	MW-58-201403	A
MW-58	0.75	3/27/2014	0.00	17.67	12.7	15:03	0.00	1.5	100	17.27	183	5.88	2.28	86.8	6.29	0.49	Lt. Brown	MW-58-201403	C
MW-60	0.75	3/6/2014	7.83	16.55	11.6	13:00	NM	0.25	NM	NM	NM	NM	NM	NM	NM	NM	Clear	MW-60-201403	B
MW-61	0.75	3/6/2014	8.89	15.54	15.0	14:00	14.12	0.25	100	14.51	596	6.57	2.60	102.4	102	NM	Sl. Cloudy	MW-61-201403	B
MW-62	0.75	3/7/2014	6.34	20.80	15.0	11:15	10.84	2.5	50	15.34	609	5.48	1.81	217	47.8	0.23	Sl. Cloudy	MW-62-201403	B
MW-63	0.75	3/7/2014	5.51	21.23	15.0	13:00	19.84	1.5	50	12.53	594	5.58	0.98	160.8	661	0.14	Clear	MW-63-201403	B
MW-65	2	3/8/2014	11.12	32.00	27.0	11:35	11.17	1.5	100	16.89	1489	5.08	0.60	278.9	7.27	NM	Clear	MW-65-201403	A
MW-65	2	3/26/2014	11.04	32.00	27.0	12:20	11.03	2.5	100	15.98	1399	5.33	0.79	423.5	6.06	0.03	Clear	MW-65-201403	C
MW-66	2	3/7/2014	5.45	17.64	14.6	11:35	6.36	0.75	80	15.12	799	6.07	2.15	-0.5	1.82	0.03	Clear	MW-66-201403	B
MW-67	2	3/7/2014	4.62	13.56	11.6	9:25	9.96	1	40	11.85	904	6.69	3.71	28.1	19.3	NM	Sl. Haze	MW-67-201403	B
MW-68	2	3/6/2014	7.10	20.55	15.6	8:40	7.29	1	100	12.52	1007	4.96	2.41	284.6	0.43	0.00	Clear	MW-68-201403	B
MW-71	2	3/7/2014	8.34	27.18	22.0	16:00	8.36	2	100	16.31	907	5.11	0.88	196.7	5.23	NM	Clear	MW-71-201403	A
MW-71	2	3/28/2014	8.22	27.18	22.2	12:30	8.26	3	100	14.93	916	5.03	0.81	246.6	1.92	0.39	Clear	MW-71-201403	C
RW-69	4	3/7/2014	8.24	28.10	23.0	17:00	8.32	0.5	100	16.72	972	5.32	0.83	207.1	2.13	NM	Clear	RW-69-201403	A
RW-69	4	3/27/2014	8.04	29.10	24.1	9:20	8.10	1.25	100	15.08	978	5.17	0.60	78.3	0.86	0.13	Clear	RW-69-201403	C

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		

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

A - Parameter A: VOCs
B - Parameter B: VOCs, Ethene, Ethane, Methane, Manganese, Nitrate, Nitrite, Ferric Iron, Sulfate, Sulfide, Total Organic Carbon, Carbon Dioxide, Acetylene, Chloroethanol, Alkalinity, Chloride, Hydrogen, Volatile Fatty Acids,
C - Parameter C: Ethene, Ethane, Methane, Manganese, Nitrate, Nitrite, Ferric Iron, Sulfate, Sulfide, Total Organic Carbon, Carbon Dioxide, Acetylene, Chloroethanol, Alkalinity, Chloride, Hydrogen, Volatile Fatty Acids,
*** -** Turbidity reading initially recorded as a negative value in the field. Negative readings are recorded on sample collection field sheets but presented as 0.00. Tubing inlet depths based on estimated distance from total depth.

TABLE 5
SUMMARY OF MONITORING WELL GROUND WATER SAMPLE ANALYTICAL RESULTS - 1ST QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	ITMW-1	ITMW-2	ITMW-2	ITMW-4	ITMW-6	ITMW-7	ITMW-9	ITMW-10	ITMW-11	ITMW-12	ITMW-12	ITMW-13	ITMW-14	ITMW-15	ITMW-16	ITMW-17	ITMW-17
ENVIRON Sample ID		ITMW-1-201403	ITMW-2-201403	ITMW-2-201403-FD	ITMW-4-201403	ITMW-6-201403	ITMW-7-201403	ITMW-9-201403	ITMW-10-201403	ITMW-11-201403	ITMW-12-20140308	MW-12-20140308-FD	ITMW-13-201403	ITMW-14-201403	ITMW-15-201403	ITMW-16-201403	ITMW-17-201403	ITMW-17-201403-FD
Laboratory Sample ID		60164494011	60164418003	60164418002	60164418004	60164418001	60164494012	60164494013	60164418015	60164494023	60164494019	60164494018	60164494003	60164494004	60164494009	60164423001	60164494028	60164494030
Sampling 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
Sample Date		03/08/2014	03/06/2014	03/06/2014	03/06/2014	03/06/2014	03/08/2014	03/08/2014	03/06/2014	03/08/2014	03/08/2014	03/08/2014	03/08/2014	03/08/2014	03/08/2014	03/07/2014	03/08/2014	03/08/2014
Comments				Field Duplicate								Field Duplicate						Field Duplicate
Volatile Organic Compounds																		
Acetone	12000	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Benzene	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	0.22 J (5)	U (5)	0.15 J (5)	0.17 J (5)	U (5)	0.21 J (5)	0.11 J (5)	U (5)	U (5)	U (5)
Bromoform	80	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
2-Butanone	4900	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Carbon Disulfide	720	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Carbon Tetrachloride	5	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Chlorobenzene	100	U (5)	U (5)	U (5)	0.4 J (5)	U (5)	U (5)	0.21 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	6.5 J (10)	U (5)	U (5)	U (5)
Chloroethane	21,000	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	0.44 J (5)	U (10)	U (10)	U (10)
Chloroform	80	U (5)	U (5)	U (5)	0.15 J (5)	U (5)	U (5)	U (5)	0.21 J (5)	0.82 J (5)	0.5 J (5)	0.55 J (5)	U (5)	U (5)	U (5)	U (5)	1.3 J (5)	1.3 J (5)
Chloromethane	190	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
1,1-Dichloroethane	2.4	0.36 J (2.4)	U (2.4)	U (2.4)	U (2.4)	4.4 (2.4)	U (2.4)	U (2.4)	2.4 (2.4)	0.95 J (2.4)	U (2.4)	0.4 J (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)
1,2-Dichloroethane	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	0.9 J (5)	U (5)	U (5)	U (5)	U (5)
1,1-Dichloroethene	7.0	U (5)	U (5)	U (5)	U (5)	0.36 J (5)	U (5)	0.61 J (5)	2.7 J (5)	2.6 J (5)	1.4 J (5)	1.2 J (5)	0.42 J (5)	U (5)	5.8 (5)	U (5)	5.1 (5)	5.2 (5)
cis-1,2-Dichloroethene	70	8.9 (5)	0.40 J (5)	0.51 J (5)	2.0 J (5)	4.9 J (5)	10 (5)	40.4 (5)	32.3 (5)	187 (5)	148 (125)	207 (125)	45.3 (5)	11.9 (5)	152 (5)	U (5)	86.1 (5)	87.3 (5)
trans-1,2-Dichloroethene	100	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	0.93 J (5)	0.83 J (5)	3.5 J (5)	4.7 J (5)	7.2 (5)	0.84 J (5)	U (5)	2.8 J (5)	U (5)	1.8 J (5)	0.67 J (5)
4-Methyl-2-pentanone	1000	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	0.79 J (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Methylene Chloride	5.0	U (5)	U (5)	U (5)	2.9 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Tetrachloroethene	5.0	U (5)	0.48 J (5)	0.26 J (5)	U (5)	U (5)	U (5)	U (5)	0.58 J (5)	1.7 J (5)	1.1 J (5)	1.3 J (5)	U (5)	27.8 (5)	0.16 J (5)	U (5)	0.9 J (5)	1.1 J (5)
Toluene	1000	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	6.2 (5)	0.19 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	0.17 J (5)	U (5)
1,1,1-Trichloroethane	200	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	0.5 J (5)	U (5)
1,1,2-Trichloroethane	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Trichloroethene	5.0	23.4 (5)	0.23 J (5)	0.28 J (5)	1.4 J (5)	2.7 J (5)	37.4 (5)	112 (5)	166 (5)	2980 (125)	1910 (125)	2400 (125)	69.3 (5)	6.1 (5)	1630 (125)	0.3 J (5)	3770 (250)	4040 (250)
Vinyl Chloride	2.0	U (2)	U (2)	U (2)	0.19 J (2)	0.18 J (2)	U (2)	0.41 J (2)	1.2 J (2)	22.5 (2)	3.4 (2)	3.4 (2)	U (2)	U (2)	11.6 (2)	U (2)	0.57 J (2)	0.74 J (2)
Location		**ITMW-1**	**ITMW-2**	**ITMW-2**	**ITMW-4**	**ITMW-6**	**ITMW-7**	**ITMW-9**	**ITMW-10**	**ITMW-11**	**ITMW-12**	**ITMW-12**	**ITMW-13**	**ITMW-14**	**ITMW-15**	**ITMW-16**	**ITMW-17**	**ITMW-17**
ENVIRON Sample ID		**ITMW-1-201403**	**ITMW-2-201403**	**NA**	**ITMW-4-201403**	**ITMW-6-201403**	**ITMW-7-201403**	**ITMW-9-201403**	**ITMW-10-201403**	**TMW-11-201403**	**ITMW-12-201403**	**NA**	**ITMW-13-201403**	**ITMW-14-201403**	**ITMW-15-201403**	**ITMW-16-201403**	**ITMW-17-201403**	**NA**
Laboratory Sample ID		**60165925005**	**60164418003**	**NA**	**60164418004**	**60164418001**	**60165962005**	**60165962007**	**60165962008**	**60165962003**	**60165962006**	**NA**	**60165925007**	**60165925006**	**60165962010**	**60164423001**	**60165962009**	**NA**
Sample Method		**Low Flow**	**Low Flow**	**NA**	**Low Flow**	**Low Flow**	**Low Flow**	**Low Flow**	**Low Flow**	**Low Flow**	**Low Flow**	**NA**	**Low Flow**	**Low Flow**	**Low Flow**	**Low Flow**	**Low Flow**	**NA**
Sample Date		**3/28/2014**	**03/06/2014**	**NA**	**03/06/2014**	**03/06/2014**	**3/30/2014**	**03/30/2014**	**03/30/2014**	**03/30/2014**	**03/30/2014**	**NA**	**03/28/2014**	**03/28/2014**	**03/30/2014**	**03/07/2014**	**03/30/2014**	**NA**
Comments																		
Metals																		
Iron		409 (50)	44.3 J (50)	NA	1620 (200)	U (50)	U (50)	U (50)	U (50)	217 (50)	U (50)	NA	U (50)	259 (50)	U (50)	4220 (200)	U (50)	NA
Manganese		6.5 (5)	4.6 J (5)	NA	3470 (5)	47.7 (5)	85.4 (5)	51.2 (5)	38.4 (5)	66.0 (5)	7.7 (5)	NA	U (5)	7.1 (5)	U (5)	48.7 (5)	167 (5)	NA
Monitored Natural Attenuation Parameters (Laboratory)																		
Ammonia		U (100)	U (100)	NA	220 (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	NA	U (100)	U (100)	U (100)	U (100)	U (100)	NA
Total Alkalinity		81100 (20000)	63500 (20000)	NA	94000 (20000)	143000 (20000)	U (20000)	66800 (20000)	106000 (20000)	115000 (20000)	91200 (20000)	NA	77100 (20000)	83900 (20000)	301000 (20000)	59400 (20000)	23900 (20000)	NA
Organic Carbon (total)		U (1000)	U (1000)	NA	8900 (1000)	U (1000)	U (1000)	U (1000)	1100 (1000)	U (1000)	U (1000)	NA	U (1000)	U (1000)	U (1000)	4100 (1000)	U (1000)	NA
Carbon Dioxide[6]		311000	174000	NA	130000	329000	0.0	205000	353000	210000	251000	NA	185000	352000	10100	78200	393000	NA
Chloride		8100 (1000)	86200 (20000)	NA	8500 (2000)	147000 (20000)	282000 (50000)	97900 (10000)	119000 (10000)	6000 (1000)	13300 (1000)	NA	25200 (2000)	8000 (1000)	32300 (5000)	1200 (1000)	280000 (50000)	NA
2-Chloroethanol		U (10000)	U (10000)	NA	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	NA	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	NA
Iron (Ferric)[6]		410 (200)	0.0	NA	690 (200)	0.0	0.0	0.0	0.0	0.0	0.0	NA	0.0	NA	0.0	3800 (200)	0.0	NA
Nitrogen, Total NO3 + NO2		380 (100)	920 (100)	NA	U (100)	U (100)	3000 (100)	15900 (1000)	5200 (200)	U (100)	U (100)	NA	190 (100)	380 (100)	430 (100)	2300 (100)	140 (100)	NA
Nitrogen, Nitrate (As N)		380 (100)	920 (100)	NA	U (100)	U (100)	3000 (100)	15900 (1000)	5200 (200)	U (100)	U (100)	NA	190 (100)	380 (100)	390 (100)	2300 (100)	140 (100)	NA
Nitrogen, Nitrite		U (100)	U (100)	NA	U (100)	U (100)	U (100)	U (1000)	U (200)	U (100)	U (100)	NA	U (100)	U (100)	U (100)	U (100)	U (100)	NA
Phosphates (total)		130 (30)	120 (30)	NA	140 (30)	150 (30)	U (30)	32 (30)	35 (30)	U (30)	32 (30)	NA	84 (30)	32 (30)	U (30)	490 (30)	66 (30)	NA
Sulfate		12000 (1000)	16400 (2000)	NA	16800 (2000)	87100 (20000)	10800 (1000)	25500 (2000)	35400 (5000)	12200 (1000)	14000 (1000)	NA	7500 (1000)	11400 (1000)	9900 (1000)	12100 (1000)	6700 (1000)	NA
Sulfide (total)		U (50)	U (50)	NA	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	NA	U (50)	U (50)	U (50)	U (50)	U (50)	NA
Gases																		
Acetylene		U (0.50)	U (0.50)	NA	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	NA	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	NA
Methane		U (0.010)	0.36 (0.1)	NA	20 (0.1)	0.51 (0.1)	0.52 (0.10)	2.0 (0.10)	1.1 (0.10)	6.1 (0.10)	16 (0.10)	NA	1.5 (0.10)	0.23 (0.10)	5.5 (0.10)	U (0.1)	1.1 (0.10)	NA
Ethane		U (0.025)	U (0.025)	NA	0.059 (0.025)	U (0.025)	U (0.025)	U (0.025)	0.032 (0.025)	0.079 (0.025)	2.4 (0.025)	NA	0.11 (0.025)	0.028 (0.025)	0.82 (0.025)	U (0.025)	0.11 (0.025)	NA
Ethene		U (0.025)	0.038 (0.025)	NA	0.097 (0.025)	0.13 (0.025)	0.048 (0.025)	0.032 (0.025)	U (0.025)	U (0.025)	U (0.025)	NA	U (0.025)	U (0.025)	0.13 (0.025)	U (0.025)	U (0.025)	NA
Hydrogen[4]		0.75 (0.6)	0.83 (0.6)	NA	0.85 (0.6)	0.76 (0.6)	0.68 (0.60)	0.67 (0.60)	1.1 (0.60)	0.72 (0.60)	0.90 (0.60)	NA	0.84 (0.60)	0.73 (0.60)	0.80 (0.60)	0.69 (0.6)	U (0.60)	NA
Molecular Analyses																		
Dehalococcoides[5]		U (0.5)	U (0.5)	NA	U (0.5)	U (0.5)	0.5	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NA	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NA
tceA Reductase		U (0.5)	U (0.5)	NA	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NA	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NA
BAV1 Vinyl Chloride Reductase		U (0.5)	U (0.5)	NA	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NA	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NA
Volatile Fatty Acids																		
Acetic Acid		U (5000)	U (5000)	NA	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	NA	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	NA
Propionic Acid		U (5000)	U (5000)	NA	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	NA	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	NA
Pyruvic Acid		U (10000)	U (10000)	NA	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	NA	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	NA
Butyric Acid		U (5000)	U (5000)	NA	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	NA	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	NA
Lactic Acid		U (25000)	U (25000)	NA	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	NA	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	NA

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 27, 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method - Bubble Strip.
5 Concentration presented in cell/mL
6 Results calculated by the ananlytical laboratory via equation, not analysis.

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Detection Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L = micrograms per Liter
mL = milliliters
nM = nanomole
NA = Not Analyzed

Off-Site Wells
On-Site Wells
Plume Boundary Wells

TABLE 5
SUMMARY OF MONITORING WELL GROUND WATER SAMPLE ANALYTICAL RESULTS - 1ST QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	ITMW-18	ITMW-18	ITMW-19	ITMW-19	ITMW-20	ITMW-21	IW-72	IW-73	IW-74	IW-74	IW-76	IW-77	IW-80	MW-22	MW-25	MW-26	MW-27
ENVIRON Sample ID		ITMW-18-201403	ITMW-18-201403-FD	ITMW-19-201403	ITMW-19-201403-FD	ITMW-20-201403	ITMW-21-201403	IW-72-201403	IW-73-201403	IW-74-201403	IW-74-201403-DF	IW-76-201403	IW-77-201403	IW-80-201403	MW-22-201403	MW-25-20140308	MW-26-201403	MW-27-201403
Laboratory Sample ID		60164494005	60164494006	60164494015	60164494014	60164307004	60164418016	60164418008	60164494026	60164423012	60164423013	60164494001	60164494002	60164494021	60164307003	60164494025	60164307002	60164423002
Sampling 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
Sample Date		03/08/2014	03/08/2014	03/08/2014	03/08/2014	03/05/2014	03/06/2014	03/06/2014	03/07/2014	03/07/2014	03/07/2014	03/08/2014	03/08/2014	03/08/2014	03/05/2014	03/08/2014	03/05/2014	03/07/2014
Comments			Field Duplicate		Field Duplicate						Field Duplicate							
Volatile Organic Compounds																		
Acetone	12000	U (500)	U (10)	U (10)	U (500)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (1000)	U (10)	U (10)
Benzene	5.0	U (250)	0.34 J (5)	U (5)	U (250)	U (5)	U (5)	U (5)	0.18 J (5)	0.17 J (5)	0.16 J (5)	U (5)	0.10 J (5)	U (5)	U (5)	U (500)	U (5)	U (5)
Bromoform	80	U (250)	U (5)	U (5)	U (250)	U (5)	U (5)	U (5)	U (5)	0.41 J (5)	0.23 J (5)	U (5)	U (5)	U (5)	U (5)	U (500)	U (5)	U (5)
2-Butanone	4900	U (500)	U (10)	U (10)	U (500)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (1000)	U (10)	U (10)
Carbon Disulfide	720	U (500)	U (10)	U (10)	U (500)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (1000)	U (10)	U (10)
Carbon Tetrachloride	5	U (250)	0.2 J (5)	U (5)	U (250)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (500)	U (5)	U (5)
Chlorobenzene	100	U (250)	U (5)	U (5)	U (250)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (500)	U (5)	U (5)
Chloroethane	21,000	U (500)	0.82 J (10)	U (10)	U (500)	U (10)	U (10)	U (10)	U (10)	1.4 J (10)	1.8 J (10)	U (10)	U (10)	U (10)	U (10)	U (1000)	U (10)	U (10)
Chloroform	80	U (250)	2 J (5)	3 J (5)	U (250)	U (5)	U (5)	U (5)	U (5)	0.18 J (5)	0.16 J (5)	U (5)	0.20 J (5)	U (5)	U (5)	U (500)	U (5)	U (5)
Chloromethane	190	U (500)	U (10)	U (10)	U (500)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (1000)	U (10)	U (10)
1,1-Dichloroethane	2.4	U (120)	1.8 J (2.4)	0.26 J (2.4)	U (120)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (240)	U (2.4)	U (2.4)
1,2-Dichloroethane	5.0	U (250)	U (5)	0.14 J (5)	U (250)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (500)	U (5)	U (5)
1,1-Dichloroethene	7.0	81.8 J (250)	83.6 (5)	13.2 (5)	U (250)	U (5)	U (5)	U (5)	2.6 J (5)	0.23 J (5)	0.39 J (5)	U (5)	1.3 J (5)	U (5)	U (5)	25.3 J (500)	U (5)	U (5)
cis-1,2-Dichloroethene	70	285 (250)	242 J (250)	66.7 (5)	60.8 J (250)	U (5)	U (5)	U (5)	20.9 (5)	4.3 J (5)	4.5 J (5)	1.5 J (5)	24.4 (5)	2.7 J (5)	U (5)	625 (500)	U (5)	U (5)
trans-1,2-Dichloroethene	100	U (250)	5.3 (5)	0.99 J (5)	U (250)	U (5)	U (5)	U (5)	0.95 J (5)	U (5)	0.31 J (5)	U (5)	0.91 J (5)	U (5)	U (5)	U (500)	U (5)	U (5)
4-Methyl-2-pentanone	1000	U (500)	U (10)	U (10)	U (500)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (1000)	U (10)	U (10)
Methylene Chloride	5.0	U (250)	U (5)	U (5)	U (250)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (500)	U (5)	U (5)
Tetrachloroethene	5.0	U (250)	2.7 J (5)	1.9 J (5)	U (250)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (500)	U (5)	U (5)
Toluene	1000	U (250)	U (5)	U (5)	U (250)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (500)	U (5)	U (5)
1,1,1-Trichloroethane	200	U (250)	0.35 J (5)	0.14 J (5)	U (250)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (500)	U (5)	U (5)
1,1,2-Trichloroethane	5.0	U (250)	U (5)	0.76 J (5)	U (250)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (500)	U (5)	U (5)
Trichloroethene	5.0	9380 (250)	8550 (250)	8850 (250)	8270 (250)	U (5)	14.8 (5)	U (5)	183 (5)	135 (5)	151 (5)	127 (5)	546 (50)	79.1 J (5)	U (5)	14500 (500)	U (5)	0.31 J (5)
Vinyl Chloride	2.0	U (100)	1.7 J (2)	0.57 J (2)	U (100)	0.15 J (2)	U (2)	U (2)	4.6 (2)	1.5 J (2)	2.2 (2)	U (2)	0.22 J (2)	U (2)	U (2)	33.6 J (200)	U (2)	U (2)
Location		ITMW-18	ITMW-18	ITMW-19	ITMW-19	ITMW-20	ITMW-21	IW-72	IW-73	IW-74	IW-74	IW-76	IW-77	IW-80	MW-22	MW-25	MW-26	MW-27
ENVIRON Sample ID		ITMW-18-201403	NA	ITMW-19-201403	NA	ITMW-20-201403	ITMW-21-201403	IW-72-201403	IW-73-201403	IW-74-201403	NA	IW-76-201403	IW-77-201403	IW-80-201403	MW-22-201403	MW-25-201403	MW-26-201403	MW-27-201403
Laboratory Sample ID		60165962001	NA	60165962011	NA	60164307004	60165925008	60164418008	60165935007	60165925004	NA	60165935006	60165706003	60165706004	60164307003	60165962012	60164307002	60164423002
Sample Method		Low Flow	NA	Low Flow	NA	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	NA	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Sample Date		03/30/2014	NA	03/30/2014	NA	03/05/2014	03/28/2014	03/06/2014	03/27/2014	03/28/2014	NA	03/27/2014	03/26/2014	03/26/2014	03/05/2014	03/30/2014	03/05/2014	03/07/2014
Comments																		
Metals																		
Iron		U (50)	NA	U (50)	NA	U (50)	U (50)	182 (50)	1660 (50)	65.4 (50)	NA	U (50)	98.0 (50)	87.7 (50)	U (50)	U (50)	U (50)	3240 (50)
Manganese		5.2 (5)	NA	20.9 (5)	NA	4.7 J (5)	330 (5)	9070 (5)	3950 (5)	272 (5)	NA	1160 (5)	731 (5)	73.2 (5)	265 (5)	298 (5)	111 (5)	36.9 (5)
Monitored Natural Attenuation Parameters (Laboratory)																		
Ammonia		U (100)	NA	U (100)	NA	U (100)	U (100)	U (100)	U (100)	U (100)	NA	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
Total Alkalinity		55200 (20000)	NA	112000 (20000)	NA	51300 (20000)	26600 (20000)	120000 (20000)	93000 (20000)	89600 (20000)	NA	34100 (20000)	31500 (20000)	78000 (20000)	49200 (20000)	U (20000)	27600 (20000)	28600 (20000)
Organic Carbon (total)		U (1000)	NA	U (1000)	NA	U (1000)	U (1000)	U (1000)	U (1000)	U (1000)	NA	U (1000)	U (1000)	U (1000)	U (1000)	U (1000)	U (1000)	1300 (1000)
Carbon Dioxide[6]		468000	NA	176000	NA	35200	555000	315000	413000	363000	NA	349000	803000	228000	302000	0.0	349000	87800
Chloride		133000 (10000)	NA	273000 (50000)	NA	79100 (10000)	682000 (50000)	203000 (20000)	306000 (50000)	244000 (50000)	NA	276000 (50000)	229000 (50000)	122000 (20000)	13700 (1000)	341000 (50000)	327000 (50000)	9800 (1000)
2-Chloroethanol		U (10000)	NA	U (10000)	NA	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	NA	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)
Iron (Ferric)[6]		0.0	NA	0.0	NA	0.0	0.0	140 J (200)	670 (200)	0.0	NA	0.0	NA	0.0	0.0	0.0	0.0	3200 (200)
Nitrogen, Total NO3 + NO2		2700 (100)	NA	1400 (100)	NA	1400 (100)	200 (100)	560 J (1000)	210 (100)	690 (100)	NA	510 (100)	590 (100)	190 (100)	U (100)	310 (100)	3100 (100)	760 (100)
Nitrogen, Nitrate (As N)		2700 (100)	NA	1400 (100)	NA	1400 (100)	200 (100)	560 J (1000)	210 (100)	690 (100)	NA	510 (100)	590 (100)	190 (100)	U (100)	310 (100)	3100 (100)	760 (100)
Nitrogen, Nitrite		U (100)	NA	U (100)	NA	U (100)	U (100)	U (100)	U (100)	U (100)	NA	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
Phosphates (total)		U (30)	NA	U (30)	NA	350 (30)	42 (30)	5200 (300)	35 (30)	200 (30)	NA	32 (30)	U (30)	600 (30)	280 (30)	46 (30)	830 (30)	140 (30)
Sulfate		21500 (2000)	NA	5800 (1000)	NA	15100 (1000)	3700 (1000)	9300 (1000)	4800 (1000)	2900 (1000)	NA	4800 (1000)	5200 (1000)	10900 (1000)	14000 (1000)	2400 (1000)	9200 (1000)	8600 (1000)
Sulfide (total)		U (50)	NA	U (50)	NA	U (50)	U (50)	U (50)	U (50)	U (50)	NA	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)
Gases																		
Acetylene		U (0.50)	NA	U (0.50)	NA	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	NA	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Methane		0.74 (0.10)	NA	0.34 (0.10)	NA	U (0.10)	0.14 (0.10)	0.81 (0.1)	2.8 (0.10)	0.36 (0.10)	NA	1.2 (0.10)	0.19 (0.10)	0.22 (0.10)	0.77 (0.10)	13 (0.10)	U (0.10)	0.12 (0.1)
Ethane		0.22 (0.025)	NA	0.071 (0.025)	NA	U (0.025)	U (0.025)	0.087 (0.087)	U (0.025)	U (0.025)	NA	U (0.025)	0.033 (0.025)	0.055 (0.025)	U (0.025)	3.9 (0.025)	U (0.025)	U (0.025)
Ethene		U (0.025)	NA	U (0.025)	NA	0.055 (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	NA	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)
Hydrogen[4]		0.83 (0.60)	NA	0.60 (0.60)	NA	0.81 (0.6)	0.66 (0.60)	0.91 (0.6)	0.68 (0.6)	0.62 (0.6)	NA	5.9 (0.6)	6.7 (0.6)	9.5 (0.6)	0.77 (0.6)	0.60 (0.60)	0.72 (0.6)	0.63 (0.6)
Molecular Analyses																		
Dehalococcoides[5]		U (0.5)	NA	U (0.5)	NA	U (0.5)	U (0.5)	U (0.5)	1.4 (0.5)	17.7 (0.5)	NA	U (0.5)	U (0.5)	U (0.5)	3.0 (0.5)	U (0.5)	U (0.5)	U (0.6)
tceA Reductase		U (0.5)	NA	U (0.5)	NA	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NA	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.6)
BAV1 Vinyl Chloride Reductase		U (0.5)	NA	U (0.5)	NA	U (0.5)	U (0.5)	U (0.5)	1.27 (0.5)	4.50	NA	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.6)
Volatile Fatty Acids																		
Acetic Acid		U (5000)	NA	U (5000)	NA	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	NA	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)
Propionic Acid		U (5000)	NA	U (5000)	NA	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	NA	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)
Pyruvic Acid		U (10000)	NA	U (10000)	NA	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	NA	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)
Butyric Acid		U (5000)	NA	U (5000)	NA	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	NA	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)
Lactic Acid		U (25000)	NA	U (25000)	NA	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	NA	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)

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 27, 2013 are double underlined.

4 Concentration presented in nM = nanomolar. Sampling Method - Bubble Strip.
5 Concentration presented in cell/mL
6 Results calculated by the ananlytical laboratory via equation, not analysis.

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Detection Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L = micrograms per Liter
mL = milliliters
nM = nanomole
NA = Not Analyzed

Off-Site Wells
On-Site Wells
Plume Boundary Wells

TABLE 5
SUMMARY OF MONITORING WELL GROUND WATER SAMPLE ANALYTICAL RESULTS - 1ST QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-28	MW-29	MW-31	MW-32	MW-33	MW-34	MW-35R	MW-36	MW-38	MW-39	MW-40	MW-41	MW-46R	MW-50	MW-55	MW-56	MW-57
ENVIRON Sample ID		MW-28-201403	MW-29-201403	MW-31-201403	MW-32-20140308	MW-33-201403	MW-34-20140308	MW-35R-201403	MW-36-201403	MW-38-201403	MW-39-201403	MW-40-201403	MW-41-201403	MW-46R-201403	MW-50-201403	Not Sampled	MW-56-201403	MW-57-201403
Laboratory Sample ID		60164418005	60164307001	60164418014	60164494022	60164494024	60164494016	60164494020	60164418009	60164494008	60164418010	60164418007	60164494027	60164423010	60164418011		60164423009	60164423008
Sampling 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
Sample Date		03/06/2014	03/05/2014	03/06/2014	03/08/2014	03/08/2014	03/08/2014	03/08/2014	03/06/2014	03/08/2014	03/06/2014	03/06/2014	03/07/2014	03/07/2014	03/06/2014		03/07/2014	03/07/2014
Comments																		
Volatile Organic Compounds																		
Acetone	12000	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	NA	U (10)	U (10)
Benzene	5.0	U (5)	0.3 J (5)	U (5)	U (5)	0.098 J (5)	U (5)	0.15 J (5)	U (5)	0.21 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	NA	U (5)	U (5)
Bromoform	80	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	NA	U (5)	U (5)
2-Butanone	4900	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	NA	U (10)	U (10)
Carbon Disulfide	720	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	NA	U (10)	U (10)
Carbon Tetrachloride	5	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	NA	U (5)	U (5)
Chlorobenzene	100	U (5)	8.9 (5)	0.24 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	NA	U (5)	U (5)
Chloroethane	21,000	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	40.8 (10)	U (10)	U (10)	U (10)	U (10)	U (10)	NA	U (10)	U (10)
Chloroform	80	U (5)	U (5)	U (5)	U (5)	0.3 J (5)	U (5)	U (5)	U (5)	0.43 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	NA	U (5)	U (5)
Chloromethane	190	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	NA	U (10)	U (10)
1,1-Dichloroethane	2.4	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	NA	U (2.4)	U (2.4)
1,2-Dichloroethane	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	NA	U (5)	U (5)
1,1-Dichloroethene	7.0	U (5)	U (5)	U (5)	U (5)	1.4 J (5)	U (5)	0.66 J (5)	U (5)	29.5 (5)	U (5)	U (5)	1.6 J (5)	1.4 J (5)	U (5)	NA	1.3 J (5)	0.56 J (5)
cis-1,2-Dichloroethene	70	U (5)	U (5)	U (5)	1.1 J (5)	15.9 (5)	0.61 J (5)	14.9 (5)	U (5)	535 (125)	U (5)	U (5)	19.7 (5)	12.8 (5)	U (5)	NA	15.3 (5)	3.0 J (5)
trans-1,2-Dichloroethene	100	U (5)	U (5)	U (5)	U (5)	0.33 J (5)	U (5)	0.5 J (5)	U (5)	13.2 (5)	U (5)	U (5)	0.5 J (5)	0.44 J (5)	U (5)	NA	0.46 J (5)	U (5)
4-Methyl-2-pentanone	1000	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	NA	U (10)	U (10)
Methylene Chloride	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	NA	U (5)	U (5)
Tetrachloroethene	5.0	U (5)	U (5)	U (5)	U (5)	0.2 J (5)	U (5)	U (5)	U (5)	0.41 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	NA	U (5)	U (5)
Toluene	1000	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	NA	U (5)	U (5)
1,1,1-Trichloroethane	200	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	NA	U (5)	U (5)
1,1,2-Trichloroethane	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	NA	U (5)	U (5)
Trichloroethene	5.0	U (5)	0.52 J (5)	U (5)	36.8 (5)	918 (50)	28.7 (5)	345 (25)	0.22 J (5)	1790 (125)	U (5)	U (5)	501 (50)	469 (50)	U (5)	NA	618 (50)	134 (5)
Vinyl Chloride	2.0	U (2)	U (2)	U (2)	U (2)	0.56 J (2)	U (2)	U (2)	U (2)	68.4 (2)	U (2)	U (2)	0.68 J (2)	0.46 J (2)	U (2)	NA	0.15 J (2)	0.14 J (2)
Location		MW-28	MW-29	MW-31	MW-32	MW-33	MW-34	MW-35R	MW-36	MW-38	MW-39	MW-40	MW-41	MW-46R	MW-50	MW-55	MW-56	MW-57
ENVIRON Sample ID		MW-28-201403	MW-29-201403	MW-31-201403	MW-32-201403	MW-33-201403	MW-34-201403	MW-35R-201403	MW-36-201403	MW-38-201403	MW-39-201403	MW-40-201403	MW-41-201403	MW-46R-201403	MW-50-201403	Not Sampled	MW-56-201403	MW-57-201403
Laboratory Sample ID		60164418005	60164307001	60164418014	60165925001	60165925002	60165935002	60165706001	60164418009	60165962004	60164418010	60164418007	60165935004	60165935005	60164418011		60165935009	60165935008
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
Sample Date		03/06/2014	03/05/2014	03/06/2014	03/28/2014	03/28/2014	03/27/2014	03/26/2014	03/06/2014	03/30/2014	03/06/2014	03/06/2014	03/27/2014	03/27/2014	03/06/2014		03/27/2014	03/27/2014
Comments																		
Metals																		
Iron		539 (50)	43.8 J (50)	161 (50)	168 (50)	139 (50)	5710 (50)	339 (50)	286 (50)	1960 (50)	189 (50)	U (50)	5550 (50)	U (50)	872 (50)	NA	1880 (50)	1260 (50)
Manganese		48.2 (5)	307 (5)	239 (5)	488 (5)	179 (5)	244 (5)	284 (5)	465 (5)	2200 (5)	332 (5)	175 (5)	6490 (5)	125 (5)	200 (5)	NA	392 (5)	283 (5)
Monitored Natural Attenuation Parameters (Laboratory)																		
Ammonia		U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	26 J (100)	U (100)	U (100)	U (100)	U (100)	NA	U (100)	U (100)
Total Alkalinity		84200 (20000)	10200 J (20000)	27200 (20000)	U (20000)	22200 (20000)	U (20000)	83800 (20000)	20700 (20000)	120000 (20000)	13500 J (20000)	17900 J (20000)	43000 (20000)	22000 (20000)	221000 (20000)	NA	29700 (20000)	32700 (20000)
Organic Carbon (total)		U (1000)	2000 (1000)	U (1000)	U (1000)	U (1000)	U (1000)	2400 (1000)	U (1000)	1300 (1000)	U (1000)	U (1000)	U (1000)	U (1000)	U (1000)	NA	U (1000)	U (1000)
Carbon Dioxide[6]		176000	0.0	177000	0.0	790000	0.0	840000	274000	244000	0.0	0.0	380000	420000	259000	NA	108000	314000
Chloride		24300 (5000)	120000 (10000)	92600 (5000)	346000 (50000)	179000 (20000)	237000 (50000)	275000 (50000)	225000 (20000)	19300 (1000)	288000 (20000)	224000 (20000)	368000 (50000)	238000 (50000)	227000 (20000)	NA	296000 (50000)	165000 (20000)
2-Chloroethanol		U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	NA	U (10000)	U (10000)
Iron (Ferric)[6]		540 (200)	0.0	0.0	0.0	0.0	5200 (200)	300 (200)	46 J (200)	300 (200)	150 J (200)	0.0	2200 (200)	0.0	870 (200)	NA	NA	NA
Nitrogen, Total NO3 + NO2		28 J (100)	2100 (100)	250 (100)	220 (100)	1400 (100)	290 (100)	370 (100)	U (100)	U (100)	24 J (100)	64 J (100)	U (100)	U (100)	U (100)	NA	260 (100)	200 (100)
Nitrogen, Nitrate (As N)		28 J (100)	2100 (100)	250 (100)	220 (100)	1400 (100)	290 (100)	370 (100)	U (100)	U (100)	U (100)	64 J(100)	U (100)	U (100)	U (100)	NA	260 (100)	200 (100)
Nitrogen, Nitrite		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)	NA	U (100)	U (100)
Phosphates (total)		140 (30)	950 (30)	U (30)	39 (30)	53 (30)	32 (30)	U (30)	180 (30)	U (30)	32 (30)	66 (30)	32 (30)	35 (30)	140 (30)	NA	300 (30)	U (30)
Sulfate		40900 (5000)	67300 (10000)	32400 (5000)	6500 (1000)	4600 (1000)	6300 (1000)	7200 (1000)	5200 (1000)	21700 (2000)	18600 (2000)	2500 (1000)	3000 (1000)	U (1000)	1900 (1000)	NA	8800 (1000)	7000 (1000)
Sulfide (total)		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)	NA	U (50)	U (50)
Gases																		
Acetylene		U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	13 (0.10)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	NA	U (0.50)	U (0.50)
Methane		0.19 (0.1)	0.14 (0.1)	3.3 (0.1)	9.9 (0.10)	2.0 (0.10)	22 (0.10)	0.38 (0.10)	U (0.1)	8.6 (0.10)	0.25 (0.1)	0.26 (0.1)	8.4 (0.10)	15 (0.10)	0.19 (0.1)	NA	U (0.10)	1.3 (0.10)
Ethane		U (0.025)	U (0.025)	U (0.025)	U (0.025)	0.035 (0.025)	U (0.025)	0.090 (0.025)	U (0.025)	0.19 (0.025)	U (0.025)	U (0.025)	0.026 (0.025)	U (0.025)	U (0.025)	NA	U (0.025)	0.029 (0.025)
Ethene		U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	0.050 (0.025)	U (0.025)	6.8 (0.10)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	NA	U (0.025)	0.076 (0.025)
Hydrogen[4]		0.88 (0.6)	0.68 (0.6)	0.70 (0.6)	61 (2.4)	36 (0.6)	43 (0.6)	150 (60)	0.75 (0.6)	0.66 (0.60)	0.81 (0.6)	0.72 (0.6)	0.7 (0.6)	32 (0.6)	0.74 (0.6)	NA	NA	NA
Molecular Analyses																		
Dehalococcoides[5]		U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.9)	U (0.9)	U (0.5)	51200 (0.5)	U (0.5)	0.55 (0.5)	24.2 (0.5)	U (0.5)	U (2.3)	NA	NA	NA
tceA Reductase		U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.9)	U (0.9)	U (0.5)	U (0.5)	U (0.5)	0.1 J (0.5)	U (0.5)	U (0.5)	U (2.3)	NA	NA	NA
BAV1 Vinyl Chloride Reductase		U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.9)	U (0.9)	U (0.5)	36900 (0.5)	U (0.5)	U (0.5)	10.3 (0.5)	U (0.5)	U (2.3)	NA	NA	NA
Volatile Fatty Acids																		
Acetic Acid		U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	NA	U (5000)	U (5000)
Propionic Acid		U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	NA	U (5000)	U (5000)
Pyruvic Acid		U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	NA	U (10000)	U (10000)
Butyric Acid		U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	NA	U (5000)	U (5000)
Lactic Acid		U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	NA	U (25000)	U (25000)

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 27, 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method - Bubble Strip.
5 Concentration presented in cell/mL
6 Results calculated by the ananlytical laboratory via equation, not analysis.

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Detection Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L = micrograms per Liter
mL = milliliters
nM = nanomole
NA = Not Analyzed

Off-Site Wells
On-Site Wells
Plume Boundary Wells

TABLE 5
SUMMARY OF MONITORING WELL GROUND WATER SAMPLE ANALYTICAL RESULTS - 1ST QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-58	MW-60	MW-61	MW-62	MW-63	MW-65	MW-66	MW-67	MW-68	MW-71	RW-69
ENVIRON Sample ID		MW-58-201403	MW-60-201403	MW-61-201403	MW-62-201403	MW-63-201403	MW-65-20140308	MW-66-201403	MW-67-201403	MW-68-201403	MW-71-201403	RW-69-201403
Laboratory Sample ID		60164423007	60164418012	60164418013	60164423005	60164423006	60164494017	60164423004	60164423003	60164418006	60164423014	60164423015
Sampling Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Sample Date		03/07/2014	03/06/2014	03/06/2014	03/07/2014	03/07/2014	03/08/2014	03/07/2014	03/07/2014	03/06/2014	03/07/2014	03/07/2014
Comments												
Volatile Organic Compounds												
Acetone	12000	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Benzene	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Bromoform	80	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
2-Butanone	4900	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Carbon Disulfide	720	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Carbon Tetrachloride	5	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Chlorobenzene	100	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Chloroethane	21,000	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Chloroform	80	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Chloromethane	190	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
1,1-Dichloroethane	2.4	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)
1,2-Dichloroethane	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,1-Dichloroethene	7.0	1.6 J (5)	U (5)	U (5)	U (5)	U (5)	0.4 J (5)	U (5)	U (5)	U (5)	1.1 J (5)	0.36 J (5)
cis-1,2-Dichloroethene	70	22.3 (5)	U (5)	U (5)	U (5)	1.3 J (5)	6.6 (5)	U (5)	U (5)	U (5)	5.8 (5)	3.5 J (5)
trans-1,2-Dichloroethene	100	0.35 J (5)	U (5)	U (5)	U (5)	U (5)	0.28 J (5)	U (5)	U (5)	U (5)	0.27 J (5)	U (5)
4-Methyl-2-pentanone	1000	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Methylene Chloride	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Tetrachloroethene	5.0	0.15 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Toluene	1000	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,1,1-Trichloroethane	200	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,1,2-Trichloroethane	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Trichloroethene	5.0	293 (25)	U (5)	4.7 J (5)	0.18 J (5)	9.4 (5)	199 (25)	3.5 J (5)	U (5)	U (5)	166 (5)	105 (5)
Vinyl Chloride	2.0	0.93 J (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	0.19 J (2)	0.41 J (2)
Location		**MW-58**	**MW-60**	**MW-61**	**MW-62**	**MW-63**	**MW-65**	**MW-66**	**MW-67**	**MW-68**	**MW-71**	**RW-69**
ENVIRON Sample ID		**MW-58-201403**	**MW-60-201403**	**MW-61-201403**	**MW-62-201403**	**MW-63-201403**	**MW-65-201403**	**MW-66-201403**	**MW-67-201403**	**MW-68-201403**	**MW-71-201403**	**RW-69-201403**
Laboratory Sample ID		**60165935003**	**60164418012**	**60164418013**	**60164423005**	**60164423006**	**60165706002**	**60164423004**	**60164423003**	**60164418006**	**60165925003**	**60165935001**
Sample Method		**Low Flow**	**Low Flow**	**Low Flow**	**Low Flow**	**Low Flow**	**Low Flow**	**Low Flow**	**Low Flow**	**Low Flow**	**Low Flow**	**Low Flow**
Sample Date		**03/27/2014**	**03/06/2014**	**03/06/2014**	**03/07/2014**	**03/07/2014**	**03/26/2014**	**03/07/2014**	**03/07/2014**	**03/06/2014**	**03/28/2014**	**03/27/2014**
Comments												
Metals												
Iron		2020 (50)	2780 (50)	9650 (50)	6950 (50)	4300 (50)	516 (50)	98.6 (50)	926 (50)	U (50)	549 (50)	300 (50)
Manganese		677 (5)	995 (5)	85.0 (5)	148 (5)	62.4 (5)	1270 (5)	7.8 (5)	7.5 (5)	574 (5)	1100 (5)	758 (5)
Monitored Natural Attenuation Parameters (Laboratory)												
Ammonia		U (100)	U (100)	36 J (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
Total Alkalinity		49300 (20000)	377000 (20000)	122000 (20000)	41900 (20000)	45200 (20000)	33200 (20000)	101000 (20000)	269000 (20000)	9000 J (20000)	30900 (20000)	20500 (20000)
Organic Carbon (total)		32700 (10000)	U (1000)	U (1000)	U (1000)	U (1000)	U (1000)	U (1000)	U (1000)	U (1000)	U (1000)	U (1000)
Carbon Dioxide[6]		173000	NA	173000	314000	277000	340000	261000	NA	0.0	604000	296000
Chloride		14900 (1000)	130000 (20000)	93000 (20000)	153000 (20000)	146000 (20000)	408000 (50000)	164000 (20000)	115000 (20000)	301000 (20000)	262000 (50000)	276000 (50000)
2-Chloroethanol		U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)
Iron (Ferric)[6]		1500 (200)	NA	9600 (200)	6700 (200)	4200 (200)	490 (200)	69 J (200)	NA	0.0	0.0	0.0
Nitrogen, Total NO3 + NO2		U (100)	U (100)	1200 (100)	680 (100)	360 (100)	670 (100)	220 (100)	96 J (100)	25400 (2000)	U (100)	200 (100)
Nitrogen, Nitrate (As N)		U (100)	U (100)	1200 (100)	680 (100)	360 (100)	670 (100)	220 (100)	96 J (100)	25400 (2000)	U (100)	200 (100)
Nitrogen, Nitrite		U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
Phosphates (total)		5200 (300)	1200 (30)	350 (30)	U (30)	170 (30)	32 (30)	U (30)	170 (30)	240 (30)	88 (30)	32 (30)
Sulfate		22000 (2000)	32900 (5000)	24700 (2000)	4200 (1000)	8300 (1000)	4000 (1000)	6400 (1000)	11400 (2000)	1300 (1000)	3500 (1000)	4900 (1000)
Sulfide (total)		U (50)	20 J (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)
Gases												
Acetylene		U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Methane		21 (0.10)	3.6 (0.10)	U (0.1)	0.25 (0.1)	0.23 (0.1)	0.50 (0.10)	U (0.1)	U (0.1)	0.35 (0.1)	28 (0.10)	1.8 (0.10)
Ethane		0.033 (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)
Ethene		0.20 (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)	0.052 (0.025)
Hydrogen[4]		1.9 (0.6)	0.82 (0.6)	0.71 (0.6)	0.87 (0.6)	0.84 (0.6)	4.0 (0.60)	0.87 (0.6)	0.92 (0.6)	0.83 (0.6)	1.2 (0.6)	0.82 (0.6)
Molecular Analyses												
Dehalococcoides[5]		U (3.1)	U (0.5)	U (1.4)	U (0.5)	U (0.7)	U (0.5)	U (0.5)	U (0.6)	U (0.5)	0.3 J (0.5)	U (0.5)
tceA Reductase		U (3.1)	U (0.5)	U (1.4)	U (0.5)	U (0.7)	U (0.5)	U (0.5)	U (0.6)	U (0.5)	0.1 J (0.5)	U (0.5)
BAV1 Vinyl Chloride Reductase		U (3.1)	U (0.5)	U (1.4)	U (0.5)	U (0.7)	U (0.5)	U (0.5)	U (0.6)	U (0.5)	U (0.5)	U (0.5)
Volatile Fatty Acids												
Acetic Acid		U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)
Propionic Acid		U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)
Pyruvic Acid		U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)
Butyric Acid		U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)
Lactic Acid		U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)

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 27, 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method - Bubble Strip.
5 Concentration presented in cell/mL
6 Results calculated by the ananlytical laboratory via equation, not analysis.

Abbreviations:

U -- Not Detected.
J -- Estimated Concentration.
( ) -- Detection Limit.
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L = micrograms per Liter
mL = milliliters
nM = nanomole
NA = Not Analyzed

Off-Site Wells
On-Site Wells
Plume Boundary Wells

Figures

FILE: K:\GIS\PROJECT\WHIRLPOOL\DOCs\2014 03 03 - 2014Q1 GW Event\Figure 1 - 1st QUARTER 2014 Potentiometric Surface Map - March 5 Event.mxd

Monitoring Well Location
Groundwater Contour (1ft Intervals)
Approximate Property Boundary

Brazil Ave
Ferguson St
Jacobs Ave
Jenny Lind Rd
Ingersoll Ave

456.0 ft
449.0 ft
450.0 ft
451.0 ft
452.0 ft
454.0 ft
453.0 ft
448.0 ft
457.0 ft
458.0 ft
459.0 ft
460.0 ft
455.0 ft
462.0 ft
461.0 ft
463.0 ft

MW-50 455.90
MW-60 453.25
MW-61 448.21
MW-67 453.19
MW-55: 462.7
MW-58 NA
MW-57 458.95
MW-66 456.64
MW-68 462.70
MW-70 462.70
MW-71: 462.70
RW-69 462.83
MW-56 457.03
IW-75 462.63
MW-40 462.74
IW-72: 462.69.
MW-46R 462.53
MW-62 456.68
MW-63 458.82
IW-74: 462.75
IW-73 462.73
MW-41 462.76
MW-35R 462.87
IW-76: 462.54
MW-39 461.61
IW-78 463.24
IW-77: 462.75
MW-65 462.66
IW-80: 462.57
MW-34 462.76
MW-36: 462.71
IW-79: 462.71
MW-28 462.52
MW-31 462.63
MW-33: 462.70
MW-32 462.72
MW-27 462.69
MW-26 463.28
ITMW-16 462.74
MW-23 462.74
MW-24 462.76
ITMW-11 462.68
ITMW-3 461.67
ITMW-15 462.74
ITMW-2 462.19
ITMW-17: 462.52
ITMW-14 462.33
ITMW-20 463.24
MW-38 462.63
ITMW-13 462.40
ITMW-1 461.13
MW-22 461.38
MW-25 462.81
ITMW-12 462.40
ITMW-19 462.51
MW-37 462.67
ITMW-21 462.95
ITMW-18 462.41
MW-30 462.29
MW-29 462.66
ITMW-7 461.75
ITMW-5 460.96
ITMW-4 461.10
ITMW-10 460.95
ITMW-9 461.00
ITMW-6 460.85

NOTES:
NA = Well was Not Accessible for this event.

0 200 400
Feet
1 inch = 200 feet

ENVIRON

1st QUARTER 2014 POTENTIOMETRIC SURFACE MAP
MARCH 5TH, 2014 EVENT

Whirlpool Facility - Fort Smith, Arkansas

Figure 1

DRAFTED BY: KTS/CCS
DATE: 04/24/2014
PROJECT: 2131344A

FILE: K:\GIS\PROJECT\WHIRLPOOL\DOCs\2014 03 03 - 2014Q1 GW Event\Figure 2 - 1st QUARTER 2014 Potentiometric Surface Map - March 25 Event.mxd

Monitoring Well Location
Groundwater Contour (1ft Intervals)
Approximate Property Boundary

Brazil Ave
Ferguson St
Jacobs Ave
Jenny Lind Rd
Ingersoll Ave

451.0 ft
450.0 ft
452.0 ft
453.0 ft
454.0 ft
455.0 ft
456.0 ft
457.0 ft
458.0 ft
459.0 ft
460.0 ft
461.0 ft
462.0 ft
463.0 ft

MW-50 455.19
MW-60 453.05
MW-61 450.92
MW-67 454.78
MW-55: NA
MW-58 NU
MW-57 457.65
MW-66 456.71
MW-68 462.49
MW-56 456.49
MW-70 462.52
MW-71: 462.55
RW-69 462.5
IW-75 462.47
MW-40 462.55
IW-72: 462.32
MW-46R 462.18
IW-74: 462.44
MW-62 457.61
MW-63 457.91
IW-73 462.61
MW-41 462.63
MW-35R 462.57
IW-76: 462.37
IW-78 462.65
IW-77: 462.54
MW-39 462.62
IW-80: 462.44
MW-65 462.63
MW-34 462.68
MW-36: 462.75
IW-79: 462.65
MW-28 462.28
MW-31 462.55
MW-33: 462.5
MW-32 462.59
MW-27 462.5
MW-26 463.21
ITMW-16 462.49
MW-23 462.56
ITMW-11 462.52
MW-24 462.57
ITMW-3 461.43
ITMW-15 462.69
ITMW-2 461.98
ITMW-17: 462.39
ITMW-14 462.14
ITMW-20 463.03
MW-38 462.51
ITMW-13 462.23
ITMW-1 460.84
MW-22 461.27
MW-25 462.63
ITMW-12 462.21
ITMW-19 462.31
MW-37 462.52
ITMW-21 463.04
ITMW-18 462.13
MW-30 462.22
MW-29 462.91
ITMW-7 461.7
ITMW-5 460.67
ITMW-4 460.81
ITMW-10 460.99
ITMW-9 460.72
ITMW-6 460.58

NOTES:
NA = Well was Not Accessible for this event.
NU = Well was Not Used in the generation of the potentiometric surface due to an anomalously high reading.

0 200 400
Feet
1 inch = 200 feet

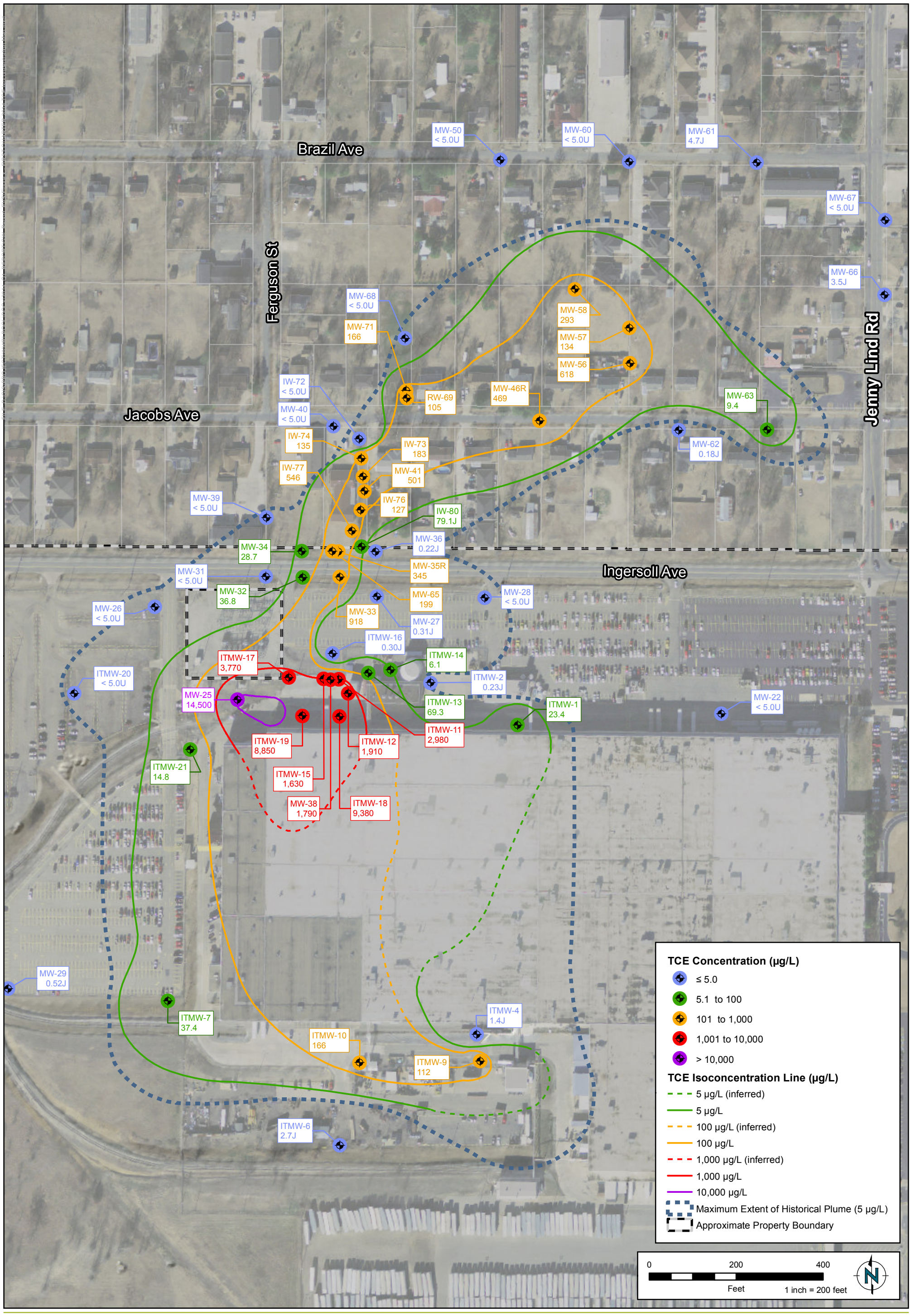
ENVIRON

1st QUARTER 2014 POTENTIOMETRIC SURFACE MAP
MARCH 25TH, 2014 EVENT

Whirlpool Facility - Fort Smith, Arkansas

Figure 2

DRAFTED BY: KTS/CCS
DATE: 04/28/2014
PROJECT: 2131344A



ENVIRON

1st QUARTER 2014 TCE ISOCONCENTRATION MAP

Whirlpool Facility - Fort Smith, Arkansas

Figure 3

DRAFTED BY: KTS

DATE: 04/28/2014

PROJECT: 2131344A

FIGURE 5
TCE Concentration with Time at Source Area On-Site Wells

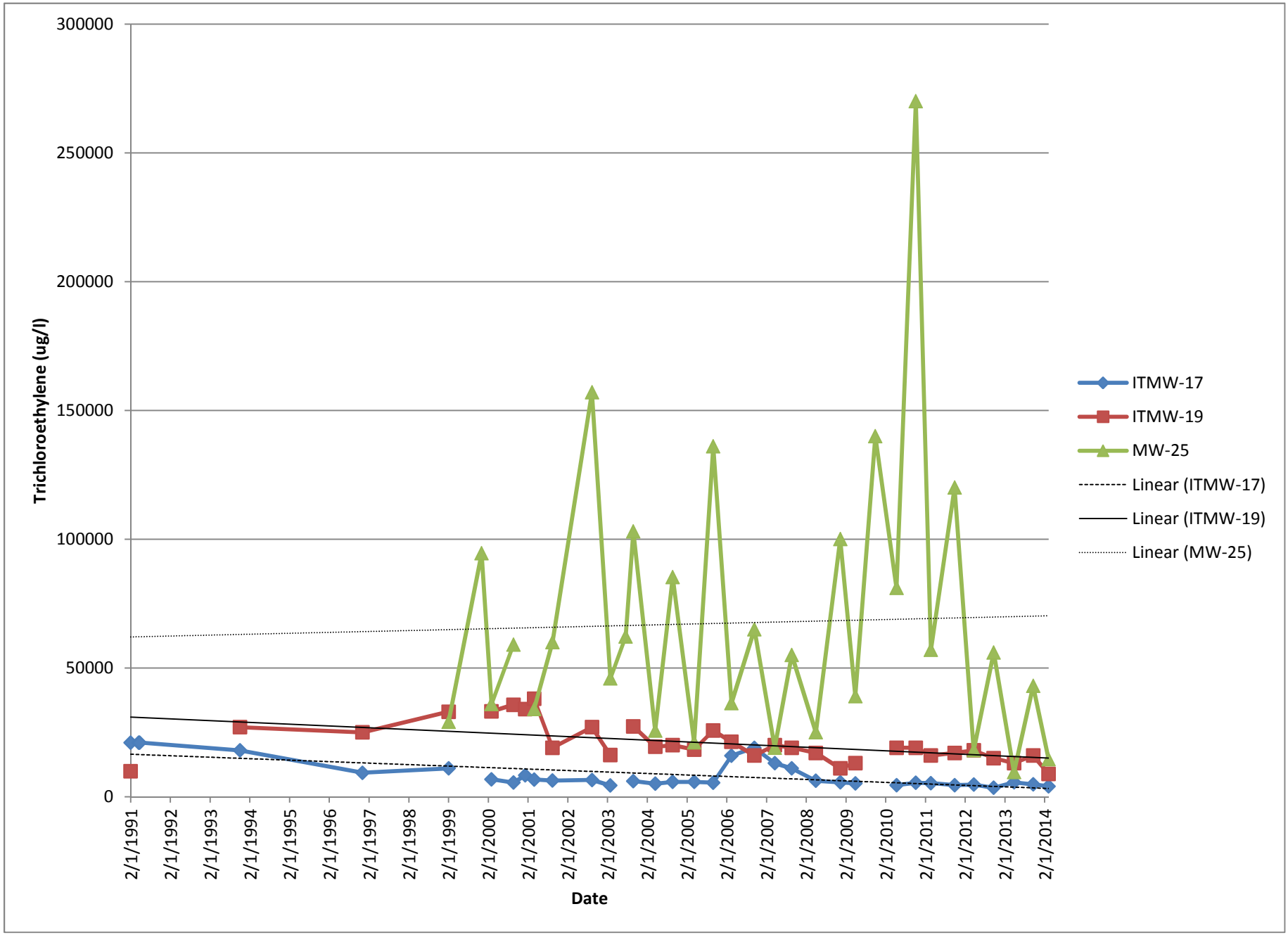


FIGURE 6
TCE Concentration with Time at Northern On-Site Wells

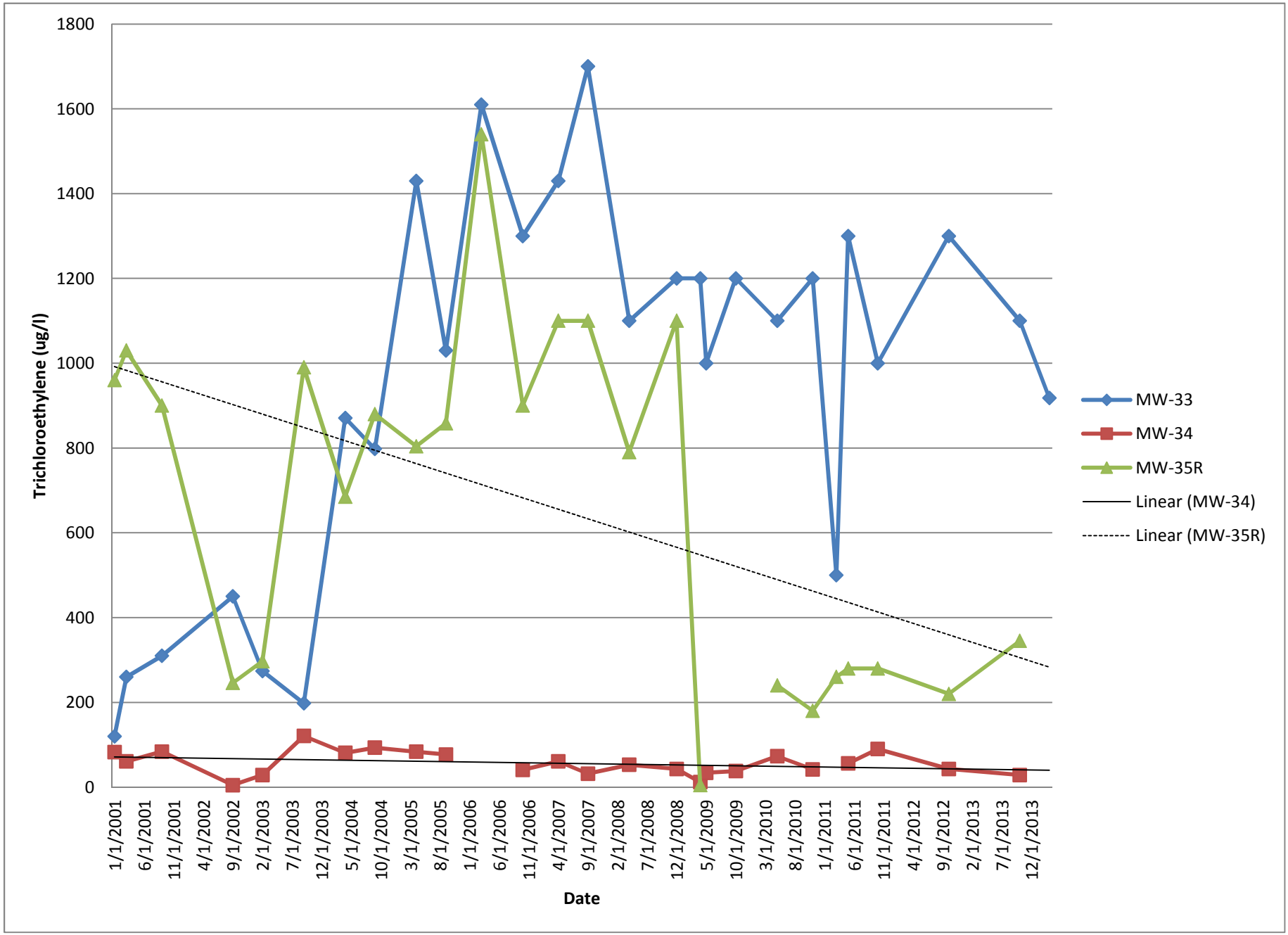
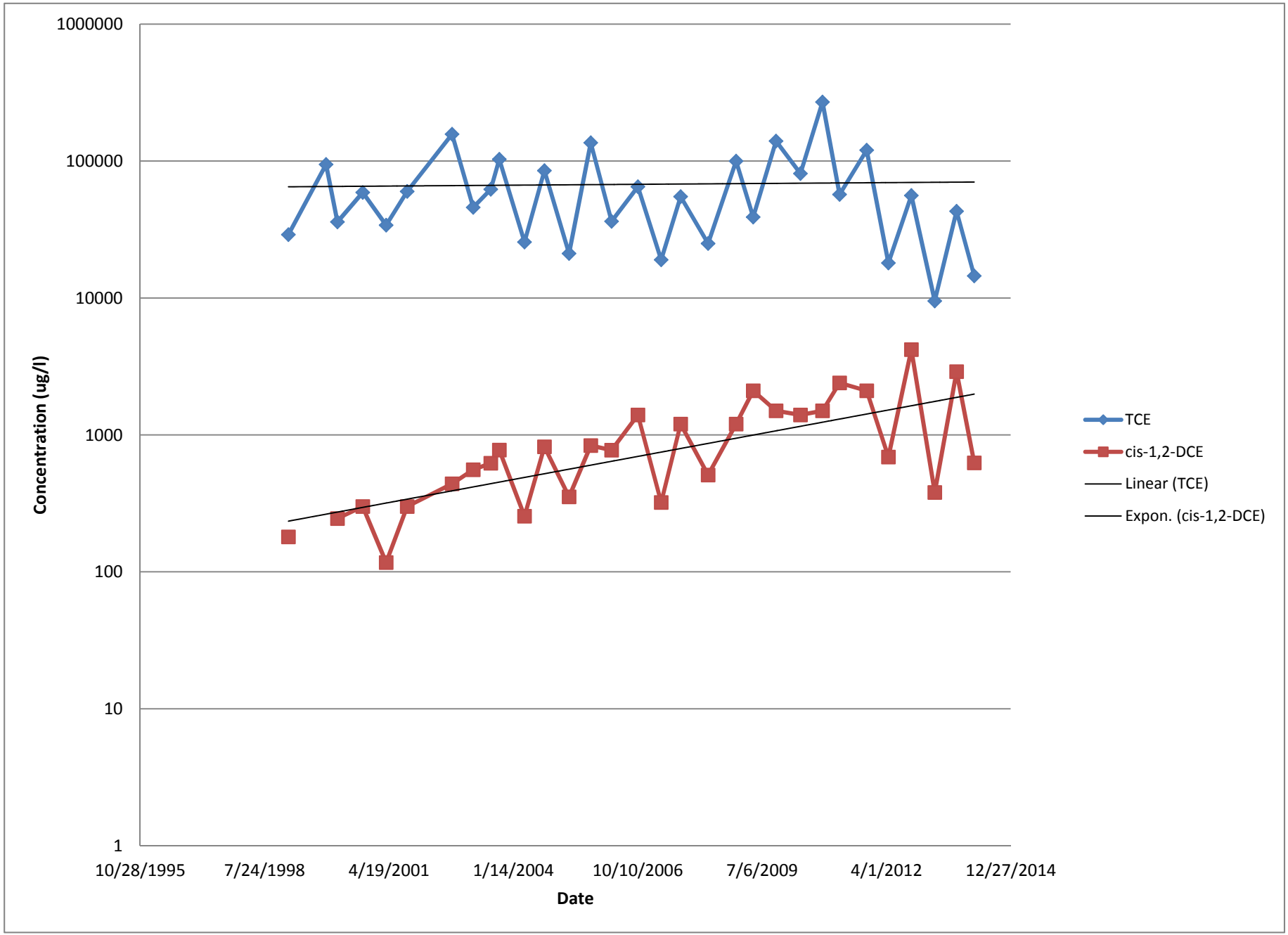


FIGURE 7
MW-25 TCE Cis-1,2-DCE Trends



Appendix A

1st Quarter 2014 Field Data Sheets

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** IT MW-1

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/8/14	Well Construction	4" PVC
Time	1110	Hach Meter Model/Serial No.	DR-890/ —
Sampler	US	Total Volume Purged (gal)	1 gal
Water Level (ft)	15.78	Pump is set at (ft)	29.1
Total Depth (ft)	34.1	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	10.5 - 30.25	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1115	15.81	16.34	1640	3.02	5.99	23.6	.28	100
1120	15.81	16.09	1630	2.69	5.98	17.4	.20	1
1125	15.82	15.90	1625	2.52	5.97	10.9	.37	
1130	15.82	16.11	1625	2.38	5.99	11.5	.10	
1135	15.82	16.08	1626	2.40	5.98	12.0	.11	
1140	15.82	16.12	1624	2.28	5.99	9.6	.14	

SAMPLE COLLECTION DATA

Date: 3/8/14 | Odor: N/A

Time: 1145 | Color: Clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: Calm

Wind Speed (mph) 0-10 10-25 >25

Temperature: 57°

COMMENTS

PVC cap, Lock a little rusty difficult to open.

needs replaced wt j-plug

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** TMW-2

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	2/3/10/14	Well Construction	4" PVC
Time	1133	Hach Meter Model/Serial No.	DR-890/473291X
Sampler	VS	Total Volume Purged (gal)	2 gal
Water Level (ft)	12.78	Pump is set at (ft)	~~21.80~~ 21.80
Total Depth (ft)	26.80	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	12.75 - 27.20	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
		19.82						
1135	12.91	~~12.91~~ VS	490	2.260	6.05	128.9	1.09	100 mL/min
1140	12.89	18.53	484	2.27	6.03	192.9	.79	
1145	12.89	18.51	480	2.24	6.03	279.3	2.01	
1150	12.89	18.61	480	2.24	6.03	308.9	1.97	
1155	12.89	18.36	479	2.18	6.03	353.6	1.93	
1200	12.89	18.104	478	2.14	6.03	387.7	1.96	
1205	12.89	18.101	478	2.11	6.02	428.4	.59	
1210	12.89	18.58	476	2.10	6.03	460.0	.49	
1215	12.89	18.72	475	2.07	6.03	476.4	.42	
1220	12.89	18.95	474	1.99	6.03	481.7	.16	
1225	12.89	18.93	473	~~2.25~~ 2.16	6.03	475.3	.14	

SAMPLE COLLECTION DATA

Date: 3/10/14 | Odor: N/A

Time: 1235 | Color: clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip		H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	.05

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: W-SW

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 50°

COMMENTS

Dup-1-20140312 1250

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ITMW-4

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/6/14	Well Construction	4" PVC
Time	955	Hach Meter Model/Serial No.	DR-890/[1732910
Sampler	US	Total Volume Purged (gal)	1.5 gal
Water Level (ft)	17.09	Pump is set at (ft)	~~17.09~~ US 27.80
Total Depth (ft)	32.80	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	18.2 - 32.2	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1000	17.10	17.36	273	.54	6.62	65.3	10.12	100mL/min
1005	17.14	17.75	269	.46	6.61	60.1	9.09	
1010	17.10	18.07	269	.47	6.60	56.9	10.50	
1015	17.16	18.18	269	.37	6.60	56.5	9.91	
1020	17.14	17.85	270	.33	6.60	44.9	9.87	
1025	17.14	17.88	268	.30	10.59	41.0	9.61	
1030	17.14	18.09	269	.29	6.60	38.3	9.54	

SAMPLE COLLECTION DATA

Date: 3/6/14 | Odor: NA

Time: 1040 | Color: Clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	.93

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: N

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 45

COMMENTS

PVC cap on well. Replace w/ j-plug

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** TMW-6

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/6/14	Well Construction	4" PVC
Time	734	Hach Meter Model/Serial No.	DR-890/H732515
Sampler	VS	Total Volume Purged (gal)	1.25 gal
Water Level (ft)	22.22	Pump is set at (ft)	VS ~~17.22~~ 34.40
Total Depth (ft)	39.41	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	21.65 - 36.15	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
740	22.22	14.106	1203	3.09	6.19	256.1	1.67	100mL/min
745	22.22	14.68	1201	3.08	6.20	272.6	.73	
750	22.22	14.12	1199	2.70	6.14	383.9	VS ~~9~~ .89	
755	22.22	14.19	1199	2.43	6.17	484.6	.47	
800	22.22	14.49	1198	2.36	6.17	497.6	.43	
805	22.23	14.66	1199	2.33	6.17	506.3	.40	
810	22.25	14.77	1195	2.25	6.16	525.6	.18	
815	22.25	14.94	1194	2.18	6.16	528.6	.09	
820	22.25	14.99	1192	2.17	6.15	534.1	.51	

SAMPLE COLLECTION DATA

Date: 3/6/14 | Odor: N/A

Time: 830 | Color: Clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	.11

WEATHER

Sunny Cloudy (Partly Cloudy)

Wind Direction: E

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 35

COMMENTS

PVC top on well replace w/ j-plug

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ITMW-7

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/8/14	Well Construction	4" PVC
Time	1005	Hach Meter Model/Serial No.	DR-890/ —
Sampler	US	Total Volume Purged (gal)	1 gal
Water Level (ft)	20.17	Pump is set at (ft)	23.17
Total Depth (ft)	36.95	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	20.40 20.45-33.90	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1010	20.24	17.34	1135	2.42	5.26	48.0	.36	100mL/min
1015	20.25	17.95	1143	1.26	5.05	40.0	.14	
1020	20.25	17.62	1153	1.09	5.01	32.8	.19	
1025	20.26	17.17	1156	1.01	4.98	24.9	.09	
1030	20.27	17.22	1152	.90	4.98	19.2	.14	
1035	20.28	17.46	1152	.90	4.98	16.0	.18	

SAMPLE COLLECTION DATA

Date: 3/8/14 | Odor: N/A

Time: 1039 | Color: Clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: NNE

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 53°

COMMENTS

Lock rusted won't close

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** IFMW-9

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/18/14	Well Construction	4"PVC
Time	840	Hach Meter Model/Serial No.	DR-890/ —
Sampler	VS	Total Volume Purged (gal)	~ 1.10 gal
Water Level (ft)	~~20.90~~ 20.82	Pump is set at (ft)	~~35.1~~ 30.1
Total Depth (ft)	35.1	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	19.95 – 33.45	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
845	20.84	14.77	726	4.55	6.01	176.1	3.36	100mL/min
850	20.84	14.77	717	4.57	5.99	138.6	1.26	
855	20.85	14.99	715	4.47	5.98	123.3	1.67	
900	20.86	15.62	713	4.49	5.98	101.0	1.41	
905	20.86	15.93	714	4.55	5.98	84.7	1.03	
910	20.86	16.31	715	4.51	5.98	70.1	.98	
915	20.86	16.79	713	4.43	6.98	58.5	.98	
920	20.87	17.06	715	4.45	5.97	52.7	.91	
925	20.87	17.15	715	4.42	5.97	48.2	.90	

SAMPLE COLLECTION DATA

Date: 3/18/14 | Odor: N/A

Time: 932 | Color: clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny Cloudy (Partly Cloudy)

Wind Direction: ESE

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 45

COMMENTS

PVC cap on well. Replace w/ j-plug needed

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ITMW-10

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/6/2014	Well Construction	4" PVC
Time	1705	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	~~CS~~ CS	Total Volume Purged (gal)	1.5
Water Level (ft)	19.78 bTOC	Pump is set at (ft)	~29 ~~ft~~ bTOC
Total Depth (ft)	33.6 ~~34.15~~ CS bTOC	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	22.65 - 33.60 bTOC	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1712	19.81	17.56	665	2.79	6.14	430.1	1.07	100
1717	19.82	17.69	673	2.62	6.13	499.5	-0.03	100
1722	19.83	17.85	672	2.72	6.14	526.2	-0.21	100
1727	19.83	17.86	673	2.56	6.14	CS 527.4	-0.37	100
1732	19.83	17.83	673	2.42	6.13	557.7	-0.29	100
17.37	19.83	17.82	673	2.38	6.13	556.8	-0.43	100
17 42	19.83	17.68	672	2.33	6.13	569.7	-0.30	100
17 47	19.84	17.64	672	2.33	6.12	573.0	0.11	100
17 52	19.83	17.57	673	2.30	6.12	578.7	-0.25	100

CS

SAMPLE COLLECTION DATA

Date: 3/6/2014 | Odor: None

Time: 1755 | Color: Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.00

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: WSW

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 55°F

COMMENTS

Neg. Turbidity after running blanks.

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ITMW-11

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/8/2014	Well Construction	4" PVC
Time	14.20	Hach Meter Model/Serial No.	DR-890/ —
Sampler	WES	Total Volume Purged (gal)	0.8
Water Level (ft)	12.30	Pump is set at (ft)	24.31
Total Depth (ft)	29.31	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15.25-28.70	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1435	12.35	17.64	288	2.13	6.58	522.7	2.53	100
1440	12.35	17.61	286	2.13	6.57	518.6	2.97	100
1445	12.35	17.58	285	2.08	6.57	517.5	2.12	100
1450	12.35	17.53	284	2.09	6.57	516.7	2.41	100
1455	12.35	17.45	283	2.01	6.57	515.7	2.25	100
1500	12.35	17.32	282	1.99	6.56	515.3	2.72	100

SAMPLE COLLECTION DATA

Date:	3/8/2014	Odor:	NONE
Time:	1505	Color:	NONE

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.0

WEATHER

Sunny Cloudy Partly (Cloudy)

Wind Direction: W

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 45°

COMMENTS

Sample ITMW-11-201403 MS/MSD

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ITMW-12

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/8/14	Well Construction	4" PVC
Time	1414	Hach Meter Model/~~Serial No.~~ NC	DR-890/
Sampler	NZ	Total Volume Purged (gal)	2 NZ 1.6
Water Level (ft)	14.17	Pump is set at (ft)	27.5' btoc
Total Depth (ft)	~~32.67~~ NZ 30	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15-30	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1430	14.19	16.71	240	2.08	6.15	435.4	0.85	100
1435	14.19	16.67	242	1.96	6.14	484.2	0.28	100
1440	14.19	16.76	243	1.87	6.14	509.6	0.42	100
1445	14.21	16.71	244	1.83	6.14	539.7	0.31	100
1450	14.21	16.55	246	1.78	6.14	547.3	0.33	100
1455	14.21	16.41	247	1.74	6.14	553.7	0.41	100
1500	14.22	16.35	246	1.81	6.14	565.7	0.35	100
1505	14.22	16.26	246	1.85	6.13	573.4	0.24	100
1510	14.22	16.20	247	1.88	6.12	578.0	0.19	100
1515	14.21	16.22	246	1.85	6.12	581.4	0.18	100

SAMPLE COLLECTION DATA

Date: 3/8/14	Odor: None
Time: 1520	Color: Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: ~~West~~ East

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 50°F

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ITMW-13

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/8/2014	Well Construction	4" PVC
Time	1155	Hach Meter Model/~~Serial No.~~	DR-890/
Sampler	CS	Total Volume Purged (gal)	1.5
Water Level (ft)	15.33 bTOC	Pump is set at (ft)	~26 ft BTOC
Total Depth (ft)	29 ~~31.95~~ bTOC	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	14-29 bTOC	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1206	15.39	15.57	243	2.55	6.09	498.5	0.96	100
1211	15.39	15.84	241	2.53	6.10	515.6	0.55	100
1216	15.39	16.15	241	2.37	6.09	535.1	0.84	100
1221	15.38	16.50	239	2.39	6.09	563.3	0.47	100
1226	15.38	16.57	239	2.40	6.07	572.1	0.64	100
1231	15.38	16.68	239	2.40	6.09	569.2	0.58	100
1236	15.37	16.85	239	2.34	6.10	565.3	0.78	100

CS

SAMPLE COLLECTION DATA

Date: 3/8/2014 | Odor: None

Time: 1240 | Color: Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: Calm

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 50

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ITMW-14

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/8/2014	Well Construction	4" PVC
Time	1302	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	CS	Total Volume Purged (gal)	1.0
Water Level (ft)	14.89	Pump is set at (ft)	~27 ft BTOC
Total Depth (ft)	CS ~~31.8~~ 29.8	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	14.8-29.8	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%) <5	Flow (mL/min, <100)
1311	14.98	16.24	184	2.34	6.35	469.3	2.51	100
1316	14.98	16.42	184	1.91	6.37	473.1	3.16	100
1321	14.98	16.56	185	1.79	6.35	472.4	3.00	100
1326	14.99	16.61	185	1.81	6.35	464.7	2.61	100
1331	14.99	16.59	185	1.84	6.34	457.5	2.82	100
1336	14.98	16.63	185	1.69	6.33	465.6	2.67	100

CS

SAMPLE COLLECTION DATA

Date:	3/8/2014	Odor:	None
Time:	1345	Color:	Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny ~~Cloudy~~ Partly Cloudy

Wind Direction: Easterly

Wind Speed (mph) ~~0-10~~ 10-25 >25

Temperature: 59

COMMENTS

Took MS/MSD2 here.

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ITMW-15

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/8/14	Well Construction	4" PVC
Time	1417	Hach Meter Model/Serial No.	DR-890/ —
Sampler	~~11.76~~ VS	Total Volume Purged (gal)	1 gal
Water Level (ft)	11.76	Pump is set at (ft)	23.31
Total Depth (ft)	30.31	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15 – 30.0	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1427	11.84	17.58	2022	6.73	11.78	-81.5	14.6	100 mL/min
1432	VS ~~11.8~~ 11.81	~~8~~ 17.83	2097	5.33	11.90	-89.4	13.5	
1437	11.81	17.77	2184	5.39	11.96	-99.7	11.1	
1442	11.81	17.69	2199	5.31	11.97	-102.8	VS ~~10.9~~ 10.04	
1447	11.81	17.59	2200	5.40	11.99	-104.8	VS ~~9.09~~ 9.19	
1452	11.81	17.33	2195	5.28	11.99	-105.4	8.96	

SAMPLE COLLECTION DATA

Date: 3/8/14	Odor: N/A
Time: 1457	Color: Clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	–
1	Hach Ampule	None	Ferrous Iron	–

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: NNW

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 61°

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ~~WES~~ ITMW-16

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/7/2014	Well Construction	4" PVC
Time	10:06	Hach Meter Model/Serial No.	DR-890/
Sampler	WES/THK	Total Volume Purged (gal)	0.9
Water Level (ft)	16.02	Pump is set at (ft)	29.36
Total Depth (ft)	34.36	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	17.00 - 32.00	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1015	16.34	14.96	169	3.63	6.68	256.4	64.4	100
1020	16.58	15.38	168	3.35	6.67	256.2	81.8	100
1025	16.58	15.60	169	3.33	6.67	255.9	65.1	100
1030	16.62	15.77	170	3.34	6.66	256.4	48.2	100
1035	16.67	16.03	170	3.30	6.66	256.4	66.7	100
1040	16.68	16.14	170	3.33	6.66	256.8	69.3	100

SAMPLE COLLECTION DATA

Date:	March 7, 2014	Odor:	NONE
Time:	1045	Color:	YELLOW

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.46 mg/L

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: SW

Wind Speed (mph) 0-10 10-25 >25

Temperature: 55°

COMMENTS

Sample - ITMW-16-201403

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** TMW-17

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/8/2014	Well Construction	4" PVC
Time	15:40	Hach Meter Model/Serial No.	DR-890/ —
Sampler	WFS	Total Volume Purged (gal)	0.9
Water Level (ft)	16.48	Pump is set at (ft)	25.10
Total Depth (ft)	30.10	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)		Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1600	16.38	15.42	1002	6.12	5.54	561.2	1.43	100
1605	16.38	15.62	1010	5.69	5.51	562.0	1.31	100
1610	16.38	15.62	1013	5.64	5.46	570.5	1.28	100
1615	16.38	15.58	1015	5.63	5.38	579.2	1.39	100
1620	16.38	15.54	1015	5.44	5.36	582.1	1.43	100
1625	16.38	15.53	1015	5.58	5.34	584.4	1.42	100

SAMPLE COLLECTION DATA

Date:	~~1630~~ 3/8/2014	Odor:	NONE
Time:	1630	Color:	NONE

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	WESD NM

WEATHER

Sunny Cloudy Partly (Cloudy)	
Wind Direction: W	
Wind Speed (mph) 0-10 (0-25) >25	
Temperature: 42° Raining	

COMMENTS

Sample: MW-17-201403
FUP3

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ITMW-18

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/8/2014	Well Construction	4" PVC
Time	1419	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	CS	Total Volume Purged (gal)	1.5
Water Level (ft)	11.09	Pump is set at (ft)	~~CS 35 ft btoc~~ 25 ft btoc
Total Depth (ft) 29.5	~~CS 39.67 CS 29.5 btoc~~	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15 - 29.5 btoc	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1428	11.15	16.03	556	2.34	5.70	504.0	0.32	100
1433	11.15	16.34	557	2.12	5.65	503.4	0.50	100
1438	11.14	16.40	557	1.98	5.65	504.2	0.79	100
1443	11.15	16.40	557	2.00	5.59	506.6	0.93	100
1448	11.15	16.36	557	1.93	5.58	509.6	0.93	100
1453	11.15	16.37	557	1.91	5.58	510.5	0.22	100
1458	11.15	16.36	556	1.91	5.57	510.3	0.53	100

SAMPLE COLLECTION DATA

Date:	3/8/2014	Odor:	None
Time:	1500	Color:	Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: W

Wind Speed (mph) 0-10 (10-25) >25

Temperature: 57 °F

COMMENTS

Collected DUP-S-201403 here

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** LT MW-19

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/8/14	Well Construction	4" PVC
Time	VS 3/5/14	Hach Meter Model/Serial No.	DR-890/ —
Sampler	VS	Total Volume Purged (gal)	~1.10 gal
Water Level (ft)	13.72	Pump is set at (ft)	28.32
Total Depth (ft)	33.20	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	16 - 31.0	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
		15.14						
1519	13.87 VS	~~14.04~~	1204	5.71	7.22	40.8	1.49	100mL/min
1524	13.87	14.83	1212	5.37	6.85	50.7	1.64	|
1529	13.88	14.81	1211	5.32 VS	6.75	55.3	1.39	|
1534	13.89	14.67	1212	5.47	6.71	56.0	.98	|
1539	13.91	14.62	1209	5.18	6.66	56.0	.69	|
1544	13.91	14.51	1210	5.21	6.65	56.5	.62	|
1549	13.92	14.36	1207	5.09	6.62	56.5	.64	|

SAMPLE COLLECTION DATA

Date: 3/8/14 | Odor: N/A

Time: 1553 | Color: Clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: W

Wind Speed (mph) 0-10 (10-25) >25

Temperature: 51°

COMMENTS

Dup-4-20140 3 - 1557

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A	**WELL NUMBER:** ITMW-20
PROJECT NAME: Whirlpool, Ft. Smith, Arkansas	

WELL PURGE DATA

Date	3/5/2014	Well Construction	4" PVC
Time	1320	Hach Meter Model/Serial No.	DR-890/ —
Sampler	MES/THK	Total Volume Purged (gal)	1.4
Water Level (ft)	13.03	Pump is set at (ft)	26.17
Total Depth (ft)	31.17	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	14.00-29.00	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond mS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1330	13.06	16.35	0.380	4.74	10.14	120.0	1.13	100 mL/min
1335	13.03	16.41	0.375	4.88	10.12	118.2	1.12	100 mL/min
1340	14.94	16.65	0.374	4.84	10.10	116.9	1.14	100 mL/min
1345	14.98	16.94	0.315	4.80	10.10	115.5	1.12	100 mL/min
Missed Reading								
1350	14.93	15.46	0.305	4.54	10.07	114.0	0.69	100mL/min
1355	14.94	15.61	0.306	4.53	10.04	113.5	0.71	100mL/min
1400	14.93	15.69	0.306	4.63	9.98	113.1	0.94	100mL/min
1405	14.94	15.67	0.306	4.69	9.96	112.8	0.97	100mL/min
1410	14.94	15.64	0.306	4.69	9.93	112.0	0.97	100mL/min
1415	14.94	15.62	0.306	4.58	9.93	111.9	0.91	100mL/min

SAMPLE COLLECTION DATA

Date:	3/5/2014	Odor:	NONE
Time:	1420	Color:	Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.0 mg/L

WEATHER

~~Sunny~~ Cloudy Partly Cloudy

Wind Direction: WNW

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 55°F

COMMENTS

Started Bubble @ 13:27

Sample ID: ITMW-20-201403

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ITMW-21

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/16/14	Well Construction	4" PVC
Time	1659	Hach Meter Model/Serial No.	DR-890/U7329IX
Sampler	VS	Total Volume Purged (gal)	~.75gal
Water Level (ft)	13.57	Pump is set at (ft)	28.00
Total Depth (ft)	33.00	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	14.00 - 29.00	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1705	13.77	17.84	2306	3.97	5.12	210.3	2.41	100
1710	13.81	17.35	2336	4.13	5.08	221.5	.56	↓
1715	13.81	16.86	2344	3.90	5.10	213.5	.04	
1720	13.80	16.87	2340	3.92	5.11	210.2	.05	
1725	13.86	16.81	2339	3.81	5.10	203.7	.05	
1730	13.87	16.70	2338	3.76	5.11	199.1	.06	

SAMPLE COLLECTION DATA

Date: 3/16/14 | Odor: NONE

Time: 1735 | Color: Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: W

Wind Speed (mph) 0-10 10-25 >25

Temperature: 59

COMMENTS

PVC cap

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-22

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/5/2014	Well Construction	4" PVC
Time	15:43	Hach Meter Model/Serial No.	DR-890/ —
Sampler	WES MHK	Total Volume Purged (gal)	1.0
Water Level (ft)	12.45	Pump is set at (ft)	24.19
Total Depth (ft)	29.19	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	14.00-29.00	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond ~~uS~~/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
16:00	12.52	13.94	0.179	2.33	5.66	154.0	0.96	100 mL/min
16:05	12.54	14.15	0.176	1.73	5.64	166.1	0.86	100 mL/min
16:10	12.53	14.26	176	1.43	5.61	171.6	0.29	100 mL/min
16:15	12.53	14.52	174	1.19	5.60	175.7	0.26	100 mL/min
16:20	12.54	14.77	175	1.13	5.60	175.9	0.14	100 mL/min
16:25	12.54	14.81	171	1.00	5.58	180.9	0.49	100 mL/min
16:30	12.54	14.79	170	1.09	5.58	184.8	0.15	100 mL/min

SAMPLE COLLECTION DATA

Date: 3/5/2014	Odor: NONE
Time: 16:35	Color: NONE

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip		H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.00

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: NWN

Wind Speed (mph) 0-10 10-25 >25

Temperature: 58° F

COMMENTS

16:38 M

Sample ID: MW-22-201403

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-25

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/8/14	Well Construction	4" PVC
Time	1545	Hach Meter Model/~~Serial No.~~ NZ	DR-890/
Sampler	NZ	Total Volume Purged (gal)	1.6
Water Level (ft)	14.04	Pump is set at (ft)	29.5 - btoc
Total Depth (ft)	~~34.54~~ NZ 32	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	~~29~~ NZ 17-32	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1555	14.10	14.81	1322	2.71	4.95	484.3	0.28	100
1600	14.11	14.96	1333	2.16	4.90	477.5	0.40	100
1605	14.12	14.94	1344	1.95	4.89	467.6	0.39	100
1610	14.12	14.97	1344	1.76	4.88	457.6	0.35	100
1615	14.13	14.88	1343	1.59	4.87	445.1	0.31	100
1620	14.13	14.78	1344	1.52	4.86	438.2	0.29	100
1625	14.13	14.70	1343	1.48	4.85	432.4	0.36	100
1630	14.13	14.82	1343	1.44	4.85	426.3	0.42	100
1635	14.13	14.55	1346	1.45	4.86	419.4	0.48	100
1640	14.13	14.60	1343	1.38	4.86	415.3	0.41	100
1645	14.13	14.62	1343	1.36	4.83	413.2	0.33	100

SAMPLE COLLECTION DATA

Date: 3/8/14 | Odor: None

Time: 1650 | Color: Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	~~0~~ NZ —

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: East

Wind Speed (mph) 0-10 10-25 >25

Temperature: 45° F

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-26

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/5/2014	Well Construction	4" PVC
Time	14:25	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	SMALLEY	Total Volume Purged (gal)	~2.5
Water Level (ft)	14.80 bTOC	Pump is set at (ft)	30 bTOC
Total Depth (ft)	35.14 bTOC	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	18.5 - 33.5 bTOC	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1441	14.88	16.36	1078	2.40	5.31	111.1	0.64	100
1446	14.92	16.58	1060	2.55	5.24	115.9	~~2.48~~ 0.62 CS	100
1451	14.93	16.78	1054	2.08	CS ~~5.7~~ 5.22	125.6	1.38	100
1456	14.94	16.87	1051	2.13	5.21	140.0	0.90	100
1501	14.94	16.99	1046	1.91	5.21	158.3	0.87	100
1506	14.95	16.98	1043	1.79	5.21	166.7	0.79	100
1511	14.94	17.01	1043	1.83	5.21	187.7	0.79	100
1516	14.94	17.08	1040	1.71	5.21	209.5	0.07	100
1521	14.96	16.99	1039	1.66	5.21	222.0	0.04	100
1526	14.96	17.09	1036	1.62	5.21	244.4	-0.05	100
1531	14.94	17.15	1034	1.58	5.21	257.9	-0.29	100
1536	14.96	17.05	1032	1.55	5.21	268.2	-0.23	100
1541	14.96	17.03	1028	1.47	5.21	281.4	-0.13	100
1546	14.95	16.95	1027	1.51	5.22	293.8	-0.19	100
1551	14.96	17.01	1026	1.46	5.22	299.3	0.25	100
1556	14.96	16.90	1025	1.42	5.23	297.4	-0.32	100

CS

SAMPLE COLLECTION DATA

Date: 3/5/2014	Odor: None
Time: 1616	Color: Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.00

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: CALM

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 45°F

COMMENTS

~~Cloudy~~ CS

~~CALM~~ CS

~~CALM~~ CS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-27

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/7/2014	Well Construction	2" PVC
Time	8:00	Hach Meter Model/Serial No.	DR-890/ —
Sampler	WES/THK	Total Volume Purged (gal)	1.1
Water Level (ft)	12.64	Pump is set at (ft)	25.08
Total Depth (ft)	~~30.08~~ 12.64 30.08	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15.00 - 30.00	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (±3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
805	12.66	13.63	95	7.24	6.11	197.7	54.7	100
810	12.66	13.66	97	6.91	6.03	209.0	53.0	100
815	12.66	13.70	95	6.75	6.04	211.3	47.0	100
820	12.66	13.76	95	6.49	6.05	216.3	44.2	100
825	12.66	13.81	93	6.35	6.06	223.2	45.7	100
830	12.66	13.67	96	6.21	6.01	224.2	44.0	100
835	12.66	13.80	98	6.07	5.99	227.1	43.9	100
840	12.66	13.99	102	5.97	5.97	228.7	42.6	100
845	12.66	13.83	103	5.77	5.96	231.1	41.0	100

SAMPLE COLLECTION DATA

Date: 3/7/2014 | Odor: NONE

Time: 8.50 | Color: Cloudy

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip		H, VC, CH_4	
1	Hach Ampule	None	Ferrous Iron	0.08 mg/L

WEATHER

Sunny / Cloudy / Partly Cloudy

Wind Direction: NW

Wind Speed (mph) 0-10 / 10-25 / >25

Temperature: 34° F

COMMENTS

Sample ID: MW-27-201403

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-28

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/6/14	Well Construction VS	~~4"PVC~~ 2" PVC
Time	1452	Hach Meter Model/Serial No.	DR-890/477329
Sampler	VS	Total Volume Purged (gal)	2.0
Water Level (ft)	7.98	Pump is set at (ft)	22.48
Total Depth (ft)	27.48	Well Measurement Technique	Electronic Water Level Meter
VS Screen Interval (ft)	VS ~~13-28~~ 13-28	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1454	8.27	13.13	382	1.44	6.20	472	2.69	100
1459	8.25	13.84	381	1.54	6.21	128.9	3.54	↓
1504 VS ~~1404~~	8.26	18.42	376	1.43	6.19	257.9	7.56	
1509	8.27	18.36	375	1.41	6.23	VS ~~356~~ 357.9	8.39	
1514	8.28	18.13	374	1.27	6.22	421.1	5.77	
1519	8.30	18.24	373	1.16	6.21	452.2	4.75	
1524	8.30	18.18	371	1.06	6.20	464.1	5.11	
1529	8.30	18.32	371	.98	6.23	462.8	3.75	
1534	8.31	18.33	370	.91	6.23	473.6	2.90	
1539	8.31	18.20	370	.87	6.21	469.5	3.03	
1544	8.31	18.27	369	.85	6.22	478.3	2.87	↓

SAMPLE COLLECTION DATA

Date: 3/6/14 | Odor: N/A

Time: 1554 | Color: Clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.0

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: W

Wind Speed (mph) 0-10 10-25 >25

Temperature: ~~50~~ 57

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-29

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/5/14	Well Construction	US 4" PVC 2" PVC
Time	1508	Hach Meter Model/Serial No.	DR-890/473291Y
Sampler	US	Total Volume Purged (gal)	1.75 gal
Water Level (ft)	12.25	Pump is set at (ft)	25.30'
Total Depth (ft)	30.30	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15.50 - 30.5	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1509 US	12.26 ~~15.40~~	15.76	712	1.39	4.96	-19.7	1.69	100mL/min
1514	12.26	15.00	700	1.01	4.96	-22.7	2.07	
1519	12.27	15.38	685	1.00	4.96	-14.0	1.42	
1524	12.27	15.24	683	.88	4.94	-19.2	1.38	
1529	12.27	15.17	679	.92	4.93	-13.3	.56	
1534	12.27	15.16	680	.76	4.92	-10.7	.53	
1539	12.27	15.06	679	.75	4.92	-7.5	.43	
1544	12.27	15.13	677	.74	4.92	US ~~HP4.6~~	.53	
1549	12.27	14.94	678	.71	4.92	8.7	.51	
1554	12.27	15.00	675	.69	4.91	16.9	.58	

SAMPLE COLLECTION DATA

Date: 3/5/14 | Odor: NA

Time: 1600 | Color: Clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	.06

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: E

Wind Speed (mph) 0-10 10-25 >25

Temperature: 43°

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-31

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/6/2014	Well Construction	3/4" PVC
Time	1505	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	CS	Total Volume Purged (gal)	1.5
Water Level (ft)	13.25	Pump is set at (ft)	21 Ft BTOC
Total Depth (ft)	26.11	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	17.5-26.11	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%) <1	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%) <5	Flow (mL/min, <100)
1516	15.44	18.68	492	0.68	6.06	371.0	20.4	100
1521	15.73	18.86	505	0.64	5.99	220.7	8.80	100
1526	15.82	18.95	479	0.36	5.81	215.8	6.65	85
1531	15.69	18.73	464	0.31	5.71	215.8	4.43	75
1536	15.89	18.56	451	0.21	5.61	219.5	2.80	85
1541	15.99	18.45	445	0.19	5.57	216.7	2.09	85
1546	15.91	18.38	443	0.18	5.55	220.3	1.42	75

CS

SAMPLE COLLECTION DATA

Date: 3/6/2014 | Odor: None

Time: 1600 | Color: Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.19

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: Calm

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 55 °F

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-32

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/8/14	Well Construction	3/4" PVC
Time	0855	Hach Meter Model/~~Serial No.~~ NE	DR-890/
Sampler	NE	Total Volume Purged (gal)	1.5
Water Level (ft)	12.89	Pump is set at (ft)	19.5'
Total Depth (ft)	~~24.30~~ 27	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	17-27	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
0910	12.94	16.02	1300	2.63	4.55	263.8	658	100
0915	12.94	16.54	1274	2.13	4.68	261.2	50.6	100
0920	12.94	16.72	1281	1.67	4.82	251.0	29.3	100
0925	12.94	16.72	1291	1.45	4.79	256.9	26.2	100
0930	12.94	16.65	1307	1.36	4.77	274.9	15.2	100
0935	12.95	16.68	1313	0.84	4.77	276.8	10.67	100
0945	12.96	16.99	1319	0.63	4.77	285.6	6.74	100
0950	12.96	17.11	1323	0.47	4.76	290.8	5.54	100
0955	12.96	17.14	1324	0.42	4.76	293.6	3.01	100
1000	12.96	17.21	1323	0.42	4.76	300.1	3.44	100

SAMPLE COLLECTION DATA

Date: 3/8/14 | Odor: None

Time: 1005 | Color: clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	~~0~~ NE —

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: West

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 45°F

COMMENTS

Initially turbid (light brown)

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-33

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/8/2014	Well Construction	3/4" PVC
Time	8:00	Hach Meter Model/Serial No.	DR-890/ —
Sampler	WES	Total Volume Purged (gal)	1.1
Water Level (ft)	12:43	Pump is set at (ft)	20.62
Total Depth (ft)	25.62	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)		Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
835	12.60	15.35	543	11.0	5.18	206.9	52.2	100
840	12.60	15.77	564	9.5	5.19	218.1	43.3	100
845	12.60	16.12	582	7.3	5.18	225.0	36.0	100
850	12.60	16.28	604	10.3	5.15	233.3	27.8	100
855	12.60	16.54	614	8.9	5.15	238.2	20.4	100
900	12.60	16.73	621	7.8	5.13	244.7	19.6	100
905	12.60	16.42	620	7.9	5.13	248.2	19.4	100

SAMPLE COLLECTION DATA

Date:	3/8/2014	Odor:	NONE
Time:	910	Color:	CLEAR

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	WES NM

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: E

Wind Speed (mph) 0-10 10-25 >25

Temperature: 45°

COMMENTS

Sample MW-33-20140 3

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-34

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/8/14	Well Construction	3/4" PVC
Time	1210	Hach Meter Model/~~Serial No.~~ NZ	DR-890/
Sampler	NZ	Total Volume Purged (gal)	~~23' btoc~~ NZ 2.0
Water Level (ft)	11.46	Pump is set at (ft)	23' btoc
Total Depth (ft)	~~27.97~~ NZ	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)		Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1222	11.51	16.30	1093	1.03	4.85	222.3	46	100
1227	11.51	16.43	1088	1.00	4.85	219.3	25.9	100
1232	11.50	16.72	1077	0.69	4.86	223.1	85.2	100
1237	11.50	16.83	1054	0.56	4.85	228.0	67.3	100
1242	11.50	16.79	1041	0.41	4.85	231.0	59.0	100
1247	11.50	16.76	1036	0.30	4.85	233.0	35.3	100
1252	11.50	16.84	1030	0.25	4.85	235.9	37.2	100
1257	11.50	16.98	1020	0.22	4.87	242.3	26.6	100
1302	11.50	17.08	1017	0.21	4.86	251.6	17.9	100
1307	11.50	17.10	1014	0.19	4.86	254.7	20.6	100
1312	11.49	17.10	1013	0.17	4.86	257.6	14.4	100
1317	11.49	17.11	1012	0.16	4.86	261.4	13.0	100
1322	11.49	17.14	1010	0.15	4.86	263.2	11.9	100
1327	11.49	17.07	1009	0.15	4.86	264.7	12.57	100

SAMPLE COLLECTION DATA

Date: 3/8/14	Odor: None
Time: 1330	Color: clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	~~0~~ NZ —

WEATHER

Sunny Cloudy Partly Cloudy Light Rain

Wind Direction: W

Wind Speed (mph) 0-10 10-25 >25

Temperature: 55°F

COMMENTS

Initially turbid (light brown)

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ~~MW-35R-201403~~ WES

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/6/2014	Well Construction	4" PVC
Time	10:10	Hach Meter Model/Serial No.	DR-890/ —
Sampler	WES	Total Volume Purged (gal)	1.0
Water Level (ft)	10.40	Pump is set at (ft)	26.85
Total Depth (ft)	31.85	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)		Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
10.20	11.19	16.85	1193	3.46	5.57	257.9	4.74	100
10 25	11.19	16.84	1197	3.28	5.59	258.1	3.40	100
10 30	11.19	16.89	1199	2.87	5.61	258.1	1.40	100
10 35	11.19	17.40	1199	2.85	5.62	257.8	1.09	100
10 40	11.19	17.57	1199	2.75	5.62	257.0	1.05	100
1045	11.19	17.59	1200	2.68	5.62	256.4	0.43	100
1050	11.19	17.62	1202	2.64	5.63	255.2	-0.37	100

SAMPLE COLLECTION DATA

Date: ~~105~~ 3/8/2014	Odor: NONE
Time: 1055	Color: CLEAR

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	WES DNM

WEATHER

(Sunny) Cloudy Partly Cloudy	
Wind Direction: W	
Wind Speed (mph) (0-10) 10-25 >25	
Temperature: 65°	

COMMENTS

Sample MW-35R-201403

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-36

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/6/2014	Well Construction	3/4" PVC
Time	1510	Hach Meter Model/Serial No.	DR-890/ —
Sampler	WES/THK	Total Volume Purged (gal)	1.1
Water Level (ft)	10.42	Pump is set at (ft)	30.58
Total Depth (ft)	35.58	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	12.00-27.00	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1520	10.45	16.84	807	0.79	5.18	397.4	86.7	100 mL
1525	10.45	16.67	797	0.55	5.19	350.0	53.1	100 mL
1530	10.45	16.61	796	0.33	5.19	333.7	21.0	100 mL
1535	10.45	16.53	794	0.30	5.20	323.8	19.2	100 mL
1540	10.45	16.38	792	0.28	5.20	318.5	11.8	100 mL
1545	10.45	16.16	791	0.27	5.20	314.4	7.28	100 mL
1550	10.45	16.13	791	0.27	5.21	313.0	7.21	100 mL

SAMPLE COLLECTION DATA

Date: 3/6/2014 | Odor: NONE

Time: 15:55 | Color: Cloudy

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.24 mg/L

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: SW

Wind Speed (mph) 0-10 10-25 >25

Temperature: 52°F

COMMENTS

Sample ID: MW-36-20140306

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-38

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/8/14	Well Construction	1" PVC
Time	1204	Hach Meter Model/Serial No.	DR-890/ —
Sampler	VS	Total Volume Purged (gal)	2.0 Gal
Water Level (ft)	~~12.07~~ VS 12.00	Pump is set at (ft)	24.80
Total Depth (ft)	29.90	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15'	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1210	12.04	17.37	459	2.40	6.31	310.7	5.86	100 mL/min
1215	12.04	17.35	457	2.29	6.31	379.7	4.93	
1220	12.03	17.42	456	2.19	6.31	414.3	4.98	
1225	12.03	17.50	454	~~6~~ 2.04	6.31	424.0	~~4~~ 4.39	
1230	12.03	17.54	451	2.03	6.31	384.6	4.39	
1235	12.03	17.80	446	1.90	6.30	148.8	4.19	
1240	12.04	17.82	442	1.80	6.29	126.3	3.62	
1245	12.03	17.80	438	1.75	6.29	109.2	3.17	
1250	12.03	17.88	433	1.67	6.28	91.4	2.44	
1255	12.04	17.92	430	1.63	6.29	81.5	2.42	
1300	12.04	18.01	426	1.53	6.28	76.6	2.41	
1305	12.03	18.10	424	1.43	6.28	65.0	2.76	
1310	12.03	18.16	422	1.40	6.27	57.2	2.65	

SAMPLE COLLECTION DATA

Date: 3/8/14 | Odor: N/A

Time: 1313 | Color: Clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: Calm

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 57

COMMENTS

~~Sprinkling on + off~~

Sprinkling on + off

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-39

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/6/2014	Well Construction	3/4" PVC
Time	16:45	Hach Meter Model/Serial No.	DR-890/ —
Sampler	WES / THK	Total Volume Purged (gal)	1.1
Water Level (ft)	14.55	Pump is set at (ft)	24.42
Total Depth (ft)	29.42	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	19.50-29.50	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1700	13.69	16.95	919	0.69	5.03	350.7	10.2	100 mL
1705	13.75	16.01	952	0.49	5.01	353.5	6.18	100 mL
1710	13.93	16.05	964	0.35	5.02	355.5	4.25	100 mL
1715	13.73	16.03	982	0.36	5.02	357.6	1.60	100 mL
1720	13.93	16.05	988	0.27	5.02	359.2	1.39	100 mL
1725	13.74	16.02	990	0.28	5.01	361.1	0.10	100 mL
1730	13.94	16.02	992	0.26	5.02	362.2	0.10	100 mL

SAMPLE COLLECTION DATA

Date: 3/6/2014 | Odor: NONE

Time: 1735 | Color: CLEAR

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.04 mg/L

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: SW

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 50°F

COMMENTS

Sample ID: MW-39-201403

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-40

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/6/2014	Well Construction	3/4" PVC
Time	10:25	Hach Meter Model/Serial No.	DR-890/ —
Sampler	WES / THK	Total Volume Purged (gal)	1.4
Water Level (ft)	10.68	Pump is set at (ft)	18.15
Total Depth (ft)	23.15	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)		Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1040	10.79	15.96	476	4.13	5.43	322.1	2.36	100
10:45	10.79	16.42	650	2.77	5.27	334.1	2.09	100
10:50	10.79	16.33	730	1.40	5.20	333.7	4.56	100
10:55	10.79	16.41	731	1.07	5.21	329.8	2.94	100
11:00	10.80	16.54	748	0.89	5.18	329.9	4.08	100
11:05	10.78	16.28	766	0.64	5.18	329.0	2.62	100
11:10	10.78	16.23	762	0.55	5.18	327.3	0.65	100
11:15	10.78	16.21	765	0.51	5.18	327.0	3.25	100
11:20	10.78	16.31	768	0.44	5.17	326.1	—	100
11:25	10.78	16.43	769	0.44	5.18	325.4	2.53	100
11:30	10.78	16.88	774	0.39	5.17	325.2	2.46	100

SAMPLE COLLECTION DATA

Date: 3/6/2014 | Odor: NONE

Time: 11:35 | Color: NONE

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.00

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: NONE

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 35°F

COMMENTS

Sample ID: MW-40-201403

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-41

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/7/2014	Well Construction	0.75" PVC
Time	1739	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	CS	Total Volume Purged (gal)	0.5
Water Level (ft)	9.07	Pump is set at (ft)	23 ft b TOC
Total Depth (ft)	28.32	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	18.75-28.32	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1755	9.11	15.27	1242	0.47	5.52	110.8	7.24	100
1800	9.11	15.52	1258	0.59	5.50	104.8	3.36	100
1805	9.10	15.58	1282	0.35	5.50	101.0	2.54	100
1810	9.10	15.58	1296	0.31	5.50	99.2	1.45	100
1815	9.10	15.58	1300	0.34	5.49	98.2	1.97	100

CS

SAMPLE COLLECTION DATA

Date: 3/7/2014 | Odor: None

Time: 1816 | Color: Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny Cloudy ~~Partly~~ Cloudy

Wind Direction: ENE

Wind Speed (mph) ~~0-10~~ 10-25 >25

Temperature: 55 °F

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-46R

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/7/2014	Well Construction	2" PVC
Time	14:44	Hach Meter Model/Serial No.	DR-890/ —
Sampler	~~J.45~~ WES/THK	Total Volume Purged (gal)	0.9
Water Level (ft)	3.45	Pump is set at (ft)	17.0
Total Depth (ft)	22.0	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	10.00 - 21.60	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1445	~~3345~~ 3.45	16.03	859	0.51	5.14	277.9	1.11	100
1460	3.45	15.93	852	0.40	5.08	280.5	4.71	100
WES 1455	3.45	15.85	851	0.39	5.07	280.8	3.14	100
1500	3.48	16.02	848	0.29	5.07	281.5	4.45	100
1505	3.48	16.40	846	0.25	5.07	281.7	2.75	100
1510	3.49	16.13	848	0.26	5.05	282.4	3.24	100

SAMPLE COLLECTION DATA

Date:	March 7, 2014	Odor:	NONE
Time:	1515	Color:	CLEAR

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	WES NM

WEATHER

Sunny Cloudy (Partly Cloudy)	
Wind Direction: W	
Wind Speed (mph) (0-10) 10-25 >25	
Temperature: 60°	

COMMENTS

Sample : MW-46R-201403

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-50

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/6/2014	Well Construction	3/4" PVC
Time	0807	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	CS	Total Volume Purged (gal)	1
Water Level (ft)	7.76 bTOC	Pump is set at (ft)	13-18 bTOC
Total Depth (ft)	18.05 bTOC	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	8-18 bTOC	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
0830	8.38	13.73	1218	1.83	6.84	81.9	8.72	100
- broken pump - replaced.								
0925	8.39	15.21	1168	2.60	6.84	80.8	38.6	100
- well dry -								
				CS				

SAMPLE COLLECTION DATA

Date: 3/6/2014	Odor: None
Time: 10:30	Color: Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	Insufficient H_2O volume

WEATHER

Sunny Cloudy Partly Cloudy	
Wind Direction: Calm	
Wind Speed (mph) (0-10) 10-25 >25	
Temperature: 40	

COMMENTS

Well went dry - DTW above are false readings.
Water depth meter stopped sounding when lowered past first alarm.
Low volume - took partial samples.

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-56

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/7/2014	Well Construction	3/4" PVC
Time	13:14	Hach Meter Model/Serial No.	DR-890/ —
Sampler	WES / THR	Total Volume Purged (gal)	0.1
Water Level (ft)	5.46	Pump is set at (ft)	14.48
Total Depth (ft)	~~5.46~~ WES 19.48	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	4.50 - 19.50	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1330	15	15.09	652	5.63	5.27	263.6	10.58	100
—	Well purged dry	—	—	—	—	—	—	—

SAMPLE COLLECTION DATA

Date:	3/7/2014	Odor:	NONE
Time:	1354	Color:	NONE

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	WES NM -

WEATHER

Sunny Cloudy	Partly Cloudy
Wind Direction:	SW
Wind Speed (mph)	0-10 10-25 >25
Temperature:	60°

COMMENTS

Well went dry during Purge (dry to screen)
1354 MW-56-20140307

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-57

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/7/14	Well Construction	1" PVC VS 3/4" PVC
Time	1324	Hach Meter Model/Serial No.	DR-890/473291X
Sampler	VS	Total Volume Purged (gal)	0.85
Water Level (ft)	3.92	Pump is set at (ft)	15.19
Total Depth (ft)	19.19	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)		Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1324	13.94	15.10	10168	3.71	5.59	-15.5		100
1333	15.65						11.0	
~~1346~~	~~15.34~~	~~10644~~	~~2.30~~	~~5.33~~				
1348	16.05	15.54	10666	2.30	5.33	4.5	26.5	
			Purged Dry					
			Purge less than 0.25 gal					

* VS

SAMPLE COLLECTION DATA

Date: 3/7/14 | Odor: N/A

Time: 1405 | Color: Clear slight Haze

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: N

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 60's

COMMENTS

* Leaving H2O meter

VS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-~~50~~58

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/7/19	Well Construction	~~4" PVC~~ VS 3/4" PVC
Time	1436	Hach Meter Model/Serial No.	DR-890/* ——
Sampler	VS	Total Volume Purged (gal)	1.0
Water Level (ft)	0.84	Pump is set at (ft)	~~12.10~~ VS 15.0
Total Depth (ft)	17.67	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	12.5 – 17.5	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1440	1.74	16.23	791	.80	5.74	-214.0	86.7	~60mL/min
1445	1.91	16.27	785	.45	5.67	-210.5	~~96~~ 94.0	~60mL/min
1450	1.95	15.56	794	.48	5.64	-206.5	89.3	1
1455	2.09	15.01	807	.44	5.57	-200.0	57.7	1
1500	2.31	15.12	813	.37	5.57	-194.6	34.1	75mL/min *
1505	~~2.22~~ VS 2.27	14.80	812	.38	5.51	-193.8	30.7	1
1510	2.34	15.17	815	.35	5.51	-194.2	27.7	1

SAMPLE COLLECTION DATA

Date: 3/7/19 | Odor: NA

Time: 1515 | Color: Clear w/ white haze

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny Cloudy (Partly Cloudy)

Wind Direction: ENE

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 62

COMMENTS

* Well started recharging increased to 75mL/min

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-60

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/6/2014	Well Construction	3/4" PVC
Time	1100	Hach Meter Model/~~Serial No.~~	DR-890/
Sampler	CS	Total Volume Purged (gal)	0.25
Water Level (ft)	7.83 bTOC	Pump is set at (ft)	16 bTOC
Total Depth (ft)	16.55 bTOC	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	12-16.55 bTOC	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
- Well went dry before first reading. -						@1115		

CS

SAMPLE COLLECTION DATA

Date: 3/6/2014	Odor: None
Time: 1300	Color: Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	Insufficient volume

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: Calm

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 50 °F

COMMENTS

Well went dry <5 min after filling flow-through cell.

Sampled after 1hr 45 min recharge

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-61

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/6/2014	Well Construction	3/4" PVC
Time	1140	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	CS	Total Volume Purged (gal)	0.25
Water Level (ft)	8.89	Pump is set at (ft)	15
Total Depth (ft)	15.54	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	10.5-15.5	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1150	11.55	14.87	601	3.41	6.62	100.4	84.2	100
1155	14.12	14.51	596	2.60	6.57	102.4	102.0	100
1200	- well	dry -						

CS

SAMPLE COLLECTION DATA

Date: 3/6/2014 | Odor: None

Time: 1400 | Color: Slightly Cloudy

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	Insufficient volume on 3/6/2014

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: Calm

Wind Speed (mph) 0-10 10-25 >25

Temperature: 55 °F

COMMENTS

Well went dry after ~20 min.

Sampled after 2 hrs recharge

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-62

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/7/2014	Well Construction	0.75" PVC
Time	0948	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	CS	Total Volume Purged (gal)	2.5
Water Level (ft)	6.34	Pump is set at (ft)	15 ft bTOC
Total Depth (ft)	20.80	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15.5 - 20.5	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
0959	8.38	13.78	613	1.37	5.48	157.2	26	100
1004	9.76	14.34	612	1.53	5.46	170.0	58.0	100
1009	10.08	14.68	609	1.86	5.44	182.2	61.9	100
1014	10.34	15.26	608	1.84	5.43	194.9	70.0	75
1019	10.47	15.48	608	1.86	5.44	198.1	57.1	75
1024	10.46	15.42	609	1.88	5.44	203.3	44.3	50
1029	10.57	15.39	608	1.84	5.45	208.0	31.1	50
1034	10.68	15.29	608	1.86	5.45	211.1	30.6	50
1039	10.52	15.11	609	1.92	5.46	213.0	48.9	50
1044	10.58	15.15	608	1.95	5.46	212.9	50.6	50
1049	10.59	15.30	608	1.87	5.47	215.1	34.8	50
1054	10.74	15.41	608	1.87	5.47	215.9	32.3	50
1059	10.84	15.34	609	1.81	5.48	217.0	47.8	50

CS

SAMPLE COLLECTION DATA

Date: 3/7/2014 | Odor: None

Time: 1115 | Color: Slightly Cloudy

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.23

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: Westerly

Wind Speed (mph) 0-10 ~~10-25~~ >25

Temperature: 50 °F

COMMENTS

Sampled after Turbidity failed to stabilize after one hour.

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-63

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/7/2014	Well Construction	0.75" PVC
Time	0814	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	~~S.S1~~ CS	Total Volume Purged (gal)	1.5
Water Level (ft)	5.51 bTOC	Pump is set at (ft)	15 ft bTOC - 21.23 ft bTOC
Total Depth (ft)	21.23 bTOC	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	16-21 bTOC	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
0823	9.91	10.85	592	2.50	5.67	167.1	50.1	100
0828	11.75	11.22	580	1.85	5.62	176.7	98.0	75
0833	13.33	11.50	580	1.75	5.61	181.8	228	75
0838	15.03	11.74	584	1.50	5.60	186.7	223	50
0843	16.22	11.71	586	1.34	5.60	190.6	193	50
0848	17.36	12.07	588	0.94	5.59	195.6	329	50
0853	17.71	11.56	590	1.56	5.59	199.6	264	50
0858	19.15	12.75	587	1.17	5.58	155.5	313	50
0903	19.84	12.53	594	0.98	5.58	160.8	661 AU	50
- Well went dry at 0907. -								

CS

SAMPLE COLLECTION DATA

Date: 3/7/2014	Odor: ~~Clear~~ None
Time: 1300	Color: Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.14

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: Westerly

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 55 °F

COMMENTS

Well allowed approx. 4 hours to recharge.

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-65

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/8/14	Well Construction	2" PVC
Time	1035	Hach Meter Model/~~Serial No.~~	DR-890/
Sampler	NZ	Total Volume Purged (gal)	1.5
Water Level (ft)	11.12	Pump is set at (ft)	27' btoc
Total Depth (ft)	~~32.22~~ NZ	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	19.5 – 29.5	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1057	11.14	17.43	1506	1.67	5.08	233.4	12.0	105
1102	11.14	17.44	1498	1.28	5.07	266.1	10.56	100
1107	11.16	17.53	1496	0.95	5.08	273.2	6.88	100
1112	11.16	17.31	1498	0.85	5.09	272.4	5.52	100
1117	11.16	17.14	1494	0.72	5.09	273.5	6.88	100
1122	11.17	17.20	1492	0.66	5.10	275.7	9.40	100
1127	11.17	17.32	1491	0.63	5.09	277.7	7.97	100
1132	11.17	16.99	1489	0.60	5.08	278.9	7.27	100

SAMPLE COLLECTION DATA

Date: 3/8/14 | Odor: None

Time: 1135 | Color: Clear (very little sediment)

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: ✓

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 50's

COMMENTS

Initially very turbid (very dark grey) & visible sediment in line out of well. Delay connections to flow cell. Connect to flow cell @ 105° (15 min purge prior).

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-106

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/7/14	Well Construction	2" PVC
Time	VS ~~H to 1056~~ 1059	Hach Meter Model/Serial No.	DR-890/473291X
Sampler	VS	Total Volume Purged (gal)	.75 gal
Water Level (ft)	5.45	Pump is set at (ft)	14.16'
Total Depth (ft)	17.64	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	11.5 – 16.5	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1105	5.90	14.77	813	4.86	6.07	-34.1	6.62	~80 mL/min
1110	6.02	14.64	805	3.16	6.07	-19.9	2.59	
1115	6.14	14.82	803	2.80	6.08	-8.3	1.59	
1120	6.21	15.00	802	2.48	6.07	-0.5	1.83	
1125	6.29	1505	799	2.43	6.06	-4.0	1.79	
1130	6.36	15.12	799	2.15	6.07	-0.5	1.82	
VS ~~1135~~								

SAMPLE COLLECTION DATA

Date: 3/7/14 | Odor: N/A

Time: 1135 | Color: Clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	.03

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: E

Wind Speed (mph) 0-10 10-25 >25

Temperature: 47

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-107

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/7/14	Well Construction	2" PVC
Time	815	Hach Meter Model/Serial No.	DR-890/U-7329/X
Sampler	VS	Total Volume Purged (gal)	1 gal
Water Level (ft)	4.02	Pump is set at (ft)	VS ~~8.50~~ 11.56
Total Depth (ft)	13.56	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	3.75 - 9.75 - 14.75	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)	
820	6.18	10.01	912	5.81	6.64	30.3	6.54	100mL/min	* Adjusted pump
825	6.54	10.82	909	4.79	6.71	30.5	69.2	75mL/min	
830	7.00	11.24	904	4.35	6.68	30.4	33.9		*
835	7.46	11.20	903	4.55	6.69	30.8	27.4		
840	7.95	11.15	903	4.52	6.69	31.3	21.6	62mL/min	
845	8.28	10.94	904	4.43	6.69	31.7	21.5		*
850	8.59	10.98	903	4.27	6.69	30.9	19.5	50mL/min	
855	8.90	10.87	904	4.26	6.69	31.0	21.2		
VS 900	9.24	11.01	904	4.15	6.69	30.8	20.3		*
905	9.53	11.07	906	4.23	6.69	30.7	20.3	40mL/min	
910	9.77	11.37	906	3.96	6.69	30.3	21.3		
915	10.00	11.52	905	3.84	6.69	29.5	20.3		
920	9.96	11.85	904	3.71	6.69	28.4	19.3		
		Letting well recharge a bit for sampling							

SAMPLE COLLECTION DATA

Date: VS 3/7/14

Time: VS 925

Odor: N/A

Color: Clear slight tone

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny Cloudy (Partly Cloudy)

Wind Direction: ENE

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 36

COMMENTS

~~* Slowed pump to a 62mL/min~~ * Slowed Pump VS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-68

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/6/2014	Well Construction	2" PVC
Time	7:30	Hach Meter Model/Serial No.	DR-890/ —
Sampler	WB	Total Volume Purged (gal)	1.0
Water Level (ft)	7.10	Pump is set at (ft)	15.55
Total Depth (ft)	20.55	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)		Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
804	7.25	10.41	1014	3.14	5.15	258.2	0.10	100 mL/min
809	7.28	10.79	1011	2.85	5.12	261.5	0.13	100 mL/min
814	7.28	11.27	1009	2.70	5.07	268.4	0.20	100 mL/min
819	7.28	11.63	1009	2.75	5.02	272.3	0.40	100 mL/min
824	7.29	12.05	1006	2.57	4.97	276.3	0.30	100 mL/min
829	7.29	12.30	1006	2.35	4.97	280.8	1.54	100
834	7.29	12.52	1007	2.41	4.96	284.6	0.43	100

SAMPLE COLLECTION DATA

Date: 3/6/2014 | Odor: NONE

Time: 8:40 | Color: NONE

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.0 mg/L

WEATHER

Sunny / Cloudy / Partly Cloudy

Wind Direction: NONE

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 35°F

COMMENTS

Sample ID: MW-68-20140306

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** RW-69

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/7/2014	Well Construction	4" PVC
Time	1627	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	CS	Total Volume Purged (gal)	0.5
Water Level (ft)	8.24	Pump is set at (ft)	23 ft bTOC
Total Depth (ft)	~~28.10~~ CS 25	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15 - 25	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%) <5	Flow (mL/min, <100)
1638	8.32	16.62	971	1.33	5.34	198.4	2.65	100
1643	8.32	16.67	971	1.08	5.32	203.1	3.94	100
1648	8.32	16.69	972	1.03	5.32	205.5	1.95	100
1653	8.32	16.72	972	0.83	5.32	207.1	2.13	100

CS

SAMPLE COLLECTION DATA

Date: 3/7/2014	Odor: None
Time: 1700	Color: Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny Cloudy ~~Partly Cloudy~~	
Wind Direction: ENE	
Wind Speed (mph) ~~0-10~~ 10-25 >25	
Temperature: 60 °F	

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-71

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/7/2014	Well Construction	2" PVC
Time	1510	Hach Meter Model/~~Serial No.~~	DR-890/
Sampler	CS	Total Volume Purged (gal)	~~4.5~~ 2.0
Water Level (ft)	8.34 ~~4~~ ft btoc	Pump is set at (ft)	22 ~~ft~~ bTOC
Total Depth (ft)	27.18 bTOC	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15-25 bTOC	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1520	8.37	16.38	899	1.86	5.10	164.8	13.4	100
1525	8.37	16.40	899	1.64	5.11	179.0	9.83	100
1530	8.37	16.43	900	1.48	5.11	190.3	7.62	100
1535	8.37	16.42	902	1.27	5.11	195.7	5.87	100
1540	8.37	16.40	904	1.16	5.11	199.8	5.88	100
1545	8.37	16.43	905	1.02	5.11	199.9	5.07	100
1550	8.36	16.39	906	0.98	5.11	197.6	5.40	100
1555	8.36	16.31	907	0.88	5.11	196.7	5.23	100

SAMPLE COLLECTION DATA

Date:	3/7/2014	Odor:	None
Time:	1600	Color:	Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: ESE

Wind Speed (mph) 0-10 10-25 >25

Temperature: 62 °F

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** IW-72

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/6/2014	Well Construction	2" PVC
Time	1300	Hach Meter Model/Serial No.	DR-890/ —
Sampler	WES/THK	Total Volume Purged (gal)	1.4
Water Level (ft)	9.10	Pump is set at (ft)	21.90
Total Depth (ft)	26.90	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15.00-25.00	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1315	9:10	14.88	815	5.03	6.06	625.5	19.8	100
1320	9.10	15.10	818	4.77	6.06	652.3	14.8	100
1325	9.12	15.25	816	4.66	6.05	661.3	14.6	100
1330	9.13	15.32	810	4.41	6.05	669.1	12.7	100
1335	9.13	15.50	811	4.49	6.04	674.9	12.5	100
1340	9.13	15.46	821	4.44	6.04	678.9	12.8	100
1345	9.13	15.36	834	4.33	6.05	684.0	9.86	100
1350	9.12	15.56	842	4.16	6.05	686.6	9.59	100
1355	9.13	15.61	851	4.08	6.05	688.8	8.23	100
1400	9.13	15.80	860	4.21	6.06	690.0	6.46	100

SAMPLE COLLECTION DATA

Date: ~~3/6/2014~~ 3/6/2014 | Odor: None

Time: 14:05 | Color: PINK

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.04 mg/L

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: SW

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 52°

COMMENTS

Began purge magenta, approximately 10 minutes cleared to pale pink.

Sample ID: IW-72-201403

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** TW-73

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/7/2014	Well Construction	2" PVC
Time	1700	Hach Meter Model/Serial No.	DR-890/ —
Sampler	WES/THK	Total Volume Purged (gal)	1.1
Water Level (ft)	9.45	Pump is set at (ft)	21.84
Total Depth (ft)	26.84	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	Not Available	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1710	8.50	15.75	1031	6.7	6.01	283.5	24.5	100
1715	8.50	16.09	1034	4.1	6.01	282.4	25.8	100
1720	8.50	16.15	1036	4.2	6.01	282.3	24.3	100
1725	8.50	16.20	1034	3.1	5.99	281.6	23.0	100
1730	8.50	16.13	1065	3.2	5.98	280.3	20.5	100
1735	8.50	16.07	1073	2.7	5.96	274.0	16.6	100
1740	8.51	16.00	1082	3.0	5.96	263.0	17.2	100
1745	8.51	16.00	1084	2.8	5.95	257.0	12.53	100
1750	8.51	15.89	1085	2.5	5.94	256.6	14.9	100

SAMPLE COLLECTION DATA

Date: 3/7/2014 | Odor: None

Time: 1755 | Color: Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	

WEATHER

Sunny Cloudy Partly (Cloudy)

Wind Direction: East

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 55°

COMMENTS

Sample: TW-73-201403

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ~~IW-74~~ WES IW-74

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/7/2014	Well Construction	2" PVC
Time	1553	Hach Meter Model/Serial No.	DR-890/ —
Sampler	WES ITHL	Total Volume Purged (gal)	0.9
Water Level (ft)	9.20	Pump is set at (ft)	≈2.35
Total Depth (ft)	27.35	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15.00 - 25.00	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1600	9.20	16.86	1028	~~27.1~~ WES 27.1	5.92	291.0	2.74	100
1605	9.20	16.93	1028	~~29.9~~ WES 22.8	5.92	290.3	3.76	100
1610	9.20	16.99	1033	20.7	5.92	289.6	4.95	100
1615	9.20	16.99	1040	19.9	5.92	289.1	5.05	100
1620	9.20	17.06	1050	18.8	5.90	288.3	2.02	100
1625	9.20	17.02	1059	18.2	5.88	288.1	2.06	100

SAMPLE COLLECTION DATA

Date:	3/7/2014	Odor:	Clear
Time:	1630	Color:	NONE

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	NM

WEATHER

Sunny (Cloudy) Partly Cloudy	
Wind Direction:	SW
Wind Speed (mph) (0-10) 10-25 >25	
Temperature:	59°

COMMENTS

Sample taken = IW-74-~~20140~~3 WES 201403

Dup = Dup-2

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ~~MW-76~~ CS IW-76

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	CS ~~3/7/2~~ 3/8/2014	Well Construction	2" PVC
Time	0815	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	CS	Total Volume Purged (gal)	2.5
Water Level (ft)	8.64 bTOC	Pump is set at (ft)	20 bTOC
Total Depth (ft)	27.5 bTOC	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	Unknown CS ~~15-25 bTOC~~	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
0820	9.64	13.90	987	2.30	5.78	547.4	3.43	100
0825	9.60	14.44	970	2.20	5.62	553.8	4.23	100
0830	9.61	14.76	963	2.34	5.61	580.8	1.84	100
0835	9.63	14.96	960	1.99	5.57	598.9	1.47	100
0840	9.64	15.25	957	1.93	5.55	622.9	1.84	100
0845	9.65	15.28	960	1.82	5.52	643.0	1.21	100
0850	9.65	15.33	961	1.72	5.52	655.5	0.72	100
0855	9.65	15.39	963	1.63	5.50	664.1	1.31	100
0900	9.65	15.53	963	1.54	5.49	673.5	1.10	100
0905	9.65	15.62	968	1.50	5.47	680.1	0.84	100
0910	9.65	15.72	970	1.39	5.46	683.1	1.15	100

CS

SAMPLE COLLECTION DATA

Date: 3/8/2014	Odor: Very slightly Purple CS
Time: 0915	Color: None

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: Westerly

Wind Speed (mph) 0-10 10-25 >25

Temperature: 40 °F

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** IW-77

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/8/2014	Well Construction	2" PVC
Time	0955	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	CS	Total Volume Purged (gal)	1.5
Water Level (ft)	10.25 bTOC	Pump is set at (ft)	~22 ft bTOC
Total Depth (ft)	27.62 bTOC	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	20-27.62 bTOC	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1005	10.26	15.95	749	2.08	5.59	539.6	5.92	100
1010	10.26	16.26	744	2.41	5.58	533.0	4.64	100
1015	10.26	16.48	740	1.91	5.56	527.1	4.20	100
1020	10.26	16.47	740	1.87	5.55	522.6	3.46	100
1025	10.27	16.44	740	1.70	5.55	520.0	3.18	100
1030	10.26	16.48	739	1.47	5.54	517.3	2.49	100
1035	10.27	16.59	740	1.39	5.53	515.2	2.74	100
1040	10.27	16.77	741	~~1.53~~ 1.43	5.52	512.1	2.55	100

SAMPLE COLLECTION DATA

Date: 3/8/2014	Odor: None
Time: 1050	Color: Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny ~~Cloudy~~ Partly Cloudy

Wind Direction: ~~S~~ Calm

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 50 °F

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** IW-80

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/8/2014	Well Construction	2" PVC
Time	1120	Hach Meter Model/Serial No.	DR-890/ —
Sampler	WES	Total Volume Purged (gal)	1.5
Water Level (ft)	10.43	Pump is set at (ft)	24.48
Total Depth (ft)	29.48	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	20.00-29.48	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1145	10.72	16.79	1557	1.69	6.47	642.8	1.08	100
1150	10.72	16.69	1191	1.89	6.36	651.3	1.09	100
1155	10.72	16.59	1021	1.93	6.23	659.5	1.02	100
1200	10.72	16.49	809	2.00	6.08	665.4	0.89	100
1205	10.73	16.55	755	1.90	6.03	672.0	2.54	100
1210	10.73	16.58	706	1.85	5.97	674.0	3.63	100
1215	10.73	16.68	673	1.74	WES 5.90	667.9	3.22	100
1220	10.73	16.68	663	1.69	5.87	669.9	3.35	100
1225	10.72	16.64	629	1.72	5.83	666.2	4.20	100
1230	10.72	16.85	599	1.58	5.81	660.0	3.42	100
1235	10.72	17.05	592	1.52	5.80	651.5	2.72	100
1240	10.71	16.85	579	1.40	5.79	641.1	3.24	100
1245	10.71	16.84	581	1.32	5.78	633.9	2.94	100

SAMPLE COLLECTION DATA

Date:	3/8/2014	Odor:	NONE
Time:	1250	Color:	Clear.

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny Cloudy Partly Cloudy RAIN

Wind Direction: W

Wind Speed (mph) 0-10 10-25 >25

Temperature: 43°F

COMMENTS

Very purple at begin of purge.
IW-80-20140308

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ITMW-1

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/28/2014	Well Construction	4" PVC
Time	1411	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	CS	Total Volume Purged (gal)	1.5
Water Level (ft)	15.55 6TOC	Pump is set at (ft)	5 Ft above TD
Total Depth (ft)	CS ~~30.5~~ 34.1 6TOC	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	16.5 - 30.25 6TOC	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1425	15.58	16.77	553	3.51	5.89	216.1	-0.06	100
1430	15.58	16.90	552	2.29	5.89	215.1	-0.50	|
1435	15.58	17.01	549	2.33	5.88	216.1	-0.54	|
1440	15.59	17.04	548	2.11	5.85	214.5	-0.58	|
1445	15.59	17.03	547	2.02	5.84	215.5	-0.08	|
1450	15.59	17.04	547	2.05	5.83	215.7	-0.16	|

SAMPLE COLLECTION DATA

Date: 3/28/2014	Odor: None
Time: 1500	Color: Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.00

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: NNW

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 66 °F

COMMENTS

RESAMPLE MNA

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ITMW-7

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/30/16	Well Construction	4" PVC
Time	838	Hach Meter Model/Serial No.	DR-890/ 472154
Sampler	DS	Total Volume Purged (gal)	1.1 gal
Water Level (ft)	20.09	Pump is set at (ft)	31.9'
Total Depth (ft)	36.97	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15'	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
840	20.28	13.80	1042	2.67	4.90	102.7	3.63	100mL/min
845	20.20	12.83	1044	1.44	4.83	82.1	2.80	
850	20.23	12.98	1043	1.00	4.75	82.0	0.77	
855	20.24	13.15	1042	0.88	4.77	79.5	0.58	
JD 900	20.23	13.64	1045	0.78	4.81	76.1	0.32	
905	20.23	14.11	1041	0.666	4.82	73.1	0.35	
910	20.23	14.13	1040	0.607	4.81	74.4	0.15	
915	20.23	14.14	1040	0.63	4.79	74.9	0.09	

SAMPLE COLLECTION DATA

Date: 3/30/16 | Odor: N/A

Time: 926 | Color: Clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hach Ampule	None	Ferrous Iron	0.0

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: ENE

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 43

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ITMW-9

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3-30-2014	Well Construction	4" PVC
Time	0843	Hach Meter Model/~~Serial No.~~ MS	DR-890/
Sampler	MS	Total Volume Purged (gal)	1 GAL
Water Level (ft)	21.03 (toc)	Pump is set at (ft)	5FT FROM TD
Total Depth (ft)	33.45	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	19.95 - 33.45	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1) MS	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
0848	21.04	16.92	679	3.83	6.08	408.2	0.89	100
0853	21.04	17.06	676	3.55	6.02	428.9	0.52	
0858	21.04	17.18	677	3.52	6.00	440	0.88	
0903	21.04	17.42	675	3.42	5.99	445	0.38	
0908	21.04	17.72	674	3.40	5.97	451.2	0.22	
0913	21.04	17.91	675	3.31	5.97	457.5	0.23	
0918	21.04	18.06	675	3.27	5.96	461.1	0.22	
0923	21.04	18.21	673	3.28	5.96	464.7	0.22	

SAMPLE COLLECTION DATA

Date:	3-30-2014	Odor:	None
Time:	0935	Color:	Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hach Ampule	None	Ferrous Iron	0.0

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: —

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 40°F

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** IMW-10

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/30/2014	Well Construction	4" PVC
Time	0825	Hach Meter Model/~~Serial No.~~es	DR-890/
Sampler	CS	Total Volume Purged (gal)	2.5
Water Level (ft)	20.05 btoc	Pump is set at (ft)	5' above TD
Total Depth (ft)	34.15 btoc	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	22.65 - 33.00	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%) or (<5)	Flow (mL/min, <100)
0835	20.10	14.36	745	3.13	5.98	391.1	-0.00	100
0840	20.11	14.38	748	2.87	5.97	386.9	-0.13	1
0845	20.10	14.49	744	3.24	5.94	441.9	-0.13	1
0850	20.10	14.52	742	2.83	5.94	449.6	-0.16	1
0855	20.11	14.59	741	2.77	5.94	450.9	-0.27	1
0900	20.11	14.77	735	2.74	5.94	481.6	-0.19	1
0905	20.11	14.89	735	2.83	5.93	506.0	-0.01	1
0910	20.11	14.94	736	2.61	5.93	520.2	-0.18	1
0915	20.11	15.03	734	2.76	5.92	532.0	-0.35	1
0920	20.12	15.07	736	2.57	5.93	537.2	-0.38	1
0925	20.12	15.18	736	2.76	5.92	552.4	-0.60	1
0930	20.12	15.12	736	2.55	5.91	556.4	-0.58	1
0935	20.12	15.06	735	2.71	5.91	563.7	-0.60	1

SAMPLE COLLECTION DATA

Date:	3/30/2014	Odor:	None
Time:	0940	Color:	Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hach Ampule	None	Ferrous Iron	0.00

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: Calm

Wind Speed (mph) 0-10 10-25 >25

Temperature: 50°F

COMMENTS

YSI AUTO-POWERED OFF AT 0844.

SAMPLED AFTER ORP FAILS TO STABILIZE AFTER 1HR.

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ITMW-11

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/30/2014	Well Construction	4" PVC
Time	1035	Hach Meter Model/~~Serial No.~~	DR-890/
Sampler	CS	Total Volume Purged (gal)	2
Water Level (ft)	11.35 bTOC	Pump is set at (ft)	5 ft above TD
Total Depth (ft)	29.45 bTOC	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15.25-28.7 bTOC	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10% or <5)	Flow (mL/min, <100)
1045	11.38	16.54	262	2.06	6.38	345.9	3.20	100
1050	11.38	16.83	260	1.86	6.36	346.8	4.36	
1055	11.38	17.03	260	1.81	6.35	352.8	3.50	
1100	11.38	17.36	260	1.78	6.34	359.7	3.34	
1105	11.39	17.49	260	1.68	6.35	354.3	2.57	
1110	11.38	17.78	260	1.63	6.34	321.6	- NOT READ -	
1115	11.38	17.95	260	1.57	6.34	291.2	2.63	
1120	11.38	17.99	260	1.59	6.34	281.1	2.85	
1125	11.38	18.20	260	1.51	6.34	271.9	2.27	
1130	11.38	18.36	260	1.48	6.33	263.8	2.20	
1135	11.38	18.53	260	1.51	6.34	259.2	2.36	
1140	11.38	18.65	260	1.50	6.33	255.0	1.88	

SAMPLE COLLECTION DATA

Date:	3/30/2013	Odor:	None
Time:	1150	Color:	Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hach Ampule	None	Ferrous Iron	0.03

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: Variable

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 60° F

COMMENTS

RESAMPLE MNA

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** LTMW-12

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/30/14	Well Construction	4" PVC
Time	1016	Hach Meter Model/Serial No.	DR-890/ 472154X
Sampler	VS	Total Volume Purged (gal)	1 gal
Water Level (ft)	14.17	Pump is set at (ft)	27.63
Total Depth (ft)	32.63	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15 - 30	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1026	14.21	17.90	254	2.02	6.12	81.7	1.58	100 mL/min
1031	14.21	18.31	253	1.84	6.06	78.7	1.10	
1036	14.21	18.48	250	1.68	6.07	77.8	1.87	
1041	14.21	18.60	250	1.58	6.05	76.8	0.91	
1046	14.21	18.71	250	1.52	6.04	77.4	0.85	
1051	14.22	18.78	249	1.50	6.03	77.7	0.77	

SAMPLE COLLECTION DATA

Date: 3/30/14 | Odor: N/A

Time: 1100 | Color: Clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hach Ampule	None	Ferrous Iron	0.0

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: ENE

Wind Speed (mph) 0-10 10-25 >25

Temperature: 51

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** IT MW - 13

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3-28-14	Well Construction	4" PVC
Time	1403	Hach Meter Model/~~Serial No.~~ MS	DR-890/
Sampler	MS	Total Volume Purged (gal)	1.5 GAL
Water Level (ft)	14.90	Pump is set at (ft)	5 FT FROM TD
Total Depth (ft)	29	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	14 - 29	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1407	14.97	17.28	247	2.99	6.30	502.8	4.65	100
1412	14.98	17.47	252	2.56	6.24	516.7	2.67	
1417	14.98	17.45	245	2.34	6.21	519.9	1.56	
1422	15.00	17.44	242	2.33	6.17	528.2	1.59	
1427	15.04	17.39	236	2.10	6.16	531.6	0.45	
1432	15.00	17.53	230	2.17	6.17	522.9	0.93	
1437	15.04	17.70	228	2.08	6.15	530.9	0.74	
1442	15.03	17.64	226	2.08	6.15	547.6	1.18	
1447	15.03	17.59	224	2.04	612	557.3	1.03	
1452	15.04	17.65	221	1.99	6.11	562.6	0.75	
MS 1457	15.04	17.83	222	1.96	6.12	563.6	0.95	

SAMPLE COLLECTION DATA

Date:	3-28-14	Odor:	None
Time:	1510	Color:	Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.00

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: ~

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 65°F

COMMENTS

RESAMPLE MNA

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** IT MW-14

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/28/14	Well Construction	4"PVC
Time	1407	Hach Meter Model/Serial No.	DR-890/472454Y
Sampler	VS	Total Volume Purged (gal)	1 gal
Water Level (ft)	14.50	Pump is set at (ft)	26.8
Total Depth (ft)	31.8	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	14.8 - 29.5	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1413	14.61	17.16	207	2.38	5.82	113.5	3.96	100mL/min
1418	14.61	16.17	193	1.81	5.50	122.0	3.15	
1423	14.61	16.99	193	1.71	5.51	118.1	2.96	
1428	14.61	16.96	193	1.82	5.55	113.6	2.94	
1433	14.61	17.05	191	1.57	5.61	108.2	2.71	
1438	14.61	17.31	190	1.60	5.75	99.4	2.69	
1443	14.61	17.32	193	1.60	5.76	98.4	2.60	
1448	14.61	17.43	191	1.50	5.78	96.7	2.69	

SAMPLE COLLECTION DATA

Date: 3/28/14 | Odor: N/A

Time: 1455 | Color: Clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: ENE

Wind Speed (mph) 0-10 (10-25) >25

Temperature: 60°

COMMENTS

MS/MSD: 1500

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ITMW-15

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3-30-14	Well Construction	4" PVC
Time	1253	Hach Meter Model/~~Serial No.~~ MS	DR-890/
Sampler	MS	Total Volume Purged (gal)	1 GAL
Water Level (ft)	11.64 (toc)	Pump is set at (ft)	5FT FROM TD
Total Depth (ft)	30	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15-30	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1258	11.69	20.94	1613	5.86	11.55	-0.3	1.39	100
1303	11.68	21.07	1670	4.75	11.67	5.6	1.23	
1308	11.66	21.16	1678	4.64	11.70	8.4	1.61	
1313	11.66	21.08	1674	4.64	11.73	7.9	1.43	
1318	11.66	21.25	1666	4.54	11.75	8.9	1.16	
1323	11.66	21.15	1662	4.88	11.73	10.8	1.46	
1328	11.66	21.01	1639	4.63	11.73	12.4	1.36	
1333	11.66	20.91	1620	4.67	11.73	15.1	1.32	

SAMPLE COLLECTION DATA

Date:	3-30-14	Odor:	None
Time:	1345	Color:	Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hach Ampule	None	Ferrous Iron	0.59

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: -

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 64°F

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ITMW-17

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/30/2014	Well Construction	4" PVC
Time	1250	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	CS	Total Volume Purged (gal)	2.5
Water Level (ft)	15.28 bTOC	Pump is set at (ft)	5' above TD
Total Depth (ft)	31 bTOC	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	CS 16-31 bTOC	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1320	15.27	19.44	1055	4.15	5.19	254.4	0.58	100
1325	15.27	19.32	1055	4.12	5.16	269.8	0.64	
1330	15.27	19.03	1053	3.92	5.13	281.6	0.65	
1335	15.26	19.05	1052	3.77	5.13	293.9	1.14	
1340	15.25	19.26	1051	3.64	5.12	303.1	0.51	
1345	15.25	19.49	1051	3.41	5.11	308.2	0.43	
1350	15.24	19.68	1051	3.38	5.11	311.8	0.53	

CD

SAMPLE COLLECTION DATA

Date: CS 1400 3/30/2014 | Odor: None

Time: 1400 | Color: Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hach Ampule	None	Ferrous Iron	0.00

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: Calm

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 70°F

COMMENTS

RESAMPLE MNA

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** TMW-18

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/30/14	Well Construction	4"PVC
Time	1146	Hach Meter Model/Serial No.	DR-890/ # 472154X
Sampler	VS	Total Volume Purged (gal)	1 gal
Water Level (ft)	11.11	Pump is set at (ft)	34.67
Total Depth (ft)	39.67	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15-30	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1149	11.14	16.91	714	11.53	5.87	113.5	1.84	100mL/min
1154	11.14	16.87	783	2.94	5.34	100.0	1.7819	
1159	11.14	16.81	792	2.72	5.32	94.4	1.42	
1204	11.14	16.74	792	2.51	5.34	91.4	0.88	
VS 1209	11.14	16.80	794	2.42	5.39	88.0	0.70	
1214 1214	11.14	16.86	794	2.49	5.42	86.1	0.61	

SAMPLE COLLECTION DATA

Date: 3/30/14 | Odor: NA

Time: 1220 | Color: Clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hach Ampule	None	Ferrous Iron	0.0

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: N

Wind Speed (mph) 0-10 10-25 >25

Temperature: 62

COMMENTS

Dup1 1230

Field test show Persulfate present in well

Resample At MNA

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ITMW-19

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/30/14	Well Construction	4" PVC
Time	1407	Hach Meter Model/Serial No.	DR-890/472154Y
Sampler	VS	Total Volume Purged (gal)	1 gal
Water Level (ft)	13.57	Pump is set at (ft)	28.2
Total Depth (ft)	33.2	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	110 -31	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C. (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
	13.70							
1413	~~17.9~~	18.74	1121	5.26	6.55	94.1	1.41	100mL/min
1418	13.72	19.08	1119	4.23	6.40	93.1	0.53	
1423	13.72	19.76	1122	4.23	6.40	90.0	0.37	
1428	13.73	18.76	1119	4.06	6.40	88.8	0.15	
1433	13.73	19.12	1119	4.00	6.44	84.0	0.07	
1438	13.73	19.42	1119	3.82	6.46	81.8	0.05	

SAMPLE COLLECTION DATA

Date: 3/30/14 | Odor: ND

Time: 1445 | Color: Clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hach Ampule	None	Ferrous Iron	0.04

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: S

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 71

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** ITMW-21

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/28/2014	Well Construction	4" PVC
Time	1545	Hach Meter Model/~~Serial No.~~	DR-890/
Sampler	CS	Total Volume Purged (gal)	1.5
Water Level (ft)	13.12	Pump is set at (ft)	5' above TOC
Total Depth (ft)	31.0 bTOC	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	16-31 Ft bTOC	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1556	13.31	16.93	2175	4.47	5.01	262.4	-0.14	100
1601	13.39	16.75	2181	3.95	5.01	264.9	-0.01	|
1606	13.43	16.64	2182	3.80	5.01	270.3	-0.21	|
~~1616~~ 1611	13.43	16.57	2181	3.91	5.00	278.4	0.08	75
1616	13.43	16.46	2181	3.80	5.00	282.9	-0.17	|
1621	13.43	16.48	2179	3.81	5.00	288.6	-0.22	|
1626	13.44	16.49	2179	3.71	5.00	291.2	-0.06	|

SAMPLE COLLECTION DATA

Date: → 3/28/2014	Odor: → None
Time: → 1645	Color: → Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.00

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: N

Wind Speed (mph) 0-10 (10-25) >25

Temperature: 65°F

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-25 & DUP02

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3-30-14	Well Construction	4" PVC
Time	1454	Hach Meter Model/~~Serial No.~~	DR-890/
Sampler	MS	Total Volume Purged (gal)	~~20 GAL~~ 2 GAL
Water Level (ft)	13.85	Pump is set at (ft)	5FT FROM TD
Total Depth (ft)	34.59	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	17-32	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1456	13.97	20.26	1304	3.16	5.77	275.8	2.13	100
1501	13.97	19.85	1318	1.59	5.20	310.8	2.28	|
1506	13.94	19.87	1310	1.28	5.15	319.2	1.64	|
1511	13.94	20.05	1305	1.36	5.12	326.7	0.33	|
1516	13.94	19.92	1291	1.12	5.08	331.7	0.47	|
1521	13.94	19.96	1288	1.06	5.05	336.3	0.79	|
1526	13.94	20.06	1283	1.02	5.04	338.6	1.03	|
1531	13.94	20.09	1278	0.99	5.03	339.6	1.63	|

SAMPLE COLLECTION DATA

Date:	3-30-14	Odor:	None
Time:	1545	Color:	clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.0

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: —

Wind Speed (mph) 0-10 10-25 >25

Temperature: ~60°F

COMMENTS

RESAMPLE MNA

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-32

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3-28-14	Well Construction	3/4" PVC
Time	0907	Hach Meter Model/~~Serial No.~~ MS	DR-890/
Sampler	VS/MS	Total Volume Purged (gal)	2.0 MS 1.5 GALS
Water Level (ft)	12.57	Pump is set at (ft)	5ft from TD
Total Depth (ft)	24.30	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	17-27	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
0915	12.65	16.72	1096	4.80	4.52	101.2	5	100
0920	12.65	16.94	1140	1.11	4.37	85.4	56.4	|
0925	12.65	17.15	1147	0.72	4.48	82.1	37.0	|
0930	12.65	17.39	1157	0.65	4.47	79.1	27.9	|
0935	12.65	17.60	1168	0.50	4.52	77.9	21.0	|
0940	12.65	17.90	1194	0.62	4.52	75.1	15.9	|
0945	12.64	17.87	1201	0.44	4.49	75.3	12.23	|
0950	12.64	17.92	1206	0.43	4.50	75.5	9.96	|
0955	12.64	17.97	1207	0.39	4.49	75.8	8.51	|
1000	12.65	18.11	1207	0.35	4.53	75.4	6.8	|
1005	12.65	18.22	1207	0.35	4.53	74.4	6.48	|
1010	12.65	18.27	1209	0.36	4.58	75.3	6.14	|
1015	12.65	18.25	1209	0.34	4.54	76.3	5.60	|

SAMPLE COLLECTION DATA

Date:	3-28-14	Odor:	None
Time:	1020	Color:	Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.02

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: W

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 62°F

COMMENTS

RESAMPLE MNA

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-33

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3-28-2014	Well Construction	3/4" PVC
Time	1058	Hach Meter Model/~~Serial No.~~	DR-890/
Sampler	VS / MS	Total Volume Purged (gal)	1 GALLON
Water Level (ft)	11.79	Pump is set at (ft)	5 FT FROM TD
Total Depth (ft)	25.8	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15.8 - 25.8	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1106	12.38	17.82	531	1.84	4.80	101.2	30.2	100
1111	12.49	18.16	568	0.95	4.67	98.7	26.4	
1116	12.50	18.61	614	0.65	4.68	92.0	21.8	
1121	12.53	18.91	642	0.59	4.80	86.2	20.0	
1126	12.55	18.93	663	0.52	4.77	84.2	15.5	
1131	12.55	18.82	673	0.48	4.76	84.6	12.46	
1136	12.55	18.96	678	0.46	4.79	83.1	10.40	
1141	12.54	19.04	681	0.46	4.80	81.7	8.75	
1146	12.57	18.81	686	0.46	4.82	82.4	7.75	
1151	12.57	18.65	686	0.48	4.77	83.6	7.61	
1156	12.57	18.63	685	0.47	4.76	84.0	7.36	

SAMPLE COLLECTION DATA

Date:	3-28-2014	Odor:	None
Time:	1205	Color:	Slightly muddy / opaque

ANALYSIS

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.00

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: W

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 65 °F

COMMENTS

Resample MNA

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-34

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/27/14	Well Construction	3/4" PVC
Time	1011	Hach Meter Model/Serial No.	DR-890/472454Y
Sampler	VS	Total Volume Purged (gal)	2 gal
Water Level (ft)	10.91	Pump is set at (ft)	22.97
Total Depth (ft)	27.97	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	Unknown	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1020 VS	11.07 ~~11.13~~	16.13	894	0.87	4.71	88.9	69.2	100mL/min
1025	11.07	16.44	882	0.50	4.75	81.5	82.4	
1030	11.08	16.52	887	0.34	4.73	79.5	34.9	
1035	11.08	16.51	871	0.33	4.74	79.7	19.5	
1040	11.08	16.53	862	0.28	4.77	80.5	14.0	
1045	11.08	16.39	859	0.26	4.73	80.0	14.7	
1050	11.08	16.52	853	0.27	4.75	79.6	13.1	
1055	11.08	16.50	848	0.27	4.76	79.7	14.6	
1100	11.08	16.35	838	0.26	4.74	80.3	15.4	
1105	11.08	16.27	838	0.29	4.73	80.3	15.7	

SAMPLE COLLECTION DATA

Date: 3/27/14	Odor: —
Time: 1115	Color: —

# of Containers	Size/type	Preservative	Analysis	Result
1	Hach Ampule	None	Ferrous Iron	.51

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: NW

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 56

COMMENTS

RESAMPLE MW

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-35R

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/26/14	Well Construction	4" PVC
Time	1138	Hach Meter Model/Serial No.	DR-890/472154X
Sampler	VS	Total Volume Purged (gal)	1 gal
Water Level (ft)	10.92	Pump is set at (ft)	36.85
Total Depth (ft)	31.85	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	~~Unknown~~ 10'	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
	10.94							
1144	~~11.49~~ VS	17.29	1094	1.24	5.27	115.2	11.49	100 mL/min
1149	10.95	17.74	1085	0.85	5.25	101.16	11.16	
1154	10.95	17.86	1083	0.65	5.30	96.4	7.24	
1159	10.93	17.33	1085	0.52	5.28	95.2	5.76	
1204	10.92	17.53	1084	0.46	5.28	94.7	5.66	
1209	10.90	17.45	1087	0.43	5.32	92.1	5.99	*
1214	10.91	16.88	1093	0.44	5.34	90.6 VS	6.06	

SAMPLE COLLECTION DATA

Date: 3/26/14	Odor: N/A
Time: 1220	Color: Clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hach Ampule	None	Ferrous Iron	.04

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction:

Wind Speed (mph) 0-10 (10-25) >25

Temperature:

COMMENTS

Readings taken while injection taking place near well

* Battery died

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-38

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3-30-14	Well Construction	~~2" PVC~~ MS 0.75" PVC
Time	1038	Hach Meter Model/~~Serial No.~~	DR-890/
Sampler	MS	Total Volume Purged (gal)	1.5 GAL
Water Level (ft)	11.84 (toc)	Pump is set at (ft)	5FT FROM TD
Total Depth (ft)	30	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15-30	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1046	12.05	18.72	386	2.10	6.27	311.6	4.03	100
1051	11.98	18.91	383	1.17	6.27	256.6	2.77	
1056	11.95	18.86	379	0.98	6.26	220.5	3.85	
1101	11.95	18.84	377	0.94	6.26	163.4	1.69	
1106	11.96	18.94	372	0.84	6.24	133.4	2.34	
1111	PUMP	Switched off due to problems with power cord.						
1116	11.99	19.41	369	0.92	6.25	111.4	2.05	
1121	11.96	19.55	376	0.81	6.25	92.4	1.93	
1126	11.96	19.70	367	0.79	6.24	85.1	1.36	
1131	11.96	19.65	370	0.68	6.24	95.7	1.34	
1136	11.96	19.85	371	0.68	6.24	92.6	0.85	
1141	11.96	19.90	374	0.62	6.24	91.5	1.40	
1146	11.96	20.02	372	0.60	6.24	83.1	1.50	

SAMPLE COLLECTION DATA

Date:	3-30-14	Odor:	None
Time:	1155	Color:	Clear.

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hach Ampule	None	Ferrous Iron	1.66

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: W

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 72°F

COMMENTS

POWER CORD ON PERISTALTIC NEEDS TO BE REPLACED. FLOW WAS VERIFIED TO BE 100 ML/MIN POST BATTERY ISSUE

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-41

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/27/2014	Well Construction	0.75" PVC
Time	1116	Hach Meter Model/~~Serial No.~~	DR-890/
Sampler	CS/MS	Total Volume Purged (gal)	1.5
Water Level (ft)	8.80 btoc	Pump is set at (ft)	5 ft above TD
Total Depth (ft)	28.32 btoc	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	18.7-28.32 btoc	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%) or (< 0.2)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%) or (< 5)	Flow (mL/min, <100)
1125	8.84	13.82	1336	19.46	5.54	205.6	18.0	100
1130	8.84	14.49	1357	0.82	5.45	188.9	11.41	|
1135	8.84	14.65	1355	0.52	5.43	178.4	3.95	|
1140	8.84	14.68	1355	0.40	5.43	181.9	2.60	|
1145	8.84	14.79	1352	0.27	5.42	179.0	2.10	|
1150	8.83	14.81	1352	0.24	5.42	183.1	1.37	|
1155	8.83	14.88	1350	0.19	5.41	177.3	1.00	|
1200	8.83 CS	14.89	1350	0.16	5.41	176.3	1.02	|
1205	8.83	14.87	1345	0.16	5.40	175.7	0.83	|

SAMPLE COLLECTION DATA

Date:	3-27-14	Odor:	None
Time:	1215	Color:	Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	3.30

WEATHER

Sunny (Cloudy) Partly Cloudy
Wind Direction: S
Wind Speed (mph) 0-10 (10-25) >25
Temperature: ~50 °F

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-46R

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3-27-2014	Well Construction	2" PVC
Time	1453	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	MS/CS	Total Volume Purged (gal)	1.5
Water Level (ft)	2.88	Pump is set at (ft)	5 ft from TD
Total Depth (ft)	21.6 bTOC	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	16.6-21.6 bTOC	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1501	3.20	15.94	837	1.58	5.20	312.9	3.98	100
1506	3.21	16.16	833	0.52	5.18	308.0	1.01	↓
1511	3.21	16.02	829	0.33	5.14	313.5	2.77	
1516	3.23	16.04	828	0.28	5.12	318.1	1.69	
1521	3.23	16.15	828	0.47	5.12	317.8	0.23	
1526	3.23	16.48	829	0.23	5.10	318.3	0.20	
1531	3.23	16.61	830	0.21	5.10	319.8	-0.06	
1536	3.30	16.45	829	0.20	5.09	324.6	0.39	
1541	3.32	16.38	829	0.16	5.05	327.9	0.70	
1546	3.34	16.28	827	0.15	5.06	328.7	-0.28	
1551	3.35	16.36	826	0.13	5.04	329.0	0.09	

SAMPLE COLLECTION DATA

Date:	3-27-14	Odor:	None
Time:	1605	Color:	Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.00

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: N

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 65

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-56

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3-27-14	Well Construction	~~CS 2" PVC~~ 0.75" PVC
Time	1346	Hach Meter Model/~~Serial No~~ CS	DR-890/
Sampler	MS / CS	Total Volume Purged (gal)	0.5 gal
Water Level (ft)	9.08	Pump is set at (ft)	@5ft From TD
Total Depth (ft)	19.48 ~~20~~ CS btoc	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	14.5 - 19.5	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1356	14.11	13.71	258	10.67	5.17	327.6	46.7	100
1401		14.31	431	7.97	5.19	335.6	40.2	50
Well went dry @ 1404								

CS

SAMPLE COLLECTION DATA

Date: 3/27/2014	Odor: None
Time: 1750	Color: Slightly Turbid

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	Insufficient Volume

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: SSW

Wind Speed (mph) 0-10 (10-25) >25

Temperature: 67°F

COMMENTS

Well went dry – allowed over 3 hours to recharge. Samples taken using bailer.

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-57

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3-27-14	Well Construction	0.75" PVC
Time	1420	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	MS/CS	Total Volume Purged (gal)	<0.25
Water Level (ft)	4.51	Pump is set at (ft)	2.5 FT FROM TD
Total Depth (ft)	19.19	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	14-19 BTOC	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1426	10.42	14.17	1022	10.82	5.43	435.5	21.0	110
1431	15.88	14.09	1051	3.72	5.36	324.9	40.1	50
Well went dry @ 1434								

CS

SAMPLE COLLECTION DATA

Date: 3/27/2014 | Odor: None

Time: 1830 | Color: Slightly Turbid

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	Insufficient Volume

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: SSW

Wind Speed (mph) 0-10 (10-25) >25

Temperature: 67°F

COMMENTS

Well went dry - allowed over 3 hours to recharge.

Samples taken using bailer/peri pump. (VOC's and 250mL bottles filled from bailer, all others from peristaltic pump.)

1LESAMPLE MNA

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-58

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/27/14	Well Construction	3/4" PVC
Time	1352	Hach Meter Model/Serial No.	DR-890/HR154X
Sampler	VS	Total Volume Purged (gal)	1.5 gal
Water Level (ft)	0.00 surface	Pump is set at (ft)	12.67
Total Depth (ft)	17.67	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	12.5 – 17.5	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1358	0.00	15.94	228	1.07	5.82	106.8	12.0	100mL/min
1403	0.00	15.79	211	1.55	5.61	116.2	8.69	
1408	0.00	15.90	206	1.67	5.65	116.8	8.70	
~~1413~~	~~0.00~~			2.99	5.70			
1418	0.00	16.03	190	~~9.35~~	~~6.14~~	102.3	12.5	
1423	0.00	16.18	188	2.41	5.71	100.5	10.74	
1428	0.00	16.44	186	2.34	5.76	99.5	8.63	
1433	0.00	16.56	185	2.31	5.84	93.3	7.67	
1438	0.00	16.76	184	2.36	5.88	90.0	6.90	*
1443	0.00	17.35	183	2.40	5.94	84.7	6.10	
1448	0.00	17.22	184	2.29	5.93	84.5	6.56	
1453	0.00	17.27	183	2.28	5.88	86.8	6.27	

* Changed battery 1504 All batteries dead
1506 Colin brought me his.

Batteries were changed until indicater light
VS ~~took~~ said they were changed.

SAMPLE COLLECTION DATA

Date: 3/27/14 | Odor: N/A

Time: 1503 | Color: Light Brown Hue

# of Containers	Size/type	Preservative	Analysis	Result
1	Hach Ampule	None	Ferrous Iron	.49

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: S

Wind Speed (mph) 0-10 (10-25) >25 → CW

Temperature: 60's

COMMENTS

VS ~~Casing~~ may have leak. Removed water on ~~case~~ Vault may have leak. Removed water below casing. Water came back quickly. Well sits in area that is flooded constantly. 1st week in march ground around well had standing water. This round more water and rain yesterday.

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-65

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/26/2014	Well Construction	2" PVC
Time	1134	Hach Meter Model/~~Serial No.~~	DR-890/
Sampler	CS	Total Volume Purged (gal)	2.5 CS
Water Level (ft)	11.04	Pump is set at (ft)	5' [redacted] ABOVE TD
Total Depth (ft)	CS ~~32~~ 29.5	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	19.5-29.5	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
CS 1141				or (< 0.2)			or (< 5)	
~~1106~~	11.06	15.73	1443	6.78	5.60	377.8	7.00	100
1146	11.06	15.97	1438	1.12	5.53	395.6	5.24	1
1151	11.06	16.12	1427	1.05	5.40	405.2	6.39	1
1156	11.05	16.06	1409	0.92	5.36	413.0	5.00	1
1201	11.05	16.14	1403	0.80	5.35	417.8	5.80	1
1206	11.05	16.06	1399	0.80	5.34	421.0	5.77	1
1211	11.03	15.98	1399	0.79	5.33	423.5	6.06	1

SAMPLE COLLECTION DATA

Date:	3/26/2014	Odor:	None
Time:	1220	Color:	Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.03

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: W

Wind Speed (mph) 0-10 (10-25) >25

Temperature: 45 °F

COMMENTS

OXIDANT INJECTION ONGOING AT IW-2 DURING THIS SAMPLING.

Resample MNA

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** RW-69

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/27/14	Well Construction	4" PVC
Time	829	Hach Meter Model/Serial No.	DR-890/472154X
Sampler	US	Total Volume Purged (gal)	1.25 gal
Water Level (ft)	8.04	Pump is set at (ft)	24.10
Total Depth (ft)	29.10	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15-25	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
836	8.09	14.18	975	1.37	5.24	82.2	3.05	100 mL/min
841	8.10	14.52	979	1.07	5.21	78.2	2.29	
846	8.11	14.68	979	0.84	5.19	77.7	1.09	
851	8.10	14.82	979	0.75	5.18	77.2	1.09	
856	8.10	14.84	979	0.74	5.18	78.6	1.08	
901	8.10	14.91	977	0.59	5.18	77.7	0.96	
906	8.10	15.05	978	0.60	5.17	77.9	0.85	
911	8.10	15.06	978	0.60	5.17	78.3	0.86	

SAMPLE COLLECTION DATA

Date: 3/27/14 | Odor: N/A

Time: 920 | Color: Clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hach Ampule	None	Ferrous Iron	0.43

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: N

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 53

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** MW-71

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/28/2014	Well Construction	2" PVC
Time	1127	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	CS	Total Volume Purged (gal)	3
Water Level (ft)	8.22	Pump is set at (ft)	5 ft above TD
Total Depth (ft)	CS ~~27.5~~ 27.18	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15-25	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1135	8.26	14.97	908	2.21	5.06	269.2	4.53	100
1140	8.26	15.08	909	1.74	5.05	263.9	4.73	
1145	8.26	15.02	911	1.37	5.04	259.0	3.83	
1150	8.26	14.98	913	1.28	5.04	253.0	3.69	
1155	8.26	14.96	913	1.14	5.04	253.9	3.48	
1200	8.26	14.94	914	1.05	5.04	250.2	2.42	
1205	8.26	15.00	916	0.97	5.03	253.0	2.10	
1210	8.26	14.98	917	0.83	5.03	250.1	2.33	
1215	8.26	14.95	917	0.81	5.03	246.8	2.90	
1220	8.26	14.93	916	0.81	5.03	246.6	1.92	

CS

SAMPLE COLLECTION DATA

Date:	3/28/2014	Odor:	None
Time:	1230	Color:	Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.39

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: ENE

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 64 °F

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** I~~4~~MW-73 MS

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3-27-14	Well Construction	2" PVC
Time	1639	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	MS/CS	Total Volume Purged (gal)	2 GAL.
Water Level (ft)	8.11	Pump is set at (ft)	5 FT FROM TD
Total Depth (ft)	26.84	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	UNKNOWN	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1644	8.15	16.48	1071	3.14	5.96	346.3	31.8	100
1649	8.13	16.47	1085	0.85	5.94	281.1	22.9	
1654	8.14	16.49	1096	0.68	5.92	203.9	14.1	
1659	8.14	16.32	1108	0.65	5.89	186.9	18.8	
1704	8.13	16.25	1118	0.54	5.88	182.4	14.7	
1709	8.13	16.27	1128	0.47	5.86	170.9	14.1	
1714	8.13	16.27	1141	0.44	5.83	166.3	12.4	
1719	8.13	16.29	1151	0.41	5.80	162.4	14.6	
1724	8.13	16.29	1153	0.40	5.79	164.4	10.22	
1729	8.12	16.27	1158	0.37	5.79	167.3	15.7	
1734	8.13	16.26	1162	0.34	5.78	165.9	13.5	
1739	8.13	16.17	1171	0.35	5.74	163.9	11.8	
1744	8.13	16.19	1175	0.35	5.75	166.7	12.7	

SAMPLE COLLECTION DATA

Date:	3-27-14	Odor:	None
Time:	1800	Color:	clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.99

WEATHER

(Sunny) Cloudy Partly Cloudy

Wind Direction: N

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 73°F

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** IW-74

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/28/2014	Well Construction	2" PVC
Time	0912	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	CS	Total Volume Purged (gal)	1.25
Water Level (ft)	9.04 ft bTOC	Pump is set at (ft)	8 ft above TD
Total Depth (ft)	28 bTOC	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	15-25 ft bTOC	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
0918	9.11	14.82	779	3.65	CS ~~5.98~~ 5.98	239.9	10.42	100
0923	9.11	15.08	784	3.16	5.99	240.7	8.60	|
0928	9.11	15.25	794	2.50	5.98	242.8	6.63	|
0933	9.10	15.44	801	2.19	5.92	244.4	4.44	|
0938	9.09	15.62	826	1.94	5.89	242.9	3.21	|
0943	9.09	15.70	837	1.77	5.87	243.1	2.92	|
0948	9.09	15.74	853	1.63	5.84	243.5	2.60	|
0953	9.09	15.70	874	1.55	5.83	244.2	2.24	|
0958	9.09	15.77	892	1.56	5.81	245.4	1.97	|
1003	9.09	15.80	900	1.44	5.80	246.1	2.06	|

SAMPLE COLLECTION DATA

Date:	3/28/2014	Odor:	None
Time:	1015	Color:	Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.04

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: ENE

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 58°F

COMMENTS

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** IW-76

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/27/2014	Well Construction	2" PVC
Time	0837	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	CS	Total Volume Purged (gal)	2.5
Water Level (ft)	9.24 btoc	Pump is set at (ft)	5 ft above TD
Total Depth (ft)	29.5 btoc	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	17-27 btoc	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%) or (<5)	Flow (mL/min, <100)
0846	9.25	13.67	963	4.25	5.50	634.6	11.94	100
0851	9.23	14.01	963	2.84	5.45	650.9	8.96	|
0856	9.23	14.23	967	2.44	5.47	653.7	7.39	|
0901	9.23	14.34	969	2.25	5.45	659.3	5.73	|
0906	9.21	14.39	973	2.27	5.40	671.7	5.45	|
0911	9.20	14.43	975	2.03	5.40	674.4	3.59	|
0916	9.20	14.45	981	1.87	5.39	674.6	4.04	|
0921	9.20	14.42	984	1.66	5.36	679.9	3.12	|
0926	9.20	14.51	985	1.65	5.35	682.2	2.29	|
0931	9.18	14.55	992	1.50	5.33	680.4	1.85	|
~~0~~ CS								

SAMPLE COLLECTION DATA

Date: 3/27/2014 | Odor: None

Time: 0940 | Color: Pink (5 on field ref. chart)

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	—	H, VC, CH_4	—
1	Hach Ampule	None	Ferrous Iron	0.00

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: Calm

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 50°F

COMMENTS

Starting out pink. Oxidant injection started at IW-2 during purge.

RESAMPLE MWA

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** IW-77

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/26/14	Well Construction	2" DVC
Time	1447	Hach Meter Model/Serial No.	DR-890/472154X
Sampler	US	Total Volume Purged (gal)	1 gal
Water Level (ft)	US ~~10.9~~ 10.09	Pump is set at (ft)	22.62
Total Depth (ft)	27.62	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	~~0527~~ 20-30	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1)	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1453	10.10	15.98	831	2.15	4.89	115.1	6.38	100 mL/min
1458	10.10	16.03	825	1.81	4.86	105.0	5.74	
1503	10.09	16.06	822	1.59	4.91	99.4	3.46	
1508	10.10	16.13	821	1.54	4.90	96.3	2.98	
1513	10.09	16.09	821	1.48	4.94	93.9	2.00	
1518	10.09	16.16	825	1.38	4.90	91.9	1.96	
1523	10.09	16.12	827	1.30	4.91	91.2	1.80	

SAMPLE COLLECTION DATA

Date: 3/26/14 | Odor: NA

Time: 1530 | Color: Clear

# of Containers	Size/type	Preservative	Analysis	Result
1	Hach Ampule	None	Ferrous Iron	—

WEATHER

Sunny Cloudy Partly Cloudy

Wind Direction: SE

Wind Speed (mph) 0-10 10-25 >25

Temperature: 57

COMMENTS

Oxidant injection took place this morning in array near well Raining start 1510

ENVIRON - GROUND WATER SAMPLING LOG

PROJECT NUMBER: 3434399A | **WELL NUMBER:** IW-80

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

WELL PURGE DATA

Date	3/26/2014	Well Construction	~~4" PVC~~ CS 2" PVC
Time	1440	Hach Meter Model/~~Serial No.~~ CS	DR-890/
Sampler	ES	Total Volume Purged (gal)	2.5
Water Level (ft)	10.54 bTOC	Pump is set at (ft)	22.5 bTOC
Total Depth (ft) CS	~~29.80~~ bTOC	Well Measurement Technique	Electronic Water Level Meter
Screen Interval (ft)	17.5-27.5 bTOC	Well Purge Equipment	Peristaltic Pump

FIELD PARAMETERS

Purge Time (5 min Δ)	DTW Feet (± 0.1)	Temp °C (±1) CS	Spec Cond µS/cm (± 3%)	DO mg/L (± 10%)	pH (±0.1)	ORP mV (± 10)	Turbidity NTUs (± 10%)	Flow (mL/min, <100)
1450	10.58	~~15.07~~ 15.04	~~689~~ 689	3.29	6.07	549.7	13.78	100
1503	10.58	15.15	664	2.89	6.03	559.1	7.54	|
1508	10.58	15.19	652	2.09	6.02	557.2	5.16	|
1513	10.56	12.21	648	2.56	6.02	556.9	4.87	|
1518	10.57	15.22	644	2.44	6.01	554.9	4.52	|
1523	10.57	14.82	639	2.42	5.99	551.3	4.14	|

SAMPLE COLLECTION DATA

Date:	3/26/2014	Odor:	None
Time:	1540	Color:	Clear

ANALYSES

# of Containers	Size/type	Preservative	Analysis	Result
1	Hydrogen Bubble Strip	——	H, VC, CH_4	——
1	Hach Ampule	None	Ferrous Iron	0.43

WEATHER

Sunny (Cloudy) Partly Cloudy

Wind Direction: W

Wind Speed (mph) (0-10) 10-25 >25

Temperature: ~50 °F

COMMENTS

Expecting rain. Oxidant injection took place in IW-2 this morning.
Rain started during purge.

Appendix B
Laboratory Analytical Data

Pace Analytical Services, Inc.
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March 24, 2014

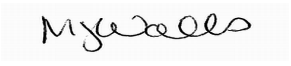
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH, AR
Pace Project No.: 60164307

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on March 07, 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

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CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60164307

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 #: T104704407-13-4
Utah Certification #: KS000212013-3
Illinois Certification #: 003097

Dallas Certification IDs
400 West Bethany Dr Suite 190 75013 Allen TX 75013
Texas Certification #: T104704232-13-5
Kansas Certification #: E-10388
Arkansas Certification #: 88-0647
Oklahoma Certification #: 2012-080
Louisiana Certification #: 02007

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SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60164307

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60164307001	**MW-29-201403**	Water	03/05/14 16:00	03/07/14 08:35
60164307002	**MW-26-201403**	Water	03/05/14 16:16	03/07/14 08:35
60164307003	**MW-22-201403**	Water	03/05/14 16:35	03/07/14 08:35
60164307004	**MW-20-201403**	Water	03/05/14 14:25	03/07/14 08:35
60164307005	**TRIP BLANK**	Water	03/05/14 00:00	03/07/14 08:35

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60164307

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60164307001	**MW-29-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	3	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	JML	1	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164307002	**MW-26-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	3	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	3	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164307003	**MW-22-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	3	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	3	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60164307

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164307004	**MW-20-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	SMW	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	3	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	3	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164307005	**TRIP BLANK**	EPA 5030B/8260	PRG	38	PASI-K

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164307

Sample: MW-29-201403 **Lab ID: 60164307001** Collected: 03/05/14 16:00 Received: 03/07/14 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		03/11/14 17:00	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**43.8J**	ug/L	50.0	24.0	1	03/10/14 10:00	03/10/14 18:23	7439-89-6	
Manganese	**307**	ug/L	5.0	2.5	1	03/10/14 10:00	03/10/14 18:23	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		03/11/14 19:21	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/11/14 19:21	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/11/14 19:21	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/11/14 19:21	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/11/14 19:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/11/14 19:21	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/11/14 19:21	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/11/14 19:21	56-23-5	
Chlorobenzene	**8.9**	ug/L	5.0	0.21	1		03/11/14 19:21	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/11/14 19:21	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/11/14 19:21	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/11/14 19:21	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/11/14 19:21	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/11/14 19:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/11/14 19:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/11/14 19:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/11/14 19:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/11/14 19:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/11/14 19:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/11/14 19:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/11/14 19:21	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/11/14 19:21	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/11/14 19:21	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/11/14 19:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/11/14 19:21	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/11/14 19:21	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/11/14 19:21	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/11/14 19:21	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/11/14 19:21	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/11/14 19:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/11/14 19:21	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/11/14 19:21	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/11/14 19:21	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/11/14 19:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		03/11/14 19:21	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		03/11/14 19:21	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		03/11/14 19:21	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/11/14 19:21		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164307

Sample: MW-29-201403 **Lab ID: 60164307001** Collected: 03/05/14 16:00 Received: 03/07/14 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**10.2J**	mg/L	20.0	1.9	1		03/12/14 13:25		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		03/21/14 08:25	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		03/21/14 09:38		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/12/14 14:31	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Bromide	**1.8**	mg/L	1.0	0.50	1		03/16/14 19:05	24959-67-9	
Chloride	**120**	mg/L	10.0	5.0	10		03/17/14 11:57	16887-00-6	
Sulfate	**67.3**	mg/L	10.0	0.56	10		03/17/14 11:57	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 12:50	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**2.1**	mg/L	0.10	0.026	1		03/07/14 11:12		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/07/14 11:12		
Nitrogen, NO2 plus NO3	**2.1**	mg/L	0.10	0.012	1		03/07/14 11:12		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		03/21/14 09:48		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**2.0**	mg/L	1.0	0.50	1		03/13/14 16:45	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.95**	mg/L	0.030	0.015	1	03/13/14 08:01	03/13/14 10:56		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164307

Sample: MW-26-201403 **Lab ID: 60164307002** Collected: 03/05/14 16:16 Received: 03/07/14 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		03/11/14 17:11	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	03/10/14 10:00	03/10/14 18:25	7439-89-6	
Manganese	**111**	ug/L	5.0	2.5	1	03/10/14 10:00	03/10/14 18:25	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		03/10/14 22:33	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/10/14 22:33	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/10/14 22:33	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/10/14 22:33	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/10/14 22:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/10/14 22:33	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/10/14 22:33	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/10/14 22:33	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/10/14 22:33	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/10/14 22:33	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/10/14 22:33	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/10/14 22:33	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/10/14 22:33	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/10/14 22:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/10/14 22:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/10/14 22:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/10/14 22:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/10/14 22:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/10/14 22:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/10/14 22:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/10/14 22:33	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/10/14 22:33	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/10/14 22:33	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/10/14 22:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/10/14 22:33	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/10/14 22:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/10/14 22:33	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/10/14 22:33	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/10/14 22:33	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/10/14 22:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/10/14 22:33	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/10/14 22:33	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/10/14 22:33	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/10/14 22:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		03/10/14 22:33	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		03/10/14 22:33	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		03/10/14 22:33	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/10/14 22:33		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164307

Sample: MW-26-201403 **Lab ID: 60164307002** Collected: 03/05/14 16:16 Received: 03/07/14 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**27.6**	mg/L	20.0	1.9	1		03/12/14 13:28		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1.9	1		03/12/14 13:28		
Alkalinity, Total as CaCO3	**27.6**	mg/L	20.0	1.9	1		03/12/14 13:28		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		03/21/14 08:25	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		03/21/14 09:38		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/12/14 14:31	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Bromide	**3.9**	mg/L	1.0	0.50	1		03/16/14 19:36	24959-67-9	
Chloride	**327**	mg/L	50.0	25.0	50		03/16/14 19:51	16887-00-6	
Sulfate	**9.2**	mg/L	1.0	0.056	1		03/16/14 19:36	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 12:51	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**3.1**	mg/L	0.10	0.026	1		03/07/14 11:13		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/07/14 11:13		
Nitrogen, NO2 plus NO3	**3.1**	mg/L	0.10	0.012	1		03/07/14 11:13		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**349**	mg/L			1		03/21/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 12:30	7440-44-0	M1
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.83**	mg/L	0.030	0.015	1	03/17/14 07:55	03/17/14 10:42		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164307

Sample: MW-22-201403 **Lab ID: 60164307003** Collected: 03/05/14 16:35 Received: 03/07/14 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		03/11/14 17:23	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	03/10/14 10:00	03/10/14 18:27	7439-89-6	
Manganese	**265**	ug/L	5.0	2.5	1	03/10/14 10:00	03/10/14 18:27	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		03/10/14 22:48	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/10/14 22:48	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/10/14 22:48	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/10/14 22:48	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/10/14 22:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/10/14 22:48	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/10/14 22:48	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/10/14 22:48	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/10/14 22:48	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/10/14 22:48	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/10/14 22:48	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/10/14 22:48	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/10/14 22:48	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/10/14 22:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/10/14 22:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/10/14 22:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/10/14 22:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/10/14 22:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/10/14 22:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/10/14 22:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/10/14 22:48	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/10/14 22:48	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/10/14 22:48	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/10/14 22:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/10/14 22:48	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/10/14 22:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/10/14 22:48	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/10/14 22:48	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/10/14 22:48	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/10/14 22:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/10/14 22:48	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/10/14 22:48	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/10/14 22:48	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/10/14 22:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		03/10/14 22:48	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	80-120		1		03/10/14 22:48	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		03/10/14 22:48	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/10/14 22:48		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164307

Sample: MW-22-201403 **Lab ID: 60164307003** Collected: 03/05/14 16:35 Received: 03/07/14 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**49.2**	mg/L	20.0	1.9	1		03/12/14 13:32		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	1.9	1		03/12/14 13:32		
Alkalinity, Total as CaCO3	**49.2**	mg/L	20.0	1.9	1		03/12/14 13:32		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		03/21/14 08:25	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		03/21/14 09:38		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/12/14 14:31	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Bromide	**0.81J**	mg/L	1.0	0.50	1		03/16/14 20:07	24959-67-9	
Chloride	**13.7**	mg/L	1.0	0.50	1		03/16/14 20:07	16887-00-6	
Sulfate	**14.0**	mg/L	1.0	0.056	1		03/16/14 20:07	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 12:52	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.026	1		03/07/14 11:16		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/07/14 11:16		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		03/07/14 11:16		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**302**	mg/L			1		03/21/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 16:40	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.28**	mg/L	0.030	0.015	1	03/17/14 07:55	03/17/14 10:42		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164307

Sample: MW-20-201403 **Lab ID: 60164307004** Collected: 03/05/14 14:25 Received: 03/07/14 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1190	1		03/11/14 17:34	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	03/10/14 10:00	03/10/14 18:29	7439-89-6	
Manganese	**4.7J**	ug/L	5.0	2.5	1	03/10/14 10:00	03/10/14 18:29	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		03/10/14 23:02	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/10/14 23:02	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/10/14 23:02	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/10/14 23:02	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/10/14 23:02	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/10/14 23:02	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/10/14 23:02	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/10/14 23:02	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/10/14 23:02	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/10/14 23:02	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/10/14 23:02	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/10/14 23:02	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/10/14 23:02	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/10/14 23:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/10/14 23:02	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/10/14 23:02	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/10/14 23:02	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/10/14 23:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/10/14 23:02	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/10/14 23:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/10/14 23:02	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/10/14 23:02	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/10/14 23:02	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/10/14 23:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/10/14 23:02	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/10/14 23:02	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/10/14 23:02	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/10/14 23:02	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/10/14 23:02	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/10/14 23:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/10/14 23:02	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/10/14 23:02	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/10/14 23:02	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/10/14 23:02	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		1		03/10/14 23:02	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120		1		03/10/14 23:02	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		03/10/14 23:02	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/10/14 23:02		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164307

Sample: MW-20-201403 **Lab ID: 60164307004** Collected: 03/05/14 14:25 Received: 03/07/14 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**28.6**	mg/L	20.0	1.9	1		03/12/14 13:36		
Alkalinity, Carbonate (CaCO3)	**22.6**	mg/L	20.0	1.9	1		03/12/14 13:36		
Alkalinity, Total as CaCO3	**51.3**	mg/L	20.0	1.9	1		03/12/14 13:36		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		03/21/14 08:25	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**9.9**	Std. Units	0.10	0.10	1		03/21/14 09:38		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/12/14 14:32	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Bromide	**1.7**	mg/L	1.0	0.50	1		03/16/14 20:37	24959-67-9	
Chloride	**79.1**	mg/L	10.0	5.0	10		03/17/14 12:13	16887-00-6	
Sulfate	**15.1**	mg/L	1.0	0.056	1		03/16/14 20:37	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 12:53	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.4**	mg/L	0.10	0.026	1		03/07/14 11:17		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/07/14 11:17		
Nitrogen, NO2 plus NO3	**1.4**	mg/L	0.10	0.012	1		03/07/14 11:17		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**35.2**	mg/L			1		03/21/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 12:56	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.35**	mg/L	0.030	0.015	1	03/17/14 07:55	03/17/14 10:42		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164307

Sample: TRIP BLANK **Lab ID: 60164307005** Collected: 03/05/14 00:00 Received: 03/07/14 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		03/10/14 21:37	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/10/14 21:37	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/10/14 21:37	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/10/14 21:37	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/10/14 21:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/10/14 21:37	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/10/14 21:37	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/10/14 21:37	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/10/14 21:37	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/10/14 21:37	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/10/14 21:37	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/10/14 21:37	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/10/14 21:37	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/10/14 21:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/10/14 21:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/10/14 21:37	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/10/14 21:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/10/14 21:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/10/14 21:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/10/14 21:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/10/14 21:37	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/10/14 21:37	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/10/14 21:37	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/10/14 21:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/10/14 21:37	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/10/14 21:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/10/14 21:37	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/10/14 21:37	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/10/14 21:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/10/14 21:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/10/14 21:37	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/10/14 21:37	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/10/14 21:37	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/10/14 21:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		1		03/10/14 21:37	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	80-120		1		03/10/14 21:37	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		03/10/14 21:37	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/10/14 21:37		

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164307

QC Batch: GCSV/2341 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60164307001, 60164307002, 60164307003, 60164307004

METHOD BLANK: 65647 Matrix: Water
Associated Lab Samples: 60164307001, 60164307002, 60164307003, 60164307004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	03/11/14 16:03	

LABORATORY CONTROL SAMPLE: 65648

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	110000	110	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 65649 65650

Parameter	Units	60164307001 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	108000	109000	108	109	40-140	0	40	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164307

QC Batch: MPRP/26371 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60164307001, 60164307002, 60164307003, 60164307004

METHOD BLANK: 1341288 Matrix: Water
Associated Lab Samples: 60164307001, 60164307002, 60164307003, 60164307004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	03/10/14 17:29	
Manganese	ug/L	ND	5.0	03/10/14 17:29	

LABORATORY CONTROL SAMPLE: 1341289

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	10200	102	80-120	
Manganese	ug/L	1000	1050	105	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1341290 1341291

Parameter	Units	60163884001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	31.6J	10000	10000	10100	10100	101	100	75-125	0	20	
Manganese	ug/L	6.3	1000	1000	1060	1060	106	106	75-125	0	20	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164307

QC Batch: MSV/59913 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60164307002, 60164307003, 60164307004, 60164307005

METHOD BLANK: 1341456 Matrix: Water
Associated Lab Samples: 60164307002, 60164307003, 60164307004, 60164307005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	03/10/14 21:22	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/10/14 21:22	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/10/14 21:22	
1,1-Dichloroethane	ug/L	ND	2.4	03/10/14 21:22	
1,1-Dichloroethene	ug/L	ND	5.0	03/10/14 21:22	
1,2-Dichloroethane	ug/L	ND	5.0	03/10/14 21:22	
1,2-Dichloropropane	ug/L	ND	5.0	03/10/14 21:22	
2-Butanone (MEK)	ug/L	ND	10.0	03/10/14 21:22	
2-Hexanone	ug/L	ND	10.0	03/10/14 21:22	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	03/10/14 21:22	
Acetone	ug/L	ND	10.0	03/10/14 21:22	
Benzene	ug/L	ND	5.0	03/10/14 21:22	
Bromodichloromethane	ug/L	ND	5.0	03/10/14 21:22	
Bromoform	ug/L	ND	5.0	03/10/14 21:22	
Bromomethane	ug/L	ND	7.0	03/10/14 21:22	
Carbon disulfide	ug/L	ND	10.0	03/10/14 21:22	
Carbon tetrachloride	ug/L	ND	5.0	03/10/14 21:22	
Chlorobenzene	ug/L	ND	5.0	03/10/14 21:22	
Chloroethane	ug/L	ND	10.0	03/10/14 21:22	
Chloroform	ug/L	ND	5.0	03/10/14 21:22	
Chloromethane	ug/L	ND	10.0	03/10/14 21:22	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/10/14 21:22	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/10/14 21:22	
Dibromochloromethane	ug/L	ND	5.0	03/10/14 21:22	
Ethylbenzene	ug/L	ND	5.0	03/10/14 21:22	
Methylene chloride	ug/L	ND	5.0	03/10/14 21:22	
Styrene	ug/L	ND	5.0	03/10/14 21:22	
Tetrachloroethene	ug/L	ND	5.0	03/10/14 21:22	
Toluene	ug/L	ND	5.0	03/10/14 21:22	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/10/14 21:22	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/10/14 21:22	
Trichloroethene	ug/L	ND	5.0	03/10/14 21:22	
Vinyl chloride	ug/L	ND	2.0	03/10/14 21:22	
Xylene (Total)	ug/L	ND	5.0	03/10/14 21:22	
1,2-Dichloroethane-d4 (S)	%	109	80-120	03/10/14 21:22	
4-Bromofluorobenzene (S)	%	102	80-120	03/10/14 21:22	
Toluene-d8 (S)	%	95	80-120	03/10/14 21:22	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164307

LABORATORY CONTROL SAMPLE: 1341457

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.4	107	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	19.4	97	73-124	
1,1,2-Trichloroethane	ug/L	20	19.4	97	80-120	
1,1-Dichloroethane	ug/L	20	20.1	100	77-120	
1,1-Dichloroethene	ug/L	20	21.2	106	78-126	
1,2-Dichloroethane	ug/L	20	21.6	108	77-123	
1,2-Dichloropropane	ug/L	20	20.9	105	80-121	
2-Butanone (MEK)	ug/L	100	115	115	52-145	
2-Hexanone	ug/L	100	102	102	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	105	105	71-131	
Acetone	ug/L	100	133	133	32-155	
Benzene	ug/L	20	21.2	106	80-120	
Bromodichloromethane	ug/L	20	21.0	105	80-120	
Bromoform	ug/L	20	18.5	93	73-124	
Bromomethane	ug/L	20	16.1	81	31-144	
Carbon disulfide	ug/L	20	22.9	115	65-125	
Carbon tetrachloride	ug/L	20	20.6	103	78-128	
Chlorobenzene	ug/L	20	20.5	103	80-120	
Chloroethane	ug/L	20	21.9	110	55-137	
Chloroform	ug/L	20	19.7	99	79-120	
Chloromethane	ug/L	20	14.7	73	22-138	
cis-1,2-Dichloroethene	ug/L	20	22.4	112	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.9	95	80-120	
Dibromochloromethane	ug/L	20	20.1	100	80-120	
Ethylbenzene	ug/L	20	20.0	100	80-121	
Methylene chloride	ug/L	20	21.6	108	73-126	
Styrene	ug/L	20	19.8	99	80-120	
Tetrachloroethene	ug/L	20	19.3	96	80-121	
Toluene	ug/L	20	21.1	105	80-122	
trans-1,2-Dichloroethene	ug/L	20	20.6	103	79-121	
trans-1,3-Dichloropropene	ug/L	20	20.4	102	80-127	
Trichloroethene	ug/L	20	19.5	98	80-120	
Vinyl chloride	ug/L	20	20.1	100	59-120	
Xylene (Total)	ug/L	60	61.1	102	80-121	
1,2-Dichloroethane-d4 (S)	%			106	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			101	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164307

QC Batch: MSV/59946
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60164307001

METHOD BLANK: 1341933
Matrix: Water
Associated Lab Samples: 60164307001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	03/11/14 15:32	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/11/14 15:32	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/11/14 15:32	
1,1-Dichloroethane	ug/L	ND	2.4	03/11/14 15:32	
1,1-Dichloroethene	ug/L	ND	5.0	03/11/14 15:32	
1,2-Dichloroethane	ug/L	ND	5.0	03/11/14 15:32	
1,2-Dichloropropane	ug/L	ND	5.0	03/11/14 15:32	
2-Butanone (MEK)	ug/L	ND	10.0	03/11/14 15:32	
2-Hexanone	ug/L	ND	10.0	03/11/14 15:32	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	03/11/14 15:32	
Acetone	ug/L	ND	10.0	03/11/14 15:32	
Benzene	ug/L	ND	5.0	03/11/14 15:32	
Bromodichloromethane	ug/L	ND	5.0	03/11/14 15:32	
Bromoform	ug/L	ND	5.0	03/11/14 15:32	
Bromomethane	ug/L	ND	7.0	03/11/14 15:32	
Carbon disulfide	ug/L	ND	10.0	03/11/14 15:32	
Carbon tetrachloride	ug/L	ND	5.0	03/11/14 15:32	
Chlorobenzene	ug/L	ND	5.0	03/11/14 15:32	
Chloroethane	ug/L	ND	10.0	03/11/14 15:32	
Chloroform	ug/L	ND	5.0	03/11/14 15:32	
Chloromethane	ug/L	ND	10.0	03/11/14 15:32	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/11/14 15:32	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/11/14 15:32	
Dibromochloromethane	ug/L	ND	5.0	03/11/14 15:32	
Ethylbenzene	ug/L	ND	5.0	03/11/14 15:32	
Methylene chloride	ug/L	ND	5.0	03/11/14 15:32	
Styrene	ug/L	ND	5.0	03/11/14 15:32	
Tetrachloroethene	ug/L	ND	5.0	03/11/14 15:32	
Toluene	ug/L	ND	5.0	03/11/14 15:32	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/11/14 15:32	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/11/14 15:32	
Trichloroethene	ug/L	ND	5.0	03/11/14 15:32	
Vinyl chloride	ug/L	ND	2.0	03/11/14 15:32	
Xylene (Total)	ug/L	ND	5.0	03/11/14 15:32	
1,2-Dichloroethane-d4 (S)	%	109	80-120	03/11/14 15:32	
4-Bromofluorobenzene (S)	%	99	80-120	03/11/14 15:32	
Toluene-d8 (S)	%	96	80-120	03/11/14 15:32	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164307

LABORATORY CONTROL SAMPLE: 1341934

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.0	100	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	18.2	91	73-124	
1,1,2-Trichloroethane	ug/L	20	19.0	95	80-120	
1,1-Dichloroethane	ug/L	20	19.0	95	77-120	
1,1-Dichloroethene	ug/L	20	19.2	96	78-126	
1,2-Dichloroethane	ug/L	20	22.3	111	77-123	
1,2-Dichloropropane	ug/L	20	19.5	97	80-121	
2-Butanone (MEK)	ug/L	100	110	110	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	121	121	32-155	
Benzene	ug/L	20	19.3	97	80-120	
Bromodichloromethane	ug/L	20	20.0	100	80-120	
Bromoform	ug/L	20	19.3	96	73-124	
Bromomethane	ug/L	20	10.9	55	31-144	
Carbon disulfide	ug/L	20	20.2	101	65-125	
Carbon tetrachloride	ug/L	20	20.5	103	78-128	
Chlorobenzene	ug/L	20	19.6	98	80-120	
Chloroethane	ug/L	20	19.3	96	55-137	
Chloroform	ug/L	20	19.5	98	79-120	
Chloromethane	ug/L	20	18.0	90	22-138	
cis-1,2-Dichloroethene	ug/L	20	21.7	109	80-120	
cis-1,3-Dichloropropene	ug/L	20	17.8	89	80-120	
Dibromochloromethane	ug/L	20	19.6	98	80-120	
Ethylbenzene	ug/L	20	18.7	93	80-121	
Methylene chloride	ug/L	20	21.3	107	73-126	
Styrene	ug/L	20	19.0	95	80-120	
Tetrachloroethene	ug/L	20	19.3	97	80-121	
Toluene	ug/L	20	20.3	102	80-122	
trans-1,2-Dichloroethene	ug/L	20	19.3	97	79-121	
trans-1,3-Dichloropropene	ug/L	20	21.0	105	80-127	
Trichloroethene	ug/L	20	19.0	95	80-120	
Vinyl chloride	ug/L	20	18.8	94	59-120	
Xylene (Total)	ug/L	60	58.7	98	80-121	
1,2-Dichloroethane-d4 (S)	%			113	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			102	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164307

QC Batch: WET/46613 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60164307001, 60164307002, 60164307003, 60164307004

METHOD BLANK: 1342328 Matrix: Water
Associated Lab Samples: 60164307001, 60164307002, 60164307003, 60164307004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	03/12/14 11:53	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	03/12/14 11:53	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	03/12/14 11:53	

LABORATORY CONTROL SAMPLE: 1342329

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	507	101	90-110	

SAMPLE DUPLICATE: 1342330

Parameter	Units	60163791002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	937	987	5	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	937	987	5	10	

SAMPLE DUPLICATE: 1342331

Parameter	Units	60163791003 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	1560	1600	3	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	1560	1600	3	10	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164307

QC Batch: WET/46615 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60164307001, 60164307002, 60164307003, 60164307004

METHOD BLANK: 1342349 Matrix: Water
Associated Lab Samples: 60164307001, 60164307002, 60164307003, 60164307004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	03/12/14 14:29	

LABORATORY CONTROL SAMPLE: 1342350

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.47	94	80-120	

MATRIX SPIKE SAMPLE: 1342351

Parameter	Units	60164242001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.35	70	75-125	M1

SAMPLE DUPLICATE: 1342352

Parameter	Units	60164169002 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.: 60164307

QC Batch: WETA/28613 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60164307001, 60164307002, 60164307003, 60164307004

METHOD BLANK: 1344863 Matrix: Water
Associated Lab Samples: 60164307001, 60164307002, 60164307003, 60164307004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Bromide	mg/L	ND	1.0	03/16/14 13:41	
Chloride	mg/L	ND	1.0	03/16/14 13:41	
Sulfate	mg/L	ND	1.0	03/16/14 13:41	

METHOD BLANK: 1345223 Matrix: Water
Associated Lab Samples: 60164307001, 60164307004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	03/17/14 09:49	
Sulfate	mg/L	ND	1.0	03/17/14 09:49	

LABORATORY CONTROL SAMPLE: 1344864

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	5	5.1	102	90-110	
Chloride	mg/L	5	4.9	97	90-110	
Sulfate	mg/L	5	5.1	102	90-110	

LABORATORY CONTROL SAMPLE: 1345224

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	96	90-110	
Sulfate	mg/L	5	4.9	98	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1344865 1344866

Parameter	Units	60164293002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Bromide	mg/L	3.1	5	5	7.9	7.9	96	97	80-120	1	15	
Chloride	mg/L	561	250	250	739	749	71	75	80-120	1	15	M1
Sulfate	mg/L	457	250	250	650	664	77	83	80-120	2	15	M1

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164307

MATRIX SPIKE SAMPLE: 1344867

Parameter	Units	60164316003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Bromide	mg/L	ND	100	105	105	80-120	
Chloride	mg/L	100	100	197	97	80-120	
Sulfate	mg/L	168	100	272	104	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164307

QC Batch: WETA/28538 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60164307001, 60164307002, 60164307003, 60164307004

METHOD BLANK: 1341793 Matrix: Water
Associated Lab Samples: 60164307001, 60164307002, 60164307003, 60164307004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	03/11/14 12:36	

LABORATORY CONTROL SAMPLE: 1341794

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.0	101	90-110	

MATRIX SPIKE SAMPLE: 1341795

Parameter	Units	60164294002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	4.5	2	5.8	65	90-110	M1

MATRIX SPIKE SAMPLE: 1341796

Parameter	Units	60164296002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.8	88	90-110	M1

SAMPLE DUPLICATE: 1341797

Parameter	Units	60164298001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	21.6	21.5	0	18	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164307

QC Batch: WETA/28485 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60164307001, 60164307002, 60164307003, 60164307004

METHOD BLANK: 1339912 Matrix: Water
Associated Lab Samples: 60164307001, 60164307002, 60164307003, 60164307004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	03/07/14 10:49	
Nitrogen, Nitrite	mg/L	ND	0.10	03/07/14 10:49	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	03/07/14 10:49	

LABORATORY CONTROL SAMPLE: 1339913

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	0.38	94	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	103	90-110	

MATRIX SPIKE SAMPLE: 1339914

Parameter	Units	60164277002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.0	1.6	2.6	97	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.51	113	90-110	M1
Nitrogen, NO2 plus NO3	mg/L	1.1	2	3.1	100	90-110	

SAMPLE DUPLICATE: 1339915

Parameter	Units	60164298001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	82.8	81.6	1	20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	82.8	81.6	2	20	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164307

QC Batch: WETA/28583
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60164307001

METHOD BLANK: 1342883 Matrix: Water
Associated Lab Samples: 60164307001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	03/13/14 10:54	

LABORATORY CONTROL SAMPLE: 1342884

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.0	100	80-120	

MATRIX SPIKE SAMPLE: 1342885

Parameter	Units	60163882002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	2.3	5	7.1	96	80-120	

SAMPLE DUPLICATE: 1342886

Parameter	Units	60163882003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	2.0	1.9	1	25	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164307

QC Batch: WETA/28594 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60164307002, 60164307003, 60164307004

METHOD BLANK: 1343816 Matrix: Water
Associated Lab Samples: 60164307002, 60164307003, 60164307004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	03/14/14 12:04	

LABORATORY CONTROL SAMPLE: 1343817

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	4.8	96	80-120	

MATRIX SPIKE SAMPLE: 1343818

Parameter	Units	60164307002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	ND	5	2.3	47	80-120	M1

SAMPLE DUPLICATE: 1343834

Parameter	Units	60164418001 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.: 60164307

QC Batch: WETA/4439
QC Batch Method: SM4500-P B
Analysis Method: SM 4500-P E
Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60164307001

METHOD BLANK: 65883 Matrix: Water
Associated Lab Samples: 60164307001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	03/13/14 10:52	

LABORATORY CONTROL SAMPLE: 65884

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: 65885 65886

Parameter	Units	7512738001 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	0.24	1.5	1.5	1.9	2.0	107	115	80-120	6	20	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164307

QC Batch: WETA/4460 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60164307002, 60164307003, 60164307004

METHOD BLANK: 66347 Matrix: Water
Associated Lab Samples: 60164307002, 60164307003, 60164307004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	03/17/14 10:40	

LABORATORY CONTROL SAMPLE: 66348

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.7	111	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 66349 66350

Parameter	Units	7512842001 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	5.5	1.5	1.5	6.8	6.6	87	73	80-120	3	20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 66353 66354

Parameter	Units	60164418005 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	0.14	1.5	1.5	1.7	1.8	102	106	80-120	3	20	

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QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60164307

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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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/59913

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

Batch: MSV/59946

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

ANALYTE QUALIFIERS

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.: 60164307

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60164307001	MW-29-201403	EPA 8015 - Alcohol	GCSV/2341		
60164307002	MW-26-201403	EPA 8015 - Alcohol	GCSV/2341		
60164307003	MW-22-201403	EPA 8015 - Alcohol	GCSV/2341		
60164307004	MW-20-201403	EPA 8015 - Alcohol	GCSV/2341		
60164307001	MW-29-201403	EPA 3010	MPRP/26371	EPA 6010	ICP/20116
60164307002	MW-26-201403	EPA 3010	MPRP/26371	EPA 6010	ICP/20116
60164307003	MW-22-201403	EPA 3010	MPRP/26371	EPA 6010	ICP/20116
60164307004	MW-20-201403	EPA 3010	MPRP/26371	EPA 6010	ICP/20116
60164307001	MW-29-201403	EPA 5030B/8260	MSV/59946		
60164307002	MW-26-201403	EPA 5030B/8260	MSV/59913		
60164307003	MW-22-201403	EPA 5030B/8260	MSV/59913		
60164307004	MW-20-201403	EPA 5030B/8260	MSV/59913		
60164307005	TRIP BLANK	EPA 5030B/8260	MSV/59913		
60164307001	MW-29-201403	SM 2320B	WET/46613		
60164307002	MW-26-201403	SM 2320B	WET/46613		
60164307003	MW-22-201403	SM 2320B	WET/46613		
60164307004	MW-20-201403	SM 2320B	WET/46613		
60164307001	MW-29-201403	SM 3500-Fe B#4	WET/46755		
60164307002	MW-26-201403	SM 3500-Fe B#4	WET/46755		
60164307003	MW-22-201403	SM 3500-Fe B#4	WET/46755		
60164307004	MW-20-201403	SM 3500-Fe B#4	WET/46755		
60164307001	MW-29-201403	SM 4500-H+B	WET/46809		
60164307002	MW-26-201403	SM 4500-H+B	WET/46809		
60164307003	MW-22-201403	SM 4500-H+B	WET/46809		
60164307004	MW-20-201403	SM 4500-H+B	WET/46809		
60164307001	MW-29-201403	SM 4500-S-2 D	WET/46615		
60164307002	MW-26-201403	SM 4500-S-2 D	WET/46615		
60164307003	MW-22-201403	SM 4500-S-2 D	WET/46615		
60164307004	MW-20-201403	SM 4500-S-2 D	WET/46615		
60164307001	MW-29-201403	EPA 300.0	WETA/28613		
60164307002	MW-26-201403	EPA 300.0	WETA/28613		
60164307003	MW-22-201403	EPA 300.0	WETA/28613		
60164307004	MW-20-201403	EPA 300.0	WETA/28613		
60164307001	MW-29-201403	EPA 350.1	WETA/28538		
60164307002	MW-26-201403	EPA 350.1	WETA/28538		
60164307003	MW-22-201403	EPA 350.1	WETA/28538		
60164307004	MW-20-201403	EPA 350.1	WETA/28538		
60164307001	MW-29-201403	EPA 353.2	WETA/28485		
60164307002	MW-26-201403	EPA 353.2	WETA/28485		
60164307003	MW-22-201403	EPA 353.2	WETA/28485		
60164307004	MW-20-201403	EPA 353.2	WETA/28485		
60164307001	MW-29-201403	SM 4500-CO2 D	WETA/28690		
60164307002	MW-26-201403	SM 4500-CO2 D	WETA/28690		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60164307

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60164307003	**MW-22-201403**	SM 4500-CO2 D	WETA/28690		
60164307004	**MW-20-201403**	SM 4500-CO2 D	WETA/28690		
60164307001	**MW-29-201403**	SM 5310C	WETA/28583		
60164307002	**MW-26-201403**	SM 5310C	WETA/28594		
60164307003	**MW-22-201403**	SM 5310C	WETA/28594		
60164307004	**MW-20-201403**	SM 5310C	WETA/28594		
60164307001	**MW-29-201403**	SM4500-P B	WETA/4439	SM 4500-P E	WETA/4440
60164307002	**MW-26-201403**	SM4500-P B	WETA/4460	SM 4500-P E	WETA/4462
60164307003	**MW-22-201403**	SM4500-P B	WETA/4460	SM 4500-P E	WETA/4462
60164307004	**MW-20-201403**	SM4500-P B	WETA/4460	SM 4500-P E	WETA/4462

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Sample Condition Upon Receipt

WO# : 60164307

60164307

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

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

Tracking #: 8050 4045 3311 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: 2.8

Temperature should be above freezing to 6°C

Date and initials of person examining contents: 3/7/14 BD

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, 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: W		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): 020314-38PD		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MW Date: 3/7/14

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Environ	Report To:	Wendy Stonestreet	Attention:	
Address:	7500 College Blvd., Ste. 925	Copy To:	Tammy 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:	STD	Project Number:		Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

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	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH aZn	$Na_2S_2O_3$	Methanol	Other	Analysis Test (Y/N)	8260 client specific list	Alkalinity	TOC	Chloride/Sulfate	Bromide	6010-Iron/Mn	Ferric Iron calc.	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-29-201403 1BP3N1.5 1BP3Z1.5	WT	G	1BP3S1.5	1BP3U	3/5/14	1600		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	X		60164304 3DG9H 3DG9U 1AG3S W1
2	MW-26-201403	WT	G			3/5/14	1616		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	X		W2
3	MW-22-201403	WT	G			3/5/14	1635		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	X		W3
4	MW-20-201403	WT	G			3/5/14	1425		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	X	X		W4
5	TRIP BLANK	WT	G			3/5/14	—		2				X						X													2DG9H
6																																
7																																
8																																
9																																
10																																
11																																
12																																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
LVL IV Data Packages	Wendy Stonestreet	3/5/2014	1815	Fed Ex	3/5/2015	1820				
				[illegible] / PASLKS	3/7/14	0835	2.8	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: WENDY STONESTREET

SIGNATURE of SAMPLER: Wendy Stonestreet

DATE Signed (MM/DD/YY): 03/05/14

*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.

F-ALL-Q-020rev.07, 15-Feb-2007

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

April 21, 2014

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

RE: Project: FORT SMITH, AR
Pace Project No.: 60164418

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on March 08, 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 4/8/14, to correct J-flagging.

Amended report, REV-2 on 4/21/14, to correct collection time for ITMW-21-201403.

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

REPORT OF LABORATORY ANALYSIS

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CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60164418

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 #: T104704407-13-4
Utah Certification #: KS000212013-3
Illinois Certification #: 003097

Dallas Certification IDs
400 West Bethany Dr Suite 190 75013 Allen TX 75013
Texas Certification #: T104704232-13-5
Kansas Certification #: E-10388
Arkansas Certification #: 88-0647
Oklahoma Certification #: 2012-080
Louisiana Certification #: 02007

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SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60164418

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60164418001	ITMW-6-201403	Water	03/06/14 08:30	03/08/14 02:14
60164418002	DUP-1-201403	Water	03/06/14 12:50	03/08/14 02:14
60164418003	ITMW-2-201403	Water	03/06/14 12:35	03/08/14 02:14
60164418004	ITMW-4-201403	Water	03/06/14 10:40	03/08/14 02:14
60164418005	MW-28-201403	Water	03/06/14 15:54	03/08/14 02:14
60164418006	MW-68-201403	Water	03/06/14 08:40	03/08/14 02:14
60164418007	MW-40-201403	Water	03/06/14 11:35	03/08/14 02:14
60164418008	IW-72-201403	Water	03/06/14 14:05	03/08/14 02:14
60164418009	MW-36-201403	Water	03/06/14 15:55	03/08/14 02:14
60164418010	MW-39-201403	Water	03/06/14 17:35	03/08/14 02:14
60164418011	MW-50-201403	Water	03/06/14 10:30	03/08/14 02:14
60164418012	MW-60-201403	Water	03/06/14 13:00	03/08/14 02:14
60164418013	MW-61-201403	Water	03/06/14 14:00	03/08/14 02:14
60164418014	MW-31-201403	Water	03/06/14 16:00	03/08/14 02:14
60164418015	ITMW-10-201403	Water	03/06/14 17:55	03/08/14 02:14
60164418016	ITMW-21-201403	Water	03/06/14 17:35	03/08/14 02:14
60164418017	TRIP BLANK 1	Water	03/06/14 00:00	03/08/14 02:14
60164418018	TRIP BLANK 2	Water	03/06/14 00:00	03/08/14 02:14
60164418019	TRIP BLANK 3	Water	03/06/14 00:00	03/08/14 02:14

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60164418

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60164418001	**ITMW-6-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164418002	**DUP-1-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164418003	**ITMW-2-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164418004	**ITMW-4-201403**	EPA 8015 - Alcohol	TA	1	PASI-D

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60164418

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164418005	**MW-28-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164418006	**MW-68-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60164418

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-P E	BAF	1	PASI-D
60164418007	**MW-40-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164418008	**IW-72-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164418009	**MW-36-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60164418

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164418010	**MW-39-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164418011	**MW-50-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164418012	**MW-60-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60164418

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164418013	**MW-61-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164418014	**MW-31-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164418015	**ITMW-10-201403**	EPA 5030B/8260	PRG	38	PASI-K
60164418016	**ITMW-21-201403**	EPA 5030B/8260	PRG	38	PASI-K
60164418017	**TRIP BLANK 1**	EPA 5030B/8260	PRG	38	PASI-K
60164418018	**TRIP BLANK 2**	EPA 5030B/8260	PRG	38	PASI-K
60164418019	**TRIP BLANK 3**	EPA 5030B/8260	PRG	38	PASI-K

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60164418

Method: **EPA 8015 - Alcohol**
Description: Alcohol by Direct Inject GCFID
Client: Environ_AR
Date: April 21, 2014

General Information:
14 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.: 60164418

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Environ_AR
Date: April 21, 2014

General Information:
14 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.: 60164418

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 21, 2014

General Information:
19 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.

QC Batch: MSV/60009

SS: This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

- LCS (Lab ID: 1343070)
  - Acetone

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/59987

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

- LCS (Lab ID: 1342567)
  - Acetone

QC Batch: MSV/60009

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

- LCS (Lab ID: 1343070)
  - Acetone

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

QC Batch: MSV/59987

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.: 60164418

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 21, 2014

QC Batch: MSV/59989

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

QC Batch: MSV/60009

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.: 60164418

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: Environ_AR
Date: April 21, 2014

General Information:
14 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.

QC Batch: WET/46752

D6: The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 1346277)
  - Alkalinity, Total as CaCO3

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60164418

Method: **SM 3500-Fe B#4**
Description: Iron, Ferric (Calculation)
Client: Environ_AR
Date: April 21, 2014

General Information:
12 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.: 60164418

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: April 21, 2014

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

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

H6: Analysis initiated outside of the 15 minute EPA recommended holding time.
- ITMW-2-201403 (Lab ID: 60164418003)
- ITMW-4-201403 (Lab ID: 60164418004)
- ITMW-6-201403 (Lab ID: 60164418001)
- IW-72-201403 (Lab ID: 60164418008)
- MW-28-201403 (Lab ID: 60164418005)
- MW-31-201403 (Lab ID: 60164418014)
- MW-36-201403 (Lab ID: 60164418009)
- MW-39-201403 (Lab ID: 60164418010)
- MW-40-201403 (Lab ID: 60164418007)
- MW-50-201403 (Lab ID: 60164418011)
- MW-61-201403 (Lab ID: 60164418013)
- MW-68-201403 (Lab ID: 60164418006)

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.: 60164418

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Environ_AR
Date: April 21, 2014

General Information:
14 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/46616

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60164418001

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

- MS (Lab ID: 1342355)
  - 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.: 60164418

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Environ_AR
Date: April 21, 2014

General Information:
14 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.: 60164418

Method: **EPA 350.1**
Description: 350.1 Ammonia
Client: Environ_AR
Date: April 21, 2014

General Information:
14 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/28540

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60164418004,60164418014

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

- MS (Lab ID: 1341804)
  - Nitrogen, Ammonia
- MS (Lab ID: 1341805)
  - 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.: 60164418

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Environ_AR
Date: April 21, 2014

General Information:
14 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.

H1: Analysis conducted outside the EPA method holding time.
- ITMW-6-201403 (Lab ID: 60164418001)

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:

Analyte Comments:

QC Batch: WETA/28505

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
- IW-72-201403 (Lab ID: 60164418008)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrite
  - Nitrogen, Nitrate

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60164418

Method: **SM 4500-CO2 D**
Description: Total Carbon Dioxide Calc
Client: Environ_AR
Date: April 21, 2014

General Information:
12 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.: 60164418

Method: **SM 5310C**
Description: 5310C TOC
Client: Environ_AR
Date: April 21, 2014

General Information:
14 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/28594

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60164307002

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

- MS (Lab ID: 1343818)
  - Total Organic Carbon

QC Batch: WETA/28595

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60164258004

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

- MS (Lab ID: 1343839)
  - Total Organic Carbon

QC Batch: WETA/28605

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60164821001

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

- MS (Lab ID: 1344831)
  - 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.: 60164418

Method: **SM 4500-P E**
Description: SM4500P-E, Total Phosphorus
Client: Environ_AR
Date: April 21, 2014

General Information:
14 samples were analyzed for SM 4500-P E. All samples were received in acceptable condition with any exceptions noted below.

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

Sample Preparation:
The samples were prepared in accordance with SM4500-P B with any exceptions noted below.

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

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

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

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

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

QC Batch: WETA/4460

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60164418005,7512842001

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

- MSD (Lab ID: 66350)
  - Phosphate as P04

QC Batch: WETA/4469

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60164418012,7512983002

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

- MS (Lab ID: 66694)
  - Phosphate as P04
- MS (Lab ID: 66698)
  - Phosphate as P04
- MSD (Lab ID: 66695)
  - Phosphate as P04

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: ITMW-6-201403 **Lab ID: 60164418001** Collected: 03/06/14 08:30 Received: 03/08/14 02:14 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		03/14/14 18:36	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:01	7439-89-6	
Manganese	**47.7**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:01	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		03/13/14 14:02	67-64-1	L3
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 14:02	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 14:02	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 14:02	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 14:02	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 14:02	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 14:02	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 14:02	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 14:02	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 14:02	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 14:02	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 14:02	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 14:02	124-48-1	
1,1-Dichloroethane	**4.4**	ug/L	2.4	0.050	1		03/13/14 14:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 14:02	107-06-2	
1,1-Dichloroethene	**0.36J**	ug/L	5.0	0.20	1		03/13/14 14:02	75-35-4	
cis-1,2-Dichloroethene	**4.9J**	ug/L	5.0	0.080	1		03/13/14 14:02	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 14:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 14:02	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 14:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 14:02	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 14:02	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 14:02	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 14:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 14:02	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 14:02	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 14:02	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 14:02	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 14:02	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 14:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 14:02	79-00-5	
Trichloroethene	**2.7J**	ug/L	5.0	0.17	1		03/13/14 14:02	79-01-6	
Vinyl chloride	**0.18J**	ug/L	2.0	0.13	1		03/13/14 14:02	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 14:02	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		03/13/14 14:02	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	80-120		1		03/13/14 14:02	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		03/13/14 14:02	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 14:02		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: ITMW-6-201403 **Lab ID: 60164418001** Collected: 03/06/14 08:30 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**143**	mg/L	20.0	1.9	1		03/12/14 14:04		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.0J**	mg/L	0.20		1		03/24/14 09:26	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.2**	Std. Units	0.10	0.10	1		03/21/14 09:38		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/12/14 14:38	18496-25-8	M1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**147**	mg/L	20.0	1.2	20		03/18/14 14:12	16887-00-6	
Sulfate	**87.1**	mg/L	20.0	2.0	20		03/18/14 14:12	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 13:06	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.026	1		03/08/14 08:30		H1
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/08/14 08:30		H1
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		03/08/14 08:30		H1
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**329**	mg/L			1		03/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 13:09	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.15**	mg/L	0.030	0.015	1	03/17/14 07:55	03/17/14 10:58		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: DUP-1-201403 **Lab ID: 60164418002** Collected: 03/06/14 12:50 Received: 03/08/14 02:14 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		03/14/14 18:48	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**33.4J**	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:08	7439-89-6	
Manganese	**5.3**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:08	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		03/12/14 17:42	67-64-1	L3
Benzene	ND	ug/L	5.0	0.060	1		03/12/14 17:42	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/12/14 17:42	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/12/14 17:42	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/12/14 17:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/12/14 17:42	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/12/14 17:42	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/12/14 17:42	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/12/14 17:42	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/12/14 17:42	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/12/14 17:42	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/12/14 17:42	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/12/14 17:42	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/12/14 17:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/12/14 17:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 17:42	75-35-4	
cis-1,2-Dichloroethene	**0.51J**	ug/L	5.0	0.080	1		03/12/14 17:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 17:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/12/14 17:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/12/14 17:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/12/14 17:42	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/12/14 17:42	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/12/14 17:42	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/12/14 17:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/12/14 17:42	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/12/14 17:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/12/14 17:42	79-34-5	
Tetrachloroethene	**0.26J**	ug/L	5.0	0.10	1		03/12/14 17:42	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/12/14 17:42	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/12/14 17:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/12/14 17:42	79-00-5	
Trichloroethene	**0.28J**	ug/L	5.0	0.17	1		03/12/14 17:42	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/12/14 17:42	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/12/14 17:42	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		03/12/14 17:42	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	80-120		1		03/12/14 17:42	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		03/12/14 17:42	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/12/14 17:42		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: DUP-1-201403 **Lab ID: 60164418002** Collected: 03/06/14 12:50 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**60.3**	mg/L	20.0	1.9	1		03/12/14 14:09		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/12/14 14:39	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**82.5**	mg/L	20.0	1.2	20		03/18/14 14:28	16887-00-6	
Sulfate	**16.0**	mg/L	2.0	0.20	2		03/19/14 12:05	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 13:07	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.93**	mg/L	0.10	0.026	1		03/08/14 08:45		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/08/14 08:45		
Nitrogen, NO2 plus NO3	**0.93**	mg/L	0.10	0.012	1		03/08/14 08:45		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 13:34	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.14**	mg/L	0.030	0.015	1	03/17/14 07:55	03/17/14 10:58		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: ITMW-2-201403 **Lab ID: 60164418003** Collected: 03/06/14 12:35 Received: 03/08/14 02:14 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		03/14/14 18:59	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**44.3J**	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:10	7439-89-6	
Manganese	**4.6J**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:10	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**1.9J**	ug/L	10.0	1.9	1		03/12/14 17:56	67-64-1	L3
Benzene	ND	ug/L	5.0	0.060	1		03/12/14 17:56	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/12/14 17:56	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/12/14 17:56	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/12/14 17:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/12/14 17:56	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/12/14 17:56	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/12/14 17:56	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/12/14 17:56	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/12/14 17:56	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/12/14 17:56	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/12/14 17:56	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/12/14 17:56	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/12/14 17:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/12/14 17:56	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 17:56	75-35-4	
cis-1,2-Dichloroethene	**0.40J**	ug/L	5.0	0.080	1		03/12/14 17:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 17:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/12/14 17:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/12/14 17:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/12/14 17:56	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/12/14 17:56	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/12/14 17:56	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/12/14 17:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/12/14 17:56	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/12/14 17:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/12/14 17:56	79-34-5	
Tetrachloroethene	**0.48J**	ug/L	5.0	0.10	1		03/12/14 17:56	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/12/14 17:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/12/14 17:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/12/14 17:56	79-00-5	
Trichloroethene	**0.23J**	ug/L	5.0	0.17	1		03/12/14 17:56	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/12/14 17:56	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/12/14 17:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		03/12/14 17:56	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	80-120		1		03/12/14 17:56	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		03/12/14 17:56	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/12/14 17:56		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: ITMW-2-201403 **Lab ID: 60164418003** Collected: 03/06/14 12:35 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**63.5**	mg/L	20.0	1.9	1		03/12/14 14:13		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.0J**	mg/L	0.20		1		03/24/14 09:26	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		03/21/14 09:38		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/12/14 14:40	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**86.2**	mg/L	20.0	1.2	20		03/18/14 14:43	16887-00-6	
Sulfate	**16.4**	mg/L	2.0	0.20	2		03/19/14 12:21	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 13:08	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.92**	mg/L	0.10	0.026	1		03/08/14 08:43		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/08/14 08:43		
Nitrogen, NO2 plus NO3	**0.92**	mg/L	0.10	0.012	1		03/08/14 08:43		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**174**	mg/L			1		03/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 13:48	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.12**	mg/L	0.030	0.015	1	03/17/14 07:55	03/17/14 10:58		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: ITMW-4-201403 **Lab ID: 60164418004** Collected: 03/06/14 10:40 Received: 03/08/14 02:14 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		03/14/14 19:10	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**1620**	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:12	7439-89-6	
Manganese	**3470**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:12	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**3.1J**	ug/L	10.0	1.9	1		03/12/14 18:10	67-64-1	L1
Benzene	ND	ug/L	5.0	0.060	1		03/12/14 18:10	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/12/14 18:10	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/12/14 18:10	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/12/14 18:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/12/14 18:10	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/12/14 18:10	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/12/14 18:10	56-23-5	
Chlorobenzene	**0.40J**	ug/L	5.0	0.21	1		03/12/14 18:10	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/12/14 18:10	75-00-3	
Chloroform	**0.15J**	ug/L	5.0	0.14	1		03/12/14 18:10	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/12/14 18:10	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/12/14 18:10	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/12/14 18:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/12/14 18:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 18:10	75-35-4	
cis-1,2-Dichloroethene	**2.0J**	ug/L	5.0	0.080	1		03/12/14 18:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 18:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/12/14 18:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/12/14 18:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/12/14 18:10	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/12/14 18:10	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/12/14 18:10	591-78-6	
Methylene chloride	**2.9J**	ug/L	5.0	0.15	1		03/12/14 18:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/12/14 18:10	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/12/14 18:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/12/14 18:10	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/12/14 18:10	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/12/14 18:10	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/12/14 18:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/12/14 18:10	79-00-5	
Trichloroethene	**1.4J**	ug/L	5.0	0.17	1		03/12/14 18:10	79-01-6	
Vinyl chloride	**0.19J**	ug/L	2.0	0.13	1		03/12/14 18:10	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/12/14 18:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		03/12/14 18:10	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120		1		03/12/14 18:10	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		03/12/14 18:10	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/12/14 18:10		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: ITMW-4-201403 **Lab ID: 60164418004** Collected: 03/06/14 10:40 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**94.0**	mg/L	20.0	1.9	1		03/19/14 11:08		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.69**	mg/L	0.20		1		03/24/14 09:26	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		03/21/14 09:38		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/12/14 14:40	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**8.5**	mg/L	2.0	0.12	2		03/19/14 12:36	16887-00-6	
Sulfate	**16.8**	mg/L	2.0	0.20	2		03/19/14 12:36	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.22**	mg/L	0.10	0.014	1		03/11/14 13:11	7664-41-7	M1
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.026	1		03/08/14 08:40		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/08/14 08:40		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		03/08/14 08:40		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**130**	mg/L			1		03/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**8.9**	mg/L	1.0	0.50	1		03/14/14 14:00	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.14**	mg/L	0.030	0.015	1	03/17/14 07:55	03/17/14 10:58		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: MW-28-201403 **Lab ID: 60164418005** Collected: 03/06/14 15:54 Received: 03/08/14 02:14 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		03/14/14 19:22	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**539**	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:14	7439-89-6	
Manganese	**48.2**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:14	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.0J**	ug/L	10.0	1.9	1		03/12/14 18:24	67-64-1	L1
Benzene	ND	ug/L	5.0	0.060	1		03/12/14 18:24	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/12/14 18:24	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/12/14 18:24	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/12/14 18:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/12/14 18:24	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/12/14 18:24	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/12/14 18:24	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/12/14 18:24	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/12/14 18:24	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/12/14 18:24	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/12/14 18:24	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/12/14 18:24	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/12/14 18:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/12/14 18:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 18:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/12/14 18:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 18:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/12/14 18:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/12/14 18:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/12/14 18:24	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/12/14 18:24	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/12/14 18:24	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/12/14 18:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/12/14 18:24	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/12/14 18:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/12/14 18:24	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/12/14 18:24	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/12/14 18:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/12/14 18:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/12/14 18:24	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/12/14 18:24	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/12/14 18:24	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/12/14 18:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	91	%	80-120		1		03/12/14 18:24	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	80-120		1		03/12/14 18:24	17060-07-0	
Toluene-d8 (S)	94	%	80-120		1		03/12/14 18:24	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/12/14 18:24		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: MW-28-201403 **Lab ID: 60164418005** Collected: 03/06/14 15:54 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**84.2**	mg/L	20.0	1.9	1		03/19/14 11:17		D6
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.54**	mg/L	0.20		1		03/24/14 09:26	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.2**	Std. Units	0.10	0.10	1		03/21/14 09:38		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/12/14 14:40	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**24.3**	mg/L	5.0	0.31	5		03/19/14 12:51	16887-00-6	
Sulfate	**40.9**	mg/L	5.0	0.49	5		03/19/14 12:51	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 13:16	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.028J**	mg/L	0.10	0.026	1		03/08/14 08:48		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/08/14 08:48		
Nitrogen, NO2 plus NO3	**0.028J**	mg/L	0.10	0.012	1		03/08/14 08:48		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**176**	mg/L			1		03/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 14:40	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.14**	mg/L	0.030	0.015	1	03/17/14 07:55	03/17/14 10:58		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: MW-68-201403 **Lab ID: 60164418006** Collected: 03/06/14 08:40 Received: 03/08/14 02:14 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		03/14/14 19:33	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:17	7439-89-6	
Manganese	**574**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:17	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		03/12/14 18:39	67-64-1	L3
Benzene	ND	ug/L	5.0	0.060	1		03/12/14 18:39	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/12/14 18:39	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/12/14 18:39	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/12/14 18:39	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/12/14 18:39	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/12/14 18:39	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/12/14 18:39	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/12/14 18:39	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/12/14 18:39	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/12/14 18:39	67-66-3	
Chloromethane	**0.14J**	ug/L	10.0	0.080	1		03/12/14 18:39	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/12/14 18:39	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/12/14 18:39	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/12/14 18:39	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 18:39	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/12/14 18:39	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 18:39	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/12/14 18:39	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/12/14 18:39	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/12/14 18:39	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/12/14 18:39	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/12/14 18:39	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/12/14 18:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/12/14 18:39	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/12/14 18:39	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/12/14 18:39	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/12/14 18:39	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/12/14 18:39	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/12/14 18:39	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/12/14 18:39	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/12/14 18:39	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/12/14 18:39	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/12/14 18:39	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		03/12/14 18:39	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	80-120		1		03/12/14 18:39	17060-07-0	
Toluene-d8 (S)	93	%	80-120		1		03/12/14 18:39	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/12/14 18:39		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: MW-68-201403 **Lab ID: 60164418006** Collected: 03/06/14 08:40 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**9.0J**	mg/L	20.0	1.9	1		03/19/14 11:24		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.0J**	mg/L	0.20		1		03/24/14 09:26	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		03/21/14 09:38		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/12/14 14:40	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**301**	mg/L	20.0	1.2	20		03/18/14 16:00	16887-00-6	
Sulfate	**1.3**	mg/L	1.0	0.098	1		03/19/14 13:07	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 13:17	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**25.4**	mg/L	2.0	0.52	20		03/08/14 08:36		
Nitrogen, Nitrite	ND	mg/L	2.0	0.52	20		03/08/14 08:36		
Nitrogen, NO2 plus NO3	**25.4**	mg/L	2.0	0.24	20		03/08/14 08:36		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		03/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 14:53	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.24**	mg/L	0.030	0.015	1	03/17/14 07:55	03/17/14 10:59		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: MW-40-201403 **Lab ID: 60164418007** Collected: 03/06/14 11:35 Received: 03/08/14 02:14 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		03/14/14 19:44	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:23	7439-89-6	
Manganese	**175**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:23	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		03/12/14 18:53	67-64-1	L3
Benzene	ND	ug/L	5.0	0.060	1		03/12/14 18:53	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/12/14 18:53	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/12/14 18:53	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/12/14 18:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/12/14 18:53	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/12/14 18:53	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/12/14 18:53	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/12/14 18:53	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/12/14 18:53	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/12/14 18:53	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/12/14 18:53	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/12/14 18:53	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/12/14 18:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/12/14 18:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 18:53	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/12/14 18:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 18:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/12/14 18:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/12/14 18:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/12/14 18:53	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/12/14 18:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/12/14 18:53	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/12/14 18:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/12/14 18:53	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/12/14 18:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/12/14 18:53	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/12/14 18:53	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/12/14 18:53	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/12/14 18:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/12/14 18:53	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/12/14 18:53	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/12/14 18:53	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/12/14 18:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		03/12/14 18:53	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120		1		03/12/14 18:53	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		03/12/14 18:53	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/12/14 18:53		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: MW-40-201403 **Lab ID: 60164418007** Collected: 03/06/14 11:35 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**17.9J**	mg/L	20.0	1.9	1		03/19/14 11:28		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.0J**	mg/L	0.20		1		03/24/14 09:26	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		03/21/14 09:38		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/12/14 14:40	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**224**	mg/L	20.0	1.2	20		03/18/14 16:16	16887-00-6	
Sulfate	**2.5**	mg/L	1.0	0.098	1		03/19/14 13:22	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 13:18	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.064J**	mg/L	0.10	0.026	1		03/08/14 08:41		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/08/14 08:41		
Nitrogen, NO2 plus NO3	**0.064J**	mg/L	0.10	0.012	1		03/08/14 08:41		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		03/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 15:06	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	0.015	1	03/17/14 07:55	03/17/14 10:59		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: IW-72-201403 **Lab ID: 60164418008** Collected: 03/06/14 14:05 Received: 03/08/14 02:14 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		03/17/14 10:47	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**182**	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:26	7439-89-6	
Manganese	**9070**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:26	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**4.7J**	ug/L	10.0	1.9	1		03/12/14 19:07	67-64-1	L1
Benzene	ND	ug/L	5.0	0.060	1		03/12/14 19:07	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/12/14 19:07	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/12/14 19:07	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/12/14 19:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/12/14 19:07	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/12/14 19:07	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/12/14 19:07	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/12/14 19:07	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/12/14 19:07	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/12/14 19:07	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/12/14 19:07	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/12/14 19:07	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/12/14 19:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/12/14 19:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 19:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/12/14 19:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 19:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/12/14 19:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/12/14 19:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/12/14 19:07	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/12/14 19:07	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/12/14 19:07	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/12/14 19:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/12/14 19:07	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/12/14 19:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/12/14 19:07	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/12/14 19:07	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/12/14 19:07	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/12/14 19:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/12/14 19:07	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/12/14 19:07	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/12/14 19:07	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/12/14 19:07	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		03/12/14 19:07	460-00-4	
1,2-Dichloroethane-d4 (S)	116	%	80-120		1		03/12/14 19:07	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		03/12/14 19:07	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/12/14 19:07		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: IW-72-201403 **Lab ID: 60164418008** Collected: 03/06/14 14:05 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**120**	mg/L	20.0	1.9	1		03/19/14 11:32		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.14J**	mg/L	0.20		1		03/24/14 09:26	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		03/21/14 09:38		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/12/14 14:41	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**203**	mg/L	20.0	1.2	20		03/18/14 16:31	16887-00-6	
Sulfate	**9.3**	mg/L	1.0	0.098	1		03/19/14 13:38	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 13:19	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.56J**	mg/L	1.0	0.26	10		03/08/14 08:47		D3
Nitrogen, Nitrite	ND	mg/L	1.0	0.26	10		03/08/14 08:47		D3
Nitrogen, NO2 plus NO3	**0.56J**	mg/L	1.0	0.12	10		03/08/14 08:47		D3
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**315**	mg/L			1		03/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/18/14 17:01	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**5.2**	mg/L	0.30	0.15	1	03/17/14 07:55	03/17/14 10:59		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: MW-36-201403 **Lab ID: 60164418009** Collected: 03/06/14 15:55 Received: 03/08/14 02:14 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		03/14/14 19:56	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**286**	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:28	7439-89-6	
Manganese	**465**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:28	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		03/12/14 19:22	67-64-1	L3
Benzene	ND	ug/L	5.0	0.060	1		03/12/14 19:22	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/12/14 19:22	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/12/14 19:22	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/12/14 19:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/12/14 19:22	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/12/14 19:22	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/12/14 19:22	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/12/14 19:22	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/12/14 19:22	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/12/14 19:22	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/12/14 19:22	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/12/14 19:22	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/12/14 19:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/12/14 19:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 19:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/12/14 19:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 19:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/12/14 19:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/12/14 19:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/12/14 19:22	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/12/14 19:22	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/12/14 19:22	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/12/14 19:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/12/14 19:22	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/12/14 19:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/12/14 19:22	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/12/14 19:22	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/12/14 19:22	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/12/14 19:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/12/14 19:22	79-00-5	
Trichloroethene	**0.22J**	ug/L	5.0	0.17	1		03/12/14 19:22	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/12/14 19:22	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/12/14 19:22	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		03/12/14 19:22	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	80-120		1		03/12/14 19:22	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		03/12/14 19:22	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/12/14 19:22		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: MW-36-201403 **Lab ID: 60164418009** Collected: 03/06/14 15:55 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**20.7**	mg/L	20.0	1.9	1		03/19/14 11:35		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.046J**	mg/L	0.20		1		03/24/14 09:26	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		03/21/14 09:38		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/12/14 14:41	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**225**	mg/L	20.0	1.2	20		03/18/14 16:47	16887-00-6	
Sulfate	**5.2**	mg/L	1.0	0.098	1		03/19/14 13:53	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 13:20	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.026	1		03/08/14 08:51		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/08/14 08:51		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		03/08/14 08:51		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**274**	mg/L			1		03/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 15:32	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.18**	mg/L	0.030	0.015	1	03/17/14 07:55	03/17/14 11:00		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: MW-39-201403 **Lab ID: 60164418010** Collected: 03/06/14 17:35 Received: 03/08/14 02:14 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		03/14/14 20:07	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**189**	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:30	7439-89-6	
Manganese	**332**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:30	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		03/12/14 23:10	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/12/14 23:10	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/12/14 23:10	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/12/14 23:10	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/12/14 23:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/12/14 23:10	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/12/14 23:10	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/12/14 23:10	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/12/14 23:10	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/12/14 23:10	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/12/14 23:10	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/12/14 23:10	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/12/14 23:10	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/12/14 23:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/12/14 23:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 23:10	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/12/14 23:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 23:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/12/14 23:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/12/14 23:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/12/14 23:10	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/12/14 23:10	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/12/14 23:10	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/12/14 23:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/12/14 23:10	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/12/14 23:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/12/14 23:10	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/12/14 23:10	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/12/14 23:10	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/12/14 23:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/12/14 23:10	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/12/14 23:10	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/12/14 23:10	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/12/14 23:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		03/12/14 23:10	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	80-120		1		03/12/14 23:10	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		03/12/14 23:10	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/12/14 23:10		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: MW-39-201403 **Lab ID: 60164418010** Collected: 03/06/14 17:35 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**13.5J**	mg/L	20.0	1.9	1		03/19/14 11:39		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.15J**	mg/L	0.20		1		03/24/14 09:26	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		03/21/14 09:38		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/12/14 14:41	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**288**	mg/L	20.0	1.2	20		03/18/14 17:02	16887-00-6	
Sulfate	**18.6**	mg/L	2.0	0.20	2		03/19/14 14:39	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.026J**	mg/L	0.10	0.014	1		03/11/14 13:22	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.026	1		03/08/14 08:52		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/08/14 08:52		
Nitrogen, NO2 plus NO3	**0.024J**	mg/L	0.10	0.012	1		03/08/14 08:52		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**0.0**	mg/L			1		03/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 15:48	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	0.015	1	03/17/14 07:55	03/17/14 11:00		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: MW-50-201403 **Lab ID: 60164418011** Collected: 03/06/14 10:30 Received: 03/08/14 02:14 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		03/14/14 20:18	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**872**	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:32	7439-89-6	
Manganese	**200**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:32	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**5.8J**	ug/L	10.0	1.9	1		03/12/14 23:24	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/12/14 23:24	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/12/14 23:24	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/12/14 23:24	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/12/14 23:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/12/14 23:24	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/12/14 23:24	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/12/14 23:24	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/12/14 23:24	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/12/14 23:24	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/12/14 23:24	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/12/14 23:24	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/12/14 23:24	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/12/14 23:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/12/14 23:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 23:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/12/14 23:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 23:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/12/14 23:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/12/14 23:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/12/14 23:24	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/12/14 23:24	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/12/14 23:24	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/12/14 23:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/12/14 23:24	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/12/14 23:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/12/14 23:24	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/12/14 23:24	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/12/14 23:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/12/14 23:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/12/14 23:24	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/12/14 23:24	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/12/14 23:24	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/12/14 23:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		03/12/14 23:24	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		03/12/14 23:24	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		03/12/14 23:24	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/12/14 23:24		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: MW-50-201403 **Lab ID: 60164418011** Collected: 03/06/14 10:30 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**221**	mg/L	20.0	1.9	1		03/19/14 11:53		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.87**	mg/L	0.20		1		03/24/14 09:26	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		03/21/14 09:38		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/12/14 14:41	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**227**	mg/L	20.0	1.2	20		03/18/14 17:17	16887-00-6	
Sulfate	**1.9**	mg/L	1.0	0.098	1		03/19/14 14:55	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 13:23	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.026	1		03/08/14 08:38		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/08/14 08:38		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		03/08/14 08:38		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**259**	mg/L			1		03/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 16:00	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.14**	mg/L	0.030	0.015	1	03/17/14 07:55	03/17/14 11:00		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: MW-60-201403 **Lab ID: 60164418012** Collected: 03/06/14 13:00 Received: 03/08/14 02:14 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		03/14/14 20:29	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**2780**	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:35	7439-89-6	
Manganese	**995**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:35	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**3.6J**	ug/L	10.0	1.9	1		03/12/14 23:38	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/12/14 23:38	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/12/14 23:38	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/12/14 23:38	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/12/14 23:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/12/14 23:38	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/12/14 23:38	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/12/14 23:38	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/12/14 23:38	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/12/14 23:38	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/12/14 23:38	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/12/14 23:38	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/12/14 23:38	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/12/14 23:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/12/14 23:38	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 23:38	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/12/14 23:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 23:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/12/14 23:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/12/14 23:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/12/14 23:38	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/12/14 23:38	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/12/14 23:38	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/12/14 23:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/12/14 23:38	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/12/14 23:38	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/12/14 23:38	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/12/14 23:38	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/12/14 23:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/12/14 23:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/12/14 23:38	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/12/14 23:38	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/12/14 23:38	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/12/14 23:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		03/12/14 23:38	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	80-120		1		03/12/14 23:38	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		03/12/14 23:38	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/12/14 23:38		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: MW-60-201403 **Lab ID: 60164418012** Collected: 03/06/14 13:00 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**377**	mg/L	20.0	1.9	1		03/19/14 11:58		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	**0.020J**	mg/L	0.050	0.0096	1		03/12/14 14:42	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**130**	mg/L	20.0	1.2	20		03/18/14 17:33	16887-00-6	
Sulfate	**32.9**	mg/L	5.0	0.49	5		03/19/14 15:10	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 13:24	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.026	1		03/08/14 08:45		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/08/14 08:45		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.012	1		03/08/14 08:45		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 16:13	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**1.2**	mg/L	0.030	0.015	1	03/19/14 07:57	03/19/14 10:53		M1

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: MW-61-201403 **Lab ID: 60164418013** Collected: 03/06/14 14:00 Received: 03/08/14 02:14 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		03/14/14 20:41	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**9650**	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:37	7439-89-6	
Manganese	**85.0**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:37	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.0J**	ug/L	10.0	1.9	1		03/12/14 23:52	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/12/14 23:52	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/12/14 23:52	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/12/14 23:52	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/12/14 23:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/12/14 23:52	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/12/14 23:52	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/12/14 23:52	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/12/14 23:52	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/12/14 23:52	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/12/14 23:52	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/12/14 23:52	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/12/14 23:52	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/12/14 23:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/12/14 23:52	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 23:52	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/12/14 23:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 23:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/12/14 23:52	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/12/14 23:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/12/14 23:52	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/12/14 23:52	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/12/14 23:52	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/12/14 23:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/12/14 23:52	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/12/14 23:52	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/12/14 23:52	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/12/14 23:52	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/12/14 23:52	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/12/14 23:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/12/14 23:52	79-00-5	
Trichloroethene	**4.7J**	ug/L	5.0	0.17	1		03/12/14 23:52	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/12/14 23:52	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/12/14 23:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		03/12/14 23:52	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%	80-120		1		03/12/14 23:52	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		03/12/14 23:52	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/12/14 23:52		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: MW-61-201403 **Lab ID: 60164418013** Collected: 03/06/14 14:00 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**122**	mg/L	20.0	1.9	1		03/19/14 12:03		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**9.6**	mg/L	0.20		1		03/24/14 09:26	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		03/21/14 09:38		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/12/14 14:43	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**93.0**	mg/L	20.0	1.2	20		03/18/14 17:48	16887-00-6	
Sulfate	**24.7**	mg/L	2.0	0.20	2		03/19/14 15:25	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.036J**	mg/L	0.10	0.014	1		03/11/14 13:25	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.2**	mg/L	0.10	0.026	1		03/08/14 08:46		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/08/14 08:46		
Nitrogen, NO2 plus NO3	**1.2**	mg/L	0.10	0.012	1		03/08/14 08:46		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**173**	mg/L			1		03/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 16:26	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.35**	mg/L	0.030	0.015	1	03/19/14 07:57	03/19/14 10:53		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: MW-31-201403 **Lab ID: 60164418014** Collected: 03/06/14 16:00 Received: 03/08/14 02:14 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		03/14/14 20:52	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**161**	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:39	7439-89-6	
Manganese	**239**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:39	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.1J**	ug/L	10.0	1.9	1		03/13/14 00:06	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 00:06	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 00:06	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 00:06	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 00:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 00:06	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 00:06	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 00:06	56-23-5	
Chlorobenzene	**0.24J**	ug/L	5.0	0.21	1		03/13/14 00:06	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 00:06	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 00:06	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 00:06	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 00:06	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 00:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 00:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 00:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/13/14 00:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 00:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 00:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 00:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 00:06	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 00:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 00:06	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 00:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 00:06	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 00:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 00:06	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 00:06	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 00:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 00:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 00:06	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/13/14 00:06	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/13/14 00:06	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 00:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		03/13/14 00:06	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%	80-120		1		03/13/14 00:06	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		03/13/14 00:06	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 00:06		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: MW-31-201403 **Lab ID: 60164418014** Collected: 03/06/14 16:00 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**27.2**	mg/L	20.0	1.9	1		03/19/14 12:07		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.0J**	mg/L	0.20		1		03/24/14 09:26	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		03/21/14 09:38		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/12/14 14:43	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**92.6**	mg/L	5.0	0.31	5		03/19/14 15:41	16887-00-6	
Sulfate	**32.4**	mg/L	5.0	0.49	5		03/19/14 15:41	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 13:28	7664-41-7	M1
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.25**	mg/L	0.10	0.026	1		03/08/14 08:51		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/08/14 08:51		
Nitrogen, NO2 plus NO3	**0.25**	mg/L	0.10	0.012	1		03/08/14 08:51		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**177**	mg/L			1		03/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 19:16	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	ND	mg/L	0.030	0.015	1	03/19/14 07:57	03/19/14 10:53		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: ITMW-10-201403 **Lab ID: 60164418015** Collected: 03/06/14 17:55 Received: 03/08/14 02:14 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	1.9	1		03/13/14 00:21	67-64-1	
Benzene	**0.22J**	ug/L	5.0	0.060	1		03/13/14 00:21	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 00:21	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 00:21	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 00:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 00:21	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 00:21	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 00:21	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 00:21	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 00:21	75-00-3	
Chloroform	**0.21J**	ug/L	5.0	0.14	1		03/13/14 00:21	67-66-3	
Chloromethane	**0.20J**	ug/L	10.0	0.080	1		03/13/14 00:21	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 00:21	124-48-1	
1,1-Dichloroethane	**2.4**	ug/L	2.4	0.050	1		03/13/14 00:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 00:21	107-06-2	
1,1-Dichloroethene	**2.7J**	ug/L	5.0	0.20	1		03/13/14 00:21	75-35-4	
cis-1,2-Dichloroethene	**32.3**	ug/L	5.0	0.080	1		03/13/14 00:21	156-59-2	
trans-1,2-Dichloroethene	**0.83J**	ug/L	5.0	0.20	1		03/13/14 00:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 00:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 00:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 00:21	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 00:21	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 00:21	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 00:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 00:21	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 00:21	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 00:21	79-34-5	
Tetrachloroethene	**0.58J**	ug/L	5.0	0.10	1		03/13/14 00:21	127-18-4	
Toluene	**6.2**	ug/L	5.0	0.17	1		03/13/14 00:21	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 00:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 00:21	79-00-5	
Trichloroethene	**166**	ug/L	5.0	0.17	1		03/13/14 00:21	79-01-6	
Vinyl chloride	**1.2J**	ug/L	2.0	0.13	1		03/13/14 00:21	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 00:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		03/13/14 00:21	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120		1		03/13/14 00:21	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		03/13/14 00:21	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 00:21		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: ITMW-21-201403 **Lab ID: 60164418016** Collected: 03/06/14 17:35 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.3J**	ug/L	10.0	1.9	1		03/13/14 00:35	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 00:35	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 00:35	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 00:35	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 00:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 00:35	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 00:35	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 00:35	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 00:35	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 00:35	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 00:35	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 00:35	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 00:35	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 00:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 00:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 00:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/13/14 00:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 00:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 00:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 00:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 00:35	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 00:35	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 00:35	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 00:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 00:35	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 00:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 00:35	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 00:35	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 00:35	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 00:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 00:35	79-00-5	
Trichloroethene	**14.8**	ug/L	5.0	0.17	1		03/13/14 00:35	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/13/14 00:35	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 00:35	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		03/13/14 00:35	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	80-120		1		03/13/14 00:35	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		03/13/14 00:35	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 00:35		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: TRIP BLANK 1 **Lab ID: 60164418017** Collected: 03/06/14 00:00 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.0J**	ug/L	10.0	1.9	1		03/12/14 22:27	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/12/14 22:27	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/12/14 22:27	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/12/14 22:27	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/12/14 22:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/12/14 22:27	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/12/14 22:27	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/12/14 22:27	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/12/14 22:27	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/12/14 22:27	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/12/14 22:27	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/12/14 22:27	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/12/14 22:27	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/12/14 22:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/12/14 22:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 22:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/12/14 22:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 22:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/12/14 22:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/12/14 22:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/12/14 22:27	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/12/14 22:27	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/12/14 22:27	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/12/14 22:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/12/14 22:27	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/12/14 22:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/12/14 22:27	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/12/14 22:27	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/12/14 22:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/12/14 22:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/12/14 22:27	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/12/14 22:27	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/12/14 22:27	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/12/14 22:27	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		03/12/14 22:27	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	80-120		1		03/12/14 22:27	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		03/12/14 22:27	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/12/14 22:27		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: TRIP BLANK 2 **Lab ID: 60164418018** Collected: 03/06/14 00:00 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.3J**	ug/L	10.0	1.9	1		03/12/14 22:41	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/12/14 22:41	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/12/14 22:41	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/12/14 22:41	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/12/14 22:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/12/14 22:41	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/12/14 22:41	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/12/14 22:41	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/12/14 22:41	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/12/14 22:41	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/12/14 22:41	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/12/14 22:41	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/12/14 22:41	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/12/14 22:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/12/14 22:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 22:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/12/14 22:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 22:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/12/14 22:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/12/14 22:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/12/14 22:41	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/12/14 22:41	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/12/14 22:41	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/12/14 22:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/12/14 22:41	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/12/14 22:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/12/14 22:41	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/12/14 22:41	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/12/14 22:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/12/14 22:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/12/14 22:41	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/12/14 22:41	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/12/14 22:41	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/12/14 22:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		03/12/14 22:41	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	80-120		1		03/12/14 22:41	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		03/12/14 22:41	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/12/14 22:41		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164418

Sample: TRIP BLANK 3 **Lab ID: 60164418019** Collected: 03/06/14 00:00 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.5J**	ug/L	10.0	1.9	1		03/12/14 22:55	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/12/14 22:55	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/12/14 22:55	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/12/14 22:55	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/12/14 22:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/12/14 22:55	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/12/14 22:55	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/12/14 22:55	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/12/14 22:55	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/12/14 22:55	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/12/14 22:55	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/12/14 22:55	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/12/14 22:55	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/12/14 22:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/12/14 22:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 22:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/12/14 22:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/12/14 22:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/12/14 22:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/12/14 22:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/12/14 22:55	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/12/14 22:55	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/12/14 22:55	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/12/14 22:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/12/14 22:55	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/12/14 22:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/12/14 22:55	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/12/14 22:55	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/12/14 22:55	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/12/14 22:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/12/14 22:55	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/12/14 22:55	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/12/14 22:55	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/12/14 22:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		03/12/14 22:55	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%	80-120		1		03/12/14 22:55	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		03/12/14 22:55	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/12/14 22:55		

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164418

QC Batch: GCSV/2356 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60164418001, 60164418002, 60164418003, 60164418004, 60164418005, 60164418006, 60164418007, 60164418009, 60164418010, 60164418011, 60164418012, 60164418013, 60164418014

METHOD BLANK: 66329 Matrix: Water
Associated Lab Samples: 60164418001, 60164418002, 60164418003, 60164418004, 60164418005, 60164418006, 60164418007, 60164418009, 60164418010, 60164418011, 60164418012, 60164418013, 60164418014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	03/14/14 17:40	

LABORATORY CONTROL SAMPLE: 66330

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	106000	106	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 66331 66332

Parameter	Units	60164418001 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.: 60164418

QC Batch: GCSV/2360
QC Batch Method: EPA 8015 - Alcohol
Analysis Method: EPA 8015 - Alcohol
Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60164418008

METHOD BLANK: 66462 Matrix: Water
Associated Lab Samples: 60164418008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	03/17/14 16:37	

LABORATORY CONTROL SAMPLE: 66463

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	95000	95	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 66464 66465

Parameter	Units	60164423001 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	97200	98100	97	98	40-140	1	40	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164418

QC Batch: MPRP/26389 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60164418001, 60164418002, 60164418003, 60164418004, 60164418005, 60164418006, 60164418007, 60164418008, 60164418009, 60164418010, 60164418011, 60164418012, 60164418013, 60164418014

METHOD BLANK: 1341654 Matrix: Water
Associated Lab Samples: 60164418001, 60164418002, 60164418003, 60164418004, 60164418005, 60164418006, 60164418007, 60164418008, 60164418009, 60164418010, 60164418011, 60164418012, 60164418013, 60164418014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	03/12/14 10:57	
Manganese	ug/L	ND	5.0	03/12/14 10:57	

LABORATORY CONTROL SAMPLE: 1341655

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	10200	102	80-120	
Manganese	ug/L	1000	1010	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1341656 1341657

Parameter	Units	60164418001 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	10000	10200	100	102	75-125	1	20	
Manganese	ug/L	47.7	1000	1000	1030	1040	99	100	75-125	1	20	

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164418

QC Batch: MSV/59987 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60164418002, 60164418003, 60164418004, 60164418005, 60164418006, 60164418007, 60164418008, 60164418009

METHOD BLANK: 1342566 Matrix: Water
Associated Lab Samples: 60164418002, 60164418003, 60164418004, 60164418005, 60164418006, 60164418007, 60164418008, 60164418009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	03/12/14 16:02	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/12/14 16:02	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/12/14 16:02	
1,1-Dichloroethane	ug/L	ND	2.4	03/12/14 16:02	
1,1-Dichloroethene	ug/L	ND	5.0	03/12/14 16:02	
1,2-Dichloroethane	ug/L	ND	5.0	03/12/14 16:02	
1,2-Dichloropropane	ug/L	ND	5.0	03/12/14 16:02	
2-Butanone (MEK)	ug/L	ND	10.0	03/12/14 16:02	
2-Hexanone	ug/L	ND	10.0	03/12/14 16:02	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	03/12/14 16:02	
Acetone	ug/L	ND	10.0	03/12/14 16:02	
Benzene	ug/L	ND	5.0	03/12/14 16:02	
Bromodichloromethane	ug/L	ND	5.0	03/12/14 16:02	
Bromoform	ug/L	ND	5.0	03/12/14 16:02	
Bromomethane	ug/L	ND	7.0	03/12/14 16:02	
Carbon disulfide	ug/L	0.16J	10.0	03/12/14 16:02	
Carbon tetrachloride	ug/L	ND	5.0	03/12/14 16:02	
Chlorobenzene	ug/L	ND	5.0	03/12/14 16:02	
Chloroethane	ug/L	ND	10.0	03/12/14 16:02	
Chloroform	ug/L	ND	5.0	03/12/14 16:02	
Chloromethane	ug/L	ND	10.0	03/12/14 16:02	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/12/14 16:02	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/12/14 16:02	
Dibromochloromethane	ug/L	ND	5.0	03/12/14 16:02	
Ethylbenzene	ug/L	ND	5.0	03/12/14 16:02	
Methylene chloride	ug/L	ND	5.0	03/12/14 16:02	
Styrene	ug/L	ND	5.0	03/12/14 16:02	
Tetrachloroethene	ug/L	ND	5.0	03/12/14 16:02	
Toluene	ug/L	ND	5.0	03/12/14 16:02	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/12/14 16:02	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/12/14 16:02	
Trichloroethene	ug/L	ND	5.0	03/12/14 16:02	
Vinyl chloride	ug/L	ND	2.0	03/12/14 16:02	
Xylene (Total)	ug/L	ND	5.0	03/12/14 16:02	
1,2-Dichloroethane-d4 (S)	%	109	80-120	03/12/14 16:02	
4-Bromofluorobenzene (S)	%	97	80-120	03/12/14 16:02	
Toluene-d8 (S)	%	101	80-120	03/12/14 16:02	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164418

LABORATORY CONTROL SAMPLE: 1342567

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.7	104	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	18.6	93	73-124	
1,1,2-Trichloroethane	ug/L	20	18.2	91	80-120	
1,1-Dichloroethane	ug/L	20	18.8	94	77-120	
1,1-Dichloroethene	ug/L	20	19.6	98	78-126	
1,2-Dichloroethane	ug/L	20	21.5	107	77-123	
1,2-Dichloropropane	ug/L	20	20.3	102	80-121	
2-Butanone (MEK)	ug/L	100	125	125	52-145	
2-Hexanone	ug/L	100	109	109	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	102	102	71-131	
Acetone	ug/L	100	165	165	32-155	L0
Benzene	ug/L	20	19.9	100	80-120	
Bromodichloromethane	ug/L	20	20.3	102	80-120	
Bromoform	ug/L	20	18.3	91	73-124	
Bromomethane	ug/L	20	13.4	67	31-144	
Carbon disulfide	ug/L	20	20.5	102	65-125	
Carbon tetrachloride	ug/L	20	21.0	105	78-128	
Chlorobenzene	ug/L	20	19.9	100	80-120	
Chloroethane	ug/L	20	17.7	89	55-137	
Chloroform	ug/L	20	19.3	96	79-120	
Chloromethane	ug/L	20	11.6	58	22-138	
cis-1,2-Dichloroethene	ug/L	20	21.4	107	80-120	
cis-1,3-Dichloropropene	ug/L	20	17.8	89	80-120	
Dibromochloromethane	ug/L	20	19.6	98	80-120	
Ethylbenzene	ug/L	20	19.4	97	80-121	
Methylene chloride	ug/L	20	20.7	104	73-126	
Styrene	ug/L	20	19.1	95	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	19.8	99	79-121	
trans-1,3-Dichloropropene	ug/L	20	20.3	101	80-127	
Trichloroethene	ug/L	20	19.4	97	80-120	
Vinyl chloride	ug/L	20	16.9	84	59-120	
Xylene (Total)	ug/L	60	58.4	97	80-121	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			97	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164418

QC Batch: MSV/59989 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60164418010, 60164418011, 60164418012, 60164418013, 60164418014, 60164418015, 60164418016, 60164418017, 60164418018, 60164418019

METHOD BLANK: 1342572 Matrix: Water
Associated Lab Samples: 60164418010, 60164418011, 60164418012, 60164418013, 60164418014, 60164418015, 60164418016, 60164418017, 60164418018, 60164418019

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	03/12/14 22:13	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/12/14 22:13	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/12/14 22:13	
1,1-Dichloroethane	ug/L	ND	2.4	03/12/14 22:13	
1,1-Dichloroethene	ug/L	ND	5.0	03/12/14 22:13	
1,2-Dichloroethane	ug/L	ND	5.0	03/12/14 22:13	
1,2-Dichloropropane	ug/L	ND	5.0	03/12/14 22:13	
2-Butanone (MEK)	ug/L	ND	10.0	03/12/14 22:13	
2-Hexanone	ug/L	ND	10.0	03/12/14 22:13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	03/12/14 22:13	
Acetone	ug/L	1.9J	10.0	03/12/14 22:13	
Benzene	ug/L	ND	5.0	03/12/14 22:13	
Bromodichloromethane	ug/L	ND	5.0	03/12/14 22:13	
Bromoform	ug/L	ND	5.0	03/12/14 22:13	
Bromomethane	ug/L	ND	7.0	03/12/14 22:13	
Carbon disulfide	ug/L	0.17J	10.0	03/12/14 22:13	
Carbon tetrachloride	ug/L	ND	5.0	03/12/14 22:13	
Chlorobenzene	ug/L	ND	5.0	03/12/14 22:13	
Chloroethane	ug/L	ND	10.0	03/12/14 22:13	
Chloroform	ug/L	ND	5.0	03/12/14 22:13	
Chloromethane	ug/L	0.085J	10.0	03/12/14 22:13	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/12/14 22:13	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/12/14 22:13	
Dibromochloromethane	ug/L	ND	5.0	03/12/14 22:13	
Ethylbenzene	ug/L	ND	5.0	03/12/14 22:13	
Methylene chloride	ug/L	ND	5.0	03/12/14 22:13	
Styrene	ug/L	ND	5.0	03/12/14 22:13	
Tetrachloroethene	ug/L	ND	5.0	03/12/14 22:13	
Toluene	ug/L	ND	5.0	03/12/14 22:13	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/12/14 22:13	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/12/14 22:13	
Trichloroethene	ug/L	ND	5.0	03/12/14 22:13	
Vinyl chloride	ug/L	ND	2.0	03/12/14 22:13	
Xylene (Total)	ug/L	ND	5.0	03/12/14 22:13	
1,2-Dichloroethane-d4 (S)	%	110	80-120	03/12/14 22:13	
4-Bromofluorobenzene (S)	%	97	80-120	03/12/14 22:13	
Toluene-d8 (S)	%	98	80-120	03/12/14 22:13	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164418

LABORATORY CONTROL SAMPLE: 1342573

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	22.1	111	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	16.8	84	73-124	
1,1,2-Trichloroethane	ug/L	20	17.8	89	80-120	
1,1-Dichloroethane	ug/L	20	19.0	95	77-120	
1,1-Dichloroethene	ug/L	20	20.2	101	78-126	
1,2-Dichloroethane	ug/L	20	21.2	106	77-123	
1,2-Dichloropropane	ug/L	20	19.7	99	80-121	
2-Butanone (MEK)	ug/L	100	111	111	52-145	
2-Hexanone	ug/L	100	95.3	95	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	92.8	93	71-131	
Acetone	ug/L	100	148	148	32-155	
Benzene	ug/L	20	20.3	101	80-120	
Bromodichloromethane	ug/L	20	21.0	105	80-120	
Bromoform	ug/L	20	18.8	94	73-124	
Bromomethane	ug/L	20	16.4	82	31-144	
Carbon disulfide	ug/L	20	21.1	106	65-125	
Carbon tetrachloride	ug/L	20	21.5	108	78-128	
Chlorobenzene	ug/L	20	19.6	98	80-120	
Chloroethane	ug/L	20	19.7	98	55-137	
Chloroform	ug/L	20	19.9	99	79-120	
Chloromethane	ug/L	20	13.6	68	22-138	
cis-1,2-Dichloroethene	ug/L	20	21.5	108	80-120	
cis-1,3-Dichloropropene	ug/L	20	17.3	86	80-120	
Dibromochloromethane	ug/L	20	19.0	95	80-120	
Ethylbenzene	ug/L	20	18.6	93	80-121	
Methylene chloride	ug/L	20	20.8	104	73-126	
Styrene	ug/L	20	19.2	96	80-120	
Tetrachloroethene	ug/L	20	19.9	100	80-121	
Toluene	ug/L	20	20.0	100	80-122	
trans-1,2-Dichloroethene	ug/L	20	20.7	104	79-121	
trans-1,3-Dichloropropene	ug/L	20	19.3	96	80-127	
Trichloroethene	ug/L	20	19.5	97	80-120	
Vinyl chloride	ug/L	20	17.9	90	59-120	
Xylene (Total)	ug/L	60	58.0	97	80-121	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			92	80-120	
Toluene-d8 (S)	%			98	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164418

QC Batch: MSV/60009
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60164418001

METHOD BLANK: 1343069
Matrix: Water
Associated Lab Samples: 60164418001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	03/13/14 11:10	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/13/14 11:10	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/13/14 11:10	
1,1-Dichloroethane	ug/L	ND	2.4	03/13/14 11:10	
1,1-Dichloroethene	ug/L	ND	5.0	03/13/14 11:10	
1,2-Dichloroethane	ug/L	ND	5.0	03/13/14 11:10	
1,2-Dichloropropane	ug/L	ND	5.0	03/13/14 11:10	
2-Butanone (MEK)	ug/L	ND	10.0	03/13/14 11:10	
2-Hexanone	ug/L	ND	10.0	03/13/14 11:10	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	03/13/14 11:10	
Acetone	ug/L	ND	10.0	03/13/14 11:10	
Benzene	ug/L	ND	5.0	03/13/14 11:10	
Bromodichloromethane	ug/L	ND	5.0	03/13/14 11:10	
Bromoform	ug/L	ND	5.0	03/13/14 11:10	
Bromomethane	ug/L	ND	7.0	03/13/14 11:10	
Carbon disulfide	ug/L	0.24J	10.0	03/13/14 11:10	
Carbon tetrachloride	ug/L	ND	5.0	03/13/14 11:10	
Chlorobenzene	ug/L	ND	5.0	03/13/14 11:10	
Chloroethane	ug/L	ND	10.0	03/13/14 11:10	
Chloroform	ug/L	ND	5.0	03/13/14 11:10	
Chloromethane	ug/L	ND	10.0	03/13/14 11:10	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/13/14 11:10	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/13/14 11:10	
Dibromochloromethane	ug/L	ND	5.0	03/13/14 11:10	
Ethylbenzene	ug/L	ND	5.0	03/13/14 11:10	
Methylene chloride	ug/L	ND	5.0	03/13/14 11:10	
Styrene	ug/L	ND	5.0	03/13/14 11:10	
Tetrachloroethene	ug/L	ND	5.0	03/13/14 11:10	
Toluene	ug/L	ND	5.0	03/13/14 11:10	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/13/14 11:10	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/13/14 11:10	
Trichloroethene	ug/L	ND	5.0	03/13/14 11:10	
Vinyl chloride	ug/L	ND	2.0	03/13/14 11:10	
Xylene (Total)	ug/L	ND	5.0	03/13/14 11:10	
1,2-Dichloroethane-d4 (S)	%	111	80-120	03/13/14 11:10	
4-Bromofluorobenzene (S)	%	99	80-120	03/13/14 11:10	
Toluene-d8 (S)	%	96	80-120	03/13/14 11:10	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164418

LABORATORY CONTROL SAMPLE: 1343070

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.4	107	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	18.3	92	73-124	
1,1,2-Trichloroethane	ug/L	20	18.1	90	80-120	
1,1-Dichloroethane	ug/L	20	18.7	93	77-120	
1,1-Dichloroethene	ug/L	20	19.0	95	78-126	
1,2-Dichloroethane	ug/L	20	21.8	109	77-123	
1,2-Dichloropropane	ug/L	20	19.7	98	80-121	
2-Butanone (MEK)	ug/L	100	145	145	52-145	
2-Hexanone	ug/L	100	127	127	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	106	106	71-131	
Acetone	ug/L	100	211	211	32-155	L0,SS
Benzene	ug/L	20	19.3	97	80-120	
Bromodichloromethane	ug/L	20	20.1	100	80-120	
Bromoform	ug/L	20	19.7	99	73-124	
Bromomethane	ug/L	20	13.6	68	31-144	
Carbon disulfide	ug/L	20	19.6	98	65-125	
Carbon tetrachloride	ug/L	20	21.0	105	78-128	
Chlorobenzene	ug/L	20	19.1	96	80-120	
Chloroethane	ug/L	20	19.4	97	55-137	
Chloroform	ug/L	20	19.6	98	79-120	
Chloromethane	ug/L	20	10.7	53	22-138	
cis-1,2-Dichloroethene	ug/L	20	21.7	108	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.3	92	80-120	
Dibromochloromethane	ug/L	20	19.3	97	80-120	
Ethylbenzene	ug/L	20	19.3	96	80-121	
Methylene chloride	ug/L	20	19.2	96	73-126	
Styrene	ug/L	20	18.6	93	80-120	
Tetrachloroethene	ug/L	20	19.7	98	80-121	
Toluene	ug/L	20	19.2	96	80-122	
trans-1,2-Dichloroethene	ug/L	20	19.2	96	79-121	
trans-1,3-Dichloropropene	ug/L	20	20.3	102	80-127	
Trichloroethene	ug/L	20	18.3	91	80-120	
Vinyl chloride	ug/L	20	15.5	77	59-120	
Xylene (Total)	ug/L	60	56.8	95	80-121	
1,2-Dichloroethane-d4 (S)	%			104	80-120	
4-Bromofluorobenzene (S)	%			93	80-120	
Toluene-d8 (S)	%			98	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164418

QC Batch: WET/46613 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60164418001, 60164418002, 60164418003

METHOD BLANK: 1342328 Matrix: Water
Associated Lab Samples: 60164418001, 60164418002, 60164418003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	20.0	03/12/14 11:53	

LABORATORY CONTROL SAMPLE: 1342329

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	507	101	90-110	

SAMPLE DUPLICATE: 1342330

Parameter	Units	60163791002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	937	987	5	10	

SAMPLE DUPLICATE: 1342331

Parameter	Units	60163791003 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	1560	1600	3	10	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164418

QC Batch: WET/46752 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60164418004, 60164418005, 60164418006, 60164418007, 60164418008, 60164418009, 60164418010, 60164418011, 60164418012, 60164418013, 60164418014

METHOD BLANK: 1346274 Matrix: Water
Associated Lab Samples: 60164418004, 60164418005, 60164418006, 60164418007, 60164418008, 60164418009, 60164418010, 60164418011, 60164418012, 60164418013, 60164418014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	20.0	03/19/14 11:04	

LABORATORY CONTROL SAMPLE: 1346275

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

SAMPLE DUPLICATE: 1346276

Parameter	Units	60164418004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	94.0	91.9	2	10	

SAMPLE DUPLICATE: 1346277

Parameter	Units	60164418005 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	84.2	94.9	12	10	D6

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164418

QC Batch: WET/46616 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60164418001, 60164418002, 60164418003, 60164418004, 60164418005, 60164418006, 60164418007, 60164418008, 60164418009, 60164418010, 60164418011, 60164418012, 60164418013, 60164418014

METHOD BLANK: 1342353 Matrix: Water
Associated Lab Samples: 60164418001, 60164418002, 60164418003, 60164418004, 60164418005, 60164418006, 60164418007, 60164418008, 60164418009, 60164418010, 60164418011, 60164418012, 60164418013, 60164418014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	03/12/14 14:32	

LABORATORY CONTROL SAMPLE: 1342354

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.47	94	80-120	

MATRIX SPIKE SAMPLE: 1342355

Parameter	Units	60164418001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.37	74	75-125	M1

SAMPLE DUPLICATE: 1342356

Parameter	Units	60164418002 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.: 60164418

QC Batch: WETA/28639 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60164418001, 60164418002, 60164418003, 60164418004, 60164418005, 60164418006, 60164418007, 60164418008, 60164418009, 60164418010, 60164418011, 60164418012, 60164418013, 60164418014

METHOD BLANK: 1345628 Matrix: Water
Associated Lab Samples: 60164418001, 60164418002, 60164418003, 60164418006, 60164418007, 60164418008, 60164418009, 60164418010, 60164418011, 60164418012, 60164418013, 60164418014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	03/18/14 10:16	
Sulfate	mg/L	ND	1.0	03/18/14 10:16	

METHOD BLANK: 1346945 Matrix: Water
Associated Lab Samples: 60164418002, 60164418003, 60164418004, 60164418005, 60164418006, 60164418007, 60164418008, 60164418009, 60164418010, 60164418011, 60164418012, 60164418013, 60164418014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	03/19/14 10:48	
Sulfate	mg/L	ND	1.0	03/19/14 10:48	

LABORATORY CONTROL SAMPLE: 1345629

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	97	90-110	
Sulfate	mg/L	5	5.0	100	90-110	

LABORATORY CONTROL SAMPLE: 1346946

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	97	90-110	
Sulfate	mg/L	5	4.9	99	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1345630 1345631

Parameter	Units	60164627003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	13.5	25	25	35.4	35.6	87	88	80-120	1	15	
Sulfate	mg/L	58.3	25	25	81.0	80.5	91	89	80-120	1	15	

MATRIX SPIKE SAMPLE: 1345632

Parameter	Units	60164717001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	1630	500	2060	86	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164418

MATRIX SPIKE SAMPLE: 1345632

Parameter	Units	60164717001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfate	mg/L	147	500	655	101	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164418

QC Batch: WETA/28540 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60164418001, 60164418002, 60164418003, 60164418004, 60164418005, 60164418006, 60164418007, 60164418008, 60164418009, 60164418010, 60164418011, 60164418012, 60164418013, 60164418014

METHOD BLANK: 1341802 Matrix: Water
Associated Lab Samples: 60164418001, 60164418002, 60164418003, 60164418004, 60164418005, 60164418006, 60164418007, 60164418008, 60164418009, 60164418010, 60164418011, 60164418012, 60164418013, 60164418014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	03/11/14 13:09	

LABORATORY CONTROL SAMPLE: 1341803

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.0	101	90-110	

MATRIX SPIKE SAMPLE: 1341804

Parameter	Units	60164418004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.22	2	1.6	70	90-110	M1

MATRIX SPIKE SAMPLE: 1341805

Parameter	Units	60164418014 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.1	57	90-110	M1

SAMPLE DUPLICATE: 1341806

Parameter	Units	60164423003 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.: 60164418

QC Batch: WETA/28505 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60164418001, 60164418002, 60164418003, 60164418004, 60164418005, 60164418006, 60164418007, 60164418008, 60164418009, 60164418010, 60164418011, 60164418012, 60164418013, 60164418014

METHOD BLANK: 1340640 Matrix: Water
Associated Lab Samples: 60164418001, 60164418002, 60164418003, 60164418004, 60164418005, 60164418006, 60164418007, 60164418008, 60164418009, 60164418010, 60164418011, 60164418012, 60164418013, 60164418014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	03/08/14 08:37	
Nitrogen, Nitrite	mg/L	ND	0.10	03/08/14 08:37	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	03/08/14 08:37	

LABORATORY CONTROL SAMPLE: 1340641

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.7	105	85-115	
Nitrogen, Nitrite	mg/L	.4	0.36	91	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.0	102	90-110	

MATRIX SPIKE SAMPLE: 1340642

Parameter	Units	60164411011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	ND	1.6	1.7	107	85-115	
Nitrogen, Nitrite	mg/L		.4	0.38	94	90-110	
Nitrogen, NO2 plus NO3	mg/L		2	2.1	105	90-110	

MATRIX SPIKE SAMPLE: 1340643

Parameter	Units	60164418007 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	0.064J	1.6	1.8	109	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.38	96	90-110	
Nitrogen, NO2 plus NO3	mg/L	0.064J	2	2.2	106	90-110	

SAMPLE DUPLICATE: 1340644

Parameter	Units	60164418003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.92	0.90	2	20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	0.92	0.90	2	20	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164418

QC Batch: WETA/28594 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60164418001, 60164418002, 60164418003, 60164418004, 60164418005, 60164418006, 60164418007, 60164418009, 60164418010, 60164418011, 60164418012, 60164418013

METHOD BLANK: 1343816 Matrix: Water
Associated Lab Samples: 60164418001, 60164418002, 60164418003, 60164418004, 60164418005, 60164418006, 60164418007, 60164418009, 60164418010, 60164418011, 60164418012, 60164418013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	03/14/14 12:04	

LABORATORY CONTROL SAMPLE: 1343817

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	4.8	96	80-120	

MATRIX SPIKE SAMPLE: 1343818

Parameter	Units	60164307002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	ND	5	2.3	47	80-120	M1

SAMPLE DUPLICATE: 1343834

Parameter	Units	60164418001 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.: 60164418

QC Batch: WETA/28595
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60164418014

METHOD BLANK: 1343837 Matrix: Water
Associated Lab Samples: 60164418014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	03/14/14 17:19	

LABORATORY CONTROL SAMPLE: 1343838

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	4.9	98	80-120	

MATRIX SPIKE SAMPLE: 1343839

Parameter	Units	60164258004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	1.5	5	4.5	59	80-120	M1

SAMPLE DUPLICATE: 1343840

Parameter	Units	60164395001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	1.3	1.3	1	25	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164418

QC Batch: WETA/28605
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60164418008

METHOD BLANK: 1344829 Matrix: Water
Associated Lab Samples: 60164418008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	03/18/14 16:35	

LABORATORY CONTROL SAMPLE: 1344830

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	4.9	99	80-120	

MATRIX SPIKE SAMPLE: 1344831

Parameter	Units	60164821001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	21.7	25	39.9	73	80-120	M1

SAMPLE DUPLICATE: 1344832

Parameter	Units	60164821002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	45.0	43.8	3	25	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164418

QC Batch: WETA/4460 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60164418001, 60164418002, 60164418003, 60164418004, 60164418005, 60164418006, 60164418007, 60164418008, 60164418009, 60164418010, 60164418011

METHOD BLANK: 66347 Matrix: Water
Associated Lab Samples: 60164418001, 60164418002, 60164418003, 60164418004, 60164418005, 60164418006, 60164418007, 60164418008, 60164418009, 60164418010, 60164418011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	03/17/14 10:40	

LABORATORY CONTROL SAMPLE: 66348

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.7	111	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 66349 66350

Parameter	Units	7512842001 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	5.5	1.5	1.5	6.8	6.6	87	73	80-120	3	20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 66353 66354

Parameter	Units	60164418005 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	0.14	1.5	1.5	1.7	1.8	102	106	80-120	3	20	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164418

QC Batch: WETA/4469 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60164418012, 60164418013, 60164418014

METHOD BLANK: 66692 Matrix: Water
Associated Lab Samples: 60164418012, 60164418013, 60164418014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	03/19/14 10:52	

LABORATORY CONTROL SAMPLE: 66693

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.5	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 66694 66695

Parameter	Units	60164418012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphate as P04	mg/L	1.2	1.5	1.5	2.2	2.2	64	68	80-120	3	20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 66698 66699

Parameter	Units	7512983002 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	1.9	1.7	121	111	80-120	9	20	M1

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QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60164418

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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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/59987

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

Batch: MSV/59989

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

Batch: MSV/60009

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

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
D6	The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
H1	Analysis conducted outside the EPA method holding time.
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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QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60164418

ANALYTE QUALIFIERS

SS	This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60164418

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60164418001	ITMW-6-201403	EPA 8015 - Alcohol	GCSV/2356		
60164418002	DUP-1-201403	EPA 8015 - Alcohol	GCSV/2356		
60164418003	ITMW-2-201403	EPA 8015 - Alcohol	GCSV/2356		
60164418004	ITMW-4-201403	EPA 8015 - Alcohol	GCSV/2356		
60164418005	MW-28-201403	EPA 8015 - Alcohol	GCSV/2356		
60164418006	MW-68-201403	EPA 8015 - Alcohol	GCSV/2356		
60164418007	MW-40-201403	EPA 8015 - Alcohol	GCSV/2356		
60164418008	IW-72-201403	EPA 8015 - Alcohol	GCSV/2360		
60164418009	MW-36-201403	EPA 8015 - Alcohol	GCSV/2356		
60164418010	MW-39-201403	EPA 8015 - Alcohol	GCSV/2356		
60164418011	MW-50-201403	EPA 8015 - Alcohol	GCSV/2356		
60164418012	MW-60-201403	EPA 8015 - Alcohol	GCSV/2356		
60164418013	MW-61-201403	EPA 8015 - Alcohol	GCSV/2356		
60164418014	MW-31-201403	EPA 8015 - Alcohol	GCSV/2356		
60164418001	ITMW-6-201403	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164418002	DUP-1-201403	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164418003	ITMW-2-201403	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164418004	ITMW-4-201403	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164418005	MW-28-201403	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164418006	MW-68-201403	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164418007	MW-40-201403	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164418008	IW-72-201403	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164418009	MW-36-201403	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164418010	MW-39-201403	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164418011	MW-50-201403	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164418012	MW-60-201403	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164418013	MW-61-201403	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164418014	MW-31-201403	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164418001	ITMW-6-201403	EPA 5030B/8260	MSV/60009		
60164418002	DUP-1-201403	EPA 5030B/8260	MSV/59987		
60164418003	ITMW-2-201403	EPA 5030B/8260	MSV/59987		
60164418004	ITMW-4-201403	EPA 5030B/8260	MSV/59987		
60164418005	MW-28-201403	EPA 5030B/8260	MSV/59987		
60164418006	MW-68-201403	EPA 5030B/8260	MSV/59987		
60164418007	MW-40-201403	EPA 5030B/8260	MSV/59987		
60164418008	IW-72-201403	EPA 5030B/8260	MSV/59987		
60164418009	MW-36-201403	EPA 5030B/8260	MSV/59987		
60164418010	MW-39-201403	EPA 5030B/8260	MSV/59989		
60164418011	MW-50-201403	EPA 5030B/8260	MSV/59989		
60164418012	MW-60-201403	EPA 5030B/8260	MSV/59989		
60164418013	MW-61-201403	EPA 5030B/8260	MSV/59989		
60164418014	MW-31-201403	EPA 5030B/8260	MSV/59989		
60164418015	ITMW-10-201403	EPA 5030B/8260	MSV/59989		
60164418016	ITMW-21-201403	EPA 5030B/8260	MSV/59989		
60164418017	TRIP BLANK 1	EPA 5030B/8260	MSV/59989		
60164418018	TRIP BLANK 2	EPA 5030B/8260	MSV/59989		

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60164418

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60164418019	TRIP BLANK 3	EPA 5030B/8260	MSV/59989		
60164418001	ITMW-6-201403	SM 2320B	WET/46613		
60164418002	DUP-1-201403	SM 2320B	WET/46613		
60164418003	ITMW-2-201403	SM 2320B	WET/46613		
60164418004	ITMW-4-201403	SM 2320B	WET/46752		
60164418005	MW-28-201403	SM 2320B	WET/46752		
60164418006	MW-68-201403	SM 2320B	WET/46752		
60164418007	MW-40-201403	SM 2320B	WET/46752		
60164418008	IW-72-201403	SM 2320B	WET/46752		
60164418009	MW-36-201403	SM 2320B	WET/46752		
60164418010	MW-39-201403	SM 2320B	WET/46752		
60164418011	MW-50-201403	SM 2320B	WET/46752		
60164418012	MW-60-201403	SM 2320B	WET/46752		
60164418013	MW-61-201403	SM 2320B	WET/46752		
60164418014	MW-31-201403	SM 2320B	WET/46752		
60164418001	ITMW-6-201403	SM 3500-Fe B#4	WET/46842		
60164418003	ITMW-2-201403	SM 3500-Fe B#4	WET/46842		
60164418004	ITMW-4-201403	SM 3500-Fe B#4	WET/46842		
60164418005	MW-28-201403	SM 3500-Fe B#4	WET/46842		
60164418006	MW-68-201403	SM 3500-Fe B#4	WET/46842		
60164418007	MW-40-201403	SM 3500-Fe B#4	WET/46842		
60164418008	IW-72-201403	SM 3500-Fe B#4	WET/46842		
60164418009	MW-36-201403	SM 3500-Fe B#4	WET/46842		
60164418010	MW-39-201403	SM 3500-Fe B#4	WET/46842		
60164418011	MW-50-201403	SM 3500-Fe B#4	WET/46842		
60164418013	MW-61-201403	SM 3500-Fe B#4	WET/46842		
60164418014	MW-31-201403	SM 3500-Fe B#4	WET/46842		
60164418001	ITMW-6-201403	SM 4500-H+B	WET/46809		
60164418003	ITMW-2-201403	SM 4500-H+B	WET/46809		
60164418004	ITMW-4-201403	SM 4500-H+B	WET/46809		
60164418005	MW-28-201403	SM 4500-H+B	WET/46809		
60164418006	MW-68-201403	SM 4500-H+B	WET/46809		
60164418007	MW-40-201403	SM 4500-H+B	WET/46809		
60164418008	IW-72-201403	SM 4500-H+B	WET/46809		
60164418009	MW-36-201403	SM 4500-H+B	WET/46809		
60164418010	MW-39-201403	SM 4500-H+B	WET/46809		
60164418011	MW-50-201403	SM 4500-H+B	WET/46809		
60164418013	MW-61-201403	SM 4500-H+B	WET/46809		
60164418014	MW-31-201403	SM 4500-H+B	WET/46809		
60164418001	ITMW-6-201403	SM 4500-S-2 D	WET/46616		
60164418002	DUP-1-201403	SM 4500-S-2 D	WET/46616		
60164418003	ITMW-2-201403	SM 4500-S-2 D	WET/46616		
60164418004	ITMW-4-201403	SM 4500-S-2 D	WET/46616		
60164418005	MW-28-201403	SM 4500-S-2 D	WET/46616		
60164418006	MW-68-201403	SM 4500-S-2 D	WET/46616		
60164418007	MW-40-201403	SM 4500-S-2 D	WET/46616		

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(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60164418

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60164418008	IW-72-201403	SM 4500-S-2 D	WET/46616		
60164418009	MW-36-201403	SM 4500-S-2 D	WET/46616		
60164418010	MW-39-201403	SM 4500-S-2 D	WET/46616		
60164418011	MW-50-201403	SM 4500-S-2 D	WET/46616		
60164418012	MW-60-201403	SM 4500-S-2 D	WET/46616		
60164418013	MW-61-201403	SM 4500-S-2 D	WET/46616		
60164418014	MW-31-201403	SM 4500-S-2 D	WET/46616		
60164418001	ITMW-6-201403	EPA 300.0	WETA/28639		
60164418002	DUP-1-201403	EPA 300.0	WETA/28639		
60164418003	ITMW-2-201403	EPA 300.0	WETA/28639		
60164418004	ITMW-4-201403	EPA 300.0	WETA/28639		
60164418005	MW-28-201403	EPA 300.0	WETA/28639		
60164418006	MW-68-201403	EPA 300.0	WETA/28639		
60164418007	MW-40-201403	EPA 300.0	WETA/28639		
60164418008	IW-72-201403	EPA 300.0	WETA/28639		
60164418009	MW-36-201403	EPA 300.0	WETA/28639		
60164418010	MW-39-201403	EPA 300.0	WETA/28639		
60164418011	MW-50-201403	EPA 300.0	WETA/28639		
60164418012	MW-60-201403	EPA 300.0	WETA/28639		
60164418013	MW-61-201403	EPA 300.0	WETA/28639		
60164418014	MW-31-201403	EPA 300.0	WETA/28639		
60164418001	ITMW-6-201403	EPA 350.1	WETA/28540		
60164418002	DUP-1-201403	EPA 350.1	WETA/28540		
60164418003	ITMW-2-201403	EPA 350.1	WETA/28540		
60164418004	ITMW-4-201403	EPA 350.1	WETA/28540		
60164418005	MW-28-201403	EPA 350.1	WETA/28540		
60164418006	MW-68-201403	EPA 350.1	WETA/28540		
60164418007	MW-40-201403	EPA 350.1	WETA/28540		
60164418008	IW-72-201403	EPA 350.1	WETA/28540		
60164418009	MW-36-201403	EPA 350.1	WETA/28540		
60164418010	MW-39-201403	EPA 350.1	WETA/28540		
60164418011	MW-50-201403	EPA 350.1	WETA/28540		
60164418012	MW-60-201403	EPA 350.1	WETA/28540		
60164418013	MW-61-201403	EPA 350.1	WETA/28540		
60164418014	MW-31-201403	EPA 350.1	WETA/28540		
60164418001	ITMW-6-201403	EPA 353.2	WETA/28505		
60164418002	DUP-1-201403	EPA 353.2	WETA/28505		
60164418003	ITMW-2-201403	EPA 353.2	WETA/28505		
60164418004	ITMW-4-201403	EPA 353.2	WETA/28505		
60164418005	MW-28-201403	EPA 353.2	WETA/28505		
60164418006	MW-68-201403	EPA 353.2	WETA/28505		
60164418007	MW-40-201403	EPA 353.2	WETA/28505		
60164418008	IW-72-201403	EPA 353.2	WETA/28505		
60164418009	MW-36-201403	EPA 353.2	WETA/28505		
60164418010	MW-39-201403	EPA 353.2	WETA/28505		
60164418011	MW-50-201403	EPA 353.2	WETA/28505		
60164418012	MW-60-201403	EPA 353.2	WETA/28505		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60164418

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60164418013	MW-61-201403	EPA 353.2	WETA/28505		
60164418014	MW-31-201403	EPA 353.2	WETA/28505		
60164418001	ITMW-6-201403	SM 4500-CO2 D	WETA/28737		
60164418003	ITMW-2-201403	SM 4500-CO2 D	WETA/28737		
60164418004	ITMW-4-201403	SM 4500-CO2 D	WETA/28737		
60164418005	MW-28-201403	SM 4500-CO2 D	WETA/28737		
60164418006	MW-68-201403	SM 4500-CO2 D	WETA/28737		
60164418007	MW-40-201403	SM 4500-CO2 D	WETA/28737		
60164418008	IW-72-201403	SM 4500-CO2 D	WETA/28737		
60164418009	MW-36-201403	SM 4500-CO2 D	WETA/28737		
60164418010	MW-39-201403	SM 4500-CO2 D	WETA/28737		
60164418011	MW-50-201403	SM 4500-CO2 D	WETA/28737		
60164418013	MW-61-201403	SM 4500-CO2 D	WETA/28737		
60164418014	MW-31-201403	SM 4500-CO2 D	WETA/28737		
60164418001	ITMW-6-201403	SM 5310C	WETA/28594		
60164418002	DUP-1-201403	SM 5310C	WETA/28594		
60164418003	ITMW-2-201403	SM 5310C	WETA/28594		
60164418004	ITMW-4-201403	SM 5310C	WETA/28594		
60164418005	MW-28-201403	SM 5310C	WETA/28594		
60164418006	MW-68-201403	SM 5310C	WETA/28594		
60164418007	MW-40-201403	SM 5310C	WETA/28594		
60164418008	IW-72-201403	SM 5310C	WETA/28605		
60164418009	MW-36-201403	SM 5310C	WETA/28594		
60164418010	MW-39-201403	SM 5310C	WETA/28594		
60164418011	MW-50-201403	SM 5310C	WETA/28594		
60164418012	MW-60-201403	SM 5310C	WETA/28594		
60164418013	MW-61-201403	SM 5310C	WETA/28594		
60164418014	MW-31-201403	SM 5310C	WETA/28595		
60164418001	ITMW-6-201403	SM4500-P B	WETA/4460	SM 4500-P E	WETA/4462
60164418002	DUP-1-201403	SM4500-P B	WETA/4460	SM 4500-P E	WETA/4462
60164418003	ITMW-2-201403	SM4500-P B	WETA/4460	SM 4500-P E	WETA/4462
60164418004	ITMW-4-201403	SM4500-P B	WETA/4460	SM 4500-P E	WETA/4462
60164418005	MW-28-201403	SM4500-P B	WETA/4460	SM 4500-P E	WETA/4462
60164418006	MW-68-201403	SM4500-P B	WETA/4460	SM 4500-P E	WETA/4462
60164418007	MW-40-201403	SM4500-P B	WETA/4460	SM 4500-P E	WETA/4462
60164418008	IW-72-201403	SM4500-P B	WETA/4460	SM 4500-P E	WETA/4462
60164418009	MW-36-201403	SM4500-P B	WETA/4460	SM 4500-P E	WETA/4462
60164418010	MW-39-201403	SM4500-P B	WETA/4460	SM 4500-P E	WETA/4462
60164418011	MW-50-201403	SM4500-P B	WETA/4460	SM 4500-P E	WETA/4462
60164418012	MW-60-201403	SM4500-P B	WETA/4469	SM 4500-P E	WETA/4470
60164418013	MW-61-201403	SM4500-P B	WETA/4469	SM 4500-P E	WETA/4470
60164418014	MW-31-201403	SM4500-P B	WETA/4469	SM 4500-P E	WETA/4470

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Sample Condition Upon Receipt

WO#: 60164418

60164418

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: 1.8, 2.8, 4.8, 2.0

Temperature should be above freezing to 6°C

Date and initials of person examining contents: 3/8/14 BH

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, 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: 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): 020314-38FD		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MW Date: 3/10/14

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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:	

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:	
Company Name:	
Address:	
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: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH + Zn	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Alkalinity	TOC	Chloride/Sulfate	Bromide	6010-Iron/Mn	Ferric Iron calc.	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.	
1	ITMW-6-201403	WT	G			3/6/14	830		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X		3D6914 3D6914	001
2	~~Dupe~~ Dup-1-201403	WT	G			3/6/14	1250		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X			002
3	ITMW-2-201403	WT	G			3/6/14	1235		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X			003
4	ITMW-4-201403	WT	G			3/6/14	1040		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X			004
5	ITMW-21-201403	WT	G			3/6/14	1735		3				X						X												016
6	MW-28-201403	WT	G			3/6/14	1554		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X			005
7	MW-~~88~~ 68-201403	WT	G			3/6/14	840		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X			006
8	MW-40-201403	WT	G			3/6/14	1135		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X			007
9	MW-72-201403	WT	G			3/6/14	1405		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X			008
10	MW-36-201403	WT	G			3/6/14	1555		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X			009
11	MW-39-201403	WT	G			3/6/14	1735		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X			010
12	MW-50-201403					3/6/14	1030		11	X	X	X	X	X					X	X	X	X	X	X	X	X	X	X			011

Requested Analysis Filtered (Y/N)

19
6016 4422 3/6/14

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Wendy Stonestreet	3/6/2014	1900	~~FedEx~~ UPS Courier	3/7/14					
				Client Cl's 1 DASI KS	3/8/14	0630	1-8	Y	Y	Y
							2-8	Y	Y	Y
							4-8	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:			2.0	Y	Y	Y
SIGNATURE of SAMPLER:	DATE Signed (MM/DD/YY):					

*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: 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:	Tamara Gleason tgleason@environcorp.com
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
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: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

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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 + Zn	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Alkalinity	TOC	Chloride/Sulfate	Bromide	6010-Iron/Mn	Ferric Iron calc.	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-60-201403 (1BP3Z^1,2,3, 1RP3W^1,3)	WT	G	(1BP3J^1,3, 1AG3S, 1BP3U)		3/6/14	1300		11	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	3DG24 3DG2U	012
2	MW-61-201403	WT	G			3/6/14	1400		11	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X		013
3	MW-31-201403	WT	G			3/6/14	1600		11	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X		014
4	ITMW-10-201403	WT	G			3/6/14	1755		3				X					X												015
5	TRIP Blank1	WT	G			3/6/14			2				X					X											2DG24	017
6	TRIP Blank2	WT	G			3/6/14			2				X					X												018
7	TRIP Blank3	WT	G			3/6/14			2				X					X												019
8																														
9																														
10																														
11																														
12																														

Requested Analysis Filtered (Y/N)

18

6016442 BA 3/8/14

Pace Project No./ Lab I.D.

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	Wendy Stonestreet	3/6/2014	1900	~~FedEx~~ DES courier	3/8/14	
				Brent Clark / PASI KS	3/8/14	0630

SAMPLE CONDITIONS

	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
L8	2.0	Y	Y	Y
2_8		Y	Y	Y
4_8		Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER:

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY):

*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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April 08, 2014

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

RE: Project: FORT SMITH, AR
Pace Project No.: 60164423

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on March 08, 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 4/8/14 to correct J-flags.

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: FORT SMITH, AR
Pace Project No.: 60164423

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 #: T104704407-13-4
Utah Certification #: KS000212013-3
Illinois Certification #: 003097

Dallas Certification IDs
400 West Bethany Dr Suite 190 75013 Allen TX 75013
Texas Certification #: T104704232-13-5
Kansas Certification #: E-10388
Arkansas Certification #: 88-0647
Oklahoma Certification #: 2012-080
Louisiana Certification #: 02007

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SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60164423

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60164423001	ITMW-16-201403	Water	03/07/14 10:45	03/08/14 02:14
60164423002	MW-27-201403	Water	03/07/14 08:50	03/08/14 02:14
60164423003	MW-67-201403	Water	03/07/14 09:50	03/08/14 02:14
60164423004	MW-66-201403	Water	03/07/14 11:35	03/08/14 02:14
60164423005	MW-62-201403	Water	03/07/14 11:15	03/08/14 02:14
60164423006	MW-63-201403	Water	03/07/14 13:00	03/08/14 02:14
60164423007	MW-58-201403	Water	03/07/14 15:15	03/08/14 02:14
60164423008	MW-57-201403	Water	03/07/14 14:05	03/08/14 02:14
60164423009	MW-56-201403	Water	03/07/14 13:54	03/08/14 02:14
60164423010	MW-46R-201403	Water	03/07/14 15:15	03/08/14 02:14
60164423011	TRIP BLANK	Water	03/07/14 08:30	03/08/14 02:14
60164423012	IW-74-201403	Water	03/07/14 16:30	03/08/14 02:14
60164423013	DUP-2-201403	Water	03/07/14 16:30	03/08/14 02:14
60164423014	MW-71-201403	Water	03/07/14 16:00	03/08/14 02:14
60164423015	RW-69-201403	Water	03/07/14 17:00	03/08/14 02:14

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60164423

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60164423001	**ITMW-16-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164423002	**MW-27-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164423003	**MW-67-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164423004	**MW-66-201403**	EPA 8015 - Alcohol	TA	1	PASI-D

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60164423

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164423005	**MW-62-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60164423006	**MW-63-201403**	EPA 8015 - Alcohol	TA	1	PASI-D
		EPA 6010	TDS	2	PASI-K
		EPA 5030B/8260	PRG	38	PASI-K
		SM 2320B	DJR	1	PASI-K
		SM 3500-Fe B#4	JML	1	PASI-K
		SM 4500-H+B	JML	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	DJR	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60164423

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-P E	BAF	1	PASI-D
60164423007	**MW-58-201403**	EPA 5030B/8260	PRG	38	PASI-K
60164423008	**MW-57-201403**	EPA 5030B/8260	PRG	38	PASI-K
60164423009	**MW-56-201403**	EPA 5030B/8260	PRG	38	PASI-K
60164423010	**MW-46R-201403**	EPA 5030B/8260	PRG	38	PASI-K
60164423011	**TRIP BLANK**	EPA 5030B/8260	PRG	38	PASI-K
60164423012	**IW-74-201403**	EPA 5030B/8260	PRG	38	PASI-K
60164423013	**DUP-2-201403**	EPA 5030B/8260	PRG	38	PASI-K
60164423014	**MW-71-201403**	EPA 5030B/8260	PRG	38	PASI-K
60164423015	**RW-69-201403**	EPA 5030B/8260	PRG	38	PASI-K

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60164423

Method: **EPA 8015 - Alcohol**
Description: Alcohol by Direct Inject GCFID
Client: Environ_AR
Date: April 08, 2014

General Information:
6 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.: 60164423

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Environ_AR
Date: April 08, 2014

General Information:
6 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.: 60164423

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 08, 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.

QC Batch: MSV/60009

SS: This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

- LCS (Lab ID: 1343070)
  - Acetone

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/60009

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

- LCS (Lab ID: 1343070)
  - Acetone

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

QC Batch: MSV/59989

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

QC Batch: MSV/60009

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.: 60164423

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: Environ_AR
Date: April 08, 2014

General Information:
6 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.

QC Batch: WET/46752

D6: The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.

- DUP (Lab ID: 1346277)
  - Alkalinity, Total as CaCO3

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60164423

Method: **SM 3500-Fe B#4**
Description: Iron, Ferric (Calculation)
Client: Environ_AR
Date: April 08, 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.: 60164423

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: April 08, 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.
- ITMW-16-201403 (Lab ID: 60164423001)
- MW-27-201403 (Lab ID: 60164423002)
- MW-62-201403 (Lab ID: 60164423005)
- MW-63-201403 (Lab ID: 60164423006)
- MW-66-201403 (Lab ID: 60164423004)

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.: 60164423

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Environ_AR
Date: April 08, 2014

General Information:
6 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/46665

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60164408002

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

- MS (Lab ID: 1343747)
  - 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.: 60164423

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Environ_AR
Date: April 08, 2014

General Information:
6 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/28645

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60164423001,60164423002

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

- MS (Lab ID: 1345925)
  - Sulfate

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60164423

Method: **EPA 350.1**
Description: 350.1 Ammonia
Client: Environ_AR
Date: April 08, 2014

General Information:
6 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/28540

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60164418004,60164418014

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

- MS (Lab ID: 1341804)
  - Nitrogen, Ammonia
- MS (Lab ID: 1341805)
  - 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.: 60164423

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Environ_AR
Date: April 08, 2014

General Information:
6 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/28506

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60164371003

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

- MS (Lab ID: 1340748)
  - Nitrogen, Nitrite

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

Additional Comments:

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60164423

Method: **SM 4500-CO2 D**
Description: Total Carbon Dioxide Calc
Client: Environ_AR
Date: April 08, 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.: 60164423

Method: **SM 5310C**
Description: 5310C TOC
Client: Environ_AR
Date: April 08, 2014

General Information:
6 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/28595

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60164258004

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

- MS (Lab ID: 1343839)
  - 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.: 60164423

Method: **SM 4500-P E**
Description: SM4500P-E, Total Phosphorus
Client: Environ_AR
Date: April 08, 2014

General Information:
6 samples were analyzed for SM 4500-P E. All samples were received in acceptable condition with any exceptions noted below.

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

Sample Preparation:
The samples were prepared in accordance with SM4500-P B with any exceptions noted below.

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

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

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

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

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

QC Batch: WETA/4469

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60164418012,7512983002

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

- MS (Lab ID: 66694)
  - Phosphate as P04
- MS (Lab ID: 66698)
  - Phosphate as P04
- MSD (Lab ID: 66695)
  - Phosphate as P04

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: ITMW-16-201403 **Lab ID: 60164423001** Collected: 03/07/14 10:45 Received: 03/08/14 02:14 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		03/17/14 09:40	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**4220**	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:42	7439-89-6	
Manganese	**48.7**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:42	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.1J**	ug/L	10.0	1.9	1		03/13/14 00:49	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 00:49	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 00:49	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 00:49	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 00:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 00:49	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 00:49	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 00:49	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 00:49	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 00:49	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 00:49	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 00:49	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 00:49	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 00:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 00:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 00:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/13/14 00:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 00:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 00:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 00:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 00:49	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 00:49	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 00:49	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 00:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 00:49	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 00:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 00:49	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 00:49	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 00:49	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 00:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 00:49	79-00-5	
Trichloroethene	**0.30J**	ug/L	5.0	0.17	1		03/13/14 00:49	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/13/14 00:49	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 00:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		03/13/14 00:49	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	80-120		1		03/13/14 00:49	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		03/13/14 00:49	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 00:49		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: ITMW-16-201403 **Lab ID: 60164423001** Collected: 03/07/14 10:45 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**59.4**	mg/L	20.0	1.9	1		03/19/14 12:11		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**3.8**	mg/L	0.20		1		03/24/14 09:26	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		03/24/14 09:07		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/14/14 12:35	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**1.2**	mg/L	1.0	0.50	1		03/20/14 08:32	16887-00-6	
Sulfate	**12.1**	mg/L	1.0	0.056	1		03/20/14 08:32	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 13:32	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**2.3**	mg/L	0.10	0.026	1		03/08/14 12:25		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/08/14 12:25		
Nitrogen, NO2 plus NO3	**2.3**	mg/L	0.10	0.012	1		03/08/14 12:25		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**78.2**	mg/L			1		03/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**4.1**	mg/L	1.0	0.50	1		03/14/14 19:55	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.49**	mg/L	0.030	0.015	1	03/19/14 07:57	03/19/14 10:53		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: MW-27-201403 **Lab ID: 60164423002** Collected: 03/07/14 08:50 Received: 03/08/14 02:14 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		03/17/14 09:51	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**3240**	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:44	7439-89-6	
Manganese	**36.9**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:44	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		03/13/14 01:03	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 01:03	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 01:03	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 01:03	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 01:03	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 01:03	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 01:03	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 01:03	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 01:03	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 01:03	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 01:03	67-66-3	
Chloromethane	**0.088J**	ug/L	10.0	0.080	1		03/13/14 01:03	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 01:03	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 01:03	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 01:03	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 01:03	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/13/14 01:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 01:03	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 01:03	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 01:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 01:03	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 01:03	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 01:03	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 01:03	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 01:03	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 01:03	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 01:03	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 01:03	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 01:03	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 01:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 01:03	79-00-5	
Trichloroethene	**0.31J**	ug/L	5.0	0.17	1		03/13/14 01:03	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/13/14 01:03	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 01:03	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		03/13/14 01:03	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	80-120		1		03/13/14 01:03	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		03/13/14 01:03	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 01:03		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: MW-27-201403 **Lab ID: 60164423002** Collected: 03/07/14 08:50 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**28.6**	mg/L	20.0	1.9	1		03/19/14 12:15		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**3.2**	mg/L	0.20		1		03/24/14 09:26	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		03/21/14 09:38		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/14/14 12:35	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**9.8**	mg/L	1.0	0.50	1		03/20/14 09:18	16887-00-6	
Sulfate	**8.6**	mg/L	1.0	0.056	1		03/20/14 09:18	14808-79-8	M1
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 13:33	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.76**	mg/L	0.10	0.026	1		03/08/14 12:26		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/08/14 12:26		
Nitrogen, NO2 plus NO3	**0.76**	mg/L	0.10	0.012	1		03/08/14 12:26		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**87.8**	mg/L			1		03/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.3**	mg/L	1.0	0.50	1		03/14/14 20:08	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.14**	mg/L	0.030	0.015	1	03/19/14 07:57	03/19/14 10:54		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: MW-67-201403 **Lab ID: 60164423003** Collected: 03/07/14 09:50 Received: 03/08/14 02:14 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		03/17/14 10:02	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**926**	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:51	7439-89-6	
Manganese	**7.5**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:51	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		03/13/14 01:17	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 01:17	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 01:17	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 01:17	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 01:17	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 01:17	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 01:17	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 01:17	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 01:17	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 01:17	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 01:17	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 01:17	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 01:17	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 01:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 01:17	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 01:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/13/14 01:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 01:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 01:17	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 01:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 01:17	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 01:17	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 01:17	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 01:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 01:17	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 01:17	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 01:17	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 01:17	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 01:17	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 01:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 01:17	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/13/14 01:17	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/13/14 01:17	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 01:17	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		03/13/14 01:17	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%	80-120		1		03/13/14 01:17	17060-07-0	
Toluene-d8 (S)	93	%	80-120		1		03/13/14 01:17	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 01:17		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: MW-67-201403 **Lab ID: 60164423003** Collected: 03/07/14 09:50 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**269**	mg/L	20.0	1.9	1		03/19/14 12:19		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/14/14 12:36	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**115**	mg/L	20.0	10.0	20		03/18/14 17:43	16887-00-6	
Sulfate	**11.4**	mg/L	2.0	0.11	2		03/20/14 10:20	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 13:34	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.096J**	mg/L	0.10	0.026	1		03/08/14 12:28		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/08/14 12:28		
Nitrogen, NO2 plus NO3	**0.096J**	mg/L	0.10	0.012	1		03/08/14 12:28		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 20:21	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	0.015	1	03/19/14 07:57	03/19/14 10:54		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: MW-66-201403 **Lab ID: 60164423004** Collected: 03/07/14 11:35 Received: 03/08/14 02:14 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		03/17/14 10:13	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**98.6**	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:53	7439-89-6	
Manganese	**7.8**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:53	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.0J**	ug/L	10.0	1.9	1		03/13/14 01:32	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 01:32	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 01:32	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 01:32	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 01:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 01:32	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 01:32	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 01:32	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 01:32	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 01:32	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 01:32	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 01:32	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 01:32	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 01:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 01:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 01:32	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/13/14 01:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 01:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 01:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 01:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 01:32	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 01:32	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 01:32	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 01:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 01:32	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 01:32	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 01:32	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 01:32	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 01:32	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 01:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 01:32	79-00-5	
Trichloroethene	**3.5J**	ug/L	5.0	0.17	1		03/13/14 01:32	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/13/14 01:32	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 01:32	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	91	%	80-120		1		03/13/14 01:32	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120		1		03/13/14 01:32	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		03/13/14 01:32	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 01:32		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: MW-66-201403 **Lab ID: 60164423004** Collected: 03/07/14 11:35 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**101**	mg/L	20.0	1.9	1		03/19/14 12:23		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.069J**	mg/L	0.20		1		03/24/14 09:26	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		03/24/14 09:07		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/14/14 12:36	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**164**	mg/L	20.0	10.0	20		03/18/14 17:59	16887-00-6	
Sulfate	**6.4**	mg/L	1.0	0.056	1		03/20/14 10:35	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 13:36	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.22**	mg/L	0.10	0.026	1		03/08/14 12:29		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/08/14 12:29		
Nitrogen, NO2 plus NO3	**0.22**	mg/L	0.10	0.012	1		03/08/14 12:29		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**261**	mg/L			1		03/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 20:34	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	0.015	1	03/19/14 07:57	03/19/14 10:54		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: MW-62-201403 **Lab ID: 60164423005** Collected: 03/07/14 11:15 Received: 03/08/14 02:14 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		03/17/14 10:25	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**6950**	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:55	7439-89-6	
Manganese	**148**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:55	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		03/13/14 01:46	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 01:46	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 01:46	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 01:46	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 01:46	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 01:46	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 01:46	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 01:46	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 01:46	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 01:46	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 01:46	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 01:46	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 01:46	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 01:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 01:46	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 01:46	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/13/14 01:46	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 01:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 01:46	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 01:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 01:46	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 01:46	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 01:46	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 01:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 01:46	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 01:46	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 01:46	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 01:46	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 01:46	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 01:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 01:46	79-00-5	
Trichloroethene	**0.18J**	ug/L	5.0	0.17	1		03/13/14 01:46	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/13/14 01:46	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 01:46	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		03/13/14 01:46	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	80-120		1		03/13/14 01:46	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		03/13/14 01:46	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 01:46		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: MW-62-201403 **Lab ID: 60164423005** Collected: 03/07/14 11:15 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**41.9**	mg/L	20.0	1.9	1		03/19/14 12:27		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**6.7**	mg/L	0.20		1		03/24/14 09:26	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		03/24/14 09:07		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/14/14 12:36	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**153**	mg/L	20.0	10.0	20		03/18/14 18:14	16887-00-6	
Sulfate	**4.2**	mg/L	1.0	0.056	1		03/20/14 10:51	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 13:38	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.68**	mg/L	0.10	0.026	1		03/08/14 12:30		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/08/14 12:30		
Nitrogen, NO2 plus NO3	**0.68**	mg/L	0.10	0.012	1		03/08/14 12:30		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**314**	mg/L			1		03/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 20:47	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	0.015	1	03/19/14 07:57	03/19/14 10:55		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: MW-63-201403 **Lab ID: 60164423006** Collected: 03/07/14 13:00 Received: 03/08/14 02:14 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		03/17/14 10:36	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**4300**	ug/L	50.0	24.0	1	03/11/14 08:45	03/12/14 11:57	7439-89-6	
Manganese	**62.4**	ug/L	5.0	2.5	1	03/11/14 08:45	03/12/14 11:57	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		03/13/14 02:00	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 02:00	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 02:00	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 02:00	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 02:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 02:00	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 02:00	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 02:00	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 02:00	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 02:00	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 02:00	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 02:00	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 02:00	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 02:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 02:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 02:00	75-35-4	
cis-1,2-Dichloroethene	**1.3J**	ug/L	5.0	0.080	1		03/13/14 02:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 02:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 02:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 02:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 02:00	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 02:00	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 02:00	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 02:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 02:00	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 02:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 02:00	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 02:00	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 02:00	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 02:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 02:00	79-00-5	
Trichloroethene	**9.4**	ug/L	5.0	0.17	1		03/13/14 02:00	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/13/14 02:00	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 02:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		03/13/14 02:00	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	80-120		1		03/13/14 02:00	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		03/13/14 02:00	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 02:00		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: MW-63-201403 **Lab ID: 60164423006** Collected: 03/07/14 13:00 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity, Total as CaCO3	**45.2**	mg/L	20.0	1.9	1		03/19/14 12:30		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**4.2**	mg/L	0.20		1		03/24/14 09:26	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		03/24/14 09:07		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.0096	1		03/14/14 12:36	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**146**	mg/L	20.0	10.0	20		03/18/14 19:00	16887-00-6	
Sulfate	**8.3**	mg/L	1.0	0.056	1		03/20/14 11:06	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.014	1		03/11/14 13:39	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.36**	mg/L	0.10	0.026	1		03/08/14 12:32		
Nitrogen, Nitrite	ND	mg/L	0.10	0.026	1		03/08/14 12:32		
Nitrogen, NO2 plus NO3	**0.36**	mg/L	0.10	0.012	1		03/08/14 12:32		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**277**	mg/L			1		03/24/14 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		03/14/14 21:00	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	0.015	1	03/19/14 07:57	03/19/14 10:55		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: MW-58-201403 **Lab ID: 60164423007** Collected: 03/07/14 15:15 Received: 03/08/14 02:14 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	1.9	1		03/13/14 02:15	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 02:15	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 02:15	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 02:15	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 02:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 02:15	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 02:15	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 02:15	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 02:15	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 02:15	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 02:15	67-66-3	
Chloromethane	**0.12J**	ug/L	10.0	0.080	1		03/13/14 02:15	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 02:15	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 02:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 02:15	107-06-2	
1,1-Dichloroethene	**1.6J**	ug/L	5.0	0.20	1		03/13/14 02:15	75-35-4	
cis-1,2-Dichloroethene	**22.3**	ug/L	5.0	0.080	1		03/13/14 02:15	156-59-2	
trans-1,2-Dichloroethene	**0.35J**	ug/L	5.0	0.20	1		03/13/14 02:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 02:15	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 02:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 02:15	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 02:15	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 02:15	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 02:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 02:15	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 02:15	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 02:15	79-34-5	
Tetrachloroethene	**0.15J**	ug/L	5.0	0.10	1		03/13/14 02:15	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 02:15	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 02:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 02:15	79-00-5	
Trichloroethene	**293**	ug/L	25.0	0.85	5		03/13/14 15:27	79-01-6	
Vinyl chloride	**0.93J**	ug/L	2.0	0.13	1		03/13/14 02:15	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 02:15	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		03/13/14 02:15	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	80-120		1		03/13/14 02:15	17060-07-0	
Toluene-d8 (S)	93	%	80-120		1		03/13/14 02:15	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 02:15		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: MW-57-201403 **Lab ID: 60164423008** Collected: 03/07/14 14:05 Received: 03/08/14 02:14 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	1.9	1		03/13/14 02:29	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 02:29	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 02:29	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 02:29	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 02:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 02:29	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 02:29	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 02:29	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 02:29	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 02:29	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 02:29	67-66-3	
Chloromethane	**0.099J**	ug/L	10.0	0.080	1		03/13/14 02:29	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 02:29	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 02:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 02:29	107-06-2	
1,1-Dichloroethene	**0.56J**	ug/L	5.0	0.20	1		03/13/14 02:29	75-35-4	
cis-1,2-Dichloroethene	**3.0J**	ug/L	5.0	0.080	1		03/13/14 02:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 02:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 02:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 02:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 02:29	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 02:29	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 02:29	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 02:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 02:29	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 02:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 02:29	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 02:29	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 02:29	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 02:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 02:29	79-00-5	
Trichloroethene	**134**	ug/L	5.0	0.17	1		03/13/14 02:29	79-01-6	
Vinyl chloride	**0.14J**	ug/L	2.0	0.13	1		03/13/14 02:29	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 02:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		03/13/14 02:29	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	80-120		1		03/13/14 02:29	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		03/13/14 02:29	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 02:29		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: MW-56-201403 **Lab ID: 60164423009** Collected: 03/07/14 13:54 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**3.5J**	ug/L	10.0	1.9	1		03/13/14 02:43	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 02:43	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 02:43	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 02:43	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 02:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 02:43	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 02:43	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 02:43	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 02:43	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 02:43	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 02:43	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 02:43	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 02:43	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 02:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 02:43	107-06-2	
1,1-Dichloroethene	**1.3J**	ug/L	5.0	0.20	1		03/13/14 02:43	75-35-4	
cis-1,2-Dichloroethene	**15.3**	ug/L	5.0	0.080	1		03/13/14 02:43	156-59-2	
trans-1,2-Dichloroethene	**0.46J**	ug/L	5.0	0.20	1		03/13/14 02:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 02:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 02:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 02:43	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 02:43	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 02:43	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 02:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 02:43	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 02:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 02:43	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 02:43	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 02:43	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 02:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 02:43	79-00-5	
Trichloroethene	**618**	ug/L	50.0	1.7	10		03/13/14 15:42	79-01-6	
Vinyl chloride	**0.15J**	ug/L	2.0	0.13	1		03/13/14 02:43	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 02:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		03/13/14 02:43	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	80-120		1		03/13/14 02:43	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		03/13/14 02:43	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 02:43		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: MW-46R-201403 **Lab ID: 60164423010** Collected: 03/07/14 15:15 Received: 03/08/14 02:14 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	1.9	1		03/13/14 02:57	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 02:57	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 02:57	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 02:57	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 02:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 02:57	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 02:57	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 02:57	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 02:57	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 02:57	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 02:57	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 02:57	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 02:57	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 02:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 02:57	107-06-2	
1,1-Dichloroethene	**1.4J**	ug/L	5.0	0.20	1		03/13/14 02:57	75-35-4	
cis-1,2-Dichloroethene	**12.8**	ug/L	5.0	0.080	1		03/13/14 02:57	156-59-2	
trans-1,2-Dichloroethene	**0.44J**	ug/L	5.0	0.20	1		03/13/14 02:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 02:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 02:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 02:57	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 02:57	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 02:57	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 02:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 02:57	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 02:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 02:57	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 02:57	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 02:57	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 02:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 02:57	79-00-5	
Trichloroethene	**469**	ug/L	50.0	1.7	10		03/13/14 15:56	79-01-6	
Vinyl chloride	**0.46J**	ug/L	2.0	0.13	1		03/13/14 02:57	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 02:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		03/13/14 02:57	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	80-120		1		03/13/14 02:57	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		03/13/14 02:57	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 02:57		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: TRIP BLANK **Lab ID: 60164423011** Collected: 03/07/14 08:30 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.0J**	ug/L	10.0	1.9	1		03/13/14 13:05	67-64-1	L1
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 13:05	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 13:05	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 13:05	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 13:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 13:05	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 13:05	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 13:05	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 13:05	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 13:05	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 13:05	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 13:05	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 13:05	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 13:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 13:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 13:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/13/14 13:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 13:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 13:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 13:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 13:05	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 13:05	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 13:05	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 13:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 13:05	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 13:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 13:05	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 13:05	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 13:05	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 13:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 13:05	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/13/14 13:05	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/13/14 13:05	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 13:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		03/13/14 13:05	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-120		1		03/13/14 13:05	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		03/13/14 13:05	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 13:05		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: IW-74-201403 **Lab ID: 60164423012** Collected: 03/07/14 16:30 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.7J**	ug/L	10.0	1.9	1		03/13/14 14:30	67-64-1	L1
Benzene	**0.17J**	ug/L	5.0	0.060	1		03/13/14 14:30	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 14:30	75-27-4	
Bromoform	**0.41J**	ug/L	5.0	0.070	1		03/13/14 14:30	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 14:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 14:30	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 14:30	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 14:30	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 14:30	108-90-7	
Chloroethane	**1.4J**	ug/L	10.0	0.15	1		03/13/14 14:30	75-00-3	
Chloroform	**0.18J**	ug/L	5.0	0.14	1		03/13/14 14:30	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 14:30	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 14:30	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 14:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 14:30	107-06-2	
1,1-Dichloroethene	**0.23J**	ug/L	5.0	0.20	1		03/13/14 14:30	75-35-4	
cis-1,2-Dichloroethene	**4.3J**	ug/L	5.0	0.080	1		03/13/14 14:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 14:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 14:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 14:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 14:30	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 14:30	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 14:30	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 14:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 14:30	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 14:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 14:30	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 14:30	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 14:30	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 14:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 14:30	79-00-5	
Trichloroethene	**135**	ug/L	5.0	0.17	1		03/13/14 14:30	79-01-6	
Vinyl chloride	**1.5J**	ug/L	2.0	0.13	1		03/13/14 14:30	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 14:30	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		03/13/14 14:30	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120		1		03/13/14 14:30	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		03/13/14 14:30	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 14:30		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: DUP-2-201403 **Lab ID: 60164423013** Collected: 03/07/14 16:30 Received: 03/08/14 02:14 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	1.9	1		03/13/14 14:45	67-64-1	L3
Benzene	**0.16J**	ug/L	5.0	0.060	1		03/13/14 14:45	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 14:45	75-27-4	
Bromoform	**0.23J**	ug/L	5.0	0.070	1		03/13/14 14:45	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 14:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 14:45	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 14:45	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 14:45	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 14:45	108-90-7	
Chloroethane	**1.8J**	ug/L	10.0	0.15	1		03/13/14 14:45	75-00-3	
Chloroform	**0.16J**	ug/L	5.0	0.14	1		03/13/14 14:45	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 14:45	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 14:45	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 14:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 14:45	107-06-2	
1,1-Dichloroethene	**0.39J**	ug/L	5.0	0.20	1		03/13/14 14:45	75-35-4	
cis-1,2-Dichloroethene	**4.5J**	ug/L	5.0	0.080	1		03/13/14 14:45	156-59-2	
trans-1,2-Dichloroethene	**0.31J**	ug/L	5.0	0.20	1		03/13/14 14:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 14:45	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 14:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 14:45	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 14:45	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 14:45	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 14:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 14:45	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 14:45	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 14:45	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 14:45	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 14:45	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 14:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 14:45	79-00-5	
Trichloroethene	**151**	ug/L	5.0	0.17	1		03/13/14 14:45	79-01-6	
Vinyl chloride	**2.2**	ug/L	2.0	0.13	1		03/13/14 14:45	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 14:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	106	%	80-120		1		03/13/14 14:45	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	80-120		1		03/13/14 14:45	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		03/13/14 14:45	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 14:45		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: MW-71-201403 **Lab ID: 60164423014** Collected: 03/07/14 16:00 Received: 03/08/14 02:14 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	1.9	1		03/13/14 14:59	67-64-1	L3
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 14:59	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 14:59	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 14:59	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 14:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 14:59	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 14:59	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 14:59	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 14:59	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 14:59	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 14:59	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 14:59	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 14:59	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 14:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 14:59	107-06-2	
1,1-Dichloroethene	**1.1J**	ug/L	5.0	0.20	1		03/13/14 14:59	75-35-4	
cis-1,2-Dichloroethene	**5.8**	ug/L	5.0	0.080	1		03/13/14 14:59	156-59-2	
trans-1,2-Dichloroethene	**0.27J**	ug/L	5.0	0.20	1		03/13/14 14:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 14:59	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 14:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 14:59	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 14:59	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 14:59	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 14:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 14:59	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 14:59	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 14:59	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 14:59	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 14:59	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 14:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 14:59	79-00-5	
Trichloroethene	**166**	ug/L	5.0	0.17	1		03/13/14 14:59	79-01-6	
Vinyl chloride	**0.19J**	ug/L	2.0	0.13	1		03/13/14 14:59	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 14:59	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		03/13/14 14:59	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		03/13/14 14:59	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		03/13/14 14:59	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 14:59		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164423

Sample: RW-69-201403 **Lab ID: 60164423015** Collected: 03/07/14 17:00 Received: 03/08/14 02:14 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.1J**	ug/L	10.0	1.9	1		03/13/14 15:13	67-64-1	L1
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 15:13	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 15:13	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 15:13	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 15:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 15:13	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 15:13	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 15:13	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 15:13	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 15:13	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 15:13	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 15:13	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 15:13	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 15:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 15:13	107-06-2	
1,1-Dichloroethene	**0.36J**	ug/L	5.0	0.20	1		03/13/14 15:13	75-35-4	
cis-1,2-Dichloroethene	**3.5J**	ug/L	5.0	0.080	1		03/13/14 15:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 15:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 15:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 15:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 15:13	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 15:13	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 15:13	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 15:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 15:13	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 15:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 15:13	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 15:13	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 15:13	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 15:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 15:13	79-00-5	
Trichloroethene	**105**	ug/L	5.0	0.17	1		03/13/14 15:13	79-01-6	
Vinyl chloride	**0.41J**	ug/L	2.0	0.13	1		03/13/14 15:13	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 15:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		03/13/14 15:13	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		03/13/14 15:13	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		03/13/14 15:13	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 15:13		

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164423

QC Batch: GCSV/2360 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

METHOD BLANK: 66462 Matrix: Water
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	03/17/14 16:37	

LABORATORY CONTROL SAMPLE: 66463

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	95000	95	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 66464 66465

Parameter	Units	60164423001 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	97200	98100	97	98	40-140	1	40	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164423

QC Batch: MPRP/26389 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

METHOD BLANK: 1341654 Matrix: Water
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	03/12/14 10:57	
Manganese	ug/L	ND	5.0	03/12/14 10:57	

LABORATORY CONTROL SAMPLE: 1341655

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	10200	102	80-120	
Manganese	ug/L	1000	1010	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1341656 1341657

Parameter	Units	60164418001 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	10000	10200	100	102	75-125	1	20	
Manganese	ug/L	47.7	1000	1000	1030	1040	99	100	75-125	1	20	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164423

QC Batch: MSV/59989 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006, 60164423007, 60164423008, 60164423009, 60164423010

METHOD BLANK: 1342572 Matrix: Water
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006, 60164423007, 60164423008, 60164423009, 60164423010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	03/12/14 22:13	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/12/14 22:13	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/12/14 22:13	
1,1-Dichloroethane	ug/L	ND	2.4	03/12/14 22:13	
1,1-Dichloroethene	ug/L	ND	5.0	03/12/14 22:13	
1,2-Dichloroethane	ug/L	ND	5.0	03/12/14 22:13	
1,2-Dichloropropane	ug/L	ND	5.0	03/12/14 22:13	
2-Butanone (MEK)	ug/L	ND	10.0	03/12/14 22:13	
2-Hexanone	ug/L	ND	10.0	03/12/14 22:13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	03/12/14 22:13	
Acetone	ug/L	1.9J	10.0	03/12/14 22:13	
Benzene	ug/L	ND	5.0	03/12/14 22:13	
Bromodichloromethane	ug/L	ND	5.0	03/12/14 22:13	
Bromoform	ug/L	ND	5.0	03/12/14 22:13	
Bromomethane	ug/L	ND	7.0	03/12/14 22:13	
Carbon disulfide	ug/L	0.17J	10.0	03/12/14 22:13	
Carbon tetrachloride	ug/L	ND	5.0	03/12/14 22:13	
Chlorobenzene	ug/L	ND	5.0	03/12/14 22:13	
Chloroethane	ug/L	ND	10.0	03/12/14 22:13	
Chloroform	ug/L	ND	5.0	03/12/14 22:13	
Chloromethane	ug/L	0.085J	10.0	03/12/14 22:13	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/12/14 22:13	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/12/14 22:13	
Dibromochloromethane	ug/L	ND	5.0	03/12/14 22:13	
Ethylbenzene	ug/L	ND	5.0	03/12/14 22:13	
Methylene chloride	ug/L	ND	5.0	03/12/14 22:13	
Styrene	ug/L	ND	5.0	03/12/14 22:13	
Tetrachloroethene	ug/L	ND	5.0	03/12/14 22:13	
Toluene	ug/L	ND	5.0	03/12/14 22:13	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/12/14 22:13	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/12/14 22:13	
Trichloroethene	ug/L	ND	5.0	03/12/14 22:13	
Vinyl chloride	ug/L	ND	2.0	03/12/14 22:13	
Xylene (Total)	ug/L	ND	5.0	03/12/14 22:13	
1,2-Dichloroethane-d4 (S)	%	110	80-120	03/12/14 22:13	
4-Bromofluorobenzene (S)	%	97	80-120	03/12/14 22:13	
Toluene-d8 (S)	%	98	80-120	03/12/14 22:13	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164423

LABORATORY CONTROL SAMPLE: 1342573

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	22.1	111	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	16.8	84	73-124	
1,1,2-Trichloroethane	ug/L	20	17.8	89	80-120	
1,1-Dichloroethane	ug/L	20	19.0	95	77-120	
1,1-Dichloroethene	ug/L	20	20.2	101	78-126	
1,2-Dichloroethane	ug/L	20	21.2	106	77-123	
1,2-Dichloropropane	ug/L	20	19.7	99	80-121	
2-Butanone (MEK)	ug/L	100	111	111	52-145	
2-Hexanone	ug/L	100	95.3	95	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	92.8	93	71-131	
Acetone	ug/L	100	148	148	32-155	
Benzene	ug/L	20	20.3	101	80-120	
Bromodichloromethane	ug/L	20	21.0	105	80-120	
Bromoform	ug/L	20	18.8	94	73-124	
Bromomethane	ug/L	20	16.4	82	31-144	
Carbon disulfide	ug/L	20	21.1	106	65-125	
Carbon tetrachloride	ug/L	20	21.5	108	78-128	
Chlorobenzene	ug/L	20	19.6	98	80-120	
Chloroethane	ug/L	20	19.7	98	55-137	
Chloroform	ug/L	20	19.9	99	79-120	
Chloromethane	ug/L	20	13.6	68	22-138	
cis-1,2-Dichloroethene	ug/L	20	21.5	108	80-120	
cis-1,3-Dichloropropene	ug/L	20	17.3	86	80-120	
Dibromochloromethane	ug/L	20	19.0	95	80-120	
Ethylbenzene	ug/L	20	18.6	93	80-121	
Methylene chloride	ug/L	20	20.8	104	73-126	
Styrene	ug/L	20	19.2	96	80-120	
Tetrachloroethene	ug/L	20	19.9	100	80-121	
Toluene	ug/L	20	20.0	100	80-122	
trans-1,2-Dichloroethene	ug/L	20	20.7	104	79-121	
trans-1,3-Dichloropropene	ug/L	20	19.3	96	80-127	
Trichloroethene	ug/L	20	19.5	97	80-120	
Vinyl chloride	ug/L	20	17.9	90	59-120	
Xylene (Total)	ug/L	60	58.0	97	80-121	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			92	80-120	
Toluene-d8 (S)	%			98	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164423

QC Batch: MSV/60009 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60164423007, 60164423009, 60164423010, 60164423011, 60164423012, 60164423013, 60164423014, 60164423015

METHOD BLANK: 1343069 Matrix: Water
Associated Lab Samples: 60164423007, 60164423009, 60164423010, 60164423011, 60164423012, 60164423013, 60164423014, 60164423015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	03/13/14 11:10	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/13/14 11:10	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/13/14 11:10	
1,1-Dichloroethane	ug/L	ND	2.4	03/13/14 11:10	
1,1-Dichloroethene	ug/L	ND	5.0	03/13/14 11:10	
1,2-Dichloroethane	ug/L	ND	5.0	03/13/14 11:10	
1,2-Dichloropropane	ug/L	ND	5.0	03/13/14 11:10	
2-Butanone (MEK)	ug/L	ND	10.0	03/13/14 11:10	
2-Hexanone	ug/L	ND	10.0	03/13/14 11:10	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	03/13/14 11:10	
Acetone	ug/L	ND	10.0	03/13/14 11:10	
Benzene	ug/L	ND	5.0	03/13/14 11:10	
Bromodichloromethane	ug/L	ND	5.0	03/13/14 11:10	
Bromoform	ug/L	ND	5.0	03/13/14 11:10	
Bromomethane	ug/L	ND	7.0	03/13/14 11:10	
Carbon disulfide	ug/L	0.24J	10.0	03/13/14 11:10	
Carbon tetrachloride	ug/L	ND	5.0	03/13/14 11:10	
Chlorobenzene	ug/L	ND	5.0	03/13/14 11:10	
Chloroethane	ug/L	ND	10.0	03/13/14 11:10	
Chloroform	ug/L	ND	5.0	03/13/14 11:10	
Chloromethane	ug/L	ND	10.0	03/13/14 11:10	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/13/14 11:10	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/13/14 11:10	
Dibromochloromethane	ug/L	ND	5.0	03/13/14 11:10	
Ethylbenzene	ug/L	ND	5.0	03/13/14 11:10	
Methylene chloride	ug/L	ND	5.0	03/13/14 11:10	
Styrene	ug/L	ND	5.0	03/13/14 11:10	
Tetrachloroethene	ug/L	ND	5.0	03/13/14 11:10	
Toluene	ug/L	ND	5.0	03/13/14 11:10	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/13/14 11:10	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/13/14 11:10	
Trichloroethene	ug/L	ND	5.0	03/13/14 11:10	
Vinyl chloride	ug/L	ND	2.0	03/13/14 11:10	
Xylene (Total)	ug/L	ND	5.0	03/13/14 11:10	
1,2-Dichloroethane-d4 (S)	%	111	80-120	03/13/14 11:10	
4-Bromofluorobenzene (S)	%	99	80-120	03/13/14 11:10	
Toluene-d8 (S)	%	96	80-120	03/13/14 11:10	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164423

LABORATORY CONTROL SAMPLE: 1343070

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.4	107	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	18.3	92	73-124	
1,1,2-Trichloroethane	ug/L	20	18.1	90	80-120	
1,1-Dichloroethane	ug/L	20	18.7	93	77-120	
1,1-Dichloroethene	ug/L	20	19.0	95	78-126	
1,2-Dichloroethane	ug/L	20	21.8	109	77-123	
1,2-Dichloropropane	ug/L	20	19.7	98	80-121	
2-Butanone (MEK)	ug/L	100	145	145	52-145	
2-Hexanone	ug/L	100	127	127	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	106	106	71-131	
Acetone	ug/L	100	211	211	32-155	L0,SS
Benzene	ug/L	20	19.3	97	80-120	
Bromodichloromethane	ug/L	20	20.1	100	80-120	
Bromoform	ug/L	20	19.7	99	73-124	
Bromomethane	ug/L	20	13.6	68	31-144	
Carbon disulfide	ug/L	20	19.6	98	65-125	
Carbon tetrachloride	ug/L	20	21.0	105	78-128	
Chlorobenzene	ug/L	20	19.1	96	80-120	
Chloroethane	ug/L	20	19.4	97	55-137	
Chloroform	ug/L	20	19.6	98	79-120	
Chloromethane	ug/L	20	10.7	53	22-138	
cis-1,2-Dichloroethene	ug/L	20	21.7	108	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.3	92	80-120	
Dibromochloromethane	ug/L	20	19.3	97	80-120	
Ethylbenzene	ug/L	20	19.3	96	80-121	
Methylene chloride	ug/L	20	19.2	96	73-126	
Styrene	ug/L	20	18.6	93	80-120	
Tetrachloroethene	ug/L	20	19.7	98	80-121	
Toluene	ug/L	20	19.2	96	80-122	
trans-1,2-Dichloroethene	ug/L	20	19.2	96	79-121	
trans-1,3-Dichloropropene	ug/L	20	20.3	102	80-127	
Trichloroethene	ug/L	20	18.3	91	80-120	
Vinyl chloride	ug/L	20	15.5	77	59-120	
Xylene (Total)	ug/L	60	56.8	95	80-121	
1,2-Dichloroethane-d4 (S)	%			104	80-120	
4-Bromofluorobenzene (S)	%			93	80-120	
Toluene-d8 (S)	%			98	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164423

QC Batch: WET/46752 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

METHOD BLANK: 1346274 Matrix: Water
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Total as CaCO3	mg/L	ND	20.0	03/19/14 11:04	

LABORATORY CONTROL SAMPLE: 1346275

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

SAMPLE DUPLICATE: 1346276

Parameter	Units	60164418004 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	94.0	91.9	2	10	

SAMPLE DUPLICATE: 1346277

Parameter	Units	60164418005 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Total as CaCO3	mg/L	84.2	94.9	12	10	D6

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164423

QC Batch: WET/46665 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

METHOD BLANK: 1343745 Matrix: Water
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	03/14/14 12:34	

LABORATORY CONTROL SAMPLE: 1343746

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.46	92	80-120	

MATRIX SPIKE SAMPLE: 1343747

Parameter	Units	60164408002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.35	71	75-125	M1

SAMPLE DUPLICATE: 1343748

Parameter	Units	60164423001 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.: 60164423

QC Batch: WETA/28645 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

METHOD BLANK: 1345921 Matrix: Water
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	03/18/14 15:55	
Sulfate	mg/L	ND	1.0	03/18/14 15:55	

METHOD BLANK: 1347914 Matrix: Water
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	03/20/14 08:01	
Sulfate	mg/L	ND	1.0	03/20/14 08:01	

LABORATORY CONTROL SAMPLE: 1345922

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	97	90-110	
Sulfate	mg/L	5	5.1	102	90-110	

LABORATORY CONTROL SAMPLE: 1347915

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.2	104	90-110	
Sulfate	mg/L	5	5.2	104	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1345923 1345924

Parameter	Units	60164423001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1.2	5	5	5.9	5.9	94	93	80-120	1	15	
Sulfate	mg/L	12.1	5	5	17.3	17.3	103	103	80-120	0	15	

MATRIX SPIKE SAMPLE: 1345925

Parameter	Units	60164423002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	9.8	5	14.6	96	80-120	
Sulfate	mg/L	8.6	5	15.5	137	80-120	M1

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164423

QC Batch: WETA/28540 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

METHOD BLANK: 1341802 Matrix: Water
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	03/11/14 13:09	

LABORATORY CONTROL SAMPLE: 1341803

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.0	101	90-110	

MATRIX SPIKE SAMPLE: 1341804

Parameter	Units	60164418004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.22	2	1.6	70	90-110	M1

MATRIX SPIKE SAMPLE: 1341805

Parameter	Units	60164418014 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.1	57	90-110	M1

SAMPLE DUPLICATE: 1341806

Parameter	Units	60164423003 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.: 60164423

QC Batch: WETA/28506 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

METHOD BLANK: 1340746 Matrix: Water
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	03/08/14 12:22	
Nitrogen, Nitrite	mg/L	ND	0.10	03/08/14 12:22	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	03/08/14 12:22	

LABORATORY CONTROL SAMPLE: 1340747

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.6	101	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: 1340748

Parameter	Units	60164371003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	0.37	1.6	2.0	99	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.46	114	90-110	M1
Nitrogen, NO2 plus NO3	mg/L	0.37	2	2.4	102	90-110	

SAMPLE DUPLICATE: 1340749

Parameter	Units	60164423002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.76	0.77	2	20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	0.76	0.77	2	20	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164423

QC Batch: WETA/28595 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

METHOD BLANK: 1343837 Matrix: Water
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	03/14/14 17:19	

LABORATORY CONTROL SAMPLE: 1343838

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	4.9	98	80-120	

MATRIX SPIKE SAMPLE: 1343839

Parameter	Units	60164258004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	1.5	5	4.5	59	80-120	M1

SAMPLE DUPLICATE: 1343840

Parameter	Units	60164395001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	1.3	1.3	1	25	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164423

QC Batch: WETA/4469 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

METHOD BLANK: 66692 Matrix: Water
Associated Lab Samples: 60164423001, 60164423002, 60164423003, 60164423004, 60164423005, 60164423006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	03/19/14 10:52	

LABORATORY CONTROL SAMPLE: 66693

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.5	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 66694 66695

Parameter	Units	60164418012 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphate as P04	mg/L	1.2	1.5	1.5	2.2	2.2	64	68	80-120	3	20	M1

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 66698 66699

Parameter	Units	7512983002 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	1.9	1.7	121	111	80-120	9	20	M1

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QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60164423

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

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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/59989

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

Batch: MSV/60009

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

ANALYTE QUALIFIERS

D6	The relative percent difference (RPD) between the sample and sample duplicate exceeded laboratory control limits.
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.
SS	This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60164423

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60164423001	**ITMW-16-201403**	EPA 8015 - Alcohol	GCSV/2360		
60164423002	**MW-27-201403**	EPA 8015 - Alcohol	GCSV/2360		
60164423003	**MW-67-201403**	EPA 8015 - Alcohol	GCSV/2360		
60164423004	**MW-66-201403**	EPA 8015 - Alcohol	GCSV/2360		
60164423005	**MW-62-201403**	EPA 8015 - Alcohol	GCSV/2360		
60164423006	**MW-63-201403**	EPA 8015 - Alcohol	GCSV/2360		
60164423001	**ITMW-16-201403**	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164423002	**MW-27-201403**	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164423003	**MW-67-201403**	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164423004	**MW-66-201403**	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164423005	**MW-62-201403**	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164423006	**MW-63-201403**	EPA 3010	MPRP/26389	EPA 6010	ICP/20130
60164423001	**ITMW-16-201403**	EPA 5030B/8260	MSV/59989		
60164423002	**MW-27-201403**	EPA 5030B/8260	MSV/59989		
60164423003	**MW-67-201403**	EPA 5030B/8260	MSV/59989		
60164423004	**MW-66-201403**	EPA 5030B/8260	MSV/59989		
60164423005	**MW-62-201403**	EPA 5030B/8260	MSV/59989		
60164423006	**MW-63-201403**	EPA 5030B/8260	MSV/59989		
60164423007	**MW-58-201403**	EPA 5030B/8260	MSV/59989		
60164423007	**MW-58-201403**	EPA 5030B/8260	MSV/60009		
60164423008	**MW-57-201403**	EPA 5030B/8260	MSV/59989		
60164423009	**MW-56-201403**	EPA 5030B/8260	MSV/59989		
60164423009	**MW-56-201403**	EPA 5030B/8260	MSV/60009		
60164423010	**MW-46R-201403**	EPA 5030B/8260	MSV/59989		
60164423010	**MW-46R-201403**	EPA 5030B/8260	MSV/60009		
60164423011	**TRIP BLANK**	EPA 5030B/8260	MSV/60009		
60164423012	**IW-74-201403**	EPA 5030B/8260	MSV/60009		
60164423013	**DUP-2-201403**	EPA 5030B/8260	MSV/60009		
60164423014	**MW-71-201403**	EPA 5030B/8260	MSV/60009		
60164423015	**RW-69-201403**	EPA 5030B/8260	MSV/60009		
60164423001	**ITMW-16-201403**	SM 2320B	WET/46752		
60164423002	**MW-27-201403**	SM 2320B	WET/46752		
60164423003	**MW-67-201403**	SM 2320B	WET/46752		
60164423004	**MW-66-201403**	SM 2320B	WET/46752		
60164423005	**MW-62-201403**	SM 2320B	WET/46752		
60164423006	**MW-63-201403**	SM 2320B	WET/46752		
60164423001	**ITMW-16-201403**	SM 3500-Fe B#4	WET/46842		
60164423002	**MW-27-201403**	SM 3500-Fe B#4	WET/46842		
60164423004	**MW-66-201403**	SM 3500-Fe B#4	WET/46842		
60164423005	**MW-62-201403**	SM 3500-Fe B#4	WET/46842		
60164423006	**MW-63-201403**	SM 3500-Fe B#4	WET/46842		
60164423001	**ITMW-16-201403**	SM 4500-H+B	WET/46820		
60164423002	**MW-27-201403**	SM 4500-H+B	WET/46809		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60164423

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60164423004	**MW-66-201403**	SM 4500-H+B	WET/46820		
60164423005	**MW-62-201403**	SM 4500-H+B	WET/46820		
60164423006	**MW-63-201403**	SM 4500-H+B	WET/46820		
60164423001	**ITMW-16-201403**	SM 4500-S-2 D	WET/46665		
60164423002	**MW-27-201403**	SM 4500-S-2 D	WET/46665		
60164423003	**MW-67-201403**	SM 4500-S-2 D	WET/46665		
60164423004	**MW-66-201403**	SM 4500-S-2 D	WET/46665		
60164423005	**MW-62-201403**	SM 4500-S-2 D	WET/46665		
60164423006	**MW-63-201403**	SM 4500-S-2 D	WET/46665		
60164423001	**ITMW-16-201403**	EPA 300.0	WETA/28645		
60164423002	**MW-27-201403**	EPA 300.0	WETA/28645		
60164423003	**MW-67-201403**	EPA 300.0	WETA/28645		
60164423004	**MW-66-201403**	EPA 300.0	WETA/28645		
60164423005	**MW-62-201403**	EPA 300.0	WETA/28645		
60164423006	**MW-63-201403**	EPA 300.0	WETA/28645		
60164423001	**ITMW-16-201403**	EPA 350.1	WETA/28540		
60164423002	**MW-27-201403**	EPA 350.1	WETA/28540		
60164423003	**MW-67-201403**	EPA 350.1	WETA/28540		
60164423004	**MW-66-201403**	EPA 350.1	WETA/28540		
60164423005	**MW-62-201403**	EPA 350.1	WETA/28540		
60164423006	**MW-63-201403**	EPA 350.1	WETA/28540		
60164423001	**ITMW-16-201403**	EPA 353.2	WETA/28506		
60164423002	**MW-27-201403**	EPA 353.2	WETA/28506		
60164423003	**MW-67-201403**	EPA 353.2	WETA/28506		
60164423004	**MW-66-201403**	EPA 353.2	WETA/28506		
60164423005	**MW-62-201403**	EPA 353.2	WETA/28506		
60164423006	**MW-63-201403**	EPA 353.2	WETA/28506		
60164423001	**ITMW-16-201403**	SM 4500-CO2 D	WETA/28738		
60164423002	**MW-27-201403**	SM 4500-CO2 D	WETA/28738		
60164423004	**MW-66-201403**	SM 4500-CO2 D	WETA/28738		
60164423005	**MW-62-201403**	SM 4500-CO2 D	WETA/28738		
60164423006	**MW-63-201403**	SM 4500-CO2 D	WETA/28738		
60164423001	**ITMW-16-201403**	SM 5310C	WETA/28595		
60164423002	**MW-27-201403**	SM 5310C	WETA/28595		
60164423003	**MW-67-201403**	SM 5310C	WETA/28595		
60164423004	**MW-66-201403**	SM 5310C	WETA/28595		
60164423005	**MW-62-201403**	SM 5310C	WETA/28595		
60164423006	**MW-63-201403**	SM 5310C	WETA/28595		
60164423001	**ITMW-16-201403**	SM4500-P B	WETA/4469	SM 4500-P E	WETA/4470
60164423002	**MW-27-201403**	SM4500-P B	WETA/4469	SM 4500-P E	WETA/4470
60164423003	**MW-67-201403**	SM4500-P B	WETA/4469	SM 4500-P E	WETA/4470
60164423004	**MW-66-201403**	SM4500-P B	WETA/4469	SM 4500-P E	WETA/4470
60164423005	**MW-62-201403**	SM4500-P B	WETA/4469	SM 4500-P E	WETA/4470
60164423006	**MW-63-201403**	SM4500-P B	WETA/4469	SM 4500-P E	WETA/4470

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Sample Condition Upon Receipt

WO# : 60164423

60164423

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

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

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☐ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☑ None ☐ Other ☑ zip/c

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

Cooler Temperature: 3.2/1.8

Date and initials of person examining contents: 2/19/14

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 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: 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: _____

Project Manager Review: MW Date: 3/10/14

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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:	

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
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: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH + Zn	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: 8260 client specific list	Alkalinity	TOC	Chloride/Sulfate	Bromide	6010-Iron/Mn	Ferric Iron calc.	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	IT MW-16-201403	WT	G			3/7/14	1045		11	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X		60164423	
2	MW-27-201403	WT	G			3/7/14	850		11	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X		3D/G9H	001
3	MW-07-201403	WT	G			3/7/14	950		11	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X			003
4	~~MW-02-201403~~ MW-16D-201403	WT	G			3/7/14	1135		11	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X			004
5	MW-62-201403	WT	G			3/7/14	1115		11	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X			005
6	MW-63-201403	WT	G			3/7/14	1300		11	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X			006
7	MW-58-201403	WT	G			3/7/14	1515		3				X					X													007
8	MW-57-201403	WT	G			3/7/14	1405		3				X					X													008
9	MW-510-201403	WT	G			3/7/14	1344		3				X					X													009
10	MW-46R-201403	WT	G			3/7/14	1515		3				X					X													010
11	Trip Blank	WT	G			3/7/14	830		2				X					X											N 3/18/14		2D/G9H	011
12	MW-14-201403	WT	G			3/7/14	1630		3				X					X													3D/G9H	012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Victoria Siegler/ ENVIRON	3/7/14	1500	PAST.	3/8/14	0214	3.2	Y	Y	Y
							1.8	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Siegler

SIGNATURE of SAMPLER: Victoria Siegler DATE Signed (MM/DD/YY): 3/7/14

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.

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:	
Address:	7500 College Blvd., Ste. 925	Copy To:		Company Name:	
	Overland Park, KS 66210			Address:	
Email To:	wstonestreet@environcorp.com	Purchase Order No.:		Pace Quote Reference:	
Phone:	913-553-5926 Fax:	Project Name:	Fort Smith, AR	Pace Project Manager:	MJ Walls
Requested Due Date/TAT:		Project Number:		Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: AR

Requested Analysis Filtered (Y/N)

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Alkalinity	TOC	Chloride/Sulfate	Bromide	6010-Iron/Mn	Ferric Iron calc.	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Dup-2-201403	WT	G			3/7/14	1630		3				X						X											60164423
2	MW-71-201403	WT	G			3/7/14	1600		3				X						X											603
3	RW-69-201403	WT	G			3/7/14	1700		3				X						X											604
4																														605
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Victoria Siegfan / Environ	3/7/14	1500	PACE	3/8/14	0214	3.2	Y	Y	Y
							1.8	X	Y	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Siegfan

SIGNATURE of SAMPLER: Victoria Siegfan DATE Signed (MM/DD/YY): 3/7/14

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

April 08, 2014

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

RE: Project: FORT SMITH, AR
Pace Project No.: 60164494

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on March 10, 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 4/8/14 to correct J-flags.

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: FORT SMITH, AR
Pace Project No.: 60164494

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 #: T104704407-13-4
Utah Certification #: KS000212013-3
Illinois Certification #: 003097

REPORT OF LABORATORY ANALYSIS

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SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60164494

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60164494001	IW-76-201403	Water	03/08/14 09:15	03/10/14 01:15
60164494002	IW-77-201403	Water	03/08/14 10:50	03/10/14 01:15
60164494003	ITMW-13-201403	Water	03/08/14 12:40	03/10/14 01:15
60164494004	ITMW-14-201403	Water	03/08/14 13:45	03/10/14 01:15
60164494005	ITMW-18-201403	Water	03/08/14 15:00	03/10/14 01:15
60164494006	DUP-5-201403	Water	03/08/14 15:00	03/10/14 01:15
60164494007	EB-4-201403	Water	03/08/14 15:26	03/10/14 01:15
60164494008	MW-38-201403	Water	03/08/14 13:13	03/10/14 01:15
60164494009	ITMW-15-201403	Water	03/08/14 14:51	03/10/14 01:15
60164494010	EB-1-201403	Water	03/08/14 13:20	03/10/14 01:15
60164494011	ITMW-1-201403	Water	03/08/14 11:45	03/10/14 01:15
60164494012	ITMW-7-201403	Water	03/08/14 10:39	03/10/14 01:15
60164494013	ITMW-9-201403	Water	03/08/14 09:32	03/10/14 01:15
60164494014	DUP-4-201403	Water	03/08/14 15:57	03/10/14 01:15
60164494015	ITMW-19-201403	Water	03/08/14 15:53	03/10/14 01:15
60164494016	MW-34-20140308	Water	03/08/14 13:30	03/10/14 01:15
60164494017	MW-65-20140308	Water	03/08/14 11:35	03/10/14 01:15
60164494018	DUP-6-20140308	Water	03/08/14 15:20	03/10/14 01:15
60164494019	ITMW-12-20140308	Water	03/08/14 15:20	03/10/14 01:15
60164494020	MW-35R-201403	Water	03/08/14 10:55	03/10/14 01:15
60164494021	IW-80-201403	Water	03/08/14 12:50	03/10/14 01:15
60164494022	MW-32-20140308	Water	03/08/14 10:05	03/10/14 01:15
60164494023	ITMW-11-201403	Water	03/08/14 15:05	03/10/14 01:15
60164494024	MW-33-201403	Water	03/08/14 09:10	03/10/14 01:15
60164494025	MW-25-20140308	Water	03/08/14 16:50	03/10/14 01:15
60164494026	IW-73-201403	Water	03/07/14 17:55	03/10/14 01:15
60164494027	MW-41-201403	Water	03/07/14 18:16	03/10/14 01:15
60164494028	ITMW-17-201403	Water	03/08/14 16:30	03/10/14 01:15
60164494029	EB-2-20140308	Water	03/08/14 17:10	03/10/14 01:15
60164494030	DUP-3-201403	Water	03/08/14 16:30	03/10/14 01:15
60164494031	TRIP BLANK 1	Water	03/08/14 09:00	03/10/14 01:15
60164494032	TRIP BLANK 2	Water	03/07/14 17:30	03/10/14 01:15
60164494033	EB-3-201403	Water	03/08/14 17:15	03/10/14 01:15

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60164494

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60164494001	IW-76-201403	EPA 5030B/8260	PRG	38
60164494002	IW-77-201403	EPA 5030B/8260	PRG	38
60164494003	ITMW-13-201403	EPA 5030B/8260	PRG	38
60164494004	ITMW-14-201403	EPA 5030B/8260	PRG	38
60164494005	ITMW-18-201403	EPA 5030B/8260	PRG	38
60164494006	DUP-5-201403	EPA 5030B/8260	PRG	38
60164494007	EB-4-201403	EPA 5030B/8260	PRG	38
60164494008	MW-38-201403	EPA 5030B/8260	PRG	38
60164494009	ITMW-15-201403	EPA 5030B/8260	PRG	38
60164494010	EB-1-201403	EPA 5030B/8260	PRG	38
60164494011	ITMW-1-201403	EPA 5030B/8260	PRG	38
60164494012	ITMW-7-201403	EPA 5030B/8260	PRG	38
60164494013	ITMW-9-201403	EPA 5030B/8260	PRG	38
60164494014	DUP-4-201403	EPA 5030B/8260	PRG	38
60164494015	ITMW-19-201403	EPA 5030B/8260	PRG	38
60164494016	MW-34-20140308	EPA 5030B/8260	PRG	38
60164494017	MW-65-20140308	EPA 5030B/8260	PRG	38
60164494018	DUP-6-20140308	EPA 5030B/8260	PRG	38
60164494019	ITMW-12-20140308	EPA 5030B/8260	PRG	38
60164494020	MW-35R-201403	EPA 5030B/8260	PRG	38
60164494021	IW-80-201403	EPA 5030B/8260	PRG	38
60164494022	MW-32-20140308	EPA 5030B/8260	PRG	38
60164494023	ITMW-11-201403	EPA 5030B/8260	PRG	38
60164494024	MW-33-201403	EPA 5030B/8260	PRG	38
60164494025	MW-25-20140308	EPA 5030B/8260	PRG	38
60164494026	IW-73-201403	EPA 5030B/8260	PRG	38
60164494027	MW-41-201403	EPA 5030B/8260	PRG	38
60164494028	ITMW-17-201403	EPA 5030B/8260	PRG	38
60164494029	EB-2-20140308	EPA 5030B/8260	PRG	38
60164494030	DUP-3-201403	EPA 5030B/8260	PRG	38
60164494031	TRIP BLANK 1	EPA 5030B/8260	PRG	38
60164494032	TRIP BLANK 2	EPA 5030B/8260	PRG	38
60164494033	EB-3-201403	EPA 5030B/8260	PRG	38

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60164494

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 08, 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.

QC Batch: MSV/60009

SS: This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

- LCS (Lab ID: 1343070)
  - Acetone

QC Batch: MSV/60108

SS: This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

- LCS (Lab ID: 1345615)
  - Acetone

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/60009

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

- LCS (Lab ID: 1343070)
  - Acetone

QC Batch: MSV/60081

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

- LCS (Lab ID: 1345090)
  - Acetone

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60164494

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 08, 2014

QC Batch: MSV/60085

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- LCS (Lab ID: 1345103)
  - Acetone

QC Batch: MSV/60108

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- LCS (Lab ID: 1345615)
  - 2-Butanone (MEK)
  - Acetone

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

QC Batch: MSV/60009

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

QC Batch: MSV/60010

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60164494004

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 1343083)
  - Styrene
- MSD (Lab ID: 1343084)
  - Styrene

QC Batch: MSV/60056

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

QC Batch: MSV/60081

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

QC Batch: MSV/60085

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60164494021,60164494023

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 1345104)
  - Trichloroethene
- MS (Lab ID: 1345106)
  - Trichloroethene
  - cis-1,2-Dichloroethene
- MSD (Lab ID: 1345107)
  - Trichloroethene
  - cis-1,2-Dichloroethene

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: IW-76-201403 **Lab ID: 60164494001** Collected: 03/08/14 09:15 Received: 03/10/14 01:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**3.5J**	ug/L	10.0	1.9	1		03/13/14 14:16	67-64-1	L1
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 14:16	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 14:16	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 14:16	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 14:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 14:16	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 14:16	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 14:16	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 14:16	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 14:16	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 14:16	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 14:16	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 14:16	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 14:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 14:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 14:16	75-35-4	
cis-1,2-Dichloroethene	**1.5J**	ug/L	5.0	0.080	1		03/13/14 14:16	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 14:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 14:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 14:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 14:16	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 14:16	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 14:16	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 14:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 14:16	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 14:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 14:16	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 14:16	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 14:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 14:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 14:16	79-00-5	
Trichloroethene	**127**	ug/L	5.0	0.17	1		03/13/14 14:16	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/13/14 14:16	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 14:16	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		03/13/14 14:16	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	80-120		1		03/13/14 14:16	17060-07-0	
Toluene-d8 (S)	94	%	80-120		1		03/13/14 14:16	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 14:16		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: IW-77-201403 **Lab ID: 60164494002** Collected: 03/08/14 10:50 Received: 03/10/14 01:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**8.8J**	ug/L	10.0	1.9	1		03/13/14 17:36	67-64-1	
Benzene	**0.10J**	ug/L	5.0	0.060	1		03/13/14 17:36	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 17:36	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 17:36	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 17:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 17:36	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 17:36	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 17:36	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 17:36	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 17:36	75-00-3	
Chloroform	**0.20J**	ug/L	5.0	0.14	1		03/13/14 17:36	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 17:36	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 17:36	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 17:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 17:36	107-06-2	
1,1-Dichloroethene	**1.3J**	ug/L	5.0	0.20	1		03/13/14 17:36	75-35-4	
cis-1,2-Dichloroethene	**24.4**	ug/L	5.0	0.080	1		03/13/14 17:36	156-59-2	
trans-1,2-Dichloroethene	**0.91J**	ug/L	5.0	0.20	1		03/13/14 17:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 17:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 17:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 17:36	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 17:36	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 17:36	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 17:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 17:36	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 17:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 17:36	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 17:36	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 17:36	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 17:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 17:36	79-00-5	
Trichloroethene	**546**	ug/L	50.0	1.7	10		03/15/14 03:39	79-01-6	
Vinyl chloride	**0.22J**	ug/L	2.0	0.13	1		03/13/14 17:36	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 17:36	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		03/13/14 17:36	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	80-120		1		03/13/14 17:36	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		03/13/14 17:36	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 17:36		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: ITMW-13-201403 **Lab ID: 60164494003** Collected: 03/08/14 12:40 Received: 03/10/14 01:15 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	1.9	1		03/13/14 17:50	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 17:50	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 17:50	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 17:50	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 17:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 17:50	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 17:50	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 17:50	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 17:50	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 17:50	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 17:50	67-66-3	
Chloromethane	**0.087J**	ug/L	10.0	0.080	1		03/13/14 17:50	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 17:50	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 17:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 17:50	107-06-2	
1,1-Dichloroethene	**0.42J**	ug/L	5.0	0.20	1		03/13/14 17:50	75-35-4	
cis-1,2-Dichloroethene	**45.3**	ug/L	5.0	0.080	1		03/13/14 17:50	156-59-2	
trans-1,2-Dichloroethene	**0.84J**	ug/L	5.0	0.20	1		03/13/14 17:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 17:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 17:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 17:50	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 17:50	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 17:50	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 17:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 17:50	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 17:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 17:50	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 17:50	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 17:50	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 17:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 17:50	79-00-5	
Trichloroethene	**69.3**	ug/L	5.0	0.17	1		03/13/14 17:50	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/13/14 17:50	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 17:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		03/13/14 17:50	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		03/13/14 17:50	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		03/13/14 17:50	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 17:50		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: ITMW-14-201403 **Lab ID: 60164494004** Collected: 03/08/14 13:45 Received: 03/10/14 01:15 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	1.9	1		03/13/14 18:05	67-64-1	
Benzene	**0.21J**	ug/L	5.0	0.060	1		03/13/14 18:05	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 18:05	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 18:05	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 18:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 18:05	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 18:05	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 18:05	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 18:05	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 18:05	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 18:05	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 18:05	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 18:05	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 18:05	75-34-3	
1,2-Dichloroethane	**0.90J**	ug/L	5.0	0.12	1		03/13/14 18:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 18:05	75-35-4	
cis-1,2-Dichloroethene	**11.9**	ug/L	5.0	0.080	1		03/13/14 18:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 18:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 18:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 18:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 18:05	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 18:05	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 18:05	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 18:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 18:05	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 18:05	100-42-5	M1
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 18:05	79-34-5	
Tetrachloroethene	**27.8**	ug/L	5.0	0.10	1		03/13/14 18:05	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 18:05	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 18:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 18:05	79-00-5	
Trichloroethene	**6.1**	ug/L	5.0	0.17	1		03/13/14 18:05	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/13/14 18:05	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 18:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		03/13/14 18:05	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	80-120		1		03/13/14 18:05	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		03/13/14 18:05	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 18:05		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: ITMW-18-201403 **Lab ID: 60164494005** Collected: 03/08/14 15:00 Received: 03/10/14 01:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**99.9J**	ug/L	500	94.0	50		03/13/14 19:58	67-64-1	
Benzene	ND	ug/L	250	3.0	50		03/13/14 19:58	71-43-2	
Bromodichloromethane	ND	ug/L	250	9.5	50		03/13/14 19:58	75-27-4	
Bromoform	ND	ug/L	250	3.5	50		03/13/14 19:58	75-25-2	
Bromomethane	ND	ug/L	350	8.0	50		03/13/14 19:58	74-83-9	
2-Butanone (MEK)	**168J**	ug/L	500	29.5	50		03/13/14 19:58	78-93-3	
Carbon disulfide	ND	ug/L	500	6.0	50		03/13/14 19:58	75-15-0	
Carbon tetrachloride	ND	ug/L	250	9.0	50		03/13/14 19:58	56-23-5	
Chlorobenzene	ND	ug/L	250	10.5	50		03/13/14 19:58	108-90-7	
Chloroethane	ND	ug/L	500	7.5	50		03/13/14 19:58	75-00-3	
Chloroform	ND	ug/L	250	7.0	50		03/13/14 19:58	67-66-3	
Chloromethane	ND	ug/L	500	4.0	50		03/13/14 19:58	74-87-3	
Dibromochloromethane	ND	ug/L	250	10.5	50		03/13/14 19:58	124-48-1	
1,1-Dichloroethane	ND	ug/L	120	2.5	50		03/13/14 19:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	250	6.0	50		03/13/14 19:58	107-06-2	
1,1-Dichloroethene	**81.8J**	ug/L	250	10.0	50		03/13/14 19:58	75-35-4	
cis-1,2-Dichloroethene	**285**	ug/L	250	4.0	50		03/13/14 19:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	250	10.0	50		03/13/14 19:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	250	8.0	50		03/13/14 19:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	50.0	7.0	50		03/13/14 19:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	50.0	6.0	50		03/13/14 19:58	10061-02-6	
Ethylbenzene	ND	ug/L	250	9.0	50		03/13/14 19:58	100-41-4	
2-Hexanone	ND	ug/L	500	59.5	50		03/13/14 19:58	591-78-6	
Methylene chloride	ND	ug/L	250	7.5	50		03/13/14 19:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	500	21.0	50		03/13/14 19:58	108-10-1	
Styrene	ND	ug/L	250	6.0	50		03/13/14 19:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	50.0	7.5	50		03/13/14 19:58	79-34-5	
Tetrachloroethene	ND	ug/L	250	5.0	50		03/13/14 19:58	127-18-4	
Toluene	ND	ug/L	250	8.5	50		03/13/14 19:58	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	250	5.5	50		03/13/14 19:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	250	10.0	50		03/13/14 19:58	79-00-5	
Trichloroethene	**9380**	ug/L	250	8.5	50		03/13/14 19:58	79-01-6	
Vinyl chloride	ND	ug/L	100	6.5	50		03/13/14 19:58	75-01-4	
Xylene (Total)	ND	ug/L	250	21.0	50		03/13/14 19:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		50		03/13/14 19:58	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120		50		03/13/14 19:58	17060-07-0	
Toluene-d8 (S)	96	%	80-120		50		03/13/14 19:58	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	50		03/13/14 19:58		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: DUP-5-201403 **Lab ID: 60164494006** Collected: 03/08/14 15:00 Received: 03/10/14 01:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.0J**	ug/L	10.0	1.9	1		03/13/14 18:19	67-64-1	
Benzene	**0.34J**	ug/L	5.0	0.060	1		03/13/14 18:19	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 18:19	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 18:19	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 18:19	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 18:19	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 18:19	75-15-0	
Carbon tetrachloride	**0.20J**	ug/L	5.0	0.18	1		03/13/14 18:19	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 18:19	108-90-7	
Chloroethane	**0.82J**	ug/L	10.0	0.15	1		03/13/14 18:19	75-00-3	
Chloroform	**2.0J**	ug/L	5.0	0.14	1		03/13/14 18:19	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 18:19	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 18:19	124-48-1	
1,1-Dichloroethane	**1.8J**	ug/L	2.4	0.050	1		03/13/14 18:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 18:19	107-06-2	
1,1-Dichloroethene	**83.6**	ug/L	5.0	0.20	1		03/13/14 18:19	75-35-4	
cis-1,2-Dichloroethene	**242J**	ug/L	250	4.0	50		03/15/14 03:53	156-59-2	
trans-1,2-Dichloroethene	**5.3**	ug/L	5.0	0.20	1		03/13/14 18:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 18:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 18:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 18:19	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 18:19	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 18:19	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 18:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 18:19	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 18:19	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 18:19	79-34-5	
Tetrachloroethene	**2.7J**	ug/L	5.0	0.10	1		03/13/14 18:19	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 18:19	108-88-3	
1,1,1-Trichloroethane	**0.35J**	ug/L	5.0	0.11	1		03/13/14 18:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 18:19	79-00-5	
Trichloroethene	**8550**	ug/L	250	8.5	50		03/15/14 03:53	79-01-6	
Vinyl chloride	**1.7J**	ug/L	2.0	0.13	1		03/13/14 18:19	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 18:19	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		03/13/14 18:19	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		03/13/14 18:19	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		03/13/14 18:19	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 18:19		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: EB-4-201403 **Lab ID: 60164494007** Collected: 03/08/14 15:26 Received: 03/10/14 01:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.1J**	ug/L	10.0	1.9	1		03/13/14 17:07	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 17:07	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 17:07	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 17:07	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 17:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 17:07	78-93-3	
Carbon disulfide	**1.2J**	ug/L	10.0	0.12	1		03/13/14 17:07	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 17:07	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 17:07	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 17:07	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 17:07	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 17:07	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 17:07	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 17:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 17:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 17:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/13/14 17:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 17:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 17:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 17:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 17:07	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 17:07	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 17:07	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 17:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 17:07	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 17:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 17:07	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 17:07	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 17:07	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 17:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 17:07	79-00-5	
Trichloroethene	**0.28J**	ug/L	5.0	0.17	1		03/13/14 17:07	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/13/14 17:07	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 17:07	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		03/13/14 17:07	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-120		1		03/13/14 17:07	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		03/13/14 17:07	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 17:07		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: MW-38-201403 **Lab ID: 60164494008** Collected: 03/08/14 13:13 Received: 03/10/14 01:15 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	1.9	1		03/13/14 18:33	67-64-1	
Benzene	**0.21J**	ug/L	5.0	0.060	1		03/13/14 18:33	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 18:33	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 18:33	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 18:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 18:33	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 18:33	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 18:33	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 18:33	108-90-7	
Chloroethane	**40.8**	ug/L	10.0	0.15	1		03/13/14 18:33	75-00-3	
Chloroform	**0.43J**	ug/L	5.0	0.14	1		03/13/14 18:33	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 18:33	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 18:33	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 18:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 18:33	107-06-2	
1,1-Dichloroethene	**29.5**	ug/L	5.0	0.20	1		03/13/14 18:33	75-35-4	
cis-1,2-Dichloroethene	**535**	ug/L	125	2.0	25		03/15/14 04:07	156-59-2	
trans-1,2-Dichloroethene	**13.2**	ug/L	5.0	0.20	1		03/13/14 18:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 18:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 18:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 18:33	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 18:33	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 18:33	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 18:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 18:33	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 18:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 18:33	79-34-5	
Tetrachloroethene	**0.41J**	ug/L	5.0	0.10	1		03/13/14 18:33	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 18:33	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 18:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 18:33	79-00-5	
Trichloroethene	**1790**	ug/L	125	4.2	25		03/15/14 04:07	79-01-6	
Vinyl chloride	**68.4**	ug/L	2.0	0.13	1		03/13/14 18:33	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 18:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		03/13/14 18:33	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		03/13/14 18:33	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		03/13/14 18:33	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 18:33		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: ITMW-15-201403 **Lab ID: 60164494009** Collected: 03/08/14 14:51 Received: 03/10/14 01:15 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	1.9	1		03/13/14 18:47	67-64-1	
Benzene	**0.11J**	ug/L	5.0	0.060	1		03/13/14 18:47	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 18:47	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 18:47	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 18:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 18:47	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 18:47	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 18:47	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 18:47	108-90-7	
Chloroethane	**6.5J**	ug/L	10.0	0.15	1		03/13/14 18:47	75-00-3	
Chloroform	**0.44J**	ug/L	5.0	0.14	1		03/13/14 18:47	67-66-3	
Chloromethane	**0.093J**	ug/L	10.0	0.080	1		03/13/14 18:47	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 18:47	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 18:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 18:47	107-06-2	
1,1-Dichloroethene	**5.8**	ug/L	5.0	0.20	1		03/13/14 18:47	75-35-4	
cis-1,2-Dichloroethene	**152**	ug/L	5.0	0.080	1		03/13/14 18:47	156-59-2	
trans-1,2-Dichloroethene	**2.8J**	ug/L	5.0	0.20	1		03/13/14 18:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 18:47	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 18:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 18:47	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 18:47	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 18:47	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 18:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 18:47	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 18:47	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 18:47	79-34-5	
Tetrachloroethene	**0.16J**	ug/L	5.0	0.10	1		03/13/14 18:47	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 18:47	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 18:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 18:47	79-00-5	
Trichloroethene	**1630**	ug/L	125	4.2	25		03/15/14 04:22	79-01-6	
Vinyl chloride	**11.6**	ug/L	2.0	0.13	1		03/13/14 18:47	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 18:47	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		03/13/14 18:47	460-00-4	
1,2-Dichloroethane-d4 (S)	112	%	80-120		1		03/13/14 18:47	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		03/13/14 18:47	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 18:47		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: EB-1-201403 **Lab ID: 60164494010** Collected: 03/08/14 13:20 Received: 03/10/14 01:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**9.1J**	ug/L	10.0	1.9	1		03/13/14 17:22	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 17:22	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 17:22	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 17:22	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 17:22	74-83-9	
2-Butanone (MEK)	**4.5J**	ug/L	10.0	0.59	1		03/13/14 17:22	78-93-3	
Carbon disulfide	**0.15J**	ug/L	10.0	0.12	1		03/13/14 17:22	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 17:22	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 17:22	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 17:22	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 17:22	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 17:22	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 17:22	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 17:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 17:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 17:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/13/14 17:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 17:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 17:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 17:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 17:22	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 17:22	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 17:22	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 17:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 17:22	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 17:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 17:22	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 17:22	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 17:22	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 17:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 17:22	79-00-5	
Trichloroethene	**0.23J**	ug/L	5.0	0.17	1		03/13/14 17:22	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/13/14 17:22	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 17:22	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		03/13/14 17:22	460-00-4	
1,2-Dichloroethane-d4 (S)	110	%	80-120		1		03/13/14 17:22	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		03/13/14 17:22	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 17:22		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: ITMW-1-201403 **Lab ID: 60164494011** Collected: 03/08/14 11:45 Received: 03/10/14 01:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.2J**	ug/L	10.0	1.9	1		03/13/14 19:01	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 19:01	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 19:01	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 19:01	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 19:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 19:01	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 19:01	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 19:01	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 19:01	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 19:01	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 19:01	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 19:01	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 19:01	124-48-1	
1,1-Dichloroethane	**0.36J**	ug/L	2.4	0.050	1		03/13/14 19:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 19:01	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 19:01	75-35-4	
cis-1,2-Dichloroethene	**8.9**	ug/L	5.0	0.080	1		03/15/14 03:11	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 19:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 19:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 19:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 19:01	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 19:01	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 19:01	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 19:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 19:01	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 19:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 19:01	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 19:01	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 19:01	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 19:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 19:01	79-00-5	
Trichloroethene	**23.4**	ug/L	5.0	0.17	1		03/15/14 03:11	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/13/14 19:01	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 19:01	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		03/13/14 19:01	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-120		1		03/13/14 19:01	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		03/13/14 19:01	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 19:01		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: ITMW-7-201403 **Lab ID: 60164494012** Collected: 03/08/14 10:39 Received: 03/10/14 01:15 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	1.9	1		03/13/14 19:16	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 19:16	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 19:16	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 19:16	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 19:16	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 19:16	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 19:16	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 19:16	56-23-5	
Chlorobenzene	**0.25J**	ug/L	5.0	0.21	1		03/13/14 19:16	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 19:16	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/13/14 19:16	67-66-3	
Chloromethane	**0.13J**	ug/L	10.0	0.080	1		03/13/14 19:16	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 19:16	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 19:16	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 19:16	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 19:16	75-35-4	
cis-1,2-Dichloroethene	**10**	ug/L	5.0	0.080	1		03/15/14 03:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/13/14 19:16	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 19:16	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 19:16	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 19:16	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 19:16	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 19:16	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 19:16	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 19:16	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 19:16	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 19:16	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 19:16	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 19:16	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 19:16	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 19:16	79-00-5	
Trichloroethene	**37.4**	ug/L	5.0	0.17	1		03/15/14 03:25	79-01-6	
Vinyl chloride	**0.24J**	ug/L	2.0	0.13	1		03/13/14 19:16	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 19:16	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		03/13/14 19:16	460-00-4	
1,2-Dichloroethane-d4 (S)	111	%	80-120		1		03/13/14 19:16	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		03/13/14 19:16	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 19:16		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: ITMW-9-201403 **Lab ID: 60164494013** Collected: 03/08/14 09:32 Received: 03/10/14 01:15 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	1.9	1		03/13/14 19:30	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 19:30	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 19:30	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 19:30	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 19:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 19:30	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 19:30	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 19:30	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 19:30	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 19:30	75-00-3	
Chloroform	**0.21J**	ug/L	5.0	0.14	1		03/13/14 19:30	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/13/14 19:30	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 19:30	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/13/14 19:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/13/14 19:30	107-06-2	
1,1-Dichloroethene	**0.61J**	ug/L	5.0	0.20	1		03/13/14 19:30	75-35-4	
cis-1,2-Dichloroethene	**40.4**	ug/L	5.0	0.080	1		03/13/14 19:30	156-59-2	
trans-1,2-Dichloroethene	**0.93J**	ug/L	5.0	0.20	1		03/13/14 19:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 19:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 19:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 19:30	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 19:30	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 19:30	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 19:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 19:30	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 19:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 19:30	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/13/14 19:30	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 19:30	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/13/14 19:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/13/14 19:30	79-00-5	
Trichloroethene	**112**	ug/L	5.0	0.17	1		03/13/14 19:30	79-01-6	
Vinyl chloride	**0.41J**	ug/L	2.0	0.13	1		03/13/14 19:30	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 19:30	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		03/13/14 19:30	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120		1		03/13/14 19:30	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		03/13/14 19:30	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 19:30		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: DUP-4-201403 **Lab ID: 60164494014** Collected: 03/08/14 15:57 Received: 03/10/14 01:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**114J**	ug/L	500	94.0	50		03/13/14 20:13	67-64-1	
Benzene	ND	ug/L	250	3.0	50		03/13/14 20:13	71-43-2	
Bromodichloromethane	ND	ug/L	250	9.5	50		03/13/14 20:13	75-27-4	
Bromoform	ND	ug/L	250	3.5	50		03/13/14 20:13	75-25-2	
Bromomethane	ND	ug/L	350	8.0	50		03/13/14 20:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	500	29.5	50		03/13/14 20:13	78-93-3	
Carbon disulfide	ND	ug/L	500	6.0	50		03/13/14 20:13	75-15-0	
Carbon tetrachloride	ND	ug/L	250	9.0	50		03/13/14 20:13	56-23-5	
Chlorobenzene	ND	ug/L	250	10.5	50		03/13/14 20:13	108-90-7	
Chloroethane	ND	ug/L	500	7.5	50		03/13/14 20:13	75-00-3	
Chloroform	ND	ug/L	250	7.0	50		03/13/14 20:13	67-66-3	
Chloromethane	ND	ug/L	500	4.0	50		03/13/14 20:13	74-87-3	
Dibromochloromethane	ND	ug/L	250	10.5	50		03/13/14 20:13	124-48-1	
1,1-Dichloroethane	ND	ug/L	120	2.5	50		03/13/14 20:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	250	6.0	50		03/13/14 20:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	250	10.0	50		03/13/14 20:13	75-35-4	
cis-1,2-Dichloroethene	**60.8J**	ug/L	250	4.0	50		03/13/14 20:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	250	10.0	50		03/13/14 20:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	250	8.0	50		03/13/14 20:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	50.0	7.0	50		03/13/14 20:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	50.0	6.0	50		03/13/14 20:13	10061-02-6	
Ethylbenzene	ND	ug/L	250	9.0	50		03/13/14 20:13	100-41-4	
2-Hexanone	ND	ug/L	500	59.5	50		03/13/14 20:13	591-78-6	
Methylene chloride	ND	ug/L	250	7.5	50		03/13/14 20:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	500	21.0	50		03/13/14 20:13	108-10-1	
Styrene	ND	ug/L	250	6.0	50		03/13/14 20:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	50.0	7.5	50		03/13/14 20:13	79-34-5	
Tetrachloroethene	ND	ug/L	250	5.0	50		03/13/14 20:13	127-18-4	
Toluene	ND	ug/L	250	8.5	50		03/13/14 20:13	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	250	5.5	50		03/13/14 20:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	250	10.0	50		03/13/14 20:13	79-00-5	
Trichloroethene	**8270**	ug/L	250	8.5	50		03/13/14 20:13	79-01-6	
Vinyl chloride	ND	ug/L	100	6.5	50		03/13/14 20:13	75-01-4	
Xylene (Total)	ND	ug/L	250	21.0	50		03/13/14 20:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		50		03/13/14 20:13	460-00-4	
1,2-Dichloroethane-d4 (S)	109	%	80-120		50		03/13/14 20:13	17060-07-0	
Toluene-d8 (S)	95	%	80-120		50		03/13/14 20:13	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	50		03/13/14 20:13		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: ITMW-19-201403 **Lab ID: 60164494015** Collected: 03/08/14 15:53 Received: 03/10/14 01:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.1J**	ug/L	10.0	1.9	1		03/13/14 19:44	67-64-1	
Benzene	ND	ug/L	5.0	0.060	1		03/13/14 19:44	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/13/14 19:44	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/13/14 19:44	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/13/14 19:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/13/14 19:44	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/13/14 19:44	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/13/14 19:44	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/13/14 19:44	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/13/14 19:44	75-00-3	
Chloroform	**3.0J**	ug/L	5.0	0.14	1		03/13/14 19:44	67-66-3	
Chloromethane	**0.093J**	ug/L	10.0	0.080	1		03/13/14 19:44	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/13/14 19:44	124-48-1	
1,1-Dichloroethane	**0.26J**	ug/L	2.4	0.050	1		03/13/14 19:44	75-34-3	
1,2-Dichloroethane	**0.14J**	ug/L	5.0	0.12	1		03/13/14 19:44	107-06-2	
1,1-Dichloroethene	**13.2**	ug/L	5.0	0.20	1		03/13/14 19:44	75-35-4	
cis-1,2-Dichloroethene	**66.7**	ug/L	5.0	0.080	1		03/13/14 19:44	156-59-2	
trans-1,2-Dichloroethene	**0.99J**	ug/L	5.0	0.20	1		03/13/14 19:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/13/14 19:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/13/14 19:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/13/14 19:44	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/13/14 19:44	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/13/14 19:44	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/13/14 19:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/13/14 19:44	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/13/14 19:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/13/14 19:44	79-34-5	
Tetrachloroethene	**1.9J**	ug/L	5.0	0.10	1		03/13/14 19:44	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/13/14 19:44	108-88-3	
1,1,1-Trichloroethane	**0.14J**	ug/L	5.0	0.11	1		03/13/14 19:44	71-55-6	
1,1,2-Trichloroethane	**0.76J**	ug/L	5.0	0.20	1		03/13/14 19:44	79-00-5	
Trichloroethene	**8850**	ug/L	250	8.5	50		03/15/14 04:36	79-01-6	
Vinyl chloride	**0.57J**	ug/L	2.0	0.13	1		03/13/14 19:44	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/13/14 19:44	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		03/13/14 19:44	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		03/13/14 19:44	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		03/13/14 19:44	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/13/14 19:44		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: MW-34-20140308 **Lab ID: 60164494016** Collected: 03/08/14 13:30 Received: 03/10/14 01:15 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	1.9	1		03/17/14 15:30	67-64-1	L3
Benzene	ND	ug/L	5.0	0.060	1		03/17/14 15:30	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/17/14 15:30	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/17/14 15:30	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/17/14 15:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/17/14 15:30	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/17/14 15:30	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/17/14 15:30	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/17/14 15:30	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/17/14 15:30	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/17/14 15:30	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/17/14 15:30	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/17/14 15:30	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/17/14 15:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/17/14 15:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/17/14 15:30	75-35-4	
cis-1,2-Dichloroethene	**0.61J**	ug/L	5.0	0.080	1		03/17/14 15:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/17/14 15:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/17/14 15:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/17/14 15:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/17/14 15:30	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/17/14 15:30	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/17/14 15:30	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/17/14 15:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/17/14 15:30	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/17/14 15:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/17/14 15:30	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/17/14 15:30	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/17/14 15:30	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/17/14 15:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/17/14 15:30	79-00-5	
Trichloroethene	**28.7**	ug/L	5.0	0.17	1		03/17/14 15:30	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/17/14 15:30	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/17/14 15:30	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		03/17/14 15:30	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		03/17/14 15:30	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		03/17/14 15:30	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/17/14 15:30		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: MW-65-20140308 **Lab ID: 60164494017** Collected: 03/08/14 11:35 Received: 03/10/14 01:15 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	1.9	1		03/18/14 10:55	67-64-1	L3
Benzene	ND	ug/L	5.0	0.060	1		03/18/14 10:55	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/18/14 10:55	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/18/14 10:55	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/18/14 10:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/18/14 10:55	78-93-3	L3
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/18/14 10:55	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/18/14 10:55	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/18/14 10:55	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/18/14 10:55	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/18/14 10:55	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/18/14 10:55	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/18/14 10:55	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/18/14 10:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/18/14 10:55	107-06-2	
1,1-Dichloroethene	**0.40J**	ug/L	5.0	0.20	1		03/18/14 10:55	75-35-4	
cis-1,2-Dichloroethene	**6.6**	ug/L	5.0	0.080	1		03/18/14 10:55	156-59-2	
trans-1,2-Dichloroethene	**0.28J**	ug/L	5.0	0.20	1		03/18/14 10:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/18/14 10:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/18/14 10:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/18/14 10:55	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/18/14 10:55	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/18/14 10:55	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/18/14 10:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/18/14 10:55	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/18/14 10:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/18/14 10:55	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/18/14 10:55	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/18/14 10:55	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/18/14 10:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/18/14 10:55	79-00-5	
Trichloroethene	**199**	ug/L	25.0	0.85	5		03/19/14 16:23	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/18/14 10:55	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/18/14 10:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		03/18/14 10:55	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-120		1		03/18/14 10:55	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		03/18/14 10:55	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/18/14 10:55		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: DUP-6-20140308 **Lab ID: 60164494018** Collected: 03/08/14 15:20 Received: 03/10/14 01:15 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	1.9	1		03/17/14 15:58	67-64-1	L3
Benzene	**0.17J**	ug/L	5.0	0.060	1		03/17/14 15:58	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/17/14 15:58	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/17/14 15:58	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/17/14 15:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/17/14 15:58	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/17/14 15:58	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/17/14 15:58	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/17/14 15:58	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/17/14 15:58	75-00-3	
Chloroform	**0.55J**	ug/L	5.0	0.14	1		03/17/14 15:58	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/17/14 15:58	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/17/14 15:58	124-48-1	
1,1-Dichloroethane	**0.40J**	ug/L	2.4	0.050	1		03/17/14 15:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/17/14 15:58	107-06-2	
1,1-Dichloroethene	**1.2J**	ug/L	5.0	0.20	1		03/17/14 15:58	75-35-4	
cis-1,2-Dichloroethene	**207**	ug/L	125	2.0	25		03/18/14 13:19	156-59-2	
trans-1,2-Dichloroethene	**7.2**	ug/L	5.0	0.20	1		03/17/14 15:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/17/14 15:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/17/14 15:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/17/14 15:58	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/17/14 15:58	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/17/14 15:58	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/17/14 15:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/17/14 15:58	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/17/14 15:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/17/14 15:58	79-34-5	
Tetrachloroethene	**1.3J**	ug/L	5.0	0.10	1		03/17/14 15:58	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/17/14 15:58	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/17/14 15:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/17/14 15:58	79-00-5	
Trichloroethene	**2400**	ug/L	125	4.2	25		03/18/14 13:19	79-01-6	
Vinyl chloride	**3.4**	ug/L	2.0	0.13	1		03/17/14 15:58	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/17/14 15:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		03/17/14 15:58	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		03/17/14 15:58	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		03/17/14 15:58	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/17/14 15:58		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: ITMW-12-20140308 **Lab ID: 60164494019** Collected: 03/08/14 15:20 Received: 03/10/14 01:15 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	1.9	1		03/17/14 16:13	67-64-1	L3
Benzene	**0.15J**	ug/L	5.0	0.060	1		03/17/14 16:13	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/17/14 16:13	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/17/14 16:13	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/17/14 16:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/17/14 16:13	78-93-3	
Carbon disulfide	**0.13J**	ug/L	10.0	0.12	1		03/17/14 16:13	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/17/14 16:13	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/17/14 16:13	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/17/14 16:13	75-00-3	
Chloroform	**0.50J**	ug/L	5.0	0.14	1		03/17/14 16:13	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/17/14 16:13	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/17/14 16:13	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/17/14 16:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/17/14 16:13	107-06-2	
1,1-Dichloroethene	**1.4J**	ug/L	5.0	0.20	1		03/17/14 16:13	75-35-4	
cis-1,2-Dichloroethene	**148**	ug/L	125	2.0	25		03/18/14 13:33	156-59-2	
trans-1,2-Dichloroethene	**4.7J**	ug/L	5.0	0.20	1		03/17/14 16:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/17/14 16:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/17/14 16:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/17/14 16:13	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/17/14 16:13	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/17/14 16:13	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/17/14 16:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.79J**	ug/L	10.0	0.42	1		03/17/14 16:13	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/17/14 16:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/17/14 16:13	79-34-5	
Tetrachloroethene	**1.1J**	ug/L	5.0	0.10	1		03/17/14 16:13	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/17/14 16:13	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/17/14 16:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/17/14 16:13	79-00-5	
Trichloroethene	**1910**	ug/L	125	4.2	25		03/18/14 13:33	79-01-6	
Vinyl chloride	**3.4**	ug/L	2.0	0.13	1		03/17/14 16:13	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/17/14 16:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		03/17/14 16:13	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	80-120		1		03/17/14 16:13	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		03/17/14 16:13	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/17/14 16:13		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: MW-35R-201403 **Lab ID: 60164494020** Collected: 03/08/14 10:55 Received: 03/10/14 01:15 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	1.9	1		03/17/14 16:27	67-64-1	L3
Benzene	**0.15J**	ug/L	5.0	0.060	1		03/17/14 16:27	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/17/14 16:27	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/17/14 16:27	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/17/14 16:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/17/14 16:27	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/17/14 16:27	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/17/14 16:27	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/17/14 16:27	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/17/14 16:27	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/17/14 16:27	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/17/14 16:27	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/17/14 16:27	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/17/14 16:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/17/14 16:27	107-06-2	
1,1-Dichloroethene	**0.66J**	ug/L	5.0	0.20	1		03/17/14 16:27	75-35-4	
cis-1,2-Dichloroethene	**14.9**	ug/L	5.0	0.080	1		03/17/14 16:27	156-59-2	
trans-1,2-Dichloroethene	**0.50J**	ug/L	5.0	0.20	1		03/17/14 16:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/17/14 16:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/17/14 16:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/17/14 16:27	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/17/14 16:27	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/17/14 16:27	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/17/14 16:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/17/14 16:27	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/17/14 16:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/17/14 16:27	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/17/14 16:27	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/17/14 16:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/17/14 16:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/17/14 16:27	79-00-5	
Trichloroethene	**345**	ug/L	25.0	0.85	5		03/18/14 13:47	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/17/14 16:27	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/17/14 16:27	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		03/17/14 16:27	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		03/17/14 16:27	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		03/17/14 16:27	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/17/14 16:27		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: IW-80-201403 **Lab ID: 60164494021** Collected: 03/08/14 12:50 Received: 03/10/14 01:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.3J**	ug/L	10.0	1.9	1		03/17/14 23:49	67-64-1	L1
Benzene	ND	ug/L	5.0	0.060	1		03/17/14 23:49	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/17/14 23:49	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/17/14 23:49	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/17/14 23:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/17/14 23:49	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/17/14 23:49	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/17/14 23:49	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/17/14 23:49	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/17/14 23:49	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/17/14 23:49	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/17/14 23:49	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/17/14 23:49	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/17/14 23:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/17/14 23:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/17/14 23:49	75-35-4	
cis-1,2-Dichloroethene	**2.7J**	ug/L	5.0	0.080	1		03/17/14 23:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/17/14 23:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/17/14 23:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/17/14 23:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/17/14 23:49	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/17/14 23:49	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/17/14 23:49	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/17/14 23:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/17/14 23:49	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/17/14 23:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/17/14 23:49	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/17/14 23:49	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/17/14 23:49	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/17/14 23:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/17/14 23:49	79-00-5	
Trichloroethene	**79.1**	ug/L	5.0	0.17	1		03/17/14 23:49	79-01-6	M1
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/17/14 23:49	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/17/14 23:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%	80-120		1		03/17/14 23:49	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		03/17/14 23:49	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		03/17/14 23:49	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/17/14 23:49		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: MW-32-20140308 **Lab ID: 60164494022** Collected: 03/08/14 10:05 Received: 03/10/14 01:15 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	1.9	1		03/17/14 16:41	67-64-1	L3
Benzene	ND	ug/L	5.0	0.060	1		03/17/14 16:41	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/17/14 16:41	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/17/14 16:41	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/17/14 16:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/17/14 16:41	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/17/14 16:41	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/17/14 16:41	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/17/14 16:41	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/17/14 16:41	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/17/14 16:41	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/17/14 16:41	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/17/14 16:41	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/17/14 16:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/17/14 16:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/17/14 16:41	75-35-4	
cis-1,2-Dichloroethene	**1.1J**	ug/L	5.0	0.080	1		03/18/14 11:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/17/14 16:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/17/14 16:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/17/14 16:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/17/14 16:41	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/17/14 16:41	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/17/14 16:41	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/17/14 16:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/17/14 16:41	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/17/14 16:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/17/14 16:41	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/17/14 16:41	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/17/14 16:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/17/14 16:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/17/14 16:41	79-00-5	
Trichloroethene	**36.8**	ug/L	5.0	0.17	1		03/18/14 11:10	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/17/14 16:41	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/17/14 16:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		03/17/14 16:41	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		03/17/14 16:41	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		03/17/14 16:41	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/17/14 16:41		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: ITMW-11-201403 **Lab ID: 60164494023** Collected: 03/08/14 15:05 Received: 03/10/14 01:15 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	1.9	1		03/18/14 00:03	67-64-1	L3
Benzene	ND	ug/L	5.0	0.060	1		03/18/14 00:03	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/18/14 00:03	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/18/14 00:03	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/18/14 00:03	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/18/14 00:03	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/18/14 00:03	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/18/14 00:03	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/18/14 00:03	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/18/14 00:03	75-00-3	
Chloroform	**0.82J**	ug/L	5.0	0.14	1		03/18/14 00:03	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/18/14 00:03	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/18/14 00:03	124-48-1	
1,1-Dichloroethane	**0.95J**	ug/L	2.4	0.050	1		03/18/14 00:03	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/18/14 00:03	107-06-2	
1,1-Dichloroethene	**2.6J**	ug/L	5.0	0.20	1		03/18/14 00:03	75-35-4	
cis-1,2-Dichloroethene	**187**	ug/L	5.0	0.080	1		03/18/14 00:03	156-59-2	M1
trans-1,2-Dichloroethene	**3.5J**	ug/L	5.0	0.20	1		03/18/14 00:03	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/18/14 00:03	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/18/14 00:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/18/14 00:03	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/18/14 00:03	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/18/14 00:03	591-78-6	
Methylene chloride	**1.7J**	ug/L	5.0	0.15	1		03/18/14 00:03	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/18/14 00:03	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/18/14 00:03	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/18/14 00:03	79-34-5	
Tetrachloroethene	**1.7J**	ug/L	5.0	0.10	1		03/18/14 00:03	127-18-4	
Toluene	**0.19J**	ug/L	5.0	0.17	1		03/18/14 00:03	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/18/14 00:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/18/14 00:03	79-00-5	
Trichloroethene	**2980**	ug/L	125	4.2	25		03/18/14 14:02	79-01-6	
Vinyl chloride	**22.5**	ug/L	2.0	0.13	1		03/18/14 00:03	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/18/14 00:03	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		03/18/14 00:03	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		03/18/14 00:03	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		03/18/14 00:03	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/18/14 00:03		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: MW-33-201403 **Lab ID: 60164494024** Collected: 03/08/14 09:10 Received: 03/10/14 01:15 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	1.9	1		03/18/14 00:18	67-64-1	L3
Benzene	**0.098J**	ug/L	5.0	0.060	1		03/18/14 00:18	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/18/14 00:18	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/18/14 00:18	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/18/14 00:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/18/14 00:18	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/18/14 00:18	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/18/14 00:18	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/18/14 00:18	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/18/14 00:18	75-00-3	
Chloroform	**0.30J**	ug/L	5.0	0.14	1		03/18/14 00:18	67-66-3	
Chloromethane	**0.13J**	ug/L	10.0	0.080	1		03/18/14 00:18	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/18/14 00:18	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/18/14 00:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/18/14 00:18	107-06-2	
1,1-Dichloroethene	**1.4J**	ug/L	5.0	0.20	1		03/18/14 00:18	75-35-4	
cis-1,2-Dichloroethene	**15.9**	ug/L	5.0	0.080	1		03/18/14 00:18	156-59-2	
trans-1,2-Dichloroethene	**0.33J**	ug/L	5.0	0.20	1		03/18/14 00:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/18/14 00:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/18/14 00:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/18/14 00:18	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/18/14 00:18	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/18/14 00:18	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/18/14 00:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/18/14 00:18	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/18/14 00:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/18/14 00:18	79-34-5	
Tetrachloroethene	**0.20J**	ug/L	5.0	0.10	1		03/18/14 00:18	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/18/14 00:18	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/18/14 00:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/18/14 00:18	79-00-5	
Trichloroethene	**918**	ug/L	50.0	1.7	10		03/18/14 14:16	79-01-6	
Vinyl chloride	**0.56J**	ug/L	2.0	0.13	1		03/18/14 00:18	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/18/14 00:18	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		1		03/18/14 00:18	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		03/18/14 00:18	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		03/18/14 00:18	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/18/14 00:18		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: MW-25-20140308 **Lab ID: 60164494025** Collected: 03/08/14 16:50 Received: 03/10/14 01:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**210J**	ug/L	1000	188	100		03/18/14 00:32	67-64-1	L1
Benzene	ND	ug/L	500	6.0	100		03/18/14 00:32	71-43-2	
Bromodichloromethane	ND	ug/L	500	19.0	100		03/18/14 00:32	75-27-4	
Bromoform	ND	ug/L	500	7.0	100		03/18/14 00:32	75-25-2	
Bromomethane	ND	ug/L	700	16.0	100		03/18/14 00:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	1000	59.0	100		03/18/14 00:32	78-93-3	
Carbon disulfide	ND	ug/L	1000	12.0	100		03/18/14 00:32	75-15-0	
Carbon tetrachloride	ND	ug/L	500	18.0	100		03/18/14 00:32	56-23-5	
Chlorobenzene	ND	ug/L	500	21.0	100		03/18/14 00:32	108-90-7	
Chloroethane	ND	ug/L	1000	15.0	100		03/18/14 00:32	75-00-3	
Chloroform	ND	ug/L	500	14.0	100		03/18/14 00:32	67-66-3	
Chloromethane	**13.9J**	ug/L	1000	8.0	100		03/18/14 00:32	74-87-3	
Dibromochloromethane	ND	ug/L	500	21.0	100		03/18/14 00:32	124-48-1	
1,1-Dichloroethane	ND	ug/L	240	5.0	100		03/18/14 00:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	500	12.0	100		03/18/14 00:32	107-06-2	
1,1-Dichloroethene	**25.3J**	ug/L	500	20.0	100		03/18/14 00:32	75-35-4	
cis-1,2-Dichloroethene	**625**	ug/L	500	8.0	100		03/18/14 00:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	500	20.0	100		03/18/14 00:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	500	16.0	100		03/18/14 00:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	100	14.0	100		03/18/14 00:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	100	12.0	100		03/18/14 00:32	10061-02-6	
Ethylbenzene	ND	ug/L	500	18.0	100		03/18/14 00:32	100-41-4	
2-Hexanone	ND	ug/L	1000	119	100		03/18/14 00:32	591-78-6	
Methylene chloride	ND	ug/L	500	15.0	100		03/18/14 00:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	1000	42.0	100		03/18/14 00:32	108-10-1	
Styrene	ND	ug/L	500	12.0	100		03/18/14 00:32	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	100	15.0	100		03/18/14 00:32	79-34-5	
Tetrachloroethene	ND	ug/L	500	10.0	100		03/18/14 00:32	127-18-4	
Toluene	ND	ug/L	500	17.0	100		03/18/14 00:32	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	500	11.0	100		03/18/14 00:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	500	20.0	100		03/18/14 00:32	79-00-5	
Trichloroethene	**14500**	ug/L	500	17.0	100		03/18/14 00:32	79-01-6	
Vinyl chloride	**33.6J**	ug/L	200	13.0	100		03/18/14 00:32	75-01-4	
Xylene (Total)	ND	ug/L	500	42.0	100		03/18/14 00:32	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		100		03/18/14 00:32	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120		100		03/18/14 00:32	17060-07-0	
Toluene-d8 (S)	102	%	80-120		100		03/18/14 00:32	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	100		03/18/14 00:32		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: IW-73-201403 **Lab ID: 60164494026** Collected: 03/07/14 17:55 Received: 03/10/14 01:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.5J**	ug/L	10.0	1.9	1		03/18/14 00:46	67-64-1	L1
Benzene	**0.18J**	ug/L	5.0	0.060	1		03/18/14 00:46	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/18/14 00:46	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/18/14 00:46	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/18/14 00:46	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/18/14 00:46	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/18/14 00:46	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/18/14 00:46	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/18/14 00:46	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/18/14 00:46	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/18/14 00:46	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/18/14 00:46	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/18/14 00:46	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/18/14 00:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/18/14 00:46	107-06-2	
1,1-Dichloroethene	**2.6J**	ug/L	5.0	0.20	1		03/18/14 00:46	75-35-4	
cis-1,2-Dichloroethene	**20.9**	ug/L	5.0	0.080	1		03/18/14 00:46	156-59-2	
trans-1,2-Dichloroethene	**0.95J**	ug/L	5.0	0.20	1		03/18/14 00:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/18/14 00:46	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/18/14 00:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/18/14 00:46	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/18/14 00:46	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/18/14 00:46	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/18/14 00:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/18/14 00:46	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/18/14 00:46	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/18/14 00:46	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/18/14 00:46	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/18/14 00:46	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/18/14 00:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/18/14 00:46	79-00-5	
Trichloroethene	**183**	ug/L	5.0	0.17	1		03/18/14 00:46	79-01-6	
Vinyl chloride	**4.6**	ug/L	2.0	0.13	1		03/18/14 00:46	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/18/14 00:46	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		03/18/14 00:46	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		03/18/14 00:46	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		03/18/14 00:46	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/18/14 00:46		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: MW-41-201403 **Lab ID: 60164494027** Collected: 03/07/14 18:16 Received: 03/10/14 01:15 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	1.9	1		03/18/14 01:00	67-64-1	L3
Benzene	ND	ug/L	5.0	0.060	1		03/18/14 01:00	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/18/14 01:00	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/18/14 01:00	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/18/14 01:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/18/14 01:00	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/18/14 01:00	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/18/14 01:00	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/18/14 01:00	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/18/14 01:00	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/18/14 01:00	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/18/14 01:00	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/18/14 01:00	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/18/14 01:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/18/14 01:00	107-06-2	
1,1-Dichloroethene	**1.6J**	ug/L	5.0	0.20	1		03/18/14 01:00	75-35-4	
cis-1,2-Dichloroethene	**19.7**	ug/L	5.0	0.080	1		03/18/14 01:00	156-59-2	
trans-1,2-Dichloroethene	**0.50J**	ug/L	5.0	0.20	1		03/18/14 01:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/18/14 01:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/18/14 01:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/18/14 01:00	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/18/14 01:00	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/18/14 01:00	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/18/14 01:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/18/14 01:00	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/18/14 01:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/18/14 01:00	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/18/14 01:00	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/18/14 01:00	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/18/14 01:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/18/14 01:00	79-00-5	
Trichloroethene	**501**	ug/L	50.0	1.7	10		03/18/14 14:30	79-01-6	
Vinyl chloride	**0.68J**	ug/L	2.0	0.13	1		03/18/14 01:00	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/18/14 01:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		03/18/14 01:00	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		03/18/14 01:00	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		03/18/14 01:00	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/18/14 01:00		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: ITMW-17-201403 **Lab ID: 60164494028** Collected: 03/08/14 16:30 Received: 03/10/14 01:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.8J**	ug/L	10.0	1.9	1		03/18/14 01:14	67-64-1	L1
Benzene	ND	ug/L	5.0	0.060	1		03/18/14 01:14	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/18/14 01:14	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/18/14 01:14	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/18/14 01:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/18/14 01:14	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/18/14 01:14	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/18/14 01:14	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/18/14 01:14	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/18/14 01:14	75-00-3	
Chloroform	**1.3J**	ug/L	5.0	0.14	1		03/18/14 01:14	67-66-3	
Chloromethane	**0.12J**	ug/L	10.0	0.080	1		03/18/14 01:14	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/18/14 01:14	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/18/14 01:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/18/14 01:14	107-06-2	
1,1-Dichloroethene	**5.1**	ug/L	5.0	0.20	1		03/18/14 01:14	75-35-4	
cis-1,2-Dichloroethene	**86.1**	ug/L	5.0	0.080	1		03/18/14 01:14	156-59-2	
trans-1,2-Dichloroethene	**1.8J**	ug/L	5.0	0.20	1		03/18/14 01:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/18/14 01:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/18/14 01:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/18/14 01:14	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/18/14 01:14	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/18/14 01:14	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/18/14 01:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/18/14 01:14	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/18/14 01:14	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/18/14 01:14	79-34-5	
Tetrachloroethene	**0.90J**	ug/L	5.0	0.10	1		03/18/14 01:14	127-18-4	
Toluene	**0.17J**	ug/L	5.0	0.17	1		03/18/14 01:14	108-88-3	
1,1,1-Trichloroethane	**0.50J**	ug/L	5.0	0.11	1		03/18/14 01:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/18/14 01:14	79-00-5	
Trichloroethene	**3770**	ug/L	250	8.5	50		03/18/14 14:45	79-01-6	
Vinyl chloride	**0.57J**	ug/L	2.0	0.13	1		03/18/14 01:14	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/18/14 01:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		03/18/14 01:14	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		03/18/14 01:14	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		03/18/14 01:14	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/18/14 01:14		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: EB-2-20140308 **Lab ID: 60164494029** Collected: 03/08/14 17:10 Received: 03/10/14 01:15 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	1.9	1		03/17/14 21:12	67-64-1	L3
Benzene	ND	ug/L	5.0	0.060	1		03/17/14 21:12	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/17/14 21:12	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/17/14 21:12	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/17/14 21:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/17/14 21:12	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/17/14 21:12	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/17/14 21:12	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/17/14 21:12	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/17/14 21:12	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/17/14 21:12	67-66-3	
Chloromethane	ND	ug/L	10.0	0.080	1		03/17/14 21:12	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/17/14 21:12	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/17/14 21:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/17/14 21:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/17/14 21:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/17/14 21:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/17/14 21:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/17/14 21:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/17/14 21:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/17/14 21:12	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/17/14 21:12	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/17/14 21:12	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/17/14 21:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/17/14 21:12	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/17/14 21:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/17/14 21:12	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/17/14 21:12	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/17/14 21:12	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/17/14 21:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/17/14 21:12	79-00-5	
Trichloroethene	**0.26J**	ug/L	5.0	0.17	1		03/17/14 21:12	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/17/14 21:12	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/17/14 21:12	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		03/17/14 21:12	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		03/17/14 21:12	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		03/17/14 21:12	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/17/14 21:12		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: DUP-3-201403 **Lab ID: 60164494030** Collected: 03/08/14 16:30 Received: 03/10/14 01:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**4.6J**	ug/L	10.0	1.9	1		03/18/14 01:29	67-64-1	L1
Benzene	ND	ug/L	5.0	0.060	1		03/18/14 01:29	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/18/14 01:29	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/18/14 01:29	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/18/14 01:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/18/14 01:29	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/18/14 01:29	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/18/14 01:29	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/18/14 01:29	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/18/14 01:29	75-00-3	
Chloroform	**1.3J**	ug/L	5.0	0.14	1		03/18/14 01:29	67-66-3	
Chloromethane	**0.16J**	ug/L	10.0	0.080	1		03/18/14 01:29	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/18/14 01:29	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/18/14 01:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/18/14 01:29	107-06-2	
1,1-Dichloroethene	**5.2**	ug/L	5.0	0.20	1		03/18/14 01:29	75-35-4	
cis-1,2-Dichloroethene	**87.3**	ug/L	5.0	0.080	1		03/18/14 01:29	156-59-2	
trans-1,2-Dichloroethene	**0.67J**	ug/L	5.0	0.20	1		03/18/14 01:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/18/14 01:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/18/14 01:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/18/14 01:29	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/18/14 01:29	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/18/14 01:29	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/18/14 01:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/18/14 01:29	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/18/14 01:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/18/14 01:29	79-34-5	
Tetrachloroethene	**1.1J**	ug/L	5.0	0.10	1		03/18/14 01:29	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/18/14 01:29	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/18/14 01:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/18/14 01:29	79-00-5	
Trichloroethene	**4040**	ug/L	250	8.5	50		03/18/14 14:59	79-01-6	
Vinyl chloride	**0.74J**	ug/L	2.0	0.13	1		03/18/14 01:29	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/18/14 01:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		03/18/14 01:29	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		03/18/14 01:29	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		03/18/14 01:29	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/18/14 01:29		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: TRIP BLANK 1 **Lab ID: 60164494031** Collected: 03/08/14 09:00 Received: 03/10/14 01:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.5J**	ug/L	10.0	1.9	1		03/17/14 21:26	67-64-1	L1
Benzene	ND	ug/L	5.0	0.060	1		03/17/14 21:26	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/17/14 21:26	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/17/14 21:26	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/17/14 21:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/17/14 21:26	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/17/14 21:26	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/17/14 21:26	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/17/14 21:26	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/17/14 21:26	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/17/14 21:26	67-66-3	
Chloromethane	**0.11J**	ug/L	10.0	0.080	1		03/17/14 21:26	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/17/14 21:26	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/17/14 21:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/17/14 21:26	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/17/14 21:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/17/14 21:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/17/14 21:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/17/14 21:26	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/17/14 21:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/17/14 21:26	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/17/14 21:26	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/17/14 21:26	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/17/14 21:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/17/14 21:26	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/17/14 21:26	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/17/14 21:26	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/17/14 21:26	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/17/14 21:26	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/17/14 21:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/17/14 21:26	79-00-5	
Trichloroethene	**0.24J**	ug/L	5.0	0.17	1		03/17/14 21:26	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/17/14 21:26	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/17/14 21:26	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	105	%	80-120		1		03/17/14 21:26	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		03/17/14 21:26	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		03/17/14 21:26	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/17/14 21:26		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: TRIP BLANK 2 **Lab ID: 60164494032** Collected: 03/07/14 17:30 Received: 03/10/14 01:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.9J**	ug/L	10.0	1.9	1		03/17/14 21:41	67-64-1	L1
Benzene	ND	ug/L	5.0	0.060	1		03/17/14 21:41	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/17/14 21:41	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/17/14 21:41	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/17/14 21:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/17/14 21:41	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/17/14 21:41	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/17/14 21:41	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/17/14 21:41	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/17/14 21:41	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/17/14 21:41	67-66-3	
Chloromethane	**0.12J**	ug/L	10.0	0.080	1		03/17/14 21:41	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/17/14 21:41	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/17/14 21:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/17/14 21:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/17/14 21:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/17/14 21:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/17/14 21:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/17/14 21:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/17/14 21:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/17/14 21:41	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/17/14 21:41	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/17/14 21:41	591-78-6	
Methylene chloride	ND	ug/L	5.0	0.15	1		03/17/14 21:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/17/14 21:41	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/17/14 21:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/17/14 21:41	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/17/14 21:41	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/17/14 21:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/17/14 21:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/17/14 21:41	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/17/14 21:41	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/17/14 21:41	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/17/14 21:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		03/17/14 21:41	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		03/17/14 21:41	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		03/17/14 21:41	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/17/14 21:41		

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60164494

Sample: EB-3-201403 **Lab ID: 60164494033** Collected: 03/08/14 17:15 Received: 03/10/14 01:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**2.7J**	ug/L	10.0	1.9	1		03/17/14 23:35	67-64-1	L1
Benzene	ND	ug/L	5.0	0.060	1		03/17/14 23:35	71-43-2	
Bromodichloromethane	ND	ug/L	5.0	0.19	1		03/17/14 23:35	75-27-4	
Bromoform	ND	ug/L	5.0	0.070	1		03/17/14 23:35	75-25-2	
Bromomethane	ND	ug/L	7.0	0.16	1		03/17/14 23:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		03/17/14 23:35	78-93-3	
Carbon disulfide	ND	ug/L	10.0	0.12	1		03/17/14 23:35	75-15-0	
Carbon tetrachloride	ND	ug/L	5.0	0.18	1		03/17/14 23:35	56-23-5	
Chlorobenzene	ND	ug/L	5.0	0.21	1		03/17/14 23:35	108-90-7	
Chloroethane	ND	ug/L	10.0	0.15	1		03/17/14 23:35	75-00-3	
Chloroform	ND	ug/L	5.0	0.14	1		03/17/14 23:35	67-66-3	
Chloromethane	**0.15J**	ug/L	10.0	0.080	1		03/17/14 23:35	74-87-3	
Dibromochloromethane	ND	ug/L	5.0	0.21	1		03/17/14 23:35	124-48-1	
1,1-Dichloroethane	ND	ug/L	2.4	0.050	1		03/17/14 23:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	5.0	0.12	1		03/17/14 23:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	5.0	0.20	1		03/17/14 23:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	5.0	0.080	1		03/17/14 23:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	5.0	0.20	1		03/17/14 23:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	5.0	0.16	1		03/17/14 23:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		03/17/14 23:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		03/17/14 23:35	10061-02-6	
Ethylbenzene	ND	ug/L	5.0	0.18	1		03/17/14 23:35	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		03/17/14 23:35	591-78-6	
Methylene chloride	**0.80J**	ug/L	5.0	0.15	1		03/17/14 23:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		03/17/14 23:35	108-10-1	
Styrene	ND	ug/L	5.0	0.12	1		03/17/14 23:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		03/17/14 23:35	79-34-5	
Tetrachloroethene	ND	ug/L	5.0	0.10	1		03/17/14 23:35	127-18-4	
Toluene	ND	ug/L	5.0	0.17	1		03/17/14 23:35	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	5.0	0.11	1		03/17/14 23:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	5.0	0.20	1		03/17/14 23:35	79-00-5	
Trichloroethene	ND	ug/L	5.0	0.17	1		03/17/14 23:35	79-01-6	
Vinyl chloride	ND	ug/L	2.0	0.13	1		03/17/14 23:35	75-01-4	
Xylene (Total)	ND	ug/L	5.0	0.42	1		03/17/14 23:35	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		03/17/14 23:35	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		03/17/14 23:35	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		03/17/14 23:35	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		03/17/14 23:35		

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164494

QC Batch: MSV/60009
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60164494001

METHOD BLANK: 1343069
Matrix: Water
Associated Lab Samples: 60164494001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	03/13/14 11:10	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/13/14 11:10	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/13/14 11:10	
1,1-Dichloroethane	ug/L	ND	2.4	03/13/14 11:10	
1,1-Dichloroethene	ug/L	ND	5.0	03/13/14 11:10	
1,2-Dichloroethane	ug/L	ND	5.0	03/13/14 11:10	
1,2-Dichloropropane	ug/L	ND	5.0	03/13/14 11:10	
2-Butanone (MEK)	ug/L	ND	10.0	03/13/14 11:10	
2-Hexanone	ug/L	ND	10.0	03/13/14 11:10	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	03/13/14 11:10	
Acetone	ug/L	ND	10.0	03/13/14 11:10	
Benzene	ug/L	ND	5.0	03/13/14 11:10	
Bromodichloromethane	ug/L	ND	5.0	03/13/14 11:10	
Bromoform	ug/L	ND	5.0	03/13/14 11:10	
Bromomethane	ug/L	ND	7.0	03/13/14 11:10	
Carbon disulfide	ug/L	0.24J	10.0	03/13/14 11:10	
Carbon tetrachloride	ug/L	ND	5.0	03/13/14 11:10	
Chlorobenzene	ug/L	ND	5.0	03/13/14 11:10	
Chloroethane	ug/L	ND	10.0	03/13/14 11:10	
Chloroform	ug/L	ND	5.0	03/13/14 11:10	
Chloromethane	ug/L	ND	10.0	03/13/14 11:10	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/13/14 11:10	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/13/14 11:10	
Dibromochloromethane	ug/L	ND	5.0	03/13/14 11:10	
Ethylbenzene	ug/L	ND	5.0	03/13/14 11:10	
Methylene chloride	ug/L	ND	5.0	03/13/14 11:10	
Styrene	ug/L	ND	5.0	03/13/14 11:10	
Tetrachloroethene	ug/L	ND	5.0	03/13/14 11:10	
Toluene	ug/L	ND	5.0	03/13/14 11:10	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/13/14 11:10	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/13/14 11:10	
Trichloroethene	ug/L	ND	5.0	03/13/14 11:10	
Vinyl chloride	ug/L	ND	2.0	03/13/14 11:10	
Xylene (Total)	ug/L	ND	5.0	03/13/14 11:10	
1,2-Dichloroethane-d4 (S)	%	111	80-120	03/13/14 11:10	
4-Bromofluorobenzene (S)	%	99	80-120	03/13/14 11:10	
Toluene-d8 (S)	%	96	80-120	03/13/14 11:10	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164494

LABORATORY CONTROL SAMPLE: 1343070

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.4	107	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	18.3	92	73-124	
1,1,2-Trichloroethane	ug/L	20	18.1	90	80-120	
1,1-Dichloroethane	ug/L	20	18.7	93	77-120	
1,1-Dichloroethene	ug/L	20	19.0	95	78-126	
1,2-Dichloroethane	ug/L	20	21.8	109	77-123	
1,2-Dichloropropane	ug/L	20	19.7	98	80-121	
2-Butanone (MEK)	ug/L	100	145	145	52-145	
2-Hexanone	ug/L	100	127	127	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	106	106	71-131	
Acetone	ug/L	100	211	211	32-155	L0,SS
Benzene	ug/L	20	19.3	97	80-120	
Bromodichloromethane	ug/L	20	20.1	100	80-120	
Bromoform	ug/L	20	19.7	99	73-124	
Bromomethane	ug/L	20	13.6	68	31-144	
Carbon disulfide	ug/L	20	19.6	98	65-125	
Carbon tetrachloride	ug/L	20	21.0	105	78-128	
Chlorobenzene	ug/L	20	19.1	96	80-120	
Chloroethane	ug/L	20	19.4	97	55-137	
Chloroform	ug/L	20	19.6	98	79-120	
Chloromethane	ug/L	20	10.7	53	22-138	
cis-1,2-Dichloroethene	ug/L	20	21.7	108	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.3	92	80-120	
Dibromochloromethane	ug/L	20	19.3	97	80-120	
Ethylbenzene	ug/L	20	19.3	96	80-121	
Methylene chloride	ug/L	20	19.2	96	73-126	
Styrene	ug/L	20	18.6	93	80-120	
Tetrachloroethene	ug/L	20	19.7	98	80-121	
Toluene	ug/L	20	19.2	96	80-122	
trans-1,2-Dichloroethene	ug/L	20	19.2	96	79-121	
trans-1,3-Dichloropropene	ug/L	20	20.3	102	80-127	
Trichloroethene	ug/L	20	18.3	91	80-120	
Vinyl chloride	ug/L	20	15.5	77	59-120	
Xylene (Total)	ug/L	60	56.8	95	80-121	
1,2-Dichloroethane-d4 (S)	%			104	80-120	
4-Bromofluorobenzene (S)	%			93	80-120	
Toluene-d8 (S)	%			98	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164494

QC Batch: MSV/60010 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60164494002, 60164494003, 60164494004, 60164494005, 60164494006, 60164494007, 60164494008, 60164494009, 60164494010, 60164494011, 60164494012, 60164494013, 60164494014, 60164494015

METHOD BLANK: 1343081 Matrix: Water
Associated Lab Samples: 60164494002, 60164494003, 60164494004, 60164494005, 60164494006, 60164494007, 60164494008, 60164494009, 60164494010, 60164494011, 60164494012, 60164494013, 60164494014, 60164494015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	03/13/14 16:53	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/13/14 16:53	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/13/14 16:53	
1,1-Dichloroethane	ug/L	ND	2.4	03/13/14 16:53	
1,1-Dichloroethene	ug/L	ND	5.0	03/13/14 16:53	
1,2-Dichloroethane	ug/L	ND	5.0	03/13/14 16:53	
1,2-Dichloropropane	ug/L	ND	5.0	03/13/14 16:53	
2-Butanone (MEK)	ug/L	ND	10.0	03/13/14 16:53	
2-Hexanone	ug/L	ND	10.0	03/13/14 16:53	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	03/13/14 16:53	
Acetone	ug/L	ND	10.0	03/13/14 16:53	
Benzene	ug/L	ND	5.0	03/13/14 16:53	
Bromodichloromethane	ug/L	ND	5.0	03/13/14 16:53	
Bromoform	ug/L	ND	5.0	03/13/14 16:53	
Bromomethane	ug/L	ND	7.0	03/13/14 16:53	
Carbon disulfide	ug/L	0.12J	10.0	03/13/14 16:53	
Carbon tetrachloride	ug/L	ND	5.0	03/13/14 16:53	
Chlorobenzene	ug/L	ND	5.0	03/13/14 16:53	
Chloroethane	ug/L	ND	10.0	03/13/14 16:53	
Chloroform	ug/L	ND	5.0	03/13/14 16:53	
Chloromethane	ug/L	0.086J	10.0	03/13/14 16:53	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/13/14 16:53	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/13/14 16:53	
Dibromochloromethane	ug/L	ND	5.0	03/13/14 16:53	
Ethylbenzene	ug/L	ND	5.0	03/13/14 16:53	
Methylene chloride	ug/L	ND	5.0	03/13/14 16:53	
Styrene	ug/L	ND	5.0	03/13/14 16:53	
Tetrachloroethene	ug/L	ND	5.0	03/13/14 16:53	
Toluene	ug/L	ND	5.0	03/13/14 16:53	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/13/14 16:53	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/13/14 16:53	
Trichloroethene	ug/L	0.20J	5.0	03/13/14 16:53	
Vinyl chloride	ug/L	ND	2.0	03/13/14 16:53	
Xylene (Total)	ug/L	ND	5.0	03/13/14 16:53	
1,2-Dichloroethane-d4 (S)	%	111	80-120	03/13/14 16:53	
4-Bromofluorobenzene (S)	%	96	80-120	03/13/14 16:53	
Toluene-d8 (S)	%	97	80-120	03/13/14 16:53	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164494

LABORATORY CONTROL SAMPLE: 1343082

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.5	102	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	18.5	93	73-124	
1,1,2-Trichloroethane	ug/L	20	18.8	94	80-120	
1,1-Dichloroethane	ug/L	20	18.8	94	77-120	
1,1-Dichloroethene	ug/L	20	19.1	96	78-126	
1,2-Dichloroethane	ug/L	20	21.3	107	77-123	
1,2-Dichloropropane	ug/L	20	20.3	102	80-121	
2-Butanone (MEK)	ug/L	100	107	107	52-145	
2-Hexanone	ug/L	100	100	100	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	71-131	
Acetone	ug/L	100	122	122	32-155	
Benzene	ug/L	20	20.1	100	80-120	
Bromodichloromethane	ug/L	20	21.6	108	80-120	
Bromoform	ug/L	20	18.9	95	73-124	
Bromomethane	ug/L	20	11.9	59	31-144	
Carbon disulfide	ug/L	20	19.6	98	65-125	
Carbon tetrachloride	ug/L	20	20.1	100	78-128	
Chlorobenzene	ug/L	20	20.1	101	80-120	
Chloroethane	ug/L	20	17.7	89	55-137	
Chloroform	ug/L	20	20.1	100	79-120	
Chloromethane	ug/L	20	8.1J	40	22-138	
cis-1,2-Dichloroethene	ug/L	20	20.9	105	80-120	
cis-1,3-Dichloropropene	ug/L	20	17.7	89	80-120	
Dibromochloromethane	ug/L	20	20.3	102	80-120	
Ethylbenzene	ug/L	20	19.4	97	80-121	
Methylene chloride	ug/L	20	20.3	102	73-126	
Styrene	ug/L	20	18.7	94	80-120	
Tetrachloroethene	ug/L	20	20.9	104	80-121	
Toluene	ug/L	20	20.8	104	80-122	
trans-1,2-Dichloroethene	ug/L	20	18.6	93	79-121	
trans-1,3-Dichloropropene	ug/L	20	20.2	101	80-127	
Trichloroethene	ug/L	20	20.3	101	80-120	
Vinyl chloride	ug/L	20	16.0	80	59-120	
Xylene (Total)	ug/L	60	57.5	96	80-121	
1,2-Dichloroethane-d4 (S)	%			106	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1343083 1343084

Parameter	Units	60164494004 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	21.9	103	109	71-136	6	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.0	16.9	90	85	61-127	6	21	
1,1,2-Trichloroethane	ug/L	ND	20	20	16.1	17.2	80	86	63-123	7	22	
1,1-Dichloroethane	ug/L	ND	20	20	18.0	18.6	90	93	62-128	4	25	
1,1-Dichloroethene	ug/L	ND	20	20	20.2	19.9	101	99	60-144	2	28	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164494

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1343083 1343084

Parameter	Units	60164494004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	0.90J	20	20	21.2	21.4	101	102	49-148	1	35	
1,2-Dichloropropane	ug/L	ND	20	20	18.4	19.3	92	96	66-130	5	22	
2-Butanone (MEK)	ug/L	ND	100	100	86.6	88.9	87	89	36-145	3	23	
2-Hexanone	ug/L	ND	100	100	83.1	83.6	83	84	42-140	1	24	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	87.5	94.0	87	94	52-137	7	24	
Acetone	ug/L	ND	100	100	82.8	84.7	83	85	24-151	2	23	
Benzene	ug/L	0.21J	20	20	18.8	20.2	93	100	37-157	7	32	
Bromodichloromethane	ug/L	ND	20	20	19.7	19.8	98	99	67-125	0	21	
Bromoform	ug/L	ND	20	20	18.7	17.0	94	85	55-124	10	23	
Bromomethane	ug/L	ND	20	20	12.4	15.4	62	77	25-138	22	42	
Carbon disulfide	ug/L	ND	20	20	20.2	21.4	101	107	57-133	6	23	
Carbon tetrachloride	ug/L	ND	20	20	20.7	22.0	104	110	68-142	6	21	
Chlorobenzene	ug/L	ND	20	20	18.2	19.0	91	95	66-133	4	20	
Chloroethane	ug/L	ND	20	20	18.2	19.0	91	95	46-147	4	28	
Chloroform	ug/L	ND	20	20	19.0	18.8	95	94	66-127	1	20	
Chloromethane	ug/L	ND	20	20	14.3	12.1	71	60	19-136	17	36	
cis-1,2-Dichloroethene	ug/L	11.9	20	20	32.9	33.8	105	109	55-140	3	23	
cis-1,3-Dichloropropene	ug/L	ND	20	20	16.1	17.1	81	85	62-122	6	22	
Dibromochloromethane	ug/L	ND	20	20	17.5	17.9	87	89	62-130	2	22	
Ethylbenzene	ug/L	ND	20	20	17.9	18.7	90	94	31-160	4	32	
Methylene chloride	ug/L	ND	20	20	19.6	20.3	98	101	55-132	3	23	
Styrene	ug/L	ND	20	20	4.8J	4.9J	24	25	55-134	1	25	M1
Tetrachloroethene	ug/L	27.8	20	20	47.3	48.0	98	101	69-133	2	20	
Toluene	ug/L	ND	20	20	19.6	20.4	98	102	35-157	4	37	
trans-1,2-Dichloroethene	ug/L	ND	20	20	20.1	21.2	101	106	66-131	5	23	
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.7	17.9	94	89	62-131	5	23	
Trichloroethene	ug/L	6.1	20	20	27.7	28.0	108	110	61-135	1	21	
Vinyl chloride	ug/L	ND	20	20	18.0	18.6	90	93	44-128	3	22	
Xylene (Total)	ug/L	ND	60	60	56.3	56.6	94	94	34-156	1	37	
1,2-Dichloroethane-d4 (S)	%						107	111	80-120			
4-Bromofluorobenzene (S)	%						99	97	80-120			
Toluene-d8 (S)	%						98	99	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.: 60164494

QC Batch: MSV/60056 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60164494002, 60164494006, 60164494008, 60164494009, 60164494011, 60164494012, 60164494015

METHOD BLANK: 1344088 Matrix: Water
Associated Lab Samples: 60164494002, 60164494006, 60164494008, 60164494009, 60164494011, 60164494012, 60164494015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/15/14 02:28	
Trichloroethene	ug/L	ND	5.0	03/15/14 02:28	
1,2-Dichloroethane-d4 (S)	%	103	80-120	03/15/14 02:28	
4-Bromofluorobenzene (S)	%	99	80-120	03/15/14 02:28	
Toluene-d8 (S)	%	100	80-120	03/15/14 02:28	

LABORATORY CONTROL SAMPLE: 1344089

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	20	20.7	104	80-120	
Trichloroethene	ug/L	20	21.0	105	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			102	80-120	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164494

QC Batch: MSV/60081 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60164494016, 60164494018, 60164494019, 60164494020, 60164494022

METHOD BLANK: 1345089 Matrix: Water
Associated Lab Samples: 60164494016, 60164494018, 60164494019, 60164494020, 60164494022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	03/17/14 11:54	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/17/14 11:54	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/17/14 11:54	
1,1-Dichloroethane	ug/L	ND	2.4	03/17/14 11:54	
1,1-Dichloroethene	ug/L	ND	5.0	03/17/14 11:54	
1,2-Dichloroethane	ug/L	ND	5.0	03/17/14 11:54	
1,2-Dichloropropane	ug/L	ND	5.0	03/17/14 11:54	
2-Butanone (MEK)	ug/L	ND	10.0	03/17/14 11:54	
2-Hexanone	ug/L	ND	10.0	03/17/14 11:54	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	03/17/14 11:54	
Acetone	ug/L	2.3J	10.0	03/17/14 11:54	
Benzene	ug/L	ND	5.0	03/17/14 11:54	
Bromodichloromethane	ug/L	ND	5.0	03/17/14 11:54	
Bromoform	ug/L	ND	5.0	03/17/14 11:54	
Bromomethane	ug/L	ND	7.0	03/17/14 11:54	
Carbon disulfide	ug/L	0.30J	10.0	03/17/14 11:54	
Carbon tetrachloride	ug/L	ND	5.0	03/17/14 11:54	
Chlorobenzene	ug/L	ND	5.0	03/17/14 11:54	
Chloroethane	ug/L	ND	10.0	03/17/14 11:54	
Chloroform	ug/L	ND	5.0	03/17/14 11:54	
Chloromethane	ug/L	0.11J	10.0	03/17/14 11:54	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/17/14 11:54	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/17/14 11:54	
Dibromochloromethane	ug/L	ND	5.0	03/17/14 11:54	
Ethylbenzene	ug/L	ND	5.0	03/17/14 11:54	
Methylene chloride	ug/L	ND	5.0	03/17/14 11:54	
Styrene	ug/L	ND	5.0	03/17/14 11:54	
Tetrachloroethene	ug/L	ND	5.0	03/17/14 11:54	
Toluene	ug/L	ND	5.0	03/17/14 11:54	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/17/14 11:54	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/17/14 11:54	
Trichloroethene	ug/L	ND	5.0	03/17/14 11:54	
Vinyl chloride	ug/L	ND	2.0	03/17/14 11:54	
Xylene (Total)	ug/L	ND	5.0	03/17/14 11:54	
1,2-Dichloroethane-d4 (S)	%	99	80-120	03/17/14 11:54	
4-Bromofluorobenzene (S)	%	101	80-120	03/17/14 11:54	
Toluene-d8 (S)	%	101	80-120	03/17/14 11:54	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164494

LABORATORY CONTROL SAMPLE: 1345090

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	21.2	106	73-124	
1,1,2-Trichloroethane	ug/L	20	19.7	98	80-120	
1,1-Dichloroethane	ug/L	20	21.6	108	77-120	
1,1-Dichloroethene	ug/L	20	21.1	106	78-126	
1,2-Dichloroethane	ug/L	20	20.6	103	77-123	
1,2-Dichloropropane	ug/L	20	21.2	106	80-121	
2-Butanone (MEK)	ug/L	100	129	129	52-145	
2-Hexanone	ug/L	100	120	120	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	108	108	71-131	
Acetone	ug/L	100	207	207	32-155	L0
Benzene	ug/L	20	20.8	104	80-120	
Bromodichloromethane	ug/L	20	20.8	104	80-120	
Bromoform	ug/L	20	19.7	98	73-124	
Bromomethane	ug/L	20	21.7	108	31-144	
Carbon disulfide	ug/L	20	22.7	114	65-125	
Carbon tetrachloride	ug/L	20	21.5	108	78-128	
Chlorobenzene	ug/L	20	20.5	103	80-120	
Chloroethane	ug/L	20	19.8	99	55-137	
Chloroform	ug/L	20	21.1	105	79-120	
Chloromethane	ug/L	20	15.5	77	22-138	
cis-1,2-Dichloroethene	ug/L	20	21.8	109	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.9	95	80-120	
Dibromochloromethane	ug/L	20	18.7	94	80-120	
Ethylbenzene	ug/L	20	20.3	102	80-121	
Methylene chloride	ug/L	20	21.6	108	73-126	
Styrene	ug/L	20	20.6	103	80-120	
Tetrachloroethene	ug/L	20	19.7	99	80-121	
Toluene	ug/L	20	20.5	103	80-122	
trans-1,2-Dichloroethene	ug/L	20	22.4	112	79-121	
trans-1,3-Dichloropropene	ug/L	20	19.3	97	80-127	
Trichloroethene	ug/L	20	20.5	103	80-120	
Vinyl chloride	ug/L	20	21.3	106	59-120	
Xylene (Total)	ug/L	60	62.8	105	80-121	
1,2-Dichloroethane-d4 (S)	%			91	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.: 60164494

QC Batch: MSV/60085 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60164494021, 60164494023, 60164494024, 60164494025, 60164494026, 60164494027, 60164494028, 60164494029, 60164494030, 60164494031, 60164494032, 60164494033

METHOD BLANK: 1345102 Matrix: Water
Associated Lab Samples: 60164494021, 60164494023, 60164494024, 60164494025, 60164494026, 60164494027, 60164494028, 60164494029, 60164494030, 60164494031, 60164494032, 60164494033

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	03/17/14 20:58	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/17/14 20:58	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/17/14 20:58	
1,1-Dichloroethane	ug/L	ND	2.4	03/17/14 20:58	
1,1-Dichloroethene	ug/L	ND	5.0	03/17/14 20:58	
1,2-Dichloroethane	ug/L	ND	5.0	03/17/14 20:58	
1,2-Dichloropropane	ug/L	ND	5.0	03/17/14 20:58	
2-Butanone (MEK)	ug/L	ND	10.0	03/17/14 20:58	
2-Hexanone	ug/L	ND	10.0	03/17/14 20:58	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	03/17/14 20:58	
Acetone	ug/L	ND	10.0	03/17/14 20:58	
Benzene	ug/L	ND	5.0	03/17/14 20:58	
Bromodichloromethane	ug/L	ND	5.0	03/17/14 20:58	
Bromoform	ug/L	ND	5.0	03/17/14 20:58	
Bromomethane	ug/L	ND	7.0	03/17/14 20:58	
Carbon disulfide	ug/L	ND	10.0	03/17/14 20:58	
Carbon tetrachloride	ug/L	ND	5.0	03/17/14 20:58	
Chlorobenzene	ug/L	ND	5.0	03/17/14 20:58	
Chloroethane	ug/L	ND	10.0	03/17/14 20:58	
Chloroform	ug/L	ND	5.0	03/17/14 20:58	
Chloromethane	ug/L	ND	10.0	03/17/14 20:58	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/17/14 20:58	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/17/14 20:58	
Dibromochloromethane	ug/L	ND	5.0	03/17/14 20:58	
Ethylbenzene	ug/L	ND	5.0	03/17/14 20:58	
Methylene chloride	ug/L	ND	5.0	03/17/14 20:58	
Styrene	ug/L	ND	5.0	03/17/14 20:58	
Tetrachloroethene	ug/L	ND	5.0	03/17/14 20:58	
Toluene	ug/L	ND	5.0	03/17/14 20:58	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/17/14 20:58	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/17/14 20:58	
Trichloroethene	ug/L	0.21J	5.0	03/17/14 20:58	
Vinyl chloride	ug/L	ND	2.0	03/17/14 20:58	
Xylene (Total)	ug/L	ND	5.0	03/17/14 20:58	
1,2-Dichloroethane-d4 (S)	%	103	80-120	03/17/14 20:58	
4-Bromofluorobenzene (S)	%	99	80-120	03/17/14 20:58	
Toluene-d8 (S)	%	98	80-120	03/17/14 20:58	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164494

LABORATORY CONTROL SAMPLE: 1345103

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	20.9	105	73-124	
1,1,2-Trichloroethane	ug/L	20	20.3	102	80-120	
1,1-Dichloroethane	ug/L	20	21.9	110	77-120	
1,1-Dichloroethene	ug/L	20	20.7	103	78-126	
1,2-Dichloroethane	ug/L	20	21.6	108	77-123	
1,2-Dichloropropane	ug/L	20	20.7	104	80-121	
2-Butanone (MEK)	ug/L	100	125	125	52-145	
2-Hexanone	ug/L	100	111	111	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	111	111	71-131	
Acetone	ug/L	100	164	164	32-155	L0
Benzene	ug/L	20	21.0	105	80-120	
Bromodichloromethane	ug/L	20	20.9	104	80-120	
Bromoform	ug/L	20	19.6	98	73-124	
Bromomethane	ug/L	20	20.5	103	31-144	
Carbon disulfide	ug/L	20	21.7	109	65-125	
Carbon tetrachloride	ug/L	20	21.5	108	78-128	
Chlorobenzene	ug/L	20	20.5	103	80-120	
Chloroethane	ug/L	20	19.5	98	55-137	
Chloroform	ug/L	20	21.2	106	79-120	
Chloromethane	ug/L	20	18.1	90	22-138	
cis-1,2-Dichloroethene	ug/L	20	21.6	108	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.1	96	80-120	
Dibromochloromethane	ug/L	20	20.6	103	80-120	
Ethylbenzene	ug/L	20	21.0	105	80-121	
Methylene chloride	ug/L	20	21.6	108	73-126	
Styrene	ug/L	20	20.8	104	80-120	
Tetrachloroethene	ug/L	20	20.1	100	80-121	
Toluene	ug/L	20	20.5	103	80-122	
trans-1,2-Dichloroethene	ug/L	20	21.2	106	79-121	
trans-1,3-Dichloropropene	ug/L	20	20.3	101	80-127	
Trichloroethene	ug/L	20	19.9	99	80-120	
Vinyl chloride	ug/L	20	21.1	105	59-120	
Xylene (Total)	ug/L	60	61.9	103	80-121	
1,2-Dichloroethane-d4 (S)	%			107	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			97	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1345104 1345105

Parameter	Units	60164494021 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	20.0	20.3	100	102	71-136	2	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.2	19.1	91	96	61-127	5	21	
1,1,2-Trichloroethane	ug/L	ND	20	20	18.4	17.9	92	90	63-123	3	22	
1,1-Dichloroethane	ug/L	ND	20	20	19.0	21.0	95	105	62-128	10	25	
1,1-Dichloroethene	ug/L	ND	20	20	19.7	20.4	98	102	60-144	4	28	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164494

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1345104 1345105

Parameter	Units	60164494021 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	20	20	19.5	20.4	97	102	49-148	5	35	
1,2-Dichloropropane	ug/L	ND	20	20	18.4	20.5	92	103	66-130	11	22	
2-Butanone (MEK)	ug/L	ND	100	100	87.4	90.7	87	91	36-145	4	23	
2-Hexanone	ug/L	ND	100	100	86.9	87.7	87	88	42-140	1	24	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	95.8	97.1	96	97	52-137	1	24	
Acetone	ug/L	2.3J	100	100	88.7	91.9	86	90	24-151	4	23	
Benzene	ug/L	ND	20	20	19.7	20.8	98	104	37-157	6	32	
Bromodichloromethane	ug/L	ND	20	20	19.0	19.6	95	98	67-125	3	21	
Bromoform	ug/L	ND	20	20	16.7	16.1	83	81	55-124	3	23	
Bromomethane	ug/L	ND	20	20	16.5	20.4	83	102	25-138	21	42	
Carbon disulfide	ug/L	ND	20	20	20.6	22.1	102	110	57-133	7	23	
Carbon tetrachloride	ug/L	ND	20	20	21.1	22.4	105	112	68-142	6	21	
Chlorobenzene	ug/L	ND	20	20	18.4	19.2	92	96	66-133	4	20	
Chloroethane	ug/L	ND	20	20	20.2	19.6	101	98	46-147	3	28	
Chloroform	ug/L	ND	20	20	20.0	20.7	100	103	66-127	3	20	
Chloromethane	ug/L	ND	20	20	19.2	20.1	95	100	19-136	5	36	
cis-1,2-Dichloroethene	ug/L	2.7J	20	20	23.0	23.1	102	102	55-140	1	23	
cis-1,3-Dichloropropene	ug/L	ND	20	20	16.7	17.6	84	88	62-122	5	22	
Dibromochloromethane	ug/L	ND	20	20	17.6	18.0	88	90	62-130	3	22	
Ethylbenzene	ug/L	ND	20	20	19.0	19.5	95	98	31-160	2	32	
Methylene chloride	ug/L	ND	20	20	19.3	20.8	96	104	55-132	8	23	
Styrene	ug/L	ND	20	20	16.6	17.2	83	86	55-134	4	25	
Tetrachloroethene	ug/L	ND	20	20	18.9	19.5	94	98	69-133	3	20	
Toluene	ug/L	ND	20	20	18.5	19.4	92	97	35-157	5	37	
trans-1,2-Dichloroethene	ug/L	ND	20	20	20.6	22.2	103	111	66-131	7	23	
trans-1,3-Dichloropropene	ug/L	ND	20	20	17.4	17.2	87	86	62-131	1	23	
Trichloroethene	ug/L	79.1	20	20	111	103	160	118	61-135	8	21	M1
Vinyl chloride	ug/L	ND	20	20	19.7	20.4	98	102	44-128	3	22	
Xylene (Total)	ug/L	ND	60	60	56.8	58.1	95	97	34-156	2	37	
1,2-Dichloroethane-d4 (S)	%						101	100	80-120			
4-Bromofluorobenzene (S)	%						99	99	80-120			
Toluene-d8 (S)	%						98	96	80-120			
Preservation pH		1.0			1.0	1.0				0		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1345106 1345107

Parameter	Units	60164494023 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	22.2	21.1	111	106	71-136	5	20	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.3	20.3	92	102	61-127	10	21	
1,1,2-Trichloroethane	ug/L	ND	20	20	19.6	20.2	98	101	63-123	3	22	
1,1-Dichloroethane	ug/L	0.95J	20	20	23.1	22.5	111	108	62-128	3	25	
1,1-Dichloroethene	ug/L	2.6J	20	20	24.8	24.4	111	109	60-144	2	28	
1,2-Dichloroethane	ug/L	ND	20	20	20.0	20.2	100	101	49-148	1	35	
1,2-Dichloropropane	ug/L	ND	20	20	21.8	21.6	109	108	66-130	1	22	
2-Butanone (MEK)	ug/L	ND	100	100	87.2	91.4	87	91	36-145	5	23	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164494

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1345106 1345107

Parameter	Units	60164494023 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
2-Hexanone	ug/L	ND	100	100	88.5	96.2	89	96	42-140	8	24	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	94.2	102	94	102	52-137	8	24	
Acetone	ug/L	ND	100	100	87.4	94.0	86	92	24-151	7	23	
Benzene	ug/L	ND	20	20	22.1	21.1	111	105	37-157	5	32	
Bromodichloromethane	ug/L	ND	20	20	20.5	20.7	103	103	67-125	1	21	
Bromoform	ug/L	ND	20	20	18.2	18.7	91	94	55-124	3	23	
Bromomethane	ug/L	ND	20	20	23.5	23.6	118	118	25-138	0	42	
Carbon disulfide	ug/L	ND	20	20	23.4	23.0	117	115	57-133	1	23	
Carbon tetrachloride	ug/L	ND	20	20	22.7	22.4	114	112	68-142	2	21	
Chlorobenzene	ug/L	ND	20	20	21.9	20.3	109	101	66-133	8	20	
Chloroethane	ug/L	ND	20	20	21.8	19.6	109	98	46-147	11	28	
Chloroform	ug/L	0.82J	20	20	22.6	21.9	109	105	66-127	3	20	
Chloromethane	ug/L	ND	20	20	19.8	22.5	99	112	19-136	12	36	
cis-1,2-Dichloroethene	ug/L	187	20	20	224	231	184	218	55-140	3	23	M1
cis-1,3-Dichloropropene	ug/L	ND	20	20	18.6	17.9	93	90	62-122	4	22	
Dibromochloromethane	ug/L	ND	20	20	19.5	19.2	97	96	62-130	1	22	
Ethylbenzene	ug/L	ND	20	20	22.1	21.5	111	107	31-160	3	32	
Methylene chloride	ug/L	1.7J	20	20	24.4	23.7	114	110	55-132	3	23	
Styrene	ug/L	ND	20	20	18.5	17.3	92	86	55-134	7	25	
Tetrachloroethene	ug/L	1.7J	20	20	24.2	23.0	113	106	69-133	5	20	
Toluene	ug/L	0.19J	20	20	21.8	20.8	108	103	35-157	5	37	
trans-1,2-Dichloroethene	ug/L	3.5J	20	20	25.2	24.7	109	106	66-131	2	23	
trans-1,3-Dichloropropene	ug/L	ND	20	20	19.2	18.9	96	95	62-131	1	23	
Trichloroethene	ug/L	2980	20	20	1640	1650	455	469	61-135	0	21	M1
Vinyl chloride	ug/L	22.5	20	20	45.5	46.9	115	122	44-128	3	22	
Xylene (Total)	ug/L	ND	60	60	66.6	63.2	111	105	34-156	5	37	
1,2-Dichloroethane-d4 (S)	%						99	94	80-120			
4-Bromofluorobenzene (S)	%						95	100	80-120			
Toluene-d8 (S)	%						104	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.: 60164494

QC Batch: MSV/60108 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60164494017, 60164494018, 60164494019, 60164494020, 60164494022, 60164494023, 60164494024, 60164494027, 60164494028, 60164494030

METHOD BLANK: 1345614 Matrix: Water
Associated Lab Samples: 60164494017, 60164494018, 60164494019, 60164494020, 60164494022, 60164494023, 60164494024, 60164494027, 60164494028, 60164494030

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	5.0	03/18/14 10:12	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	03/18/14 10:12	
1,1,2-Trichloroethane	ug/L	ND	5.0	03/18/14 10:12	
1,1-Dichloroethane	ug/L	ND	2.4	03/18/14 10:12	
1,1-Dichloroethene	ug/L	ND	5.0	03/18/14 10:12	
1,2-Dichloroethane	ug/L	ND	5.0	03/18/14 10:12	
1,2-Dichloropropane	ug/L	ND	5.0	03/18/14 10:12	
2-Butanone (MEK)	ug/L	ND	10.0	03/18/14 10:12	
2-Hexanone	ug/L	ND	10.0	03/18/14 10:12	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	03/18/14 10:12	
Acetone	ug/L	ND	10.0	03/18/14 10:12	
Benzene	ug/L	ND	5.0	03/18/14 10:12	
Bromodichloromethane	ug/L	ND	5.0	03/18/14 10:12	
Bromoform	ug/L	ND	5.0	03/18/14 10:12	
Bromomethane	ug/L	ND	7.0	03/18/14 10:12	
Carbon disulfide	ug/L	ND	10.0	03/18/14 10:12	
Carbon tetrachloride	ug/L	ND	5.0	03/18/14 10:12	
Chlorobenzene	ug/L	ND	5.0	03/18/14 10:12	
Chloroethane	ug/L	ND	10.0	03/18/14 10:12	
Chloroform	ug/L	ND	5.0	03/18/14 10:12	
Chloromethane	ug/L	ND	10.0	03/18/14 10:12	
cis-1,2-Dichloroethene	ug/L	ND	5.0	03/18/14 10:12	
cis-1,3-Dichloropropene	ug/L	ND	1.0	03/18/14 10:12	
Dibromochloromethane	ug/L	ND	5.0	03/18/14 10:12	
Ethylbenzene	ug/L	ND	5.0	03/18/14 10:12	
Methylene chloride	ug/L	ND	5.0	03/18/14 10:12	
Styrene	ug/L	ND	5.0	03/18/14 10:12	
Tetrachloroethene	ug/L	ND	5.0	03/18/14 10:12	
Toluene	ug/L	ND	5.0	03/18/14 10:12	
trans-1,2-Dichloroethene	ug/L	ND	5.0	03/18/14 10:12	
trans-1,3-Dichloropropene	ug/L	ND	1.0	03/18/14 10:12	
Trichloroethene	ug/L	0.29J	5.0	03/18/14 10:12	
Vinyl chloride	ug/L	ND	2.0	03/18/14 10:12	
Xylene (Total)	ug/L	ND	5.0	03/18/14 10:12	
1,2-Dichloroethane-d4 (S)	%	102	80-120	03/18/14 10:12	
4-Bromofluorobenzene (S)	%	103	80-120	03/18/14 10:12	
Toluene-d8 (S)	%	100	80-120	03/18/14 10:12	

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60164494

LABORATORY CONTROL SAMPLE: 1345615

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.4	97	80-121	
1,1,2,2-Tetrachloroethane	ug/L	20	20.5	102	73-124	
1,1,2-Trichloroethane	ug/L	20	21.0	105	80-120	
1,1-Dichloroethane	ug/L	20	20.6	103	77-120	
1,1-Dichloroethene	ug/L	20	20.0	100	78-126	
1,2-Dichloroethane	ug/L	20	20.5	103	77-123	
1,2-Dichloropropane	ug/L	20	20.3	101	80-121	
2-Butanone (MEK)	ug/L	100	149	149	52-145	L0
2-Hexanone	ug/L	100	136	136	57-139	
4-Methyl-2-pentanone (MIBK)	ug/L	100	114	114	71-131	
Acetone	ug/L	100	221	221	32-155	L0,SS
Benzene	ug/L	20	20.3	102	80-120	
Bromodichloromethane	ug/L	20	19.8	99	80-120	
Bromoform	ug/L	20	19.2	96	73-124	
Bromomethane	ug/L	20	19.3	97	31-144	
Carbon disulfide	ug/L	20	19.3	97	65-125	
Carbon tetrachloride	ug/L	20	20.3	101	78-128	
Chlorobenzene	ug/L	20	20.1	100	80-120	
Chloroethane	ug/L	20	18.3	92	55-137	
Chloroform	ug/L	20	20.3	102	79-120	
Chloromethane	ug/L	20	13.0	65	22-138	
cis-1,2-Dichloroethene	ug/L	20	20.9	104	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.3	97	80-120	
Dibromochloromethane	ug/L	20	19.4	97	80-120	
Ethylbenzene	ug/L	20	19.6	98	80-121	
Methylene chloride	ug/L	20	21.7	108	73-126	
Styrene	ug/L	20	20.2	101	80-120	
Tetrachloroethene	ug/L	20	19.6	98	80-121	
Toluene	ug/L	20	19.7	98	80-122	
trans-1,2-Dichloroethene	ug/L	20	20.0	100	79-121	
trans-1,3-Dichloropropene	ug/L	20	19.9	99	80-127	
Trichloroethene	ug/L	20	20.0	100	80-120	
Vinyl chloride	ug/L	20	16.6	83	59-120	
Xylene (Total)	ug/L	60	60.8	101	80-121	
1,2-Dichloroethane-d4 (S)	%			107	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.: 60164494

QC Batch: MSV/60146
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60164494017

METHOD BLANK: 1346388
Matrix: Water
Associated Lab Samples: 60164494017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	ug/L	ND	5.0	03/19/14 15:40	
1,2-Dichloroethane-d4 (S)	%	101	80-120	03/19/14 15:40	
4-Bromofluorobenzene (S)	%	101	80-120	03/19/14 15:40	
Toluene-d8 (S)	%	98	80-120	03/19/14 15:40	

LABORATORY CONTROL SAMPLE: 1346389

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	20	20.2	101	80-120	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			102	80-120	

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60164494

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to changes in sample preparation, dilution of the sample aliquot, or moisture content.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PRL - Pace Reporting Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine (8270 listed analyte) decomposes to Azobenzene.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: MSV/60009
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/60056
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/60081
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/60108
[BF] Batch extracted by separatory funnel extraction.

Batch: MSV/60146
[BF] Batch extracted by separatory funnel extraction.

ANALYTE QUALIFIERS

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.
SS	This analyte did not meet the secondary source verification criteria for the initial calibration. The reported result should be considered an estimated value.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60164494

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60164494001	IW-76-201403	EPA 5030B/8260	MSV/60009		
60164494002	IW-77-201403	EPA 5030B/8260	MSV/60010		
60164494002	IW-77-201403	EPA 5030B/8260	MSV/60056		
60164494003	ITMW-13-201403	EPA 5030B/8260	MSV/60010		
60164494004	ITMW-14-201403	EPA 5030B/8260	MSV/60010		
60164494005	ITMW-18-201403	EPA 5030B/8260	MSV/60010		
60164494006	DUP-5-201403	EPA 5030B/8260	MSV/60010		
60164494006	DUP-5-201403	EPA 5030B/8260	MSV/60056		
60164494007	EB-4-201403	EPA 5030B/8260	MSV/60010		
60164494008	MW-38-201403	EPA 5030B/8260	MSV/60010		
60164494008	MW-38-201403	EPA 5030B/8260	MSV/60056		
60164494009	ITMW-15-201403	EPA 5030B/8260	MSV/60010		
60164494009	ITMW-15-201403	EPA 5030B/8260	MSV/60056		
60164494010	EB-1-201403	EPA 5030B/8260	MSV/60010		
60164494011	ITMW-1-201403	EPA 5030B/8260	MSV/60010		
60164494011	ITMW-1-201403	EPA 5030B/8260	MSV/60056		
60164494012	ITMW-7-201403	EPA 5030B/8260	MSV/60010		
60164494012	ITMW-7-201403	EPA 5030B/8260	MSV/60056		
60164494013	ITMW-9-201403	EPA 5030B/8260	MSV/60010		
60164494014	DUP-4-201403	EPA 5030B/8260	MSV/60010		
60164494015	ITMW-19-201403	EPA 5030B/8260	MSV/60010		
60164494015	ITMW-19-201403	EPA 5030B/8260	MSV/60056		
60164494016	MW-34-20140308	EPA 5030B/8260	MSV/60081		
60164494017	MW-65-20140308	EPA 5030B/8260	MSV/60108		
60164494017	MW-65-20140308	EPA 5030B/8260	MSV/60146		
60164494018	DUP-6-20140308	EPA 5030B/8260	MSV/60081		
60164494018	DUP-6-20140308	EPA 5030B/8260	MSV/60108		
60164494019	ITMW-12-20140308	EPA 5030B/8260	MSV/60081		
60164494019	ITMW-12-20140308	EPA 5030B/8260	MSV/60108		
60164494020	MW-35R-201403	EPA 5030B/8260	MSV/60081		
60164494020	MW-35R-201403	EPA 5030B/8260	MSV/60108		
60164494021	IW-80-201403	EPA 5030B/8260	MSV/60085		
60164494022	MW-32-20140308	EPA 5030B/8260	MSV/60081		
60164494022	MW-32-20140308	EPA 5030B/8260	MSV/60108		
60164494023	ITMW-11-201403	EPA 5030B/8260	MSV/60085		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60164494

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60164494023	**ITMW-11-201403**	EPA 5030B/8260	MSV/60108		
60164494024	**MW-33-201403**	EPA 5030B/8260	MSV/60085		
60164494024	**MW-33-201403**	EPA 5030B/8260	MSV/60108		
60164494025	**MW-25-20140308**	EPA 5030B/8260	MSV/60085		
60164494026	**IW-73-201403**	EPA 5030B/8260	MSV/60085		
60164494027	**MW-41-201403**	EPA 5030B/8260	MSV/60085		
60164494027	**MW-41-201403**	EPA 5030B/8260	MSV/60108		
60164494028	**ITMW-17-201403**	EPA 5030B/8260	MSV/60085		
60164494028	**ITMW-17-201403**	EPA 5030B/8260	MSV/60108		
60164494029	**EB-2-20140308**	EPA 5030B/8260	MSV/60085		
60164494030	**DUP-3-201403**	EPA 5030B/8260	MSV/60085		
60164494030	**DUP-3-201403**	EPA 5030B/8260	MSV/60108		
60164494031	**TRIP BLANK 1**	EPA 5030B/8260	MSV/60085		
60164494032	**TRIP BLANK 2**	EPA 5030B/8260	MSV/60085		
60164494033	**EB-3-201403**	EPA 5030B/8260	MSV/60085		

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Sample Condition Upon Receipt

WO# : 60164494

60164494

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 ☐

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

Cooler Temperature: 1.8 1.6

Temperature should be above freezing to 6°C

Date and initials of person examining contents: MW 3/10/14

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	All vials on COC 1 of 3 arrived w/ TB1 All vials on COC 2 of 3 & 3 of 3 arrived w/ TB2
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: _____

Project Manager Review: MW Date: 3/10/14

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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:	
Address:	7500 College Blvd., Ste. 925	Copy To:		Company Name:	
	Overland Park, KS 66210			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:	STD	Project Number:		Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	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	Alkalinity	TOC	Chloride/Sulfate	Bromide	6010-Iron/Mn	Ferric Iron calc.	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 60164494
1	IW-76-201403	WT	G			3/8/14	0915		3				X						X										01
2	IW-77-201403	WT	G			3/8/14	1050		3				X						X										02
3	ITMW-13-201403	WT	G			3/8/14	1240		3				X						X										03
4	ITMW-14-201403	WT	G			3/8/14	1345		3				X						X										04
5	MS/MSD2	WT	G			3/8/14	1345		3				X						X										—
6	ITMW-18-201403	WT	G			3/8/14	1500		3				X						X										05
7	DUP-5-201403	WT	G			3/8/14	1500		3				X						X										06
8	EB-4-201403	WT	G			3/8/14	1526		3				X						X										07
9	MW-38-201403	WT	G			3/8/14	1313		3				X						X										08
10	ITMW-15-201403	WT	G			3/8/14	1457		3				X						X										09
11	EB-1-201403	WT	G			3/8/14	1320		3				X						X										10
12	ITMW-1-201403	WT	G			3/8/14	1145		3				X						X										11

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)
	Wendy Stonestreet	3/9/2014	6:15pm	PACE Courier						
					3/10/14	0115	1.8	Y	Y	Y

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Wendy Stonestreet
SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 3/9/14

*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

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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:	STD

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
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: AR

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Alkalinity	TOC	Chloride/Sulfate	Bromide	6010-Iron/Mn	Ferric Iron calc.	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	ITMW-7-201403 3(0.5+H)	WT	G			3/8/14	1039		3				X						X											012
2	ITMW-9-201403	WT	G			3/8/14	932		3				X						X											013
3	DUP-4-201403	WT	G			3/8/14	1557		3				X						X											014
4	ITMW-19-201403	WT	G			3/8/14	1553		3				X						X											015
5	MW-34-20140308	WT	G			3/8/14	1330		3				X						X											016
6	MW-10S-20140308	WT	G			3/8/14	1135		3				X						X											017
7	DUP-6-20140308	WT	G			3/8/14	1520		3				X						X											018
8	ITMW-12-20140308	WT	G			3/8/14	1520		3				X						X											019
9	MW-35R-201403	WT	G			3/8/14	1055		3				X						X											020
10	MS/MSD	WT	G			3/8/14	1250		3				X						X											—
11	~~MW~~ MW-30-201403 6(0.5+H)	WT	G			3/8/14	1250		3				X						X											021
12	MW-32-20140308 3(0.5+H)	WT	G			3/8/14	1005		3				X						X											022

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
	Wendy Stonestreet	3/4/14	615pm	PACE Courier		
					3/10/14	0115

SAMPLE CONDITIONS			
~~1.6~~	LW 3/10		
1.6	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Wendy Stonestreet

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 3/11/2014

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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Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	
Purchase Order No.:	
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
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: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID		MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Alkalinity	TOC	Chloride/Sulfate	Bromide	6010-Iron/Mn	Ferric Iron calc.	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	ITMW-11-201403	(1 DG9H)	WT	G			3/6/14	1505		3				X						X											023
2	MS/MSD3	—	WT	G			3/6/14	1505		3				X						X											—
3	MW-33-201403	3 (DG9H)	WT	G			3/6/14	910		3				X						X											024
4	MW-25-20140308		WT	G			3/6/14	1050		3				X						X											025
5	IW-73-201403		WT	G			3/7/14	1755		3				X						X											026
6	MW-41-201403		WT	G			3/7/14	1810		3				X						X											027
7	ITMW-17-201403		WT	G			3/6/14	1630		3				X						X											028
8	EB-2-20140308		WT	G			3/8/14	1710		3				X						X											029
9	Dup-3-201403		WT	G			3/6/14	1630		3				X						X											030
10	Trip Blank	2 (DG9H)	WT	G			3/8/14	900		2				X						X											031
11	Trip Blank		WT	G			3/7/14	1730		2				X						X											032
12	~~Eqb EB3~~ EB-3-201403	3 (DG9H)	WT	G			3/6/14	1715		3				X						X											033

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Wendy Stonestreet	3/6/2014	6:15pm	PACE Courier	3/10/14	0915	1.6	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.

Appendix C
Data Validation Report

DATA VALIDATION REVIEW
1st Quarter Groundwater Monitoring Event
Whirlpool Corporation
Fort Smith, Arkansas

Laboratory Sample Delivery Groups (SDGs): 60164307, 60164418, 60164423 and 60164494

Laboratory: PACE Analytical, Lenexa, Kansas

Reviewer: Wendy Stonestreet **Date Reviewed: April 21, 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 March 5, 2014 to March 8, 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 72 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), four (4) equipment rinsate blanks and seven (7) 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: 60164307				
MW-29-201403	SA	60164307001	Aqueous	X
MW-26-201403	SA	60164307002	Aqueous	X
MW-22-201403	SA	60164307003	Aqueous	X
ITMW-20-201403	SA	60164307004	Aqueous	X
Trip Blank	TB	60164307005	Aqueous	X
SDG: 60164418				
ITMW-6-201403	SA	60164418001	Aqueous	X
DUP-1-201403	FD	60164418002	Aqueous	X
ITMW-2-201403	SA	60164418003	Aqueous	X
ITMW-4-201403	SA	60164418004	Aqueous	X
MW-28-201403	SA	60164418005	Aqueous	X
MW-68-201403	SA	60164418006	Aqueous	X
MW-40-201403	SA	60164418007	Aqueous	X
IW-72-201403	SA	60164418008	Aqueous	X
MW-36-201403	SA	60164418009	Aqueous	X
MW-39-201403	SA	60164418010	Aqueous	X
MW-50-201403	SA	60164418011	Aqueous	X

Field ID	Sample Type	Lab ID	Matrix	Analyses
				VOCs
MW-60-201403	SA	60164418012	Aqueous	X
MW-61-201403	SA	60164418013	Aqueous	X
MW-31-201403	SA	60164418014	Aqueous	X
ITMW-10-201403	SA	60164418015	Aqueous	X
ITMW-21-201403	SA	60164418016	Aqueous	X
Trip Blank 1	TB	60164418017	Aqueous	X
Trip Blank 2	TB	60164418018	Aqueous	X
Trip Blank 3	TB	60164418019	Aqueous	X
SDG: 60164423				
ITMW-16-201403	SA	60164423001	Aqueous	X
MW-27-201403	SA	60164423002	Aqueous	X
MW-67-201403	SA	60164423003	Aqueous	X
MW-66-201403	SA	60164423004	Aqueous	X
MW-62-201403	SA	60164423005	Aqueous	X
MW-63-201403	SA	60164423006	Aqueous	X
MW-58-201403	SA	60164423007	Aqueous	X
MW-57-201403	SA	60164423008	Aqueous	X
MW-56-201403	SA	60164423009	Aqueous	X
MW-46R-201403	SA	60164423010	Aqueous	X
Trip Blank	TB	60164423011	Aqueous	X
IW-74-201403	SA	60164423012	Aqueous	X
DUP-2-201403	FD	60164423013	Aqueous	X
MW-71-201403	SA	60164423014	Aqueous	X
RW-69-201403	SA	60164423015	Aqueous	X
SDG: 60164494				
IW-76-201403	SA	60164494001	Aqueous	X
IW-77-201403	SA	60164494002	Aqueous	X
ITMW-13-201403	SA	60164494003	Aqueous	X
ITMW-14-201403	SA/MS/MSD	60164494004	Aqueous	X
ITMW-18-201403	SA	60164494005	Aqueous	X
DUP-5-201403	FD	60164494006	Aqueous	X
EB-4-201403	RB	60164494007	Aqueous	X
MW-38-201403	SA	60164494008	Aqueous	X
ITMW-15-201403	SA	60164494009	Aqueous	X
EB-1-201403	RB	60164494010	Aqueous	X
ITMW-1-201403	SA	60164494011	Aqueous	X
ITMW-7-201403	SA	60164494012	Aqueous	X
ITMW-9-201403	SA	60164494013	Aqueous	X
DUP-4-201403	FD	60164494014	Aqueous	X
ITMW-19-201403	SA	60164494015	Aqueous	X
MW-34-201403	SA	60164494016	Aqueous	X
MW-65-201403	SA	60164494017	Aqueous	X
DUP-6-20140308	FD	60164494018	Aqueous	X
ITMW-12-201403	SA	60164494019	Aqueous	X
MW-35R-201403	SA	60164494020	Aqueous	X
IW-80-201403	SA/MS/MSD	60164494021	Aqueous	X
MW-32-201403	SA	60164494022	Aqueous	X

Field ID	Sample Type	Lab ID	Matrix	Analyses
				VOCs
ITMW-11-201403	SA/MS/MSD	60164494023	Aqueous	X
MW-33-201403	SA	60164494024	Aqueous	X
MW-25-201403	SA	60164494025	Aqueous	X
IW-73-201403	SA	60164494026	Aqueous	X
MW-41-201403	SA	60164494027	Aqueous	X
ITMW-17-201403	SA	60164494028	Aqueous	X
EB-2-20140308	RB	60164494029	Aqueous	X
DUP-3-201403	FD	60164494030	Aqueous	X
Trip Blank 1	TB	60164494031	Aqueous	X
Trip Blank 2	TB	60164494032	Aqueous	X
EB-3-201403	RB	60164494033	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,
- GC/MS Instrument Performance Check,
- Initial Calibration,
- Continuing Calibration,
- Blanks,
- Surrogate Compound Recoveries,
- Internal Standards,
- 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?

The samples were evaluated for agreement with the chain of custody (COC). The laboratory

amended SDGs 60164307, 60164418, 60164423 and 60164494 to add J qualifier codes for results reported between the method detection limit (MDL) and the reporting limit (RL) to indicate the results were estimated values. In addition the laboratory amended SDGs 60164307 and 60164494 to correct sample identifiers. Sample ITMW-20-201403 was inadvertently indicated on the COC as MW-20-201403 in SDG 6016430. Several samples were misidentified on the COC, by including an 08 at the end of the ID in SDG 60164464. The laboratory changed the IDs per Wendy Stonestreet of ENVIRON on 4/21/2014. The laboratory incorrectly logged in the sample time collected for field ID ITMW-21-201403 at 1753.The correct collection time was 1735 respectively.

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: 60164418:** Acetone did not meet the secondary source verification criteria for the initial calibration. See Section 5.0 for further discussion and resultant data qualification. The LCS recoveries for acetone were outside laboratory control limits. See Section10.0 for further discussion and resultant qualification.
- **SDG: 60164423:** Acetone did not meet the secondary source verification criteria for the initial calibration. See Section 5.0 for further discussion and resultant data qualification. The LCS recoveries for acetone were outside laboratory control limits. See Section10.0 for further discussion and resultant qualification.
- **SDG: 60164494:** Acetone did not meet the secondary source verification criteria for the initial calibration. See Section 5.0 for further discussion and resultant data qualification. The LCS recoveries for acetone were outside laboratory control limits. See Section10.0 for further discussion and resultant qualification. The MS/MSD recoveries for several analytes were outside of laboratory control limits for several analytes. See Section 11.0 for further discussion and resultant qualification.

Samples were received at the PACE, Lenexa, Kansas laboratory in good condition and at proper temperature 4˚C ± 2˚C (nine coolers at 2.8˚C, 1.8˚C, 2.8˚C, 4.8˚C, 2.8˚C, 3.2˚C, 1.8˚C, 1.6˚C, 1.8 ˚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 GC/MS Instrument Performance Check

Did GC/MS Instrument Performance Checks meet method specific criteria?

Yes. GC/MS instrument performance checks are performed to ensure mass resolution, identification and sensitivity. The appropriate compound, bromofluorobenzene (BFB) for volatile analysis, was used for instrument tuning. GC/MS tunes were performed at the appropriate frequency (once every 12 hours). BFB ion abundance met criteria specified by the method.

No analytical data were qualified based on the results of the GC/MS instrument performance.

5.0 Initial Calibration

Was the Initial Calibration within evaluation criteria?

Yes. Initial calibration demonstrates that the instrument is capable of acceptable performance at the start of an analytical run and producing a linear calibration curve. Eight standards (0.4, 1,5, 10, 20, 50, 100 and 200) were used for the initial calibration. The initial calibration relative response factors (RRFs) were greater than 0.05 for all VOCs and system monitoring compounds. The percent relative standard deviation (%RSD) was less than 30% for all relative VOCs and system monitoring compounds.

No analytical data were qualified based on the results of the initial calibration, however the laboratory indicated acetone did not meet the secondary source verification criteria for the initial calibration for SDGs 60164418, 60164423 and 60164494. See Section 10.0 for data qualification.

6.0 Continuing Calibration

Were the continuing calibration verification response factors within evaluation criteria?

Yes. Continuing calibration establishes the 12-hour relative response factors on which quantitations are based and checks satisfactory instrument performance on a daily basis. The continuing calibration RRFs were greater than 0.05 for all VOCs and system monitoring compounds. The percent difference (%D) between the initial calibration and continuing calibration RRFs were less than 30% for all VOCs and system monitoring compounds.

No analytical data were qualified based on the results of continuing calibration verification response factors.

7.0 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. The discussion following the table details the data qualification if any.

SDG	Blank ID	Blank Type	Parameter	Analyte	Concentration	Units
60164307	1341456	Method	8260B	Carbon disulfide	0.16	µg/L
60164307	1341456	Method	8260B	Chloromethane	0.13	µg/L
60164307	1341933	Method	8260B	1,2-Dichloroethane	0.57	µg/L
60164307	1341933	Method	8260B	Chloromethane	0.14	µg/L
60164418	1342566	Method	8260B	Carbon disulfide	0.16	µg/L
60164418	1342572	Method	8260B	Acetone	1.9	µg/L
60164418	1342572	Method	8260B	Carbon disulfide	0.17	µg/L
60164418	1342572	Method	8260B	Chloromethane	0.085	µg/L
60164418	1343069	Method	8260B	Carbon disulfide	0.24	µg/L
60164423	1342572	Method	8260B	Acetone	1.9	µg/L
60164423	1342572	Method	8260B	Carbon disulfide	0.17	µg/L
60164423	1342572	Method	8260B	Chloromethane	0.085	µg/L
60164423	1343069	Method	8260B	Carbon disulfide	0.24	µg/L
60164423	Trip Blank	Trip	8260B	Acetone	2.0	µg/L
60164494	1343069	Method	8260B	Carbon disulfide	0.24	µg/L
60164494	1343081	Method	8260B	Carbon disulfide	0.12	µg/L
60164494	1343081	Method	8260B	Chloromethane	0.086	µg/L

SDG	Blank ID	Blank Type	Parameter	Analyte	Concentration	Units
60164494	1343081	Method	8260B	Trichloroethene	0.20	µg/L
60164494	1345089	Method	8260B	Acetone	2.3	µg/L
60164494	1345089	Method	8260B	Carbon disulfide	0.30	µg/L
60164494	1345089	Method	8260B	Chloromethane	0.11	µg/L
60164494	1345102	Method	8260B	Trichloroethene	0.21	µg/L
60164494	EB-4-201403	Rinsate	8260B	Acetone	2.1	µg/L
60164494	EB-4-201403	Rinsate	8260B	Carbon disulfide	1.2	µg/L
60164494	EB-1-201403	Rinsate	8260B	Acetone	9.1	µg/L
60164494	EB-1-201403	Rinsate	8260B	2-Butanone	4.5	µg/L
60164494	Trip Blank 1	Trip	8260B	Acetone	2.5	µg/L
60164494	Trip Blank 1	Trip	8260B	Chloromethane	0.11	µg/L
60164494	Trip Blank 2	Trip	8260B	Acetone	2.9	µg/L
60164494	Trip Blank 2	Trip	8260B	Chloromethane	0.12	µg/L
60164494	EB-3-201403	Rinsate	8260B	Acetone	2.7	µg/L
60164494	EB-3-201403	Rinsate	8260B	Chloromethane	0.15	µg/L
60164494	EB-3-201403	Rinsate	8260B	Methylene chloride	0.80	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
60164307	MW-29-201403	8260B	Chloromethane	10.0 µg/L	**U**
60164307	ITMW-20-201403	8260B	Chloromethane	10.0 µg/L	**U**
60164307	Trip Blank	8260B	Carbon Disulfide	10.0 µg/L	**U**
60164418	ITMW-2-201403	8260B	Acetone	10.0 µg/L	**U**
60164418	ITMW-4-201403	8260B	Acetone	10.0 µg/L	**U**
60164418	MW-28-201403	8260B	Acetone	10.0 µg/L	**U**
60164418	MW-68-201403	8260B	Chloromethane	10.0 µg/L	**U**
60164418	IW-72-201403	8260B	Acetone	10.0 µg/L	**U**
60164418	MW-50-201403	8260B	Acetone	10.0 µg/L	**U**
60164418	MW-60-201403	8260B	Acetone	10.0 µg/L	**U**
60164418	MW-61-201403	8260B	Acetone	10.0 µg/L	**U**
60164418	MW-31-201403	8260B	Acetone	10.0 µg/L	**U**
60164418	ITMW-10-201403	8260B	Chloromethane	10.0 µg/L	**U**
60164418	ITMW-21-201403	8260B	Acetone	10.0 µg/L	**U**
60164418	Trip Blank 1	8260B	Acetone	10.0 µg/L	**U**
60164418	Trip Blank 2	8260B	Acetone	10.0 µg/L	**U**
60164418	Trip Blank 3	8260B	Acetone	10.0 µg/L	**U**
60164423	MW-27-201403	8260B	Chloromethane	10.0 µg/L	**U**
60164423	MW-66-201403	8260B	Acetone	10.0 µg/L	**U**
60164423	MW-58-201403	8260B	Chloromethane	10.0 µg/L	**U**
60164423	MW-57-201403	8260B	Chloromethane	10.0 µg/L	**U**
60164423	MW-56-201403	8260B	Acetone	10.0 µg/L	**U**
60164423	IW-74-201403	8260B	Acetone	10.0 µg/L	**U**
60164423	RW-69-201403	8260B	Acetone	10.0 µg/L	**U**
60164494	IW-76-201403	8260B	Acetone	10.0 µg/L	**U**
60164494	IW-77-201403	8260B	Acetone	10.0 µg/L	**U**
60164494	ITMW-13-201403	8260B	Chloromethane	10.0 µg/L	**U**
60164494	ITMW-18-201403	8260B	Acetone	500 µg/L	**U**

SDG	Field ID	Parameter	Analyte	New RL	Qualification
60164494	ITMW-18-201403	8260B	2-Butanone	500 µg/L	**U**
60164494	DUP-5-201403	8260B	Acetone	10.0 µg/L	**U**
60164494	ITMW-15-201403	8260B	Acetone	10.0 µg/L	**U**
60164494	ITMW-15-201403	8260B	Chloromethane	10.0 µg/L	**U**
60164494	ITMW-1-201403	8260B	Acetone	10.0 µg/L	**U**
60164494	ITMW-7-201403	8260B	Chloromethane	10.0 µg/L	**U**
60164494	DUP-4-201403	8260B	Acetone	500 µg/L	**U**
60164494	ITMW-19-201403	8260B	Acetone	10.0 µg/L	**U**
60164494	ITMW-19-201403	8260B	Chloromethane	10.0 µg/L	**U**
60164494	ITMW-12-201403	8260B	Carbon disulfide	10.0 µg/L	**U**
60164494	IW-80-201403	8260B	Acetone	10.0 µg/L	**U**
60164494	ITMW-11-201403	8260B	Methylene Chloride	5.0 µg/L	**U**
60164494	MW-33-201403	8260B	Chloromethane	10.0 µg/L	**U**
60164494	MW-25-201403	8260B	Acetone	1000 µg/L	**U**
60164494	MW-25-201403	8260B	Chloromethane	1000 µg/L	**U**
60164494	IW-73-201403	8260B	Acetone	10.0 µg/L	**U**
60164494	ITMW-17-201403	8260B	Acetone	10.0 µg/L	**U**
60164494	ITMW-17-201403	8260B	Chloromethane	10.0 µg/L	**U**
60164494	DUP-3-201403	8260B	Acetone	10.0 µg/L	**U**
60164494	DUP-3-201403	8260B	Chloromethane	10.0 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. Three internal standards (flourobenzene, chlorobenzene-d5 and 1,4-dichlorobenzene) were added to each sample prior to volatile analysis. All internal standard area counts were within the method required QC limits of -50% to +100% of the internal standard area counts for the associated 12-hour calibration standard. The retention times for all internal standards did not vary more than the method-specified QC limit of ± 30 seconds from the retention time of the associated 12-hour calibration standard.

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 independent of matrix effects. The following table summarizes the LCS results that were outside the acceptance limits of 60-140%.

SDG	LCS ID	Parameter	Analyte	LCS (%)	LCS Criteria (Recovery %)
60164418	1342567	8260B	Acetone	**165**	60-140
60164418	1343070	8260B	Acetone	**211**	60-140
60164418	1343070	8260B	Acetone	**211**	60-140
60164494	1343070	8260B	Acetone	**211**	60-140
60164494	1343070	8260B	Acetone	**207**	60-140
60164494	1345103	8260B	Acetone	**164**	60-140
60164494	1345615	8260B	2-Butanone	**149**	60-140
60164494	1345615	8260B	Acetone	**221**	60-140

ID = Identification LCS/D = Laboratory Control Sample/Duplicate RPD = Relative Percent Difference
% = Percent

Analytical data reported as non-detect and associated with LCS 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 (%)
60164494	ITMW-14-201403	8260B	Styrene	**24/25**	1	55-134/25
60164494	IW-80-201403	8260B	Trichloroethene	**160**/118	8	61-135/21
60164494	ITMW-11-201403	8260B	cis-1,2-Dichloroethene	**184/218**	3	55-140/23
60164494	ITMW-11-201403	8260B	Trichloroethene	**455/469**	0	61-135/21

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
60164494	ITMW-14-201403	8260B	Styrene	**UJ**
60164494	IW-80-201403	8260B	Trichloroethene	**J**

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
60164418	ITMW-2-201403	DUP-1-201403
60164423	IW-74-201403	DUP-2-201403
60164494	ITMW-19-201403	DUP-4-201403
60164494	ITMW-18-201403	DUP-5-201403
60164494	ITMW-12-201403	DUP-6-201403
60164494	ITMW-17-201403	DUP-3-201403

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 (%)
60164418	ITMW-2-201403	DUP-1-201403	cis-1,2-Dichloroethene	0.40J*	0.51J*	24.1
			Tetrachloroethene	0.48J*	0.26J*	59.5
			Trichloroethene	0.28J*	0.23J*	19.6
60164423	IW-74-201403	DUP-2-201403	Benzene	0.17J*	0.16J*	6.1
			Bromoform	0.41J*	0.23J*	56.3
			Chloroethane	1.4J*	1.8J*	25.0
			Chloroform	0.18J*	0.16J*	11.8
			1,1-Dichloroethane	0.23J*	0.39J*	51.6
			cis-1,2-Dichloroethene	4.3J*	4.5J*	4.5
			trans-1,2-Dichlororethene	ND*	0.31J*	NE
			Trichloroethene	135	151	11.2
			Vinyl chloride	1.5J*	2.2	37.8
60164494	ITMW-18-201403	DUP-5-201403	1,1-Dichloroethene	81.8J*	90.0J*	9.5
			cis-1,2-Dichloroethene	285	242	16.3
			Trichloroethene	9380	8550	9.3
60164494	ITMW-19-201403	DUP-4-201403	cis-1,2-Dichloroethene	60.8*	66.7	9.3
			Trichloroethene	8270	8850	6.8
60164494	ITMW-12-201403	DUP-6-201403	Benzene	0.17J*	0.15J*	12.5
			Chloroform	0.55J*	0.50J*	9.5
			1,1-Dichloroethane	0.40J*	ND	NE
			1,1-Dichloroethene	1.2J*	1.4J*	15.4
			cis-1,2-Dichloroethene	207	148	33.2
			trans-1,2-Dichloroethene	7.2	4.7J*	42
			4-Methyl-2-pentanone	ND	0.79J*	NE
			Tetrachloroethene	1.3J*	1.1J*	16.7
			Trichloroethene	2400	1910	22.7
			Vinyl chloride	3.4	3.4	0
60164494	ITMW-17-201403	DUP-3-201403	Chloroform	1.3J*	1.3J*	0
			1,1-Dichloroethene	5.1	5.2	1.9
			cis-1,2-Dichloroethene	86.1	87.3	1.4

SDG	Field ID	Duplicate ID	Analyte	Sample Result (ug/L)	Duplicate Result (ug/L)	RPD (%)
60164494	ITMW-17-201403	DUP-3-201403	trans-1,2-Dichloroethene	1.8J*	0.67J*	94.5
			Tetrachloroethene	0.90J*	1.1J*	20.0
			Toluene	0.17J*	ND	NE
			1,1,1-Trichloroethene	0.50J*	ND	NE
			Trichloroethene	3770	4040	6.9
			Vinyl chloride	0.57J*	0.74J*	26.0

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?

Yes, with the exceptions noted below.

The following table identifies the analyses which were reported as nondetect, diluted, and an undiluted run ***was not*** reported:

SDG	Field ID	Parameter	Dilution Factor
60164494	MW-25-201403	8260B	100

For samples that were diluted, were the detected results divided by the dilution factors greater than the reporting limits and within calibration range?

No

The following table identifies the results that were reported from a dilution and were either less than the reporting limit or exceeded the calibration range:

SDG	Field ID	Analyte	Result	Dilution Factor	Qualifier
60164494	MW-25-201403	1,1-Dichloroethene	25.3	100	**J**
60164494	MW-25-201403	Vinyl chloride	33.6	100	**J**

Data users should be aware of the elevated detection limits when evaluating data usage for comparison to project standards.

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
60164307	MW-29-201403	8260B	Chloromethane	U	1
60164307	ITMW-20-201403	8260B	Chloromethane	U	1
60164307	Trip Blank	8260B	Carbon Disulfide	U	1
60164418	ITMW-2-201403	8260B	Acetone	U	1
60164418	ITMW-4-201403	8260B	Acetone	U	1
60164418	MW-28-201403	8260B	Acetone	U	1
60164418	MW-68-201403	8260B	Chloromethane	U	1
60164418	IW-72-201403	8260B	Acetone	U	1
60164418	MW-50-201403	8260B	Acetone	U	1
60164418	MW-60-201403	8260B	Acetone	U	1
60164418	MW-61-201403	8260B	Acetone	U	1
60164418	MW-31-201403	8260B	Acetone	U	1
60164418	ITMW-10-201403	8260B	Chloromethane	U	1
60164418	ITMW-21-201403	8260B	Acetone	U	1
60164418	Trip Blank 1	8260B	Acetone	U	1
60164418	Trip Blank 2	8260B	Acetone	U	1
60164418	Trip Blank 3	8260B	Acetone	U	1
60164423	MW-27-201403	8260B	Chloromethane	U	1
60164423	MW-66-201403	8260B	Acetone	U	1
60164423	MW-58-201403	8260B	Chloromethane	U	1
60164423	MW-57-201403	8260B	Chloromethane	U	1
60164423	MW-56-201403	8260B	Acetone	U	1
60164423	IW-74-201403	8260B	Acetone	U	1
60164423	RW-69-201403	8260B	Acetone	U	1
60164494	IW-76-201403	8260B	Acetone	U	1
60164494	IW-77-201403	8260B	Acetone	U	1
60164494	ITMW-13-201403	8260B	Chloromethane	U	1
60164494	ITMW-18-201403	8260B	Acetone	U	1
60164494	ITMW-18-201403	8260B	2-Butanone	U	1
60164494	DUP-5-201403	8260B	Acetone	U	1
60164494	ITMW-15-201403	8260B	Acetone	U	1
60164494	ITMW-15-201403	8260B	Chloromethane	U	1
60164494	ITMW-1-201403	8260B	Acetone	U	1
60164494	ITMW-7-201403	8260B	Chloromethane	U	1
60164494	DUP-4-201403	8260B	Acetone	U	1
60164494	ITMW-19-201403	8260B	Acetone	U	1
60164494	ITMW-19-201403	8260B	Chloromethane	U	1
60164494	ITMW-12-201403	8260B	Carbon disulfide	U	1
60164494	IW-80-201403	8260B	Acetone	U	1
60164494	ITMW-11-201403	8260B	Methylene Chloride	U	1
60164494	MW-33-201403	8260B	Chloromethane	U	1
60164494	MW-25-201403	8260B	Acetone	U	1
60164494	MW-25-201403	8260B	Chloromethane	U	1
60164494	IW-73-201403	8260B	Acetone	U	1
60164494	ITMW-17-201403	8260B	Acetone	U	1

SDG	Field ID	Analysis	Analyte	Qualifier	Reason Code
60164494	ITMW-17-201403	8260B	Chloromethane	**U**	1
60164494	DUP-3-201403	8260B	Acetone	**U**	1
60164494	DUP-3-201403	8260B	Chloromethane	**U**	1
60164494	ITMW-14-201403	8260B	Styrene	**UJ**	2
60164494	IW-80-201403	8260B	Trichloroethene	**J**	2
60164494	MW-25-201403	8260B	1,1-Dichloroethene	**J**	3
60164494	MW-25-201403	8260B	Vinyl chloride	**J**	3

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/Matrix Spike Duplicate or RPDs were outside of quality control parameters.

3 Results from a dilution and were either less than the reporting limit or exceeded the calibration range.





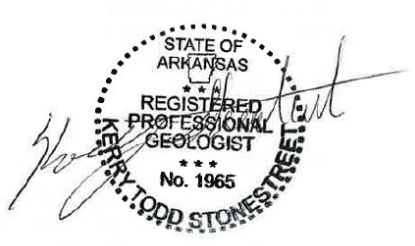
ATTACHMENT B
1st Quarter 2014 Soil Vapor Monitoring/Vapor Intrusion Report
Whirlpool Corporation
Fort Smith, AR

Prepared for:
Whirlpool Corporation

Prepared by:
ENVIRON International Corporation

Date:
May 15, 2014

Project Number:
3434399A



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1 Introduction

ENVIRON International Corporation (ENVIRON) has prepared this 1st Quarter 2014 Quarterly Soil Vapor Monitoring/Vapor Intrusion Report (Report) for the Fort Smith, Arkansas Site (Site) on behalf of Whirlpool Corporation (Whirlpool) in accordance with the December 27, 2013 Remedial Action Decision Document (RADD) issued by the Arkansas Department of Environmental Quality (ADEQ).

Whirlpool has been monitoring the groundwater Site since 1989 and soil vapor since 2012. In 2012, the potential for significant vapor intrusion from groundwater into off-site structures was evaluated in the human health risk assessment (Appendix A of the Revised Risk Management Plan (RRMP), April 24, 2013), which also included evaluation of soil vapor data as an additional line of evidence to support the conclusions regarding the potential for vapor intrusion. This report is Attachment B of the 1st Quarter 2014 Progress Report for the Site and provides an updated evaluation of the potential for vapor intrusion based on the groundwater and soil vapor data collected in March 2014.

2 Soil Vapor Monitoring Point Installation & Sample Collection

The following sections describe the installation of additional soil vapor monitoring points as well as the sample collection methods and procedures used during the soil vapor monitoring event.

2.1 Installation of Soil Vapor Monitoring Points

The RADD identified five locations where soil vapor monitoring should occur to confirm the conclusions regarding the potential for significant vapor intrusion at off-site areas. These locations included the two locations installed in 2012. However, during the 4th Quarter 2013 monitoring event, these locations were saturated (i.e., the soil vapor point screens were filled with water). Therefore, the geology in the location of these two points was reevaluated and new monitoring points were installed with a Central Mining Equipment (CME) model 45 drill rig mounted on a Ford F-450. The installation used 8.25-inch outside diameter (O.D.) hollow stem augers with a 4.25-inch O.D. continuous core barrel, and vertically placed the vapor point screen based on lithology (i.e., placing the screen in a zone of relatively higher permeability).

One soil vapor monitoring point (VP-2) was installed on-site at the northern property boundary within the neck of the TCE plume, proximate to monitoring well MW-33. The second soil vapor monitoring point (VP-1) was installed off-site at the property owned by Whirlpool, adjacent to monitoring well MW-71. The locations of VP-1 and VP-2 are shown on Figure 1.

Consistent with the Final Remedy Work Plan (Work Plan, February 24, 2014), two screens were installed at each vapor monitoring point: one deep screen immediately above groundwater, and one shallow screen approximately midway between the ground surface and the groundwater. At VP-1, the shallow screen was installed 7.25 to 7.75 feet below ground surface (bgs) in a layer of silty sandy clay, and the deep screen was installed 11.08 to 11.58 feet bgs in a silty clay layer. At VP-2, the shallow screen was installed 4.25 to 4.75 feet bgs in a slightly moist layer of silty sandy clay, and the deep screen was installed at 9.25 to 9.75 feet bgs in a slightly moist silty sandy clay layer. The boring and vapor monitoring point installation logs are shown in Appendix B, which also documents the construction of these soil vapor monitoring points.

Two additional soil vapor monitoring points (VP-3 and VP-4) were attempted north of Ingersoll Avenue. During installation of VP-3 a very moist strata was observed at 3 feet bgs and water entered the borehole at 4 feet bgs. At VP-4 very moist to wet soil was observed starting at 2.5 feet bgs. Because wet shallow strata were observed at each point, these boreholes were not completed as soil vapor monitoring points. The boring logs for these locations are also shown in Appendix B.

The RADD identified two additional locations for soil vapor monitoring well installation on Jacobs Avenue (Figure 1). These wells were not able to be installed as access was limited at one location due to the presence of multiple utilities in the road right-of-way and access to other

potential properties was not granted by the property owner[1]. Whirlpool will continue to attempt to gain access to suitable off-site locations to install additional points.

2.2 Sampling Methods

Soil vapor samples were collected using United States Environmental Protection Agency (US EPA) and industry standard methods. Canister ID, start and finish sample time, initial and final vacuum readings, and leak checks were recorded on the Vapor Monitoring Port Sampling field sheet, shown in Appendix C.

Soil vapor samples were collected as follows:

- The flow controller connection to the summa canister was checked for leaks, and three pore volumes of air were purged from the well.
- The sampling crew verified the integrity of the surface components of each individual soil vapor monitoring point. Swagelok® stainless steel valves were installed on each monitoring port using compression ferrule connections.
- Teflon® tubing was connected directly to the Swagelok® barb, and the sampling train was assembled. The soil vapor monitoring point and sampling train were then tested for leaks using helium (or other similar inert gas). If leaks were detected, the sample chain fittings and connections were checked for tightness and the leak test was repeated until the assembly passed the test.
- To assess whether the screen was submerged in groundwater, the port valves were opened and purged using a 15 mL vacuum pump. If water was readily purged from the tubing, no sample was collected.
- The stainless-steel canister was opened to collect a sample for approximately 8 hours, or until a vacuum gauge reading of -5 inches Hg was observed. When the stainless-steel canister was filled, or movement in the vacuum gauge ceased, the valve was closed.
- After sample collection, the stainless-steel canister and flow controller were removed and separated from the sample train, final vacuum readings were taken and recorded on the field sheet, and the port was closed.
- Each canister was logged on a chain of custody (COC) form, packaged in a laboratory provided box, and delivered under the proper COC documentation to the laboratory, where the samples were analyzed for volatile organic compounds (VOCs) via Modified US EPA TO-15 for soil vapor.

[1] Wayne Weber informed David Gillespie about inability to install vapor points at various locations in the neighborhood during his site visit on March 24, 2014.
Phone conversation on March 25, 2014: Tamara House-Knight informed Jay Rich about installation of vapor points
Phone conversation on March 26, 2014: Kerry Stonestreet spoke with Charles Johnson regarding vapor point installations

2.3 1st Quarter 2014 Event

Following the procedures described above, three (3) soil vapor samples were collected during the 1st Quarter 2014 monitoring event. Samples were successfully collected at the shallow and deep ports of VP-1 on March 6, 2014; and at the deep port of VP-2 on March 7, 2014. No sample was collected at the shallow port of VP-2 because the screen, which is 5 ft bgs and 5 feet above the deeper port, was saturated (i.e., tubing was observed to contain water during purging).

The VOC results for these samples are discussed in Section 3, and complete analytical results from the event are provided in Appendix A.

3 Results

Soil vapor analytical results from the 1st Quarter 2014 soil vapor monitoring event are attached as Table 1. Groundwater analytical results from the 1st Quarter 2014 groundwater monitoring event for off-site wells and those adjacent to the soil vapor monitoring points are shown in Table 2. Table 3 summarizes the maximum detected concentrations in off-site groundwater from the 1st Quarter 2014 monitoring event, which includes MW-71 (adjacent to VP-1) as well as the other off-site monitoring wells. To evaluate the potential for significant vapor intrusion, these results were compared to those evaluated in the RRMP and the risks from potential vapor intrusion were calculated using the approach used in the human health risk assessment (Appendix A of the RRMP, 2013).

The soil vapor results from VP-1 and VP-2 were comparable to those from the May 2012 event. Similarly, as discussed in Attachment A (1st Quarter 2014 Groundwater Monitoring Report), groundwater concentrations of VOCs at the wells adjacent to the soil vapor monitoring points, and overall VOC concentrations in groundwater, have not changed significantly since May 2012.

Risk estimates for potential vapor intrusion from groundwater into off-site residences were calculated following the approach in Section 6.5.2 of the ADEQ-approved RRMP and compared to ADEQ's risk management limits of 10^{-5} and 1 for cumulative cancer risk and noncancer hazard index (HI), respectively. As shown in Table 3, the cumulative cancer risk and noncancer HI based on the March 2014 groundwater data from all off-site monitoring wells are $2x10^{-6}$ and 0.5, respectively, which are below ADEQ's limits.

As discussed in Section 6.8.2 of the RRMP, the soil vapor results were used to confirm the results of the groundwater vapor intrusion calculations. The measured concentrations of VOCs in soil gas and US EPA's 95th percentile subslab soil gas attenuation factor of 0.03 (US EPA 2012a) were used to conservatively estimate the risks for potential vapor intrusion from shallow soil vapor.

As shown in Table 4, the risk estimates for detected concentrations in shallow soil gas at VP-1 are the same as or lower than those for groundwater from MW-71. A shallow soil gas sample was not collected at VP-2, because the shallow screen was saturated. The theoretical risks from potential vapor intrusion from deep soil vapor at this location were calculated assuming the shallow screen was not saturated, and the calculated cumulative cancer risk and noncancer HI estimates are $7x10^{-7}$ and 0.1. As shown in Table 4, these are lower than the risk estimates for groundwater from MW-33.

Consistent with the results discussed in Section 6.8.2 of the RRMP, measured groundwater concentrations are not expected to result in the potential for significant vapor intrusion. Further, the measured soil vapor concentrations indicate that the modeling approach used to calculate vapor intrusion risks from groundwater over-predicts exposure risks from groundwater by nearly 10-fold or greater.

4 Summary and Conclusion

- The concentrations in groundwater and soil vapor are consistent with those from the previous reporting period and historic results.
- Risk estimates for vapor intrusion from off-site groundwater are below ADEQ's risk management limits of 10^{-5} and 1 for cumulative cancer risk and noncancer HI, respectively.
- Soil vapor concentrations indicate that the groundwater vapor intrusion modeling approach over-predicts potential exposure risks by nearly 10-fold or greater.

Tables

TABLE 1

1st Quarter Soil Vapor Data

Whirlpool Corporation; Fort Smith, AR

Location	VP-1S	VP-1D	VP-2D
ENVIRON Sample ID	SV-1-Shallow	SV-1-Deep	SV-2-Deep
Lab Sample ID	P1400978-001	P1400978-002	P1400975-001
Sample Method	6.0 L Summa Canister	6.0 L Summa Canister	6.0 L Summa Canister
Sample Date	3/6/2014	3/6/2014	3/8/2014
VOC			
1,2-Dichloroethane	0.15 (0.038)	0.12 (0.038)	0.18 (0.074)
1,1-Dichloroethene	U (0.038)	U (0.038)	68 (0.074)
cis-1,2-Dichloroethene	U (0.038)	U (0.038)	14 (0.074)
trans-1,2-Dichloroethene	U (0.038)	U (0.038)	5.2 (0.074)
Tetrachloroethene	0.64 (0.038)	0.63 (0.038)	0.99 (0.074)
Trichloroethene	0.11 (0.038)	0.63 (0.038)	9.3 (0.074)
Vinyl Chloride	0.11 (0.038)	U (0.038)	14 (0.074)

Notes:

1 All concentration are presented in ug/m^3.

2 Only compounds with at least one detection are shown.

Abbreviations:

U -- Not Detected.

( ) -- Method Reporting Limit.

TABLE 2:

1st Quarter Groundwater VOC Data for Off-Site and Relevant Wells

Whirlpool Corporation; Fort Smith, AR

Location	MW-33	IW-113	IW-113	IW-114	IW-114	IW-115	IW-115
On/Off-Site	On-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
ENVIRON Sample ID	MW-33-20140308	IW-113-20140324	IW-113	IW-114-20140324	IW-114	IW-115-20140324	IW-115-20140407
Lab Sample ID	60164494024	60165578018	60167279001	60165578017	60167279002	60165578002	60166526001
Sample Date	03/08/2014	03/24/2014	04/14/2014	03/24/2014	04/14/2014	03/24/2014	04/07/2014
Comments							
Volatile Organic Compounds							
Acetone	U (10)	162 (10)	31.1 (10)	122 (10)	26.1 (10)	63.4 (10)	40.9 (100)
Benzene	0.098 J (5)	U (5)	0.12 J (5)	U (5)	0.17 J (5)	U (5)	U (50)
Bromodichloromethane	U (5)	0.27 J (5)	U (5)	0.23 J (5)	U (5)	U (5)	U (50)
Bromoform	U (5)	U (5)	1.4 J (5)	U (5)	U (5)	U (5)	U (50)
2-Butanone	U (10)	121 (10)	12.1 (10)	101 (10)	1.2 J (10)	20.9 (10)	129 (100)
Carbon Disulfide	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (100)
Chloroethane	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (100)
Chloroform	0.3 J (5)	1.3 J (5)	0.44 J (5)	1 J (5)	0.48 J (5)	0.97 J (5)	U (50)
1,2-Dichloroethane	U (5)	U (5)	0.18 J (5)	U (5)	U (5)	U (5)	U (50)
1,1-Dichloroethene	1.4 J (5)	0.96 J (5)	U (5)	0.73 J (5)	U (5)	1.1 J (5)	U (50)
cis-1,2-Dichloroethene	15.9 (5)	11.1 (5)	8.7 (5)	9.7 (5)	8.1 (5)	14 (5)	9.1 J (50)
trans-1,2-Dichloroethene	0.33 J (5)	1.2 J (5)	1.6 J (5)	1.2 J (5)	0.91 J (5)	1.6 J (5)	U (50)
Ethyl Benzene	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (50)
Methylene Chloride	U (5)	U (5)	0.23 J (5)	U (5)	0.19 J (5)	U (5)	16.4 J (50)
Tetrachloroethene	0.2 J (5)	U (5)	U (5)	0.15 J (5)	U (5)	0.27 J (5)	U (50)
Toluene	U (5)	0.43 J (5)	U (5)	0.51 J (5)	0.27 J (5)	0.22 J (5)	U (50)
Trichloroethene	918 (50)	510 (25)	435 (25)	397 (50)	336 (25)	622 (50)	455 (50)
Vinyl Chloride	0.56 J (2)	0.43 J (2)	U (2)	0.25 J (2)	U (2)	0.25 J (2)	U (20)

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.
ug/L -- micrograms per Liter

TABLE 2:

1st Quarter Groundwater VOC Data for Off-Site and Relevant Wells

Whirlpool Corporation; Fort Smith, AR

Location	IW-115	IW-116	IW-116	IW-117	IW-117	IW-118	IW-118
On/Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
ENVIRON Sample ID	IW-115	IW-116-20140324	IW-116	IW-117-20140324	IW-117	IW-118-20140324	IW-118
Lab Sample ID	60167279003	60165578006	60167279004	60165578014	60167279005	60165578007	60167279006
Sample Date	04/14/2014	03/24/2014	04/15/2014	03/24/2014	04/15/2014	03/24/2014	04/15/2014
Comments							
Volatile Organic Compounds							
Acetone	32.8 (10)	191 (10)	22 (10)	163 (10)	42.4 (10)	37.3 (10)	20.4 (10)
Benzene	U (5)	U (5)	0.15 J (5)	U (5)	U (5)	U (5)	0.3 J (5)
Bromodichloromethane	U (5)	0.21 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Bromoform	1.3 J (5)	U (5)	U (5)	U (5)	1.5 J (5)	U (5)	3.7 J (5)
2-Butanone	11.6 (10)	137 (10)	0.64 J (10)	236 (10)	26.6 (10)	U (10)	U (10)
Carbon Disulfide	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Chloroethane	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Chloroform	0.36 J (5)	0.92 J (5)	0.37 J (5)	0.72 J (5)	0.32 J (5)	1.1 J (5)	0.5 J (5)
1,2-Dichloroethane	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,1-Dichloroethene	U (5)	0.75 J (5)	0.88 J (5)	0.62 J (5)	U (5)	0.89 J (5)	U (5)
cis-1,2-Dichloroethene	9.3 (5)	10.9 (5)	10.8 (5)	9.1 (5)	9.9 (5)	11.6 (5)	9.7 (5)
trans-1,2-Dichloroethene	1.2 J (5)	1.3 J (5)	U (5)	1.3 J (5)	1.4 J (5)	1.3 J (5)	1.7 J (5)
Ethyl Benzene	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Methylene Chloride	0.28 J (5)	U (5)	0.31 J (5)	U (5)	0.22 J (5)	U (5)	0.3 J (5)
Tetrachloroethene	U (5)	0.13 J (5)	0.22 J (5)	U (5)	U (5)	0.14 J (5)	0.2 J (5)
Toluene	U (5)	0.42 J (5)	U (5)	0.47 J (5)	U (5)	0.49 J (5)	U (5)
Trichloroethene	449 (25)	486 (25)	546 (50)	384 (25)	384 (25)	496 (25)	395 (25)
Vinyl Chloride	U (2)	0.33 J (2)	0.34 J (2)	0.23 J (2)	U (2)	0.34 J (2)	U (2)

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.
ug/L -- micrograms per Liter

TABLE 2:

1st Quarter Groundwater VOC Data for Off-Site and Relevant Wells

Whirlpool Corporation; Fort Smith, AR

Location	IW-119	IW-119	IW-119	IW-120	IW-120	IW-121	IW-121
On/Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
ENVIRON Sample ID	IW-119-20140324	IW-119-20140407	IW-119	IW-120-20140324	IW-120	IW-121-20140324	IW-121
Lab Sample ID	60165578001	60166526002	60167279007	60165578012	60167279008	60165578025	60167279009
Sample Date	03/24/2014	04/07/2014	04/15/2014	03/24/2014	04/15/2014	03/24/2014	04/15/2014
Comments							
Volatile Organic Compounds							
Acetone	10.7 (10)	U (100)	19.8 (10)	U (10)	28.5 (10)	U (50)	21.1 (10)
Benzene	U (5)	U (50)	U (5)	U (5)	U (5)	U (25)	U (5)
Bromodichloromethane	0.28 J (5)	U (50)	U (5)	U (5)	U (5)	U (25)	U (5)
Bromoform	U (5)	U (50)	U (5)	U (5)	3.5 J (5)	U (25)	2 J (5)
2-Butanone	U (10)	U (100)	U (10)	U (10)	1 J (10)	U (50)	0.69 J (10)
Carbon Disulfide	U (10)	U (100)	U (10)	U (10)	U (10)	U (50)	U (10)
Chloroethane	U (10)	U (100)	U (10)	U (10)	U (10)	U (50)	U (10)
Chloroform	1.1 J (5)	U (50)	0.4 J (5)	1.1 J (5)	0.69 J (5)	U (25)	0.33 J (5)
1,2-Dichloroethane	U (5)	U (50)	U (5)	U (5)	U (5)	U (25)	0.15 J (5)
1,1-Dichloroethene	1.1 J (5)	U (50)	0.36 J (5)	0.63 J (5)	U (5)	U (25)	U (5)
cis-1,2-Dichloroethene	11.5 (5)	9.1 J (50)	11.3 (5)	7.9 (5)	10.2 (5)	8.9 J (25)	11.7 (5)
trans-1,2-Dichloroethene	U (5)	U (50)	0.96 J (5)	1.2 J (5)	1.9 J (5)	U (25)	1.5 J (5)
Ethyl Benzene	U (5)	U (50)	U (5)	U (5)	U (5)	U (25)	U (5)
Methylene Chloride	U (5)	17.1 J (50)	0.21 J (5)	U (5)	0.3 J (5)	U (25)	0.23 J (5)
Tetrachloroethene	0.15 J (5)	U (50)	U (5)	U (5)	U (5)	U (25)	U (5)
Toluene	0.37 J (5)	U (50)	U (5)	0.33 J (5)	U (5)	U (25)	U (5)
Trichloroethene	524 (50)	478 (50)	509 (50)	289 (25)	390 (25)	402 (25)	445 (25)
Vinyl Chloride	0.33 J (2)	U (20)	U (2)	0.14 J (2)	U (2)	U (10)	U (2)

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.

ug/L -- micrograms per Liter

TABLE 2:

1st Quarter Groundwater VOC Data for Off-Site and Relevant Wells

Whirlpool Corporation; Fort Smith, AR

Location	IW-122	IW-122	IW-123	IW-123	IW-123	IW-124	IW-124
On/Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
ENVIRON Sample ID	IW-122-20140324	IW-122	IW-123-20140324	IW-123-20140407	IW-123	IW-124-20140324	IW-124
Lab Sample ID	60165630002	60167279010	60165630001	60166526003	60167279011	60165578024	60167279012
Sample Date	03/24/2014	04/15/2014	03/24/2014	04/07/2014	04/15/2014	03/24/2014	04/15/2014
Comments							
Volatile Organic Compounds							
Acetone	U (10)	19.7 (10)	2.2 J,B (10)	U (100)	24.3 (10)	U (50)	U (10)
Benzene	U (5)	U (5)	U (5)	U (50)	U (5)	U (25)	U (5)
Bromodichloromethane	U (5)	U (5)	0.22 J (5)	U (50)	U (5)	U (25)	U (5)
Bromoform	U (5)	U (5)	U (5)	U (50)	1.5 J (5)	U (25)	U (5)
2-Butanone	U (10)	U (10)	U (10)	U (100)	U (10)	U (50)	U (10)
Carbon Disulfide	U (10)	U (10)	U (10)	U (100)	0.14 J (10)	U (50)	U (10)
Chloroethane	U (10)	U (10)	U (10)	U (100)	U (10)	U (50)	U (10)
Chloroform	0.73 J (5)	0.41 J (5)	0.78 J (5)	U (50)	0.39 J (5)	U (25)	0.62 J (5)
1,2-Dichloroethane	U (5)	U (5)	U (5)	U (50)	U (5)	U (25)	U (5)
1,1-Dichloroethene	0.8 J (5)	0.39 J (5)	1 J (5)	U (50)	U (5)	1.1 J (25)	0.83 J (5)
cis-1,2-Dichloroethene	11.5 (5)	10 (5)	12.2 (5)	8.8 J (50)	10 (5)	6.8 J (25)	8.7 (5)
trans-1,2-Dichloroethene	1.5 J (5)	0.71 J (5)	1.1 J (5)	U (50)	1.9 J (5)	U (25)	U (5)
Ethyl Benzene	U (5)	U (5)	U (5)	U (50)	U (5)	U (25)	U (5)
Methylene Chloride	U (5)	0.27 J (5)	U (5)	12.9 J (50)	0.21 J (5)	U (25)	0.15 J (5)
Tetrachloroethene	U (5)	U (5)	0.25 J (5)	U (50)	U (5)	U (25)	U (5)
Toluene	0.32 J (5)	U (5)	0.78 J (5)	U (50)	U (5)	U (25)	U (5)
Trichloroethene	473 (25)	384 (25)	532 (25)	539 (50)	488 (50)	455 (25)	448 (25)
Vinyl Chloride	0.29 J (2)	U (2)	0.4 J (2)	U (20)	U (2)	U (10)	0.26 J (2)

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.
ug/L -- micrograms per Liter

TABLE 2:

1st Quarter Groundwater VOC Data for Off-Site and Relevant Wells

Whirlpool Corporation; Fort Smith, AR

Location	IW-131	IW-72	IW-73	IW-74	IW-74	IW-76	IW-77
On/Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
ENVIRON Sample ID	IW-131-20140324	IW-72-201403	IW-73-201403	IW-74-201403	IW-74-201403-FD	IW-76-201403	IW-77-201403
Lab Sample ID	60165578009	60164418008	60164494026	60164423012	60164423013	60164494001	60164494002
Sample Date	03/24/2014	03/06/2014	03/07/2014	03/07/2014	03/07/2014	03/08/2014	03/08/2014
Comments					Field Duplicate		
Volatile Organic Compounds							
Acetone	261 (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Benzene	U (5)	U (5)	0.18 J (5)	0.17 J (5)	0.16 J (5)	U (5)	0.1 J (5)
Bromodichloromethane	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Bromoform	U (5)	U (5)	U (5)	0.41 J (5)	0.23 J (5)	U (5)	U (5)
2-Butanone	341 (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Carbon Disulfide	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Chloroethane	U (10)	U (10)	U (10)	1.4 J (10)	1.8 J (10)	U (10)	U (10)
Chloroform	1.9 J (5)	U (5)	U (5)	0.18 J (5)	0.16 J (5)	U (5)	0.2 J (5)
1,2-Dichloroethane	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,1-Dichloroethene	0.96 J (5)	U (5)	2.6 J (5)	0.23 J (5)	0.39 J (5)	U (5)	1.3 J (5)
cis-1,2-Dichloroethene	11.5 (5)	U (5)	20.9 (5)	4.3 J (5)	4.5 J (5)	1.5 J (5)	24.4 (5)
trans-1,2-Dichloroethene	1.4 J (5)	U (5)	0.95 J (5)	U (5)	0.31 J (5)	U (5)	0.91 J (5)
Ethyl Benzene	0.41 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Methylene Chloride	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Tetrachloroethene	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Toluene	0.38 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Trichloroethene	526 (25)	U (5)	183 (5)	135 (5)	151 (5)	127 (5)	546 (50)
Vinyl Chloride	0.35 J (2)	U (2)	4.6 (2)	1.5 J (2)	2.2 (2)	U (2)	0.22 J (2)

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.

ug/L -- micrograms per Liter

TABLE 2:

1st Quarter Groundwater VOC Data for Off-Site and Relevant Wells

Whirlpool Corporation; Fort Smith, AR

Location	IW-80	MW-34	MW-35R	MW-36	MW-39	MW-40	MW-41
On/Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
ENVIRON Sample ID	IW-80-201403	MW-34-201403	MW-35R-201403	MW-36-201403	MW-39-201403	MW-40-201403	MW-41-201403
Lab Sample ID	60164494021	60164494016	60164494020	60164418009	60164418010	60164418007	60164494027
Sample Date	03/08/2014	03/08/2014	03/08/2014	03/06/2014	03/06/2014	03/06/2014	03/07/2014
Comments							
Volatile Organic Compounds							
Acetone	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Benzene	U (5)	U (5)	0.15 J (5)	U (5)	U (5)	U (5)	U (5)
Bromodichloromethane	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Bromoform	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
2-Butanone	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Carbon Disulfide	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Chloroethane	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Chloroform	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,2-Dichloroethane	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,1-Dichloroethene	U (5)	U (5)	0.66 J (5)	U (5)	U (5)	U (5)	1.6 J (5)
cis-1,2-Dichloroethene	2.7 J (5)	0.61 J (5)	14.9 (5)	U (5)	U (5)	U (5)	19.7 (5)
trans-1,2-Dichloroethene	U (5)	U (5)	0.5 J (5)	U (5)	U (5)	U (5)	0.5 J (5)
Ethyl Benzene	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Methylene Chloride	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Tetrachloroethene	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Toluene	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Trichloroethene	79.1 J (5)	28.7 (5)	345 (25)	0.22 J (5)	U (5)	U (5)	501 (50)
Vinyl Chloride	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	0.68 J (2)

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.

ug/L -- micrograms per Liter

TABLE 2:

1st Quarter Groundwater VOC Data for Off-Site and Relevant Wells

Whirlpool Corporation; Fort Smith, AR

Location	MW-46R	MW-50	MW-56	MW-57	MW-58	MW-60	MW-61
On/Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
ENVIRON Sample ID	MW-46R-201403	MW-50-201403	MW-56-201403	MW-57-201403	MW-58-201403	MW-60-201403	MW-61-201403
Lab Sample ID	60164423010	60164418011	60164423009	60164423008	60164423007	60164418012	60164418013
Sample Date	03/07/2014	03/06/2014	03/07/2014	03/07/2014	03/07/2014	03/06/2014	03/06/2014
Comments							
Volatile Organic Compounds							
Acetone	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Benzene	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Bromodichloromethane	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Bromoform	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
2-Butanone	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Carbon Disulfide	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Chloroethane	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Chloroform	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,2-Dichloroethane	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,1-Dichloroethene	1.4 J (5)	U (5)	1.3 J (5)	0.56 J (5)	1.6 J (5)	U (5)	U (5)
cis-1,2-Dichloroethene	12.8 (5)	U (5)	15.3 (5)	3 J (5)	22.3 (5)	U (5)	U (5)
trans-1,2-Dichloroethene	0.44 J (5)	U (5)	0.46 J (5)	U (5)	0.35 J (5)	U (5)	U (5)
Ethyl Benzene	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Methylene Chloride	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Tetrachloroethene	U (5)	U (5)	U (5)	U (5)	0.15 J (5)	U (5)	U (5)
Toluene	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Trichloroethene	469 (50)	U (5)	618 (50)	134 (5)	293 (25)	U (5)	4.7 J (5)
Vinyl Chloride	0.46 J (2)	U (2)	0.15 J (2)	0.14 J (2)	0.93 J (2)	U (2)	U (2)

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.

ug/L -- micrograms per Liter

TABLE 2:

1st Quarter Groundwater VOC Data for Off-Site and Relevant Wells

Whirlpool Corporation; Fort Smith, AR

Location	MW-62	MW-63	MW-65	MW-66	MW-67	MW-68	MW-71	RW-69
On/Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site	Off-Site
ENVIRON Sample ID	MW-62-201403	MW-63-201403	MW-65-201403	MW-66-201403	MW-67-201403	MW-68-201403	MW-71-201403	RW-69-201403
Lab Sample ID	60164423005	60164423006	60164494017	60164423004	60164423003	60164418006	60164423014	60164423015
Sample Date	03/07/2014	03/07/2014	03/08/2014	03/07/2014	03/07/2014	03/06/2014	03/07/2014	03/07/2014
Comments								
Volatile Organic Compounds								
Acetone	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Benzene	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Bromodichloromethane	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Bromoform	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
2-Butanone	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Carbon Disulfide	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Chloroethane	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Chloroform	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,2-Dichloroethane	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,1-Dichloroethene	U (5)	U (5)	0.4 J (5)	U (5)	U (5)	U (5)	1.1 J (5)	0.36 J (5)
cis-1,2-Dichloroethene	U (5)	1.3 J (5)	6.6 (5)	U (5)	U (5)	U (5)	5.8 (5)	3.5 J (5)
trans-1,2-Dichloroethene	U (5)	U (5)	0.28 J (5)	U (5)	U (5)	U (5)	0.27 J (5)	U (5)
Ethyl Benzene	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Methylene Chloride	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Tetrachloroethene	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Toluene	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Trichloroethene	0.18 J (5)	9.4 (5)	199 (25)	3.5 J (5)	U (5)	U (5)	166 (5)	105 (5)
Vinyl Chloride	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	0.19 J (2)	0.41 J (2)

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.

ug/L -- micrograms per Liter

Table 3: Vapor Intrusion Risk Estimates Based on 1st Quarter Off-Site Groundwater Data
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	Max Detected Conc in Off-Site GW (mg/L)	Residential VI	
				Risk	HQ
VOC	Acetone	67-64-1	2.61E-01		1.3E-06
VOC	Benzene	71-43-2	3.00E-04	1.3E-09	1.3E-05
VOC	Bromodichloromethane	75-27-4	2.80E-04		
VOC	Bromoform	75-25-2	3.70E-03	3.2E-10	
VOC	2-Butanone	78-93-3	3.41E-01		1.0E-05
VOC	Carbon Disulfide	75-15-0	1.40E-04		5.5E-07
VOC	Chloroethane	75-00-3	1.80E-03		5.2E-07
VOC	Chloroform	67-66-3	1.90E-03	2.2E-08	4.4E-05
VOC	1,2-Dichloroethane	107-06-2	1.80E-04	1.2E-09	1.6E-05
VOC	1,1-Dichloroethene	75-35-4	2.60E-03		3.3E-05
VOC	cis-1,2-Dichloroethene	156-59-2	2.44E-02		
VOC	trans-1,2-Dichloroethene	156-60-5	1.90E-03		
VOC	Ethyl Benzene	100-41-4	4.10E-04		4.8E-07
VOC	Methylene Chloride	75-09-2	1.71E-02	1.9E-10	2.9E-05
VOC	Tetrachloroethene	127-18-4	2.70E-04	5.0E-11	1.1E-05
VOC	Toluene	108-88-3	7.80E-04		1.9E-07
VOC	Trichloroethene	79-01-6	6.22E-01	2.3E-06	4.7E-01
VOC	Vinyl Chloride	75-01-4	4.60E-03	9.3E-08	1.4E-04
		Cumulative Risk and HI:		2E-06	5E-01

Note:

Only VOCs detected in off-site groundwater are shown.

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.

Detected concentrations are from samples collected in the 1st Quarter of 2014.

Table 4: Evaluation of VOCs in Soil Vapor
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	Off-Site				On-Site			
			VP-1S		MW-71		VP-2S		MW-33	
			Soil Vapor		Groundwater		Soil Vapor		Groundwater	
			Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ
VOC	Benzene	71-43-2					NA	NA	4.2E-10	4.2E-06
VOC	Chloroform	67-66-3					NA	NA	3.5E-09	7.0E-06
VOC	Chloromethane	74-87-3					NA	NA		2.2E-06
VOC	1,2-Dichloroethane	107-06-2	4.8E-08	6.2E-04			NA	NA		
VOC	1,1-Dichloroethene	75-35-4				1.4E-05	NA	NA		1.8E-05
VOC	Tetrachloroethene	127-18-4	2.1E-09	4.6E-04			NA	NA	3.7E-11	8.4E-06
VOC	Trichloroethene	79-01-6	7.6E-09	1.6E-03	6.0E-07	1.2E-01	NA	NA	3.3E-06	6.9E-01
VOC	Vinyl Chloride	75-01-4	2.0E-08	3.2E-05	3.8E-09	5.9E-06	NA	NA	1.1E-08	1.7E-05
	Cumulative Risk and HI:		8E-08	3E-03	6E-07	1E-01	NA	NA	3E-06	7E-01

Notes:

NA -- No shallow soil vapor sample was collected at VP-2S because the screen, which is 5 ft bgs and 5 feet above the deeper port, was saturated.

Only VOCs detected in the 1st Quarter 2014 samples at MW-33, MW-70, and VP-1S are shown.

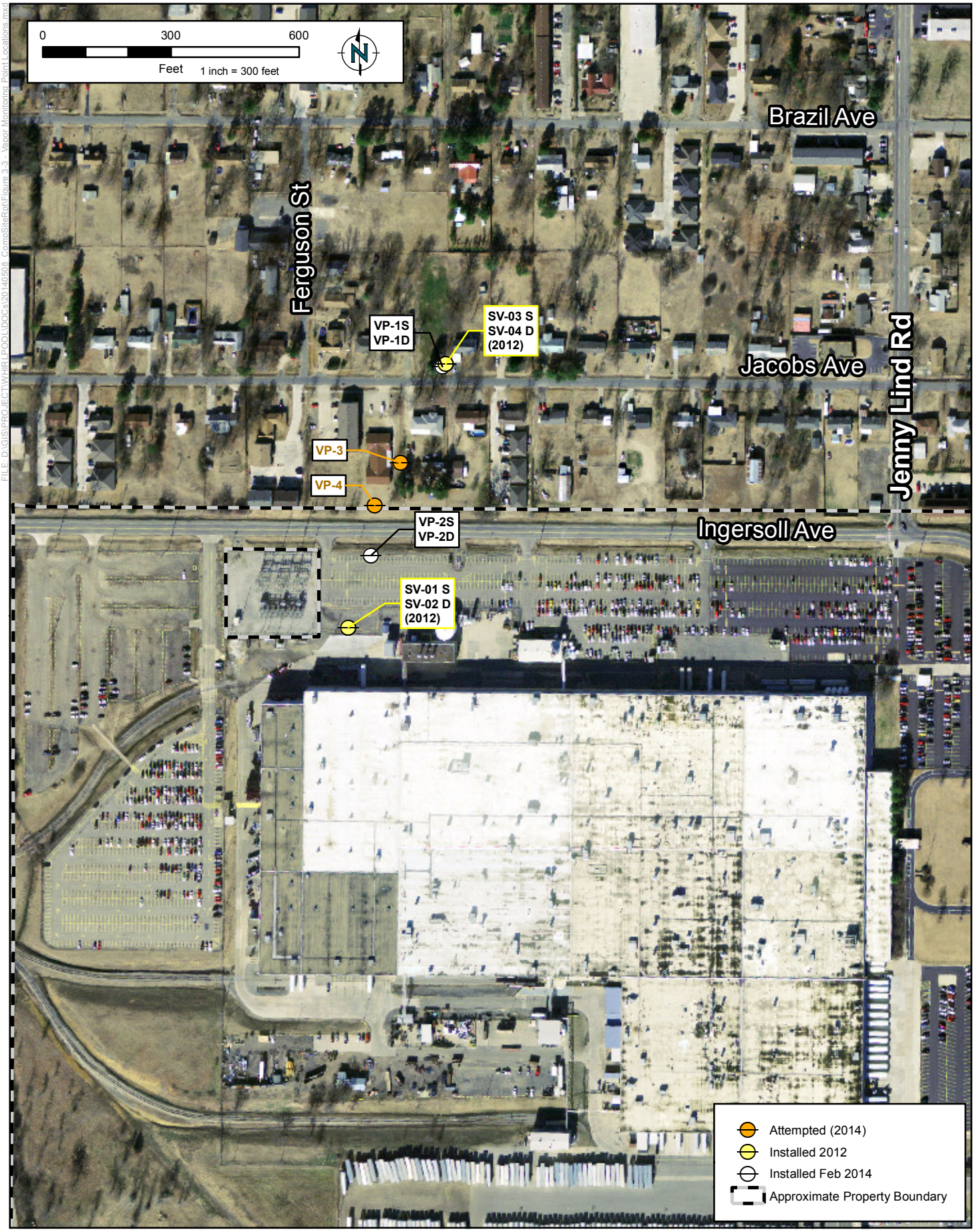
Risk and HQ estimates were not calculated for detected chemicals with inadequate toxicity or physical/chemical parameters or where chemical concentrations were non-detect.

Risks based on soil vapor data were calculated using USEPA's default attenuation factor for subslab gas to indoor air of 0.03, as discussed in Section 6.8.2 of the April 2013 Revised Risk Management Plan.

Risks based on groundwater data 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.

Detected concentrations are from samples collected in March, 2014.

Figures



FILE: D:\GIS\PROJECTS\WHIRLPOOL\DOCS\20140508_CompSiteRpt\Figure 3-3 - Vapor Monitoring Point Locations.mxd

ENVIRON

VAPOR MONITORING POINT LOCATIONS

Whirlpool Facility - Fort Sm ith, Ark an sas

Figure 1

DRAFTED BY: KTS

DATE: 05/14/2014

PROJECT: 3433253A

Appendix A
Laboratory Analytical Data

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

LABORATORY REPORT

March 26, 2014

Wendy Stonestreet
Environ International Corporation
7500 College Boulevard, Suite 925
Overland Park, KS 66210

RE: Vapor Monitoring Event 1st Quarter

Dear Wendy:

Enclosed are the results of the sample submitted to our laboratory on March 12, 2014. For your reference, this analysis has been assigned our service request number P1400975.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Kelly Horiuchi at 9:13 am, Mar 26, 2014

Kelly Horiuchi
Laboratory Director

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

Client: Environ International Corporation
Project: Vapor Monitoring Event 1st Quarter

Service Request No: P1400975

CASE NARRATIVE

The sample was received intact under chain of custody on March 12, 2014 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Volatile Organic Compound Analysis

The sample was analyzed in SIM mode for selected volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is not included on the laboratory's AIHA-LAP scope of accreditation.

The Summa canister was cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

2655 Park Center Dr., Suite A
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www.alsglobal.com

ALS Environmental – Simi Valley

Certifications, Accreditations, and Registrations

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L11-203
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2012039
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	494864
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	CA200007
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-13-4
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA016272013-3
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Environ International Corporation Service Request: P1400975

Project ID: Vapor Monitoring Event 1st Quarter

Date Received: 3/12/2014

Time Received: 09:45

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pfl (psig)	TO-15 - VOC SIM
SV-2-Deep	P1400975-001	Air	3/8/2014	07:15	SC01865	-8.45	3.71	X

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle:
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10-Day-Standard

ALS Project No: P140095

Company Name & Address (Reporting Information)	ENVIRON 7500 College Blvd Ste 925 Overland Park, KS 66210
Project Name	Vapor Monitoring Event 1st Quarter
Project Number	
Project Manager	Tamara Gleason
P.O. # / Billing Information	Same
Phone	913-553-5926
Fax	
Email Address for Result Reporting	nstonestreet@environcorp.com tgleason@environcorp.com
Sampler (Print & Sign)	

ALS Contact:

Analysis Method: VOC Specific List

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume	Analysis Method		Comments e.g. Actual Preservative or specific instructions
SV-2-Deep	01-8.25	3/8/2014	715	SC01865	AVG02081	-27.5	-12.5	15.0	X		
	-14.16										

Report Tier Levels - please select

Tier I - Results (Default in not specified) ____
Tier II (Results + QC Summaries ____
Tier III (Results + QC & Calibration Summaries) X
Tier IV (Date Validation Package) 10% Surcharge ____

EDD required YES / No
Type: Equis Units: ____

Chain of Custody Seal: (Circle)
INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature) Wendy Stonestreet	Date: 3/10/2014	Time: 2000	Received by: (Signature)	Date: 3/12/14	Time: 0900	Cooler / Blank Temperature ____°C
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:	

5 of 10

ALS Environmental
Sample Acceptance Check Form

Client: Environ International Corporation Work order: P1400975

Project: Vapor Monitoring Event 1st Quarter

Sample(s) received on: 3/12/14 Date opened: 3/12/14 by: MZAMORA

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by ALS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1400975-001.01	6.0 L Source Can					Received w/liquid in valve.

Explain any discrepancies: (include lab sample ID numbers):

Chain of Custody is missing sampler's signature

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environ International Corporation**
Client Sample ID: **SV-2-Deep** ALS Project ID: P1400975
Client Project ID: **Vapor Monitoring Event 1st Quarter** ALS Sample ID: P1400975-001

Test Code: EPA TO-15 SIM Date Collected: 3/8/14
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 3/12/14
Analyst: Wida Ang Date Analyzed: 3/19/14
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SC01865

Initial Pressure (psig): -8.45 Final Pressure (psig): 3.71

Canister Dilution Factor: 2.95

CAS #	Compound	Result µg/m	MRL µg/m	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	**14**	0.074	**5.4**	0.029	
75-35-4	1,1-Dichloroethene	**68**	0.074	**17**	0.019	
156-60-5	trans-1,2-Dichloroethene	**5.2**	0.074	**1.3**	0.019	
75-34-3	1,1-Dichloroethane	ND	0.074	ND	0.018	
156-59-2	cis-1,2-Dichloroethene	**14**	0.074	**3.6**	0.019	
107-06-2	1,2-Dichloroethane	**0.18**	0.074	**0.043**	0.018	
71-55-6	1,1,1-Trichloroethane	ND	0.074	ND	0.014	
79-01-6	Trichloroethene	**9.3**	0.074	**1.7**	0.014	
127-18-4	Tetrachloroethene	**0.99**	0.074	**0.15**	0.011	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environ International Corporation**
Client Sample ID: **Method Blank** ALS Project ID: P1400975
Client Project ID: **Vapor Monitoring Event 1st Quarter** ALS Sample ID: P140319-MB

Test Code: EPA TO-15 SIM Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: NA
Analyst: Wida Ang Date Analyzed: 3/19/14
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m	MRL µg/m	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.025	ND	0.0098	
75-35-4	1,1-Dichloroethene	ND	0.025	ND	0.0063	
156-60-5	trans-1,2-Dichloroethene	ND	0.025	ND	0.0063	
75-34-3	1,1-Dichloroethane	ND	0.025	ND	0.0062	
156-59-2	cis-1,2-Dichloroethene	ND	0.025	ND	0.0063	
107-06-2	1,2-Dichloroethane	ND	0.025	ND	0.0062	
71-55-6	1,1,1-Trichloroethane	ND	0.025	ND	0.0046	
79-01-6	Trichloroethene	ND	0.025	ND	0.0047	
127-18-4	Tetrachloroethene	ND	0.025	ND	0.0037	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Environ International Corporation**
Client Project ID: **Vapor Monitoring Event 1st Quarter** ALS Project ID: P1400975

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date(s) Collected: 3/8/14
Analyst: Wida Ang Date(s) Received: 3/12/14
Sample Type: 6.0 L Summa Canister(s) Date(s) Analyzed: 3/19/14
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 % Recovered	Toluene-d8 % Recovered	Bromofluorobenzene % Recovered	Acceptance Limits	Data Qualifier
Method Blank	P140319-MB	**97**	**101**	**108**	70-130	
Lab Control Sample	P140319-LCS	**100**	**99**	**109**	70-130	
SV-2-Deep	P1400975-001	**93**	**97**	**107**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environ International Corporation**
Client Sample ID: **Lab Control Sample** ALS Project ID: P1400975
Client Project ID: **Vapor Monitoring Event 1st Quarter** ALS Sample ID: P140319-LCS

Test Code: EPA TO-15 SIM Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: NA
Analyst: Wida Ang Date Analyzed: 3/19/14
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m	Result µg/m	% Recovery	ALS Acceptance Limits	Data Qualifier
75-01-4	Vinyl Chloride	4.00	**3.76**	**94**	63-120	
75-35-4	1,1-Dichloroethene	4.28	**4.03**	**94**	67-114	
156-60-5	trans-1,2-Dichloroethene	4.24	**4.04**	**95**	66-115	
75-34-3	1,1-Dichloroethane	4.16	**3.93**	**94**	65-117	
156-59-2	cis-1,2-Dichloroethene	4.28	**4.13**	**96**	66-116	
107-06-2	1,2-Dichloroethane	4.20	**3.99**	**95**	61-118	
71-55-6	1,1,1-Trichloroethane	4.12	**3.96**	**96**	65-114	
79-01-6	Trichloroethene	4.16	**3.98**	**96**	66-116	
127-18-4	Tetrachloroethene	3.92	**3.73**	**95**	65-118	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

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LABORATORY REPORT

March 26, 2014

Wendy Stonestreet
Environ International Corporation
7500 College Boulevard, Suite 925
Overland Park, KS 66210

RE: Vapor Monitoring Event 1st Quarter

Dear Wendy:

Enclosed are the results of the samples submitted to our laboratory on March 12, 2014. For your reference, these analyses have been assigned our service request number P1400978.

All analyses were performed according to our laboratory's NELAP and DoD-ELAP-approved quality assurance program. The test results meet requirements of the current NELAP and DoD-ELAP standards, where applicable, and except as noted in the laboratory case narrative provided. For a specific list of NELAP and DoD-ELAP-accredited analytes, refer to the certifications section at www.alsglobal.com. Results are intended to be considered in their entirety and apply only to the samples analyzed and reported herein.

If you have any questions, please call me at (805) 526-7161.

Respectfully submitted,

ALS | Environmental

By Kelly Horiuchi at 9:15 am, Mar 26, 2014

Kelly Horiuchi
Laboratory Director

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

Client: Environ International Corporation
Project: Vapor Monitoring Event 1st Quarter

Service Request No: P1400978

CASE NARRATIVE

The samples were received intact under chain of custody on March 12, 2014 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the samples at the time of sample receipt.

Volatile Organic Compound Analysis

The samples were analyzed in SIM mode for selected volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is not included on the laboratory's AIHA-LAP scope of accreditation.

The Summa canisters were cleaned, prior to sampling, down to the method reporting limit (MRL) reported for this project. Please note, projects which require reporting below the MRL could have results between the MRL and method detection limit (MDL) that are biased high.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.

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ALS Environmental – Simi Valley

Certifications, Accreditations, and Registrations

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L11-203
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2012039
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	494864
New Jersey DEP (NELAP)	http://www.nj.gov/dep/oqa/	CA009
New York DOH (NELAP)	http://www.wadsworth.org/labcert/elap/elap.html	11221
Oregon PHD (NELAP)	http://public.health.oregon.gov/LaboratoryServices/EnvironmentalLaboratoryAccreditation/Pages/index.aspx	CA200007
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-13-4
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA016272013-3
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Environ International Corporation Service Request: P1400978

Project ID: Vapor Monitoring Event 1st Quarter

Date Received: 3/12/2014

Time Received: 09:45

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pfl (psig)	TO-15 - VOC SIM
SV-1-Shallow	P1400978-001	Air	3/6/2014	15:42	SC00293	-2.76	3.51	X
SV-1-Deep	P1400978-002	Air	3/6/2014	21:20	SC00058	-2.56	3.60	X

Air - Chain of Custody Record & Analytical Service Request

2655 Park Center Drive, Suite A
Simi Valley, California 93065
Phone (805) 526-7161
Fax (805) 526-7270

Requested Turnaround Time in Business Days (Surcharges) please circle:
1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) (10-Day-Standard)

ALS Project No: P1400978

ALS Contact:

Company Name & Address (Reporting Information):
ENVIRON
7500 College Blvd Ste 925
Overland Park, KS, 66210

Project Name: Vapor Monitoring Event 1st Quarter

Project Number:

Project Manager: Tamara Gleason

P.O. # / Billing Information: same

Phone: 913-451-5926

Fax:

Email Address for Result Reporting: wstonestreet@environcorp.com tgleason@environcorp.com

Sampler (Print & Sign):

Analysis Method: Voc Specific List

Client Sample ID	Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg	Canister End Pressure "Hg/psig	Sample Volume			Comments e.g. Actual Preservative or specific instructions
(1) SV-1-Shallow	3/6/2014	3/6/2014	1542	~~SC00058~~ SC00293	OA00583	-27	-5	22	X		2.71
(1) SV-1-Deep	3/6/2014	3/6/2014	2120	SC00058	OA1418	-29	-12.5	16.5	X		4.07

5 of 11

Report Tier Levels - please select

Tier I - Results (Default in not specified) _____
Tier II (Results + QC Summaries _____
Tier III (Results + QC & Calibration Summaries) X
Tier IV (Date Validation Package) 10% Surcharge _____

EDD required (YES) / No
Type: Equis Units: _____

Chain of Custody Seal: (Circle)
INTACT BROKEN (ABSENT)

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Wendy Stonestreet	3/10/2014	1000			
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:

Cooler / Blank Temperature _____ °C

ALS Environmental
Sample Acceptance Check Form

Client: Environ International Corporation Work order: P1400978

Project: Vapor Monitoring Event 1st Quarter

Sample(s) received on: 3/12/14 Date opened: 3/12/14 by: MZAMORA

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by ALS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1400978-001.01	6.0 L Source Can					
P1400978-002.01	6.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers):

Chain of Custody is missing sampler's signature

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environ International Corporation**
Client Sample ID: **SV-1-Shallow** ALS Project ID: P1400978
Client Project ID: **Vapor Monitoring Event 1st Quarter** ALS Sample ID: P1400978-001

Test Code: EPA TO-15 SIM Date Collected: 3/6/14
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 3/12/14
Analyst: Wida Ang Date Analyzed: 3/18/14
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SC00293

Initial Pressure (psig): -2.76 Final Pressure (psig): 3.51

Canister Dilution Factor: 1.53

CAS #	Compound	Result µg/m	MRL µg/m	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	**0.11**	0.038	**0.043**	0.015	
75-35-4	1,1-Dichloroethene	ND	0.038	ND	0.0097	
156-60-5	trans-1,2-Dichloroethene	ND	0.038	ND	0.0097	
75-34-3	1,1-Dichloroethane	ND	0.038	ND	0.0095	
156-59-2	cis-1,2-Dichloroethene	ND	0.038	ND	0.0097	
107-06-2	1,2-Dichloroethane	**0.15**	0.038	**0.037**	0.0095	
71-55-6	1,1,1-Trichloroethane	ND	0.038	ND	0.0070	
79-01-6	Trichloroethene	**0.11**	0.038	**0.021**	0.0071	
127-18-4	Tetrachloroethene	**0.64**	0.038	**0.095**	0.0056	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environ International Corporation**
Client Sample ID: **SV-1-Deep** ALS Project ID: P1400978
Client Project ID: **Vapor Monitoring Event 1st Quarter** ALS Sample ID: P1400978-002

Test Code: EPA TO-15 SIM Date Collected: 3/6/14
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 3/12/14
Analyst: Wida Ang Date Analyzed: 3/18/14
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SC00058

Initial Pressure (psig): -2.56 Final Pressure (psig): 3.60

Canister Dilution Factor: 1.51

CAS #	Compound	Result µg/m	MRL µg/m	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.038	ND	0.015	
75-35-4	1,1-Dichloroethene	ND	0.038	ND	0.0095	
156-60-5	trans-1,2-Dichloroethene	ND	0.038	ND	0.0095	
75-34-3	1,1-Dichloroethane	ND	0.038	ND	0.0093	
156-59-2	cis-1,2-Dichloroethene	ND	0.038	ND	0.0095	
107-06-2	1,2-Dichloroethane	**0.12**	0.038	**0.031**	0.0093	
71-55-6	1,1,1-Trichloroethane	ND	0.038	ND	0.0069	
79-01-6	Trichloroethene	**0.63**	0.038	**0.12**	0.0070	
127-18-4	Tetrachloroethene	**0.63**	0.038	**0.093**	0.0056	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environ International Corporation**
Client Sample ID: **Method Blank** ALS Project ID: P1400978
Client Project ID: **Vapor Monitoring Event 1st Quarter** ALS Sample ID: P140318-MB

Test Code: EPA TO-15 SIM Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: NA
Analyst: Wida Ang Date Analyzed: 3/18/14
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m	MRL µg/m	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.025	ND	0.0098	
75-35-4	1,1-Dichloroethene	ND	0.025	ND	0.0063	
156-60-5	trans-1,2-Dichloroethene	ND	0.025	ND	0.0063	
75-34-3	1,1-Dichloroethane	ND	0.025	ND	0.0062	
156-59-2	cis-1,2-Dichloroethene	ND	0.025	ND	0.0063	
107-06-2	1,2-Dichloroethane	ND	0.025	ND	0.0062	
71-55-6	1,1,1-Trichloroethane	ND	0.025	ND	0.0046	
79-01-6	Trichloroethene	ND	0.025	ND	0.0047	
127-18-4	Tetrachloroethene	ND	0.025	ND	0.0037	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Environ International Corporation**
Client Project ID: **Vapor Monitoring Event 1st Quarter** ALS Project ID: P1400978

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date(s) Collected: 3/6/14
Analyst: Wida Ang Date(s) Received: 3/12/14
Sample Type: 6.0 L Summa Canister(s) Date(s) Analyzed: 3/18/14
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 % Recovered	Toluene-d8 % Recovered	Bromofluorobenzene % Recovered	Acceptance Limits	Data Qualifier
Method Blank	P140318-MB	**98**	**100**	**104**	70-130	
Lab Control Sample	P140318-LCS	**101**	**99**	**107**	70-130	
SV-1-Shallow	P1400978-001	**101**	**101**	**98**	70-130	
SV-1-Deep	P1400978-002	**103**	**101**	**95**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environ International Corporation**
Client Sample ID: **Lab Control Sample** ALS Project ID: P1400978
Client Project ID: **Vapor Monitoring Event 1st Quarter** ALS Sample ID: P140318-LCS

Test Code: EPA TO-15 SIM Date Collected: NA
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: NA
Analyst: Wida Ang Date Analyzed: 3/18/14
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m	Result µg/m	% Recovery	ALS Acceptance Limits	Data Qualifier
75-01-4	Vinyl Chloride	4.00	**3.83**	**96**	63-120	
75-35-4	1,1-Dichloroethene	4.28	**4.05**	**95**	67-114	
156-60-5	trans-1,2-Dichloroethene	4.24	**4.06**	**96**	66-115	
75-34-3	1,1-Dichloroethane	4.16	**3.99**	**96**	65-117	
156-59-2	cis-1,2-Dichloroethene	4.28	**4.17**	**97**	66-116	
107-06-2	1,2-Dichloroethane	4.20	**4.08**	**97**	61-118	
71-55-6	1,1,1-Trichloroethane	4.12	**3.97**	**96**	65-114	
79-01-6	Trichloroethene	4.16	**3.96**	**95**	66-116	
127-18-4	Tetrachloroethene	3.92	**3.77**	**96**	65-118	

Laboratory Control Sample percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly.

Appendix B

Vapor Monitoring Port Logs – Successful and Unsuccessful Installation

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: VP-1		Date(s): **2/17/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **K. Stonestreet**	
Contractor: **Mohawk Drilling**		Purpose: **Vapor Point**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **471.5 amsl**	TOC Elevation:
Sampling Method: **HSA Continuous Sampler**		North: **369667.83**	East: **591169.57**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **12.0 feet**
Blank Casing: Tubing	0 FT to 7.25 FT 0 FT to 11.08 FT	Project Number: **3433253A**	
Screen: Stainless Steel	7.25 FT to 7.75 FT 11.08 FT to 11.58 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Bentonite	0 FT TO 7 FT 8 FT to 10.83 FT	Remarks:	
Sand	7 FT to 8 FT 10.83 FT to 11.83 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
470	0	5					TOP SOIL		Flush Mount
						CL	SILTY CLAY, RED BROWN, VERY MOIST		
							SILTY CLAY, RED BROWN, SANDY, FINE GRAIN, MOIST		
	5						SILTY SANDY CLAY, LIGHT BROWN, FINE TO MEDIUM GRAIN, ABUNDANT NODULES (IRON CEMENTED SAND/SILT), DRY		
465		5							
						CH	SILTY CLAY, LIGHT BROWN, MOTTLED, DRY, FIRM		
	10						SILTY SANDY CLAY, LIGHT BROWN, FINE GRAIN, ABUNDANT NODULES (IRON CEMENTEDSAND/SILT)		
460		2					SILTY CLAY, LIGHT BROWN, MOTTLED, DRY, FIRM		
	15								
455									
	20								
450									
	25								
445									

Report: VAPOR_POINT_MKE; File: TUESDAY_12PM.GPJ; 04/17/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: VP-2		Date(s): **2/17/2014**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **K. Stonestreet**	
Contractor: **Mohawk Drilling**		Purpose: **Vapor Point**	
Drilling Method: **Hollow Stem Auger**		GS Elevation: **475.5 amsl**	TOC Elevation:
Sampling Method: **HSA Continuous Sampler**		North: **369235.02**	East: **590978.39**
Well Construction:		Borehole Dia.: **8.25 inches**	Total Depth: **13.0 feet**
Blank Casing: Tubing	0 FT to 4.25 FT 0 FT to 9.25 FT	Project Number: **3433253A**	
Screen: Stainless Steel	4.25 FT to 4.75 FT 9.25 FT to 9.75 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Bentonite	0 FT to 4 FT 5 FT to 9 FT	Remarks:	
Sand	4 FT to 5 FT 9 FT to 10 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
475							ASPHALT		Flush Mount
		5				CL	SILTY SANDY, CLAY, GRAY, FINE GRAIN, MOIST		
							SILTY SANDY CLAY, FINE GRAIN, OCCSIONAL NODULES (IRON CEMENTED), SLIGHLTY MOIST (WET 6-6.5')		
470	5	5				CH	SILTY CLAY, BROWN, BLACK ORGANIC MATERIAL, DRY TO SLIGHTLY MOIST		
							SILTY SANDY CLAY, BROWN, FINE GRAIN, DRY TO SLIGHLTY MOIST		
465	10	3					SILTY CLAY, BROWN, STIFF		
						CL	SILTY SANDY CLAY, BROWN, FINE GRAIN, OCCASIONAL NODULES (IRON CEMENTED)		
						CH	SILTY CLAY, BROWN, STIFF. STARTED MAKING WATER.		
460	15								
455	20								
450	25								

Report: VAPOR_POINT_MKE; File: TUESDAY_12PM.GPJ; 04/17/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: VP-3	Date(s): **2/18/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **M. Eddings**	
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**
Contractor: **Mohawk Drilling**	Purpose: **Vapor Point**
Drilling Method: **Hollow Stem Auger**	Datum: **NAVD88** Elevation: **473.0**
Sampling Method: **HSA Continuous Sampler**	North: **369447.970** East: **591059.170**
Remarks: **Borehole abandoned with hydrated bentonite chips.**	Borehole Dia.: **8.25 inches** Total Depth: **10.0 feet**
	Project Number: **3433253A**
	Project Name: **Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Graphic Log	USCS Code	Material Description
		5			TOP SOIL
				CL	SILTY CLAY, BROWN, MOTTLED, MOIST, FIRM
470					SILTY SANDY CLAY, BROWN, FINE GRAIN, MOTTLED, VERY MOIST
	5	5			SILTY SANDY CLAY, BROWN, FINE GRAIN, SLIGHLTY MOIST (WATER ENTERING BOREHOLE AT 4 FEET)
					SILTY SANDY CLAY, BROWN, FINE GRAIN, MOTTLED, VERY MOIST, SEAM OF WATER
465				CH	SILTY SANDY CLAY, LIGHT BROWN, FINE GRAIN, SLIGHLTY MOIST, STIFF.
	10				
460					
	15				
455					
	20				
450					
	25				
445					

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM.GPJ; 04/18/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: VP-4	Date(s): **2/26/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**
Contractor: **Mohawk Drilling**	Purpose: **Vapor Point**
Drilling Method: **Hollow Stem Auger**	Datum: **NAVD88** Elevation: **474.0**
Sampling Method: **HSA Continuous Sampler**	North: **369352.110** East: **590954.670**
Remarks: **Borehole abandoned with hydrated bentonite chips.**	Borehole Dia.: **8.25 inches** Total Depth: **10.0 feet**
	Project Number: **3433253A**
	Project Name: **Whirlpool Corporation**

Elevation (ft)	Water Level	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description
470		0	5				CL	SILTY FILL, DARK BROWN, LITTLE ROOT HAIRS, SOME SUBANGULAR GRAVEL UP TO 1/2", VERY SLIGHTLY STIFF, SLIGHLTY PLASTIC
								SILTY CLAY, BROWN, SOME LIGHT GRAY AND RED MOTTLING, STICKY PLASTIC, VERY MOIST TO WET, LAST 0.3', MOIST, STIFF
		5	5					SILTY CLAY, BROWN, SOME LIGHT GRAY AND RED MOTTLING, STICKY PLASTIC, VERY MOIST TO WET
465								SILTY CLAY, BROWN, SOME LIGHT GRAY MOTTLING, STICKY, PLASTIC, TRACE SAND, VERY FINE GRAIN, VERY MOIST
								SILTY CLAY, BROWN AND LIGHT GRAY, PLASTIC, BLACK NODULES, TRACE SUB-ROUNDED GRAVEL AND SAND, VERY FINE GRAIN, SLIGHLTY MOIST, STIFF
		10						
460								
		15						
455								
		20						
450								
		25						
445								

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM.GPJ; 04/18/14

Appendix C

Vapor Monitoring Port Sampling Field Sheet

ENVIRON – VAPOR MONITORING PORT SAMPLING

PROJECT NUMBER: 3434399A | **Sampler** | Windy Stonestreet

PROJECT NAME: Whirlpool, Ft. Smith, Arkansas

FIELD PARAMETERS

Well Location	Depth	Date	Canister ID	Regulator ID	Helium in Shroud during leak test	Start Time	Initial Vacuum Reading	Finish Time	Final Vacuum Reading	Notes
SV-1	Shallow	3/6/2014	SC00293	OAC00583	20%	10:40	-27" Hg	1542	-5" Hg	Checked vacuum @ 12:17, 12:45, 15:00
SV-1	Deep	3/6/2014	SC00058	OA1418	20%	10:40	-29" Hg	2120	-12.5" Hg	Small amount of water in line
SV-2	Shallow	3/7/2014	—	—	—	—	—	—	—	Water in line, could not purge all out.
SV-2	Deep	3/7/2014	SC01865	AVG03081	29%	9:20	-27.5" Hg	715 3/8/2014	-12.5" Hg	Checked vacuum 9:30, 17:00, 19:00 Water in line.

WEATHER

(Sunny) Cloudy Partly Cloudy 63°

Wind Direction: NONE

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 63° - 3/6/2014 48° 3/7/2014

COMMENTS

SV-2 - Line full of water, could not purge all of it and clear line. (Shallow)

SV-2 (Deep) - Water in line on 3/8/2014.

ATTACHMENT C - 1
SUMMARY OF GROUND WATER SAMPLE ANALYTICAL RESULTS - PREDESIGN DEC. 2013 JAN. 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial	DP-01	DP-02	DP-02	DP-03	DP-04	DP-05
ENVIRON Sample ID	Action Levels	DP-01-20131219	DP-02-20131220	DP-02-20131220-FD	DP-03-20131218	DP-04-20131218	DP-05-20131217
Lab Sample ID	per ADEQ	600-84460-3	600-84500-4	600-84500-5	600-84393-6	600-84393-5	600-84325-7
Sample Method	RADD Issued	Terra Core	Terra Core	Terra Core	Terra Core	Terra Core	Terra Core
Sample Date	December	12/19/2013	12/20/2013	12/20/2013	12/18/2013	12/18/2013	12/17/2013
Comments	27, 2013			Field Duplicate			
Volatile Organic Compounds							
Acetone	12000	U (10)	U (10)	U (10)	U* (10)	U* (10)	4.3 J* (10)
Benzene	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Bromodichloromethane	80	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Chloroform	80	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,1-Dichloroethane	2.4	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,1-Dichloroethene	7.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,2-Dichloroethene (total)	NE	U (10)	8.2 J (10)	8.7 J (10)	5.1 J (10)	2.3 J (10)	U (10)
cis-1,2-Dichloroethene	70	U (5)	8.2 (5)	8.7 (5)	5.1 (5)	2.3 J (5)	U (5)
trans-1,2-Dichloroethene	100	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Methylene Chloride	5.0	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Tetrachloroethene	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Toluene	1000	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,1,2-Trichloroethane	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Trichloroethene	5.0	8 (5)	270 (50)	270 (50)	120 (5)	57 (5)	2.2 J (5)
Vinyl Chloride	2.0	U (2)	0.33 J (2)	0.34 J (2)	0.14 J (2)	0.15 J (2)	U (2)
m,p-xylene	NE	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
ortho-xylene	NE	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Xylenes (total)	10000	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)

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
B -- Compound was found in the blank and sample
* -- LCS or LCSD exceeds the control limits
( ) -- Detection Limit
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L = micrograms per Liter
NE = Not Established

ATTACHMENT C - 1
SUMMARY OF GROUND WATER SAMPLE ANALYTICAL RESULTS - PREDESIGN DEC. 2013 JAN. 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial	DP-07	DP-12	DP-12	DP-14	DP-16	DP-18
ENVIRON Sample ID	Action Levels	DP-07-20131217	DP-12-20140111	DP-12-20140111-FD	DP-14-20140109	DP-16-20140110	DP-18-20140110
Lab Sample ID	per ADEQ	600-84325-6	600-85474-8	600-85474-9	600-85316-7	600-85378-7	600-85378-4
Sample Method	RADD Issued	Terra Core	Terra Core	Terra Core	Terra Core	Terra Core	Terra Core
Sample Date	December	12/17/2013	01/11/2014	01/11/2014	01/09/2014	01/10/2014	01/10/2014
Comments	27, 2013			Field Duplicate			
Volatile Organic Compounds							
Acetone	12000	U* (10)	4.7 J* (10)	U* (10)	U (50)	10 (10)	U (10)
Benzene	5.0	U (5)	0.71 JB (5)	0.68 JB (5)	U (25)	U (5)	U (5)
Bromodichloromethane	80	U (5)	U (5)	U (5)	U (25)	U (5)	U (5)
Chloroform	80	2.4 J (5)	U (5)	U (5)	6.5 J (25)	U (5)	U (5)
1,1-Dichloroethane	2.4	U (5)	U (5)	U (5)	U (25)	U (5)	5 (5)
1,1-Dichloroethene	7.0	14 (5)	U (5)	U (5)	24 J (25)	U (5)	15 (5)
1,2-Dichloroethene (total)	NE	97 (10)	140 (10)	140 (10)	150 (50)	48 (10)	170 (10)
cis-1,2-Dichloroethene	70	97 (5)	140 (5)	140 (5)	150 (25)	48 (5)	170 (5)
trans-1,2-Dichloroethene	100	U (5)	2.5 J (5)	1.7 J (5)	U (25)	U (5)	2 J (5)
Methylene Chloride	5.0	4.1 J (10)	U (10)	U (10)	12 JB (50)	U (10)	U (10)
Tetrachloroethene	5.0	2.5 J (5)	U (5)	U (5)	U (25)	U (5)	3.8 J (5)
Toluene	1000	U (5)	0.96 JB (5)	1 JB (5)	U (25)	U (5)	U (5)
1,1,2-Trichloroethane	5.0	1.1 J (5)	U (5)	U (5)	U (25)	U (5)	U (5)
Trichloroethene	5.0	12000 (500)	390 (50)	490 (50)	17000 (2500)	390 (25)	2800 (500)
Vinyl Chloride	2.0	21 (2)	1.6 J (2)	1.3 J (2)	16 J (25)	3.6 (2)	U (20)
m,p-xylene	NE	U (10)	U (10)	U (10)	U (50)	U (10)	U (10)
ortho-xylene	NE	U (5)	U (5)	U (5)	U (25)	U (5)	U (5)
Xylenes (total)	10000	U (5)	U (5)	U (5)	U (25)	U (5)	U (5)

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
B -- Compound was found in the blank and sample
* -- LCS or LCSD exceeds the control limits
( ) -- Detection Limit
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L = micrograms per Liter
NE = Not Established

ATTACHMENT C - 1
SUMMARY OF GROUND WATER SAMPLE ANALYTICAL RESULTS - PREDESIGN DEC. 2013 JAN. 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial	DP-22	SLUG-01	SLUG-02	SLUG-06
ENVIRON Sample ID	Action Levels	DP-22-20140111	SLUG-01-GW-20140108	SLUG-02-GW-20140108	SLUG-06-GW-20140112
Lab Sample ID	per ADEQ	600-85474-7	600-85259-3	600-85259-4	600-85474-10
Sample Method	RADD Issued	Terra Core	Terra Core	Terra Core	Terra Core
Sample Date	December	01/11/2014	01/08/2014	01/08/2014	01/12/2014
Comments	27, 2013				
Volatile Organic Compounds					
Acetone	12000	16 (10)	U (10)	U (10)	5.6 J* (10)
Benzene	5.0	0.72 JB (5)	U (5)	U (5)	1.7 JB (5)
Bromodichloromethane	80	1.9 J (5)	U (5)	U (5)	U (5)
Chloroform	80	U (5)	U (5)	U (5)	4 J (5)
1,1-Dichloroethane	2.4	U (5)	U (5)	U (5)	3.9 J (5)
1,1-Dichloroethene	7.0	U (5)	U (5)	U (5)	40 (5)
1,2-Dichloroethene (total)	NE	3 J (10)	7.7 J (10)	11 (10)	620 (200)
cis-1,2-Dichloroethene	70	3 J (5)	7.7 (5)	11 (5)	620 (100)
trans-1,2-Dichloroethene	100	U (5)	U (5)	U (5)	U (100)
Methylene Chloride	5.0	U (10)	U (10)	U (10)	40 B (10)
Tetrachloroethene	5.0	U (5)	U (5)	U (5)	3.6 J (5)
Toluene	1000	1.3 JB (5)	U (5)	U (5)	3.9 JB (5)
1,1,2-Trichloroethane	5.0	U (5)	U (5)	U (5)	2 J (5)
Trichloroethene	5.0	170 (5)	230 (50)	300 (50)	11000 (1000)
Vinyl Chloride	2.0	U (2)	U (2)	U (2)	31 (2)
m,p-xylene	NE	U (10)	U (10)	U (10)	2.5 J (10)
ortho-xylene	NE	U (5)	U (5)	U (5)	1.5 J (5)
Xylenes (total)	10000	U (5)	U (5)	U (5)	4 J (5)

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
B -- Compound was found in the blank and sample
* -- LCS or LCSD exceeds the control limits
( ) -- Detection Limit
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L = micrograms per Liter
NE = Not Established

ATTACHMENT C-2
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS - PREDESIGN DEC. 2013 JAN. 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial Action Levels per ADEQ RADD Issued December 27, 2013	DP-01	DP-01	DP-02	DP-02	DP-02	DP-03
ENVIRON Sample ID		DP-01 (15.5-16.0')-20131219	DP-01 (19.0-19.5')-20131219	DP-02 (15.0-15.5')-20131220	DP-02 (2.5-3.0')-20131220	DP-02 (6.0-6.5')-20131220	DP-03 (12.0-12.5')-20131218
Lab Sample ID		600-84460-1	600-84460-2	600-84500-3	600-84500-1	600-84500-2	600-84393-4
Collection Depth (ft bgs)		15.5 - 16	19 - 19.5	15 - 15.5	2.5 - 3	6 - 6.5	12 - 12.5
Sample Method		Terra Core	Terra Core	Terra Core	Terra Core	Terra Core	Terra Core
Sample Date		12/19/2013	12/19/2013	12/20/2013	12/20/2013	12/20/2013	12/18/2013
Comments							
Volatile Organic Compounds							
Acetone	NE	U (0.0086)	U (0.0078)	U (0.0075)	U (0.0086)	U (0.0076)	U (0.0088)
Benzene	NE	U (0.0043)	U (0.0039)	U (0.0038)	U (0.0043)	U (0.0038)	U (0.0044)
Bromodichloromethane	NE	U* (0.0043)	U* (0.0039)	U (0.0038)	U (0.0043)	U (0.0038)	U (0.0044)
2-Butanone	NE	U (0.0086)	U (0.0078)	U (0.0075)	U (0.0086)	U (0.0076)	U (0.0088)
Carbon Disulfide	NE	U (0.0086)	0.00091 JB (0.0078)	0.00042 JB (0.0075)	0.00053 JB (0.0086)	U (0.0076)	0.00066 JB (0.0088)
Chloroform	NE	U (0.0043)	U (0.0039)	U (0.0038)	U (0.0043)	U (0.0038)	U (0.0044)
1,1-Dichloroethane	NE	U (0.0043)	U (0.0039)	U (0.0038)	U (0.0043)	U (0.0038)	U (0.0044)
1,2-Dichloroethane	NE	U (0.0043)	U (0.0039)	U (0.0038)	U (0.0043)	U (0.0038)	U (0.0044)
1,1-Dichloroethene	NE	U (0.0043)	U (0.0039)	U (0.0038)	U (0.0043)	U (0.0038)	U (0.0044)
1,2-Dichloroethene (total)	NE	U (0.0086)	U (0.0078)	U (0.0075)	U (0.0086)	U (0.0076)	U (0.0088)
cis-1,2-Dichloroethene	NE	U (0.0043)	U (0.0039)	0.00084 J (0.0038)	U (0.0043)	U (0.0038)	U (0.0044)
Ethyl Benzene	NE	U (0.0043)	U (0.0039)	U (0.0038)	U (0.0043)	U (0.0038)	U (0.0044)
2-Hexanone	NE	U (0.0086)	U (0.0078)	U (0.0075)	U (0.0086)	U (0.0076)	U (0.0088)
4-Methyl-2-pentanone	NE	U (0.0086)	U (0.0078)	U (0.0075)	U (0.0086)	U (0.0076)	U (0.0088)
Methylene Chloride	NE	U (0.0086)	U (0.0078)	U (0.0075)	U (0.0086)	U (0.0076)	U (0.0088)
Tetrachloroethene	NE	U (0.0043)	U (0.0039)	U (0.0038)	U (0.0043)	U (0.0038)	U (0.0044)
Toluene	NE	U (0.0043)	U (0.0039)	U (0.0038)	U (0.0043)	U (0.0038)	0.0012 J (0.0044)
1,1,1-Trichloroethane	NE	U (0.0043)	U (0.0039)	U (0.0038)	U (0.0043)	U (0.0038)	U (0.0044)
1,1,2-Trichloroethane	NE	U (0.034)	U (0.031)	U (0.03)	U (0.034)	U (0.03)	U (0.035)
Trichloroethene	0.129	0.0017 J (0.0043)	0.016 (0.0039)	0.087 (0.0038)	0.0013 J (0.0043)	U (0.0038)	0.0019 J (0.0044)
Vinyl Chloride	NE	U (0.0086)	U (0.0078)	U (0.0075)	U (0.0086)	U (0.0076)	U (0.0088)
m,p-xylene	NE	U (0.0086)	U (0.0078)	U (0.0075)	U (0.0086)	U (0.0076)	0.0031 J (0.0088)
ortho-xylene	NE	U (0.0043)	U (0.0039)	U (0.0038)	U (0.0043)	U (0.0038)	U (0.0044)
Xylenes (total)	NE	U (0.0043)	U (0.0039)	U (0.0038)	U (0.0043)	U (0.0038)	0.0031 J (0.0044)

Notes:

1 All concentrations are presented in mg/kg.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs for Fort Smith ADEQ RADD issued December 2013 are double underlined.

Abbreviations:

U -- Not Detected
J -- Estimated Concentration
B -- Compound was found in the blank and sample
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RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg = miligram per kilogram
NE = Not Established

ATTACHMENT C-2
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS - PREDESIGN DEC. 2013 JAN. 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial Action Levels per ADEQ RADD Issued December 27, 2013	DP-03	DP-04	DP-04	DP-05	DP-05	DP-06
ENVIRON Sample ID		DP-03 (4.0-4.5')-20131218	DP-04 (18.0-18.5')-20131218	DP-04 (25.0-25.5')-20131218	DP-05 (21.5-22.0')-20131217	DP-05 (24.5-25.0')-20131217	DP-06 (25.5-26.0')-20140111
Lab Sample ID		600-84393-3	600-84393-1	600-84393-2	600-84325-4	600-84325-5	600-85474-3
Collection Depth (ft bgs)		4 - 4.5	18 - 18.5	25 - 25.5	21.5 - 22	24.5 - 25	25.5 - 26
Sample Method		Terra Core	Terra Core	Terra Core	Terra Core	Terra Core	Terra Core
Sample Date		12/18/2013	12/18/2013	12/18/2013	12/17/2013	12/17/2013	01/11/2014
Comments							
Volatile Organic Compounds							
Acetone	NE	U (0.0095)	U (0.009)	U (0.0082)	U (0.0086)	U (0.0079)	0.0049 J (0.01)
Benzene	NE	U (0.0048)	U (0.0045)	U (0.0041)	U (0.0043)	U (0.004)	U (0.005)
Bromodichloromethane	NE	U (0.0048)	U (0.0045)	U (0.0041)	U* (0.0043)	U (0.004)	U (0.005)
2-Butanone	NE	U (0.0095)	U (0.009)	U (0.0082)	U (0.0086)	U (0.0079)	U (0.01)
Carbon Disulfide	NE	0.00077 JB (0.0095)	U (0.009)	0.0005 JB (0.0082)	0.0012 J (0.0086)	0.0014 JB (0.0079)	U (0.01)
Chloroform	NE	U (0.0048)	U (0.0045)	U (0.0041)	U (0.0043)	U (0.004)	U (0.005)
1,1-Dichloroethane	NE	U (0.0048)	U (0.0045)	U (0.0041)	U (0.0043)	U (0.004)	U (0.005)
1,2-Dichloroethane	NE	U (0.0048)	U (0.0045)	U (0.0041)	U (0.0043)	U (0.004)	U (0.005)
1,1-Dichloroethene	NE	U (0.0048)	U (0.0045)	U (0.0041)	U (0.0043)	U (0.004)	U (0.005)
1,2-Dichloroethene (total)	NE	U (0.0095)	U (0.009)	U (0.0082)	U (0.0086)	U (0.0079)	0.023 (0.01)
cis-1,2-Dichloroethene	NE	U (0.0048)	U (0.0045)	U (0.0041)	U (0.0043)	U (0.004)	0.023 (0.005)
Ethyl Benzene	NE	U (0.0048)	U (0.0045)	U (0.0041)	U (0.0043)	U (0.004)	U (0.005)
2-Hexanone	NE	U (0.0095)	U (0.009)	U (0.0082)	U (0.0086)	U (0.0079)	U (0.01)
4-Methyl-2-pentanone	NE	U (0.0095)	U (0.009)	U (0.0082)	U (0.0086)	U (0.0079)	U (0.01)
Methylene Chloride	NE	U (0.0095)	U (0.009)	U (0.0082)	U (0.0086)	U (0.0079)	U (0.01)
Tetrachloroethene	NE	U (0.0048)	U (0.0045)	U (0.0041)	U (0.0043)	U (0.004)	U (0.005)
Toluene	NE	U (0.0048)	U (0.0045)	U (0.0041)	U (0.0043)	U (0.004)	U (0.005)
1,1,1-Trichloroethane	NE	U (0.0048)	U (0.0045)	U (0.0041)	U (0.0043)	U (0.004)	U (0.005)
1,1,2-Trichloroethane	NE	U (0.038)	U (0.036)	U (0.033)	U (0.034)	U (0.032)	U (0.04)
Trichloroethene	0.129	0.0026 J (0.0048)	0.0049 (0.0045)	0.027 (0.0041)	0.0039 J (0.0043)	0.0021 J (0.004)	3.2 (0.21)
Vinyl Chloride	NE	U (0.0095)	U (0.009)	U (0.0082)	U (0.0086)	U (0.0079)	0.0038 J (0.01)
m,p-xylene	NE	U (0.0095)	U (0.009)	U (0.0082)	U (0.0086)	U (0.0079)	U (0.01)
ortho-xylene	NE	U (0.0048)	U (0.0045)	U (0.0041)	U (0.0043)	U (0.004)	U (0.005)
Xylenes (total)	NE	U (0.0048)	U (0.0045)	U (0.0041)	U (0.0043)	U (0.004)	U (0.005)

Notes:

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ATTACHMENT C-2
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS - PREDESIGN DEC. 2013 JAN. 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial Action Levels per ADEQ RADD Issued December 27, 2013	DP-06	DP-06	DP-06	DP-07	DP-07	DP-07
ENVIRON Sample ID		DP-06 (5.5-6.0')-20140111	DP-06 (8.5-9.0')-20140111	DP-06 (25.5-26.0')-20140111-FD	DP-07 (12.5-13.0')-20131217	DP-07 (23.5-24.0')-20131217	DP-07 (5.5-6.0')-20131217
Lab Sample ID		600-85474-1	600-85474-2	600-85474-4	600-84325-2	600-84325-3	600-84325-1
Collection Depth (ft bgs)		5.5 - 6	8.5 - 9	25.5 - 26	12.5 - 13	23.5 - 24	5.5 - 6
Sample Method		Terra Core	Terra Core	Terra Core	Terra Core	Terra Core	Terra Core
Sample Date		01/11/2014	01/11/2014	01/11/2014	12/17/2013	12/17/2013	12/17/2013
Comments				Field Duplicate			
Volatile Organic Compounds							
Acetone	NE	0.014 (0.0083)	0.0035 J (0.0092)	U (0.0076)	0.048 (0.0075)	U (0.0083)	U* (0.4)
Benzene	NE	0.00063 J (0.0042)	U (0.0046)	U (0.0038)	U (0.0038)	U (0.0042)	U (0.2)
Bromodichloromethane	NE	U (0.0042)	U (0.0046)	U (0.0038)	0.013 (0.0038)	U* (0.0042)	U (0.2)
2-Butanone	NE	U (0.0083)	U (0.0092)	U (0.0076)	U (0.0075)	U (0.0083)	U (0.4)
Carbon Disulfide	NE	U (0.0083)	0.00067 J (0.0092)	U (0.0076)	0.00094 JB (0.0075)	0.00065 J (0.0083)	U (0.4)
Chloroform	NE	U (0.0042)	0.0012 J (0.0046)	0.00092 J (0.0038)	0.014 (0.0038)	U (0.0042)	0.057 J (0.2)
1,1-Dichloroethane	NE	U (0.0042)	U (0.0046)	U (0.0038)	0.00072 J (0.0038)	U (0.0042)	U (0.2)
1,2-Dichloroethane	NE	U (0.0042)	U (0.0046)	U (0.0038)	0.00084 J (0.0038)	U (0.0042)	U (0.2)
1,1-Dichloroethene	NE	U (0.0042)	0.0057 (0.0046)	0.0092 (0.0038)	0.05 (0.0038)	U (0.0042)	0.16 J (0.2)
1,2-Dichloroethene (total)	NE	2.8 (0.43)	0.18 (0.0092)	0.092 (0.0076)	5.1 (0.4)	0.0048 J (0.0083)	4.7 (0.4)
cis-1,2-Dichloroethene	NE	2.8 (0.22)	0.18 (0.0046)	0.092 (0.0038)	5.1 (0.2)	0.0048 (0.0042)	4.7 (0.2)
Ethyl Benzene	NE	U (0.0042)	U (0.0046)	U (0.0038)	0.0012 J (0.0038)	U (0.0042)	U (0.2)
2-Hexanone	NE	U (0.0083)	U (0.0092)	U (0.0076)	0.052 (0.0075)	U (0.0083)	0.073 J (0.4)
4-Methyl-2-pentanone	NE	U (0.0083)	U (0.0092)	U (0.0076)	U (0.0075)	U (0.0083)	U (0.4)
Methylene Chloride	NE	0.1 (0.0083)	U (0.0092)	U (0.0076)	0.014 (0.0075)	U (0.0083)	0.15 J (0.4)
Tetrachloroethene	NE	0.0024 J (0.0042)	0.0021 J (0.0046)	0.0015 J (0.0038)	0.098 (0.0038)	U (0.0042)	0.17 J (0.2)
Toluene	NE	0.0013 J (0.0042)	U (0.0046)	U (0.0038)	0.013 (0.0038)	U (0.0042)	U (0.2)
1,1,1-Trichloroethane	NE	U (0.0042)	U (0.0046)	U (0.0038)	0.0068 (0.0038)	U (0.0042)	0.032 J (0.2)
1,1,2-Trichloroethane	NE	U (0.033)	U (0.037)	U (0.03)	0.017 J (0.03)	U (0.033)	0.035 J (1.6)
Trichloroethene	0.129	13 (2.2)	2.1 (0.25)	4.6 (1.1)	200 (20)	1 (0.23)	270 (20)
Vinyl Chloride	NE	U (0.0083)	0.025 (0.0092)	0.022 (0.0076)	0.04 (0.0075)	U (0.0083)	0.071 J (0.4)
m,p-xylene	NE	U (0.0083)	U (0.0092)	U (0.0076)	0.0058 J (0.0075)	U (0.0083)	U (0.4)
ortho-xylene	NE	U (0.0042)	U (0.0046)	U (0.0038)	0.002 J (0.0038)	U (0.0042)	U (0.2)
Xylenes (total)	NE	U (0.0042)	U (0.0046)	U (0.0038)	0.0078 (0.0038)	U (0.0042)	U (0.2)

Notes:

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ATTACHMENT C-2
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS - PREDESIGN DEC. 2013 JAN. 2014
Whirlpool Corporation; Fort Smith, AR

Location		DP-08	DP-08	DP-08	DP-09	DP-09	DP-11
ENVIRON Sample ID	Remedial Action Levels per ADEQ RADD Issued December 27, 2013	DP-08 (11.0-11.5')-20140107	DP-08 (18.5-19.0')-20140107	DP-08 (5.0-5.5')-20140107	DP-09 (3.0-3.5')-20140108	DP-09-(5.0-5.5')-20140108	DP-11 (19.5-20.0')-20140107
Lab Sample ID		600-85197-2	600-85197-3	600-85197-1	600-85259-6	600-85259-1	600-85197-4
Collection Depth (ft bgs)		11 - 11.5	18.5 - 19	5 - 5.5	3 - 3.5	5 - 5.5	19.5 - 20
Sample Method		Terra Core	Terra Core	Terra Core	Terra Core	Terra Core	Terra Core
Sample Date		01/07/2014	01/07/2014	01/07/2014	01/08/2014	01/08/2014	01/07/2014
Comments							
Volatile Organic Compounds							
Acetone	NE	U (0.38)	U (4.1)	0.017 (0.0087)	U (0.0079)	0.0051 J (0.0078)	0.005 J (0.0077)
Benzene	NE	U (0.19)	U (2)	U (0.0044)	U (0.004)	U (0.0039)	U (0.0039)
Bromodichloromethane	NE	U (0.19)	U (2)	0.001 J (0.0044)	U (0.004)	U (0.0039)	U (0.0039)
2-Butanone	NE	U (0.38)	U (4.1)	0.0028 J (0.0087)	U (0.0079)	U (0.0078)	U (0.0077)
Carbon Disulfide	NE	U (0.38)	U (4.1)	U (0.0087)	U (0.0079)	U (0.0078)	U (0.0077)
Chloroform	NE	U (0.19)	U (2)	0.00072 J (0.0044)	U (0.004)	U (0.0039)	U (0.0039)
1,1-Dichloroethane	NE	U (0.19)	U (2)	U (0.0044)	0.0065 (0.004)	0.0064 (0.0039)	U (0.0039)
1,2-Dichloroethane	NE	U (0.19)	U (2)	U (0.0044)	U (0.004)	U (0.0039)	U (0.0039)
1,1-Dichloroethene	NE	0.097 J (0.19)	1.8 J (2)	0.0097 (0.0044)	0.0032 J (0.004)	0.0021 J (0.0039)	0.0014 J (0.0039)
1,2-Dichloroethene (total)	NE	2 (0.38)	8.2 (4.1)	5.2 (4.2)	0.83 (0.38)	1 (0.38)	0.011 (0.0077)
cis-1,2-Dichloroethene	NE	2 (0.19)	8.2 (2)	5.2 (2.1)	0.83 (0.19)	1 (0.19)	0.011 (0.0039)
Ethyl Benzene	NE	U (0.19)	U (2)	0.0014 J (0.0044)	U (0.004)	U (0.0039)	U (0.0039)
2-Hexanone	NE	U (0.38)	U (4.1)	U (0.0087)	U (0.0079)	U (0.0078)	U (0.0077)
4-Methyl-2-pentanone	NE	U (0.38)	U (4.1)	0.0015 J (0.0087)	U (0.0079)	U (0.0078)	U (0.0077)
Methylene Chloride	NE	U (0.38)	U (4.1)	U (0.0087)	U (0.0079)	U (0.0078)	U (0.0077)
Tetrachloroethene	NE	U (0.19)	2.4 (2)	0.15 (0.0044)	0.0007 J (0.004)	U (0.0039)	U (0.0039)
Toluene	NE	U (0.19)	U (2)	0.0064 (0.0044)	U (0.004)	U (0.0039)	U (0.0039)
1,1,1-Trichloroethane	NE	U (0.19)	1.7 J (2)	U (0.0044)	U (0.004)	U (0.0039)	U (0.0039)
1,1,2-Trichloroethane	NE	U (1.5)	U (16)	0.0009 J (0.035)	U (0.032)	U (0.031)	U (0.031)
Trichloroethene	0.129	110 (9.4)	3300 (200)	66 (2.1)	0.96 (0.19)	1.3 (0.19)	1.2 (0.21)
Vinyl Chloride	NE	U (0.38)	U (4.1)	0.14 (0.0087)	0.1 (0.0079)	0.054 (0.0078)	U (0.0077)
m,p-xylene	NE	U (0.38)	U (4.1)	0.0064 J (0.0087)	U (0.0079)	U (0.0078)	U (0.0077)
ortho-xylene	NE	U (0.19)	U (2)	0.0025 J (0.0044)	U (0.004)	U (0.0039)	U (0.0039)
Xylenes (total)	NE	U (0.19)	U (2)	0.0089 (0.0044)	U (0.004)	U (0.0039)	U (0.0039)

Notes:

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SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS - PREDESIGN DEC. 2013 JAN. 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial Action Levels per ADEQ RADD Issued December 27, 2013	DP-11	DP-12	DP-12	DP-14	DP-14	DP-14
ENVIRON Sample ID		DP-11 (19.5-20.0')-20140107-FD	DP-12 (11.5-12.0')-20140111	DP-12 (4.5-5.0')-20140111	DP-14 (11.5-12.0)-20140109	DP-14 (15.5-16.0)-20140109	DP-14 (28.5-29.0)-20140109
Lab Sample ID		600-85197-6	600-85474-6	600-85474-5	600-85316-1	600-85316-2	600-85316-4
Collection Depth (ft bgs)		19.5 - 20	11.5 - 12	4.5 - 5	11.5 - 12	15.5 - 16	28.5 - 29
Sample Method		Terra Core	Terra Core	Terra Core	Terra Core	Terra Core	Terra Core
Sample Date		01/07/2014	01/11/2014	01/11/2014	01/09/2014	01/09/2014	01/09/2014
Comments		Field Duplicate					
Volatile Organic Compounds							
Acetone	NE	0.0018 J (0.0079)	0.0067 J (0.0081)	0.015 (0.008)	U (0.0082)	U (0.0081)	U (0.0077)
Benzene	NE	U (0.004)	U (0.0041)	U (0.004)	U (0.0041)	U (0.0041)	U (0.0039)
Bromodichloromethane	NE	U (0.004)	U (0.0041)	U (0.004)	U (0.0041)	U (0.0041)	U (0.0039)
2-Butanone	NE	U (0.0079)	U (0.0081)	U (0.008)	U (0.0082)	U (0.0081)	U (0.0077)
Carbon Disulfide	NE	U (0.0079)	U (0.0081)	U (0.008)	U (0.0082)	U (0.0081)	U (0.0077)
Chloroform	NE	U (0.004)	0.00089 J (0.0041)	0.00075 J (0.004)	U (0.0041)	U (0.0041)	U (0.0039)
1,1-Dichloroethane	NE	U (0.004)	U (0.0041)	U (0.004)	U (0.0041)	U (0.0041)	U (0.0039)
1,2-Dichloroethane	NE	U (0.004)	U (0.0041)	U (0.004)	U (0.0041)	U (0.0041)	U (0.0039)
1,1-Dichloroethene	NE	U (0.004)	U* (0.0041)	U* (0.004)	U (0.0041)	U (0.0041)	0.0012 J (0.0039)
1,2-Dichloroethene (total)	NE	0.0068 J (0.0079)	0.069 (0.0081)	0.12 (0.008)	0.051 (0.0082)	0.035 (0.0081)	0.0021 J (0.0077)
cis-1,2-Dichloroethene	NE	0.0068 (0.004)	0.069 (0.0041)	0.12 (0.004)	0.051 (0.0041)	0.035 (0.0041)	0.0021 J (0.0039)
Ethyl Benzene	NE	U (0.004)	U (0.0041)	U (0.004)	U (0.0041)	U (0.0041)	U (0.0039)
2-Hexanone	NE	U (0.0079)	U (0.0081)	U (0.008)	U (0.0082)	U (0.0081)	U (0.0077)
4-Methyl-2-pentanone	NE	U (0.0079)	U (0.0081)	U (0.008)	U (0.0082)	U (0.0081)	U (0.0077)
Methylene Chloride	NE	U (0.0079)	U (0.0081)	U (0.008)	U (0.0082)	U (0.0081)	U (0.0077)
Tetrachloroethene	NE	U (0.004)	U* (0.0041)	U* (0.004)	0.004 J (0.0041)	0.0035 J (0.0041)	0.0023 J (0.0039)
Toluene	NE	U (0.004)	U (0.0041)	U (0.004)	U (0.0041)	U (0.0041)	U (0.0039)
1,1,1-Trichloroethane	NE	U (0.004)	U* (0.0041)	U* (0.004)	U (0.0041)	U (0.0041)	U (0.0039)
1,1,2-Trichloroethane	NE	U (0.032)	U (0.032)	U (0.032)	U (0.033)	U (0.032)	U (0.031)
Trichloroethene	0.129	1.1 (0.2)	0.84 (0.21)	0.63 (0.21)	0.57 (0.2)	0.63 (0.19)	1 (0.2)
Vinyl Chloride	NE	U (0.0079)	0.0024 J (0.0081)	U (0.008)	0.0032 J (0.0082)	0.002 J (0.0081)	U (0.0077)
m,p-xylene	NE	U (0.0079)	U (0.0081)	U (0.008)	U (0.0082)	U (0.0081)	U (0.0077)
ortho-xylene	NE	U (0.004)	U (0.0041)	U (0.004)	U (0.0041)	U (0.0041)	U (0.0039)
Xylenes (total)	NE	U (0.004)	U (0.0041)	U (0.004)	U (0.0041)	U (0.0041)	U (0.0039)

Notes:

1 All concentrations are presented in mg/kg.
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3 Concentrations that exceed the RALs for Fort Smith ADEQ RADD issued December 2013 are double underlined.

Abbreviations:

U -- Not Detected
J -- Estimated Concentration
B -- Compound was found in the blank and sample
* -- LCS or LCSD exceeds the control limits
( ) -- Detection Limit
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg = miligram per kilogram
NE = Not Established

ATTACHMENT C-2
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS - PREDESIGN DEC. 2013 JAN. 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial Action Levels per ADEQ RADD Issued December 27, 2013	DP-14	DP-15	DP-15	DP-15	DP-16	DP-16
ENVIRON Sample ID		DP-14 (15.5-16.0)-20140109-FD	DP-15 (18.5-19.0')-20140106	DP-15 (22.5-23.0')-20140106	DP-15 (25.0-25.5')-20140106	DP-16 (29.5-30.0)-20140109	DP-16 (9.0-9.5)-20140109
Lab Sample ID		600-85316-3	600-85111-1	600-85111-2	600-85111-3	600-85316-6	600-85316-5
Collection Depth (ft bgs)		15.5 - 16	18.5 - 19	22.5 - 23	25 - 25.5	29.5 - 30	9 - 9.5
Sample Method		Terra Core	Terra Core	Terra Core	Terra Core	Terra Core	Terra Core
Sample Date		01/09/2014	01/06/2014	01/06/2014	01/06/2014	01/09/2014	01/09/2014
Comments		Field Duplicate					
Volatile Organic Compounds							
Acetone	NE	0.0029 J (0.008)	U (0.0082)	U (0.0083)	U (0.0083)	U (0.0082)	U (0.0076)
Benzene	NE	U (0.004)	U (0.0041)	U (0.0042)	U (0.0042)	U (0.0041)	U (0.0038)
Bromodichloromethane	NE	U (0.004)	U (0.0041)	U (0.0042)	U (0.0042)	U (0.0041)	U (0.0038)
2-Butanone	NE	U (0.008)	U (0.0082)	U (0.0083)	U (0.0083)	U (0.0082)	U (0.0076)
Carbon Disulfide	NE	U (0.008)	U (0.0082)	U (0.0083)	U (0.0083)	U (0.0082)	U (0.0076)
Chloroform	NE	U (0.004)	U (0.0041)	U (0.0042)	U (0.0042)	U (0.0041)	0.00073 J (0.0038)
1,1-Dichloroethane	NE	U (0.004)	U (0.0041)	U (0.0042)	U (0.0042)	U (0.0041)	U (0.0038)
1,2-Dichloroethane	NE	U (0.004)	U (0.0041)	U (0.0042)	U (0.0042)	U (0.0041)	U (0.0038)
1,1-Dichloroethene	NE	U (0.004)	U (0.0041)	0.0084 (0.0042)	0.0052 (0.0042)	U (0.0041)	0.0011 J (0.0038)
1,2-Dichloroethene (total)	NE	0.049 (0.008)	U (0.0082)	0.029 (0.0083)	0.021 (0.0083)	U (0.0082)	0.49 (0.39)
cis-1,2-Dichloroethene	NE	0.049 (0.004)	U (0.0041)	0.029 (0.0042)	0.021 (0.0042)	0.0011 J (0.0041)	0.49 (0.2)
Ethyl Benzene	NE	U (0.004)	U (0.0041)	U (0.0042)	U (0.0042)	U (0.0041)	U (0.0038)
2-Hexanone	NE	U (0.008)	U (0.0082)	U (0.0083)	U (0.0083)	U (0.0082)	U (0.0076)
4-Methyl-2-pentanone	NE	U (0.008)	U (0.0082)	U (0.0083)	U (0.0083)	U (0.0082)	U (0.0076)
Methylene Chloride	NE	U (0.008)	U (0.0082)	U (0.0083)	U (0.0083)	U (0.0082)	U (0.0076)
Tetrachloroethene	NE	0.0053 (0.004)	U (0.0041)	0.0017 J (0.0042)	0.0011 J (0.0042)	U (0.0041)	0.0018 J (0.0038)
Toluene	NE	U (0.004)	U (0.0041)	U (0.0042)	U (0.0042)	U (0.0041)	0.0016 J (0.0038)
1,1,1-Trichloroethane	NE	U (0.004)	U (0.0041)	U (0.0042)	U (0.0042)	U (0.0041)	U (0.0038)
1,1,2-Trichloroethane	NE	U (0.032)	U (0.033)	U (0.033)	U (0.033)	U (0.033)	U (0.03)
Trichloroethene	0.129	0.73 (0.21)	0.4 (0.22)	5.8 (0.2)	5.7 (0.21)	0.01 (0.0041)	1.7 (0.2)
Vinyl Chloride	NE	0.0029 J (0.008)	U (0.0082)	0.0086 (0.0083)	0.0062 J (0.0083)	U (0.0082)	0.038 (0.0076)
m,p-xylene	NE	U (0.008)	U (0.0082)	U (0.0083)	U (0.0083)	U (0.0082)	U (0.0076)
ortho-xylene	NE	U (0.004)	U (0.0041)	U (0.0042)	U (0.0042)	U (0.0041)	U (0.0038)
Xylenes (total)	NE	U (0.004)	U (0.0041)	U (0.0042)	U (0.0042)	U (0.0041)	U (0.0038)

Notes:

1 All concentrations are presented in mg/kg.
2 Only compounds with at least one detection are shown.
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Abbreviations:

U -- Not Detected
J -- Estimated Concentration
B -- Compound was found in the blank and sample
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( ) -- Detection Limit
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
mg/kg = miligram per kilogram
NE = Not Established

ATTACHMENT C-2
SUMMARY OF SOIL SAMPLE ANALYTICAL RESULTS - PREDESIGN DEC. 2013 JAN. 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial Action Levels per ADEQ RADD Issued December 27, 2013	DP-17	DP-18	DP-18	DP-22	DP-22
ENVIRON Sample ID		DP-17-(9.0-9.5')-20140108	DP-18 (27.5-28.0')-20140110	DP-18 (27.5-28.0')-20140110-FD	DP-22 (27.5-28.0')-20140110	DP-22 (8.5-9.0')-20140110
Lab Sample ID		600-85259-2	600-85378-1	600-85378-6	600-85378-3	600-85378-2
Collection Depth (ft bgs)		9 - 9.5	27.5 - 28	27.5 - 28	27.5 - 28	8.5 - 9
Sample Method		Terra Core	Terra Core	Terra Core	Terra Core	Terra Core
Sample Date		01/08/2014	01/10/2014	01/10/2014	01/10/2014	01/10/2014
Comments				Field Duplicate		
Volatile Organic Compounds						
Acetone	NE	U (0.0078)	U (0.0077)	0.0035 J (0.0082)	U (0.01)	U (0.0088)
Benzene	NE	U (0.0039)	U (0.0039)	U (0.0041)	U (0.0052)	U (0.0044)
Bromodichloromethane	NE	U (0.0039)	U (0.0039)	U (0.0041)	U (0.0052)	U (0.0044)
2-Butanone	NE	U (0.0078)	U (0.0077)	U (0.0082)	U (0.01)	U (0.0088)
Carbon Disulfide	NE	U (0.0078)	U (0.0077)	U (0.0082)	U (0.01)	U (0.0088)
Chloroform	NE	U (0.0039)	U (0.0039)	U (0.0041)	U (0.0052)	U (0.0044)
1,1-Dichloroethane	NE	U (0.0039)	U (0.0039)	U (0.0041)	U (0.0052)	U (0.0044)
1,2-Dichloroethane	NE	U (0.0039)	U (0.0039)	U (0.0041)	U (0.0052)	U (0.0044)
1,1-Dichloroethene	NE	U (0.0039)	U (0.0039)	U (0.0041)	U (0.0052)	U (0.0044)
1,2-Dichloroethene (total)	NE	0.021 (0.0078)	0.009 (0.0077)	0.009 (0.0082)	U (0.01)	U (0.0088)
cis-1,2-Dichloroethene	NE	0.021 (0.0039)	0.009 (0.0039)	0.009 (0.0041)	U (0.0052)	U (0.0044)
Ethyl Benzene	NE	U (0.0039)	U (0.0039)	U (0.0041)	U (0.0052)	U (0.0044)
2-Hexanone	NE	U (0.0078)	U (0.0077)	U (0.0082)	U (0.01)	U (0.0088)
4-Methyl-2-pentanone	NE	U (0.0078)	U (0.0077)	U (0.0082)	U (0.01)	U (0.0088)
Methylene Chloride	NE	U (0.0078)	U (0.0077)	U (0.0082)	U (0.01)	U (0.0088)
Tetrachloroethene	NE	U (0.0039)	U (0.0039)	U (0.0041)	U (0.0052)	U (0.0044)
Toluene	NE	U (0.0039)	U (0.0039)	U (0.0041)	U (0.0052)	U (0.0044)
1,1,1-Trichloroethane	NE	U (0.0039)	U (0.0039)	U (0.0041)	U (0.0052)	U (0.0044)
1,1,2-Trichloroethane	NE	U (0.031)	U (0.031)	U (0.033)	U (0.042)	U (0.035)
Trichloroethene	0.129	0.011 (0.0039)	0.35 (0.2)	0.38 (0.19)	0.0049 J (0.0052)	U (0.0044)
Vinyl Chloride	NE	U (0.0078)	U (0.0077)	U (0.0082)	U (0.01)	U (0.0088)
m,p-xylene	NE	U (0.0078)	U (0.0077)	U (0.0082)	U (0.01)	U (0.0088)
ortho-xylene	NE	U (0.0039)	U (0.0039)	U (0.0041)	U (0.0052)	U (0.0044)
Xylenes (total)	NE	U (0.0039)	U (0.0039)	U (0.0041)	U (0.0052)	U (0.0044)

Notes:

1 All concentrations are presented in mg/kg.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs for Fort Smith ADEQ RADD issued December 2013 are double underlined.

Abbreviations:

U -- Not Detected
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ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-1	Date(s): **12/19/2013**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**
Contractor: **Mohawk Drilling**	Purpose: **Soil Boring**
Drilling Method: **Direct Push**	Datum: **NAVD88** Elevation: **473.69 amsl**
Sampling Method: **Continuous Sampler**	North: **369386.66** East: **590976.20**
Remarks:	Borehole Dia.: **2.5 inches** Total Depth: **24.5 feet**
	Project Number: **3433253A**
	Project Name: **Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
470	0	2.5		3.1	CH	SILTY CLAY FILL, DARK GRAYISH BROWN, WITH BROWN MOTTLING, PLASTIC, SLIGHTLY STIFF,
				2.9	MH	CLAYEY SILT, BROWN, SOME STRONG BROWN MOTTLING, STIFF TO SLIGHTLY STIFF, PLASTIC, MOIST
	5	4		3.1	CL	SILTY CLAY, DARK GRAY AND STRONG BROWN, STIFF TO SLIGHTLY STIFF, PLASTIC, MOIST
				2.9		SILTY CLAY, DARK GRAYISH BROWN, WITH BLACK NODULES, TRACE SMALL GRAVEL AND SAND, MEDIUM SAND, SLIGHTLY PLASTIC , STIFF, SLIGHTLY COHESIVE
465				2.5		SILTY CLAY, DARK GRAYISH BROWN, SOME GRAYISH BROWN MOTTLING, PLASTIC, STIFF, MOIST
	10	4		3.6		SILTY CLAY, STRONG BROWN, SOME LIGHT GRAY MOTTLING, SOME BLACK MODULES, TRACE SMALL ROUNDED GRAVEL
				3.9		SANDY CLAY, STRONG BROWN, SOME ROUNDED GRAVEL, MEDIUM SAND, STIFF, SLIGHTLY PLASTIC, SLIGHTLY MOIST.
460		3.5				SANDY CLAY, STRONG BROWN, WITH LIGHT GREENISH GRAY MOTTLING, MEDIUM SAND, SOME BLACK NODULES, VERY STIFF, PLASTIC, SLIGHTLY MOIST, TRACE PALE RED STREAKING LAST 0.8'
	15		DP-01 (15.5-16.0)	4.1		SANDY CLAY, STRONG BROWN, LIGHT GRAY MOTTLING, SOME BLACK NODULES, FINE SAND, VERY STIFF, PLASTIC, TRACE PALE RED STREAKING LAST 0.8', SLIGHTLY MOIST.
		4		3.4		SANDY CLAY, STRONG BROWN, TRACE PALE RED STREAKING, FINE SAND, STIFF, MOIST, PLASTIC, TRACE MOTTLING, LIGHT GRAY
455			DP-01 (19-19.5)	4.2		
	20			5.6	SC	SAND, STRONG BROWN, WITH CLAY, MEDIUM SAND, COHESIVE STICKY, WET
		3.8			SW	SAND, STRONG BROWN, MEDIUM SAND, LOOSE, VERY MOIST
				4.5	GC	CLAYEY SAND AND GRAVEL, DARK GRAYISH BROWN, MEDIUM SAND, ROUNDED GRAVEL UP TO 1", VERY SLIGHTLY COHESIVE, MOIST TO VERY MOIST.
450		0.5		4.3	GC	SAND AND GRAVEL, STRONG BROWN, WITH CLAY, MEDIUM TO COARSE SAND, LOOSE, CRUMBLES, ROUNDED GRAVEL UP TO 1", VERY MOIST.
	25					
445						

Water Level

Graphic Log

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM_NZ2.GPJ; 05/02/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID:	DP-2	Date(s):	**12/20/2013**
Location:	**Fort Smith, Arkansas**		
Logged By:	**N. Zurweller**		
Consulting Firm:	**ENVIRON**	Checked By:	**K. Stonestreet**
Contractor:	**Mohawk Drilling**	Purpose:	**Soil Boring**
Drilling Method:	**Direct Push**	Datum:	**NAVD88** Elevation: **472.53 amsl**
Sampling Method:	**Continuous Sampler**	North:	**369376.37** East: **591056.93**
Remarks:		Borehole Dia.:	**2.5 inches** Total Depth: **27.5 feet**
		Project Number:	**3433253A**
		Project Name:	**Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
				3.7	CL	SILTY CLAY FILL, VERY DARK BROWN, SOME ROOT HAIRS, SLIGHTLY STIFF, PLASTIC, MOIST
					MH	CLAYEY SILT, LIGHT BROWN, SOME STRONG BROWN MOTTLING, VERY SLIGHTLY STIFF, PLASTIC, MOIST
470		3.3	DP-02 (2.5-3.0)	4.0		CLAYEY SILT, LIGHT BROWN, WITH RED MOTTLING, STIFF, PLASTIC, SLIGHTLY MOIST
	5	4	DP-02 (6.5-7.0)	2.3	CL	SILTY CLAY, STRONG BROWN, WITH LIGHT BROWNISH GRAY MOTTLING, SOME BLACK NODULES, VERY STIFF, PLASTIC, SLIGHTLY MOIST, TRACE ROUNDED GRAVEL UP TO 1/8" LAST 0.7'
465				3.2		
				2.8		SILTY CLAY, STRONG BROWN, WITH LIGHT BROWNISH GRAY MOTTLING, VERY STIFF, SOME BLACK NODULES, PLASTIC, SLIGHTLY MOIST, TRACE ROUNDED GRAVEL UP TO 1/8" LAST 0.7'
	10	2		0		SANDY CLAY, STRONG BROWN, WITH SUBROUNDED GRAVEL UP TO 1/8", TRACE BLACK NODULES, MEDIUM SAND, SLIGHTLY COHESIVE WHEN WET, STIFF, DRY.
460				7.4		SANDY CLAY, STRONG BROWN, WITH SUBROUNDED GRAVEL UP TO 1/8", TRACE BLACK NODULES, MEDIUM SAND, PLASTIC, COHESIVE, STICKY, WET
		4				
	15		DP-02 (15.0-15.5)	10.1		SANDY CLAY, STRONG BROWN, WITH LIGHT GREENISH GRAY MOTTLING, FINE SAND, STIFF TO VERY STIFF, PLASTIC, CRUMBLES, SLIGHTLY MOIST, INCREASING SAND WITH DEPTH.
				4.5	SC	CLAYEY SAND, STRONG BROWN, WITH LIGHT GREENISH GRAY MOTTLING, FINE SAND, STIFF TO VERY STIFF, PLASTIC, CRUMBLES, SLIGHTLY MOIST, INCREASING SAND WITH DEPTH
455		1.6			SW	SAND, STRONG BROWN AND LIGHT GREENISH GRAY, TRACE CLAY, FINE SAND, SLIGHTLY COHESIVE, MOIST.
				0	SP	SAND, STRONG BROWN, MEDIUM TO COARSE SAND, LOOSE, VERY MOIST TO WET
	20			5.1		
		4			GC	CLAYEY SAND AND GRAVEL, STRONG BROWN, SUBROUNDED GRAVEL UP TO 1", MEDIUM TO COARSE SAND, VERY SLIGHTLY COHESIVE, WET
450				6.2		
	25			9.5		SAND AND GRAVEL, STRONG BROWN, WITH CLAY, SUBROUNDED GRAVEL UP TO 1", MEDIUM TO COARSE SAND, VERY SLIGHTLY COHESIVE, WET
		3.5		2.9		
445					GM	WEATHERED SHALE AND CLAY, STRONG BROWN, SOME BLACK NODULES, SLIGHTLY PLASTIC TO PLASTIC, VERY STIFF, SLIGHTLY MOIST

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM_NZ2.GPJ; 05/02/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-3	Date(s): **12/18/2013**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**
Contractor: **Mohawk Drilling**	Purpose: **Soil Boring**
Drilling Method: **Direct Push**	Datum: **NAVD88** Elevation: **474.16 amsl**
Sampling Method: **Continuous Sampler**	North: **369335.30** East: **590941.79**
Remarks:	Borehole Dia.: **2.5 inches** Total Depth: **23.5 feet**
	Project Number: **3433253A**
	Project Name: **Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
				3.7	MH	SILTY FILL, DARK BROWN, SOME GRASS AND ROOT HAIRS, MOIST CLAYEY SILT, BROWN, TRACE ROOT HAIRS, SLIGHTLY STIFF, PLASTIC, MOIST
		2.8		4.6	CL	SILTY CLAY, BROWN, TRACE FINE SAND, PLASTIC, STICKY, COHESIVE, WET.
470	5	4	DP-03 (4-4.5)	4.1 4.4		SILTY CLAY, STRONG BROWN, GRAYISH BROWN MOTTLING, VERY STIFF, SLIGHTLY PLASTIC, SLIGHTLY MOIST
465	10	4	DP-03 (12-12.5)	3.6 3.1		SILTY CLAY, STRONG BROWN, GRAYISH BROWN MOTTLING, WITH BLACK NODULES, HARD, VERY SLIGHTLY MOIST
460	15	4		4.7 4.6	CH	SANDY CLAY, STRONG BROWN, MEDIUM SAND, PLASTIC, SOFT, STICKY, WET SILTY CLAY, STRONG BROWN, HARD, SLIGHTLY PLASTIC, SLIGHTLY MOIST
		3.8		4.1 4.6	CL	SANDY CLAY, STRONG BROWN, TRACE SUBROUNDED GRAVEL, STIFF TO VERY STIFF, MOIST TO VERY MOIST.
455	20	3.5		2.1		SANDY CLAY, STRONG BROWN, TRACE SMALL GRAVEL UP TO 1/8", VERY MOIST
450	25			2.5	GC	SAND AND GRAVEL, STRONG BROWN, TRACE LIGHT GRAY MOTTLING, WITH CLAY, LITTLE BLACK NODULES, SUBROUNDED GRAVEL UP TO 1/2", MEDIUM TO COARSE SAND, SLIGHTLY COHESIVE, STIFF, MOIST.
445						

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM_NZ2.GPJ; 05/02/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID:	DP-4	Date(s):	**12/18/2013**
Location:	**Fort Smith, Arkansas**		
Logged By:	**N. Zurweller**		
Consulting Firm:	**ENVIRON**	Checked By:	**K. Stonestreet**
Contractor:	**Mohawk Drilling**	Purpose:	**Soil Boring**
Drilling Method:	**Direct Push**	Datum:	**NAVD88** Elevation: **473.27 amsl**
Sampling Method:	**Continuous Sampler**	North:	**369328.62** East: **591044.76**
Remarks:		Borehole Dia.:	**2.5 inches** Total Depth: **26.0 feet**
		Project Number:	**3433253A**
		Project Name:	**Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
470	0	3.8		1.0	MH	SILTY FILL, DARK BROWN, TRACE CLAY, WITH GRASS AND ROOT HAIRS, SLIGHTLY STIFF, MOIST
				1.0		CLAYEY SILT, STRONG BROWN, TRACE GRAYISH BROWN MOTTLING, STIFF, SLIGHTLY PLASTIC, SLIGHTY MOIST TO VERY MOIST
	5	4		1.2	CL	SILTY CLAY, STRONG BROWN, SOME GRAYISH BROWN MOTTLING,TRACE SUBROUNDED GRAVEL UP TO 1/8",STIFF, SLIGHTLY PLASTIC, SLIGHTY MOIST TO VERY MOIST
				1.0		
465				1.1		SILTY CLAY, STRONG BROWN, WITH GRAYISH BROWN MOTTLING, TRACE SUBROUNDED GRAVEL UP TO 1/8", STIFF, SLIGHTLY PLASTIC, SLIGHTY MOIST TO VERY MOIST, TRACE FINE SAND LAST 0.3'
	10	4		2.0		SILTY CLAY, STRONG BROWN, WITH LIGHT GRAY MOTTLING, TRACE FINE SAND, SOME BLACK NODULES, SLIGHTLY PLASTIC, HARD, SLIGHTLY TO VERY SLIGHTLY MOIST
460		4		2.0		SANDY CLAY, STRONG BROWN, WITH LIGHT GRAY MOTTLING, TRACE RED STREAKING, SOME BLACK NODULES, FINE SAND, SLIGHTLY PLASTIC, HARD, SLIGHTLY TO VERY SLIGHTLY MOIST. CLAYEY SAND IN SHOE OF SAMPLER, LIGHT GRAY, SAND, FINE SAND, COHESIVE AND SLIGHTLY MOIST.
	15			1.9		
		4	DP-04 (18-18.5)	2.1		SANDY CLAY, BROWN, TRACE RED STREAKING, FINE GRAIN, WITH MOTTLING, LIGHT GRAY, SOME BLACK NODULES, SLIGHTLY PLASTIC, HARD, SLIGHTLY TO VERY SLIGHTLY MOIST.
455				2.5	SC	CLAYEY SAND, LIGHT BROWNISH GRAY, SOME SILT, FINE SAND, COHESIVE, VERY MOIST
						CLAYEY SAND, STRONG BROWN, FINE TO MEDIUM SAND, COHESIVE, STIFF, MOIST.
	20					SAND, BROWN, MEDIUM TO COARSE GRAIN, LOOSE, VERY MOIST.
		4		2.4		
450				2.7	GC	CLAYEY SAND AND GRAVEL, STRONG BROWN, MEDIUM TO COARSE SAND, SUBROUNDED GRAVEL UP TO 1/2", SLIGHTLY COHESIVE, MOIST
		2	DP-04 (25.0-25.5)	4.7		CLAYEY SAND, STRONG BROWN, WITH SUBROUNDED ROUNDED GRAVEL UP TO 1/2", MEDIUM TO COARSE SAND, SLIGHTLY COHESIVE, SLIGHTLY STIFF, MOIST.
	25					
445						

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM_NZ2.GPJ; 05/02/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-5	Date(s): **12/17/2013**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**
Contractor: **Mohawk Drilling**	Purpose: **Soil Boring**
Drilling Method: **Direct Push**	Datum: **NAVD88** Elevation: **473.08 amsl**
Sampling Method: **Continuous Sampler**	North: **368963.83** East: **590708.59**
Remarks:	Borehole Dia.: **2.5 inches** Total Depth: **25.5 feet**
	Project Number: **3433253A**
	Project Name: **Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
				1.2		SILTY FILL, VERY DARK BROWN, SUBANGULAR GRAVEL 0.5" TO 1.0", SLIGHTLY STIFF, SLIGHTLY COHESIVE, SLIGHTLY MOIST
		2.8		1.5	CL	SILTY CLAY, BROWN, TRACE BROWNISH GRAY MOTTLING, TRACE FINE SAND, PLASTIC, STIFF, MOIST TO SLIGHTLY MOIST
470						SILTY CLAY, STRONG BROWN, TRACE LIGHT GRAY MOTTLING, PLASTIC, VERY STIFF, SLIGHTLY MOIST
	5	4		1.7		
				1.2		
465						
				2.6	GP	SILTY CLAY, STRONG BROWN, TRACE LIGHT GRAY MOTTLING, PLASTIC, VERY STIFF, VERY MOIST
	10	4			CL	GRAVEL AND SAND, DARK BROWN, TRACE CLAY, COARSE SAND, ANGULAR GRAVEL, VERY SLIGHTLY COHESIVE, WET
				3.2		SILTY CLAY, STRONG BROWN, WITH LIGHT GRAY MOTTLING, HARD, PLASTIC, MOIST
460				4.7	GC	GRAVEL AND SILTY CLAY, DARK BROWN, SOME COARSE SAND, SUBROUNDED GRAVEL UP TO 0.5", COHESIVE TO SLIGHTLY COHESIVE, WET.
		4			CL	SILTY CLAY, STRONG BROWN, TRACE LIGHT GRAY MOTTLING, VERY STIFF, PLASTIC, MOIST
	15			1.2		
				3.0		SANDY CLAY, STRONG BROWN, TRACE LIGHT GRAY MOTTLING, VERY FINE SAND
					SP	SAND AND GRAVEL SLUFF
455		2.2		4.0	CL	SANDY CLAY, STRONG BROWN, TRACE SUBANGULAR GRAVEL, VERY FINE SAND, PLASTIC, SLIGHTLY STIFF, WET
	20					
		4	DP-05 (21.5-22.0)	2.4		
450				4.2		SANDY CLAY, STRONG BROWN, STIFF TO VERY STIFF, SLIGHTLY PLASTIC, MOIST TO VERY MOIST
		1.5	DP-05 (24.5-25.5)	4.0	SC	SANDY CLAY, STRONG BROWN, WITH SUBANGULAR GRAVEL UP TO 1", COARSE SAND, STIFF TO VERY STIFF, SLIGHTLY PLASTIC, WET
	25					
445						

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM_NZ2.GPJ; 05/02/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID:	DP-6	Date(s):	**1/11/2014**
Location:	**Fort Smith, Arkansas**		
Logged By:	**N. Zurweller**		
Consulting Firm:	**ENVIRON**	Checked By:	**K. Stonestreet**
Contractor:	**Mohawk Drilling**	Purpose:	**Soil Boring**
Drilling Method:	**Direct Push**	Datum:	**NAVD88** Elevation: **473.74 amsl**
Sampling Method:	**Continuous Sampler**	North:	**369008.09** East: **590755.62**
Remarks:		Borehole Dia.:	**2.5 inches** Total Depth: **26.0 feet**
		Project Number:	**3433253A**
		Project Name:	**Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
				58	CL	SILTY FILL AND GRAVEL, DARK BROWN, ANGULAR GRAVEL UP TO 1"
		4				SILTY CLAY, PALE BROWN, SOME GRAY MOTTLING, WITH WHITE NODULES, SLIGHTLY STIFF, SLIGHTLY PLASTIC TO PLASTIC, SLIGHTLY MOIST
				333		SILTY CLAY, STRONG BROWN, LITTLE YELLOWISH RED MOTTLING, LITTLE GRAY MOTTLING,SLIGHTLY PLASTIC TO PLASTIC, SLIGHTLY STIFF, SLIGHTLY MOIST, SLIGHT SOLVENT ODOR
470						
	5		DP-06 (5.5-6.0)	792		SILTY CLAY, STRONG BROWN, TRACE GRAY MOTTLING, SLIGHTLY PLASTIC TO PLASTIC, SLIGHTLY STIFF, SLIGHTLY MOIST, SLIGHT SOLVENT ODOR.
		4				
				565		SILTY CLAY, STRONG BROWN, WITH GRAY MOTTLING, TRACE BLACK NODULES, SLIGHTLY STIFF TO STIFF, PLASTIC, SLIGHTLY MOIST TO MOIST, SLIGHT SOLVENT ODOR
			DP-06 (8.5-9.0)			
465				316		SILTY CLAY, YELLOWISH RED, WITH GRAY MOTTLING, WITH BLACK NODULES, VERY STIFF, SLIGHTLY PLASTIC, SLIGHTLY MOIST, SLIGHT SOLVENT ODOR
	10	4				SILTY CLAY, YELLOWISH RED, WITH GRAY MOTTLING, WITH BLACK NODULES, SOME SUBROUNDED GRAVEL UP TO 1/8", VERY STIFF, SLIGHTLY PLASTIC, SLIGHTLY MOIST, SLIGHT SOLVENT ODOR
				437		SILTY CLAY, YELLOWISH RED, WITH GRAY MOTTLING, WITH BLACK NODULES, VERY STIFF, SLIGHTLY PLASTIC, SLIGHTLY MOIST, SLIGHT SOLVENT ODOR
				494		SILTY CLAY, YELLOWISH RED, WITH GRAY MOTTLING, GRAY, WITH BLACK NODULES, SOME SUBROUNDED GRAVEL UP TO 1/8", VERY STIFF, SLIGHTLY PLASTIC, SLIGHTLY MOIST
460		4				
	15			779		
				589		SILTY CLAY, YELLOWISH RED, TRACE GRAY MOTTLING, TRACE BLACK NODULES, SOME SUBROUNDED GRAVEL UP TO 1/8" , VERY STIFF, SLIGHTLY PLASTIC, MOIST, VERY SLIGHT SOLVENT ODOR.
		4				
455				405		
	20					
				343		SANDY CLAY, YELLOWISH RED, TRACE GRAY MOTTLING, TRACE BLACK NODULES, SOME SUBROUNDED GRAVEL UP TO 1/2", VERY FINE SAND, SLIGHTLY STIFF, SLIGHTLY PLASTIC, MOIST: SLIGHTLY STIFF FIRST 2', SLIGHTLY MOIST LAST 1.5'
		3				
				353	SC	CLAYEY SAND, STRONG BROWN, TRACE GRAY MOTTLING, SOME SUBROUNDED GRAVEL UP TO 3/4", FINE SAND, COHESIVE, SLIGHTLY STIFF, SLIGHTLY MOIST
450		2				
	25		DP-06 (25.5-26)	472		
445						

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM_NZ2.GPJ; 05/02/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-7	Date(s): **12/17/2013**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**
Contractor: **Mohawk Drilling**	Purpose: **Soil Boring**
Drilling Method: **Direct Push**	Datum: **NAVD88** Elevation: **473.3 amsl**
Sampling Method: **Continuous Sampler**	North: **369021.01** East: **590887.61**
Remarks:	Borehole Dia.: **2.5 inches** Total Depth: **25.0 feet**
	Project Number: **3433253A**
	Project Name: **Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
						CONCRETE
		4		1300	CL	SILTY CLAY, REDDISH YELLOW, STIFF, PLASTIC, VERY DARK GRAY MOTTLING, SLIGHTLY MOIST
470				5600		
	5	4	DP-07 (5.5-6)	5850		SILTY CLAY, STRONG BROWN, WITH BROWN MOTTLING, SLIGHTLY PLASTIC TO PLASTIC, SLIGHTLY STIFF, MOIST TO VERY MOIST, STRONG SOLVENT ODOR
						SILTY CLAY, REDDISH YELLOW, SOME GRAY, LITTLE VERY DARK GRAY, LITTLE ANGULAR GRAVEL, VERY STIFF, VERY PLASTIC, WET
				750		SILTY CLAY, BROWN AND GRAY, TRACE SUBANGULAR GRAVEL, VERY STIFF, PLASTIC, VERY MOIST, SOLVENT ODOR.
465				45		SILTY CLAY, BROWN AND GRAY, TRACE SUBANGULAR GRAVEL, VERY STIFF, PLASTIC, VERY MOIST, SOLVENT ODOR.
	10	4				SANDY CLAY, PALE BROWN, FINE SAND, WITH YELLOWISH RED MOTTLING, VERY STIFF, SLIGHTLY PLASTIC TO PLASTIC, WET, SOLVENT ODOR
				227		
			DP-07 (12.5-13)	108		SANDY CLAY, PALE BROWN, FINE SAND, WITH YELLOWISH RED MOTTLING, VERY STIFF, SLIGHTLY PLASTIC TO PLASTIC, WET, SOLVENT ODOR.
460		4				SILTY CLAY, YELLOW RED AND GRAY, STIFF, PLASTIC, MOIST
	15			32.1		SANDY CLAY, LIGHT GRAY TO REDDISH BROWN, FINE SAND, SLIGHTLY COHESIVE, SLIGHTLY MOIST, SLIGHT SOLVENT ODOR.
						SANDY CLAY, REDDISH BROWN, FINE GRAIN, PLASTIC, SLIGHTLY STIFF, WET.
		4		52.6	SC	CLAYEY SAND, LIGHT GRAY AND REDDISH BROWN, TRACE CLAY, FINE SAND, SLIGHTLY STIFF, SLIGHTLY COHESIVE, MOIST.
455				86.2		
	20				SP	SAND, STRONG BROWN, TRACE CLAY, MEDIUM TO COARSE SAND, SLIGHTLY COHESIVE, VERY MOIST
		3		23.8		
			DP-07 (23.5-24)	14	GC	SAND AND GRAVEL, STRONG BROWN, WITH CLAY, MEDIUM SAND, SUBROUNDED GRAVEL UP TO 1", STIFF, SLIGHTLY MOIST
450		1		16.3		SAND AND GRAVEL, STRONG BROWN, WITH CLAY, MEDIUM SAND, SUBROUNDED GRAVEL UP TO 1", STIFF, WET
	25					
445						

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM_NZ2.GPJ; 05/02/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-8	Date(s): **1/7/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**
Contractor: **Mohawk Drilling**	Purpose: **Soil Boring**
Drilling Method: **Direct Push**	Datum: **NAVD88** Elevation: **473.33 amsl**
Sampling Method: **Continuous Sampler**	North: **369014.03** East: **590830.47**
Remarks:	Borehole Dia.: **2.5 inches** Total Depth: **24.0 feet**
	Project Number: **3433253A**
	Project Name: **Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
				49.4		SILTY CLAY AND GRAVEL FILL, DARK GRAYISH BROWN, ANGULAR GRAVEL UP TO 1", STIFF, VERY SLIGHTLY MOIST (FROZEN)
		3.7		815.4	CL	SILTY CLAY, STRONG BROWN, WITH LIGHT GRAY MOTTLING, WITH BLACK STREAKING, STIFF, PLASTIC, SLIGHTLY MOIST
470						SILTY CLAY, STRONG BROWN, WITH LIGHT GRAY MOTTLING, SUBROUNDED GRAVEL UP TO 1/4", VERY STIFF, PLASTIC, SLIGHTLY MOIST, SLIGHT SOLVENT ODOR
	5	4	DP-08 (5-5.5)	1555		
				1090		
465				1029		SANDY CLAY, REDDISH BROWN, TRACE LIGHT GRAY, SOME SUBROUNDED GRAVEL UP TO 1/8", SOME BLACK NODULES, FINE SAND, SLIGHTLY COHESIVE, SLIGHTLY STIFF, SLIGHTLY MOIST
	10	4	DP-08 (11-11.5)	3898		SILTY CLAY, STRONG BROWN, SOME LIGHT GRAY, SOME BLACK STREAKING, STIFF, PLASTIC, SLIGHTLY MOIST, SOLVENT ODOR
460				3673		SILTY CLAY, STRONG BROWN, WITH LIGHT GRAY, SOME BLACK STREAKING, STIFF, PLASTIC, SLIGHTLY MOIST, SOLVENT ODOR
	15	3.7		1989		
				4090		SANDY CLAY, LIGHT GRAYISH BROWN, VERY FINE SAND, COHESIVE, SLIGHTLY MOIST, SOLVENT ODOR
455		3.7	DP-08 (18.5-19)	15000	SC	CLAYEY SAND, STRONG BROWN, SOME LIGHT GRAY, COHESIVE, SLIGHTLY PLASTIC, VERY MOIST, SOLVENT ODOR
	20			87.1	GC	SAND AND GRAVEL, STRONG BROWN, WITH CLAY, SUBROUNDED GRAVEL UP TO 1", MEDIUM SAND, COHESIVE, SLIGHTLY STIFF, VERY MOIST TO WET, SOLVENT ODOR
450		4		38.9		
	25					
445						

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM_NZ2.GPJ; 05/02/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID:	DP-9	Date(s):	**1/8/2014**
Location:	**Fort Smith, Arkansas**		
Logged By:	**N. Zurweller**		
Consulting Firm:	**ENVIRON**	Checked By:	**K. Stonestreet**
Contractor:	**Mohawk Drilling**	Purpose:	**Soil Boring**
Drilling Method:	**Direct Push**	Datum:	**NAVD88** Elevation: **474.15 amsl**
Sampling Method:	**Continuous Sampler**	North:	**369034.62** East: **590987.84**
Remarks:		Borehole Dia.:	**2.5 inches** Total Depth: **26.0 feet**
		Project Number:	**3433253A**
		Project Name:	**Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
						CONCRETE
		4		35.9		SILTY FILL, DARK BROWN, SOME SUBBASE GRAVEL, STIFF, MOIST
				99.1	MH	CLAYEY SILT, LIGHT YELLOWISH BROWN, TRACE SUBROUNDED GRAVEL UP TO 1/2", SLIGHTLY STIFF, VERY SLIGHTLY TO SLIGHTLY PLASTIC, VERY SLIGHTLY MOIST
470					CL	SILTY CLAY, LIGHT YELLOWISH BROWN, SOME LIGHT GRAY MOTTLING, TRACE SUBROUNDED GRAVEL UP TO 1/8", STIFF, PLASTIC, SLIGHTLY MOIST
	5	4	DP-09 (5.0-5.5)	69.2		
				48.2		SILTY CLAY, LIGHT YELLOWISH BROWN AND STRONG BROWN, TRACE LIGHT GRAY MOTTLING, TRACE SUBROUNDED GRAVEL UP TO 1/8", TRACE FINE SAND, PLASTIC, SLIGHTLY MOIST
465				19.3		SILTY CLAY, STRONG BROWN, WITH LIGHT GRAY MOTTLING, TRACE SUBROUNDED GRAVEL UP TO 1/8", TRACE FINE SAND, HARD, PLASTIC, SLIGHTLY MOIST
	10	4		33.2		
				0		LOST SAMPLE DUE TO HARD DRILLING. SMALL AMOUNT OF SOIL IN SAMPLER: SILTY CLAY, BROWN, TRACE SAND, FINE GRAIN
460		0		0		
	15			95.9		SANDY CLAY, STRONG BROWN, SOME LIGHT GRAY MOTTLING, FINE SAND, PLASTIC, VERY SLIGHTLY STIFF, WET
		3.5			SC	CLAYEY SAND, STRONG BROWN, WITH LIGHT GRAY MOTTLING, FINE SAND, COHESIVE, WET, INCREASED SAND FROM 18'-18.5' BGS
455				134.4		
	20					CLAYEY SAND, STRONG BROWN, WITH LIGHT GRAY MOTTLING, FINE SAND, COHESIVE, WET
		3.5		32.3	SP	SAND WITH GRAVEL, BROWN, SOME DARK BROWN, TRACE CLAY, SUBROUNDED GRAVEL UP TO 1/8", MEDIUM TO COARSE SAND, SLIGHTLY COHESIVE, WET
				3.0		SAND AND GRAVEL, BROWN AND DARK BROWN, SOME CLAY, SUBROUNDED GRAVEL UP TO 1/4", MEDIUM TO COARSE SAND, COHESIVE, VERY MOIST TO WET
450		2			GC	SAND AND GRAVEL, BROWN AND DARK BROWN, WITH CLAY, SUBROUNDED GRAVEL UP TO 1/2", COARSE SAND, COHESIVE, VERY MOIST TO WET
	25			7.0		
445						

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM_NZ2.GPJ; 05/02/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-11	Date(s): **1/7/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**
Contractor: **Mohawk Drilling**	Purpose: **Soil Boring**
Drilling Method: **Direct Push**	Datum: **NAVD88** Elevation: **475.35 amsl**
Sampling Method: **Continuous Sampler**	North: **369051.32** East: **590896.86**
Remarks:	Borehole Dia.: **2.5 inches** Total Depth: **26.0 feet**
	Project Number: **3433253A**
	Project Name: **Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
475				0.5	MH	SILT FILL, DARK GRAYISH BROWN, WITH SUBBASE GRAVEL, SOME CLAY, SLIGHTLY COHESIVE, SLIGHTLY MOIST
		4		1.1		CLAYEY SILT, YELLOWISH RED AND LIGHT YELLOWISH BROWN, WITH BLACK NODULES, SOME SUBROUNDED GRAVEL UP TO 1/8", SLIGHTLY PLASTIC, SLIGHTLY STIFF, SLIGHTLY MOIST
470	5	4		1.1	CL	SILTY CLAY, YELLOWISH RED AND LIGHT YELLOW BROWN BROWN, WITH LIGHT GRAY MOTTLING, WITH BLACK NODULES, SOME SUBROUNDED GRAVEL UP TO 1/8", SLIGHTLY PLASTIC, STIFF, SLIGHTLY MOIST
				0.5		
465	10	4		0.3		SILTY CLAY, YELLOWISH RED AND LIGHT YELLOWISH BROWN, WITH LIGHT GRAY MOTTLING, WITH BLACK NODULES, SOME SUBROUNDED GRAVEL UP TO 1/4", SLIGHTLY PLASTIC, HARD, SLIGHTLY MOIST
				0.2		
		4		1.1		SILTY CLAY, STRONG BROWN, TRACE LIGHT GRAY MOTTLING, SOME BLACK NODULES, HARD, SLIGHTLY PLASTIC, SLIGHTLY MOIST
460	15			2.2		SILTY CLAY, STRONG BROWN AND LIGHT GRAY, SOME BLACK NODULES, TRACE FINE SAND, HARD, SLIGHTLY PLASTIC, SLIGHTLY MOIST
				8.1		SANDY CLAY, STRONG BROWN, SOME LIGHT GRAY MOTTLING, FINE SAND, SLIGHTLY STIFF, MOIST TO VERY MOIST
		3.5	DP-11 (19.5-20.0)	19.5	SC	CLAYEY SAND, STRONG BROWN AND LIGHT GRAY, FINE SAND, TRACE MEDIUM SAND, SLIGHTLY COHESIVE, MOIST.
455	20				SP	SAND, STRONG BROWN, TRACE LIGHT GRAY, SOME CLAY, FINE TO MEDIUM SAND, SLIGHTLY TO VERY SLIGHTLY COHESIVE, WET
				37.3	SW	SAND, STRONG BROWN, TRACE LIGHT GRAY, TRACE CLAY, MEDIUM SAND, VERY SLIGHTLY COHESIVE
		2.8			GC	SAND AND GRAVEL, VERY DARK GRAYISH BROWN, TRACE CLAY, SUBROUNDED GRAVEL UP TO 1/2", MEDIUM SAND
				14.4		SAND AND GRAVEL, VERY DARK GRAYISH BROWN, TRACE CLAY, SUBROUNDED GRAVEL UP TO 1", MEDIUM SAND, WHITE ROCK AT TOTAL DEPTH (CHERT)
450	25	2		30.1		

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM_NZ2.GPJ; 05/02/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-12	Date(s): **1/11/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**
Contractor: **Mohawk Drilling**	Purpose: **Soil Boring**
Drilling Method: **Direct Push**	Datum: **NAVD88** Elevation: **474.3 amsl**
Sampling Method: **Continuous Sampler**	North: **368949.21** East: **591101.69**
Remarks:	Borehole Dia.: **2.5 inches** Total Depth: **30.0 feet**
	Project Number: **3433253A**
	Project Name: **Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
				7.6	CL	SUBBASE ANGULAR GRAVEL
		4		17.3		SILTY CLAY AND CLAYEY SILT, STRONG BROWN, SOME YELLOWISH RED, TRACE LIGHT GRAY, WITH BLACK NODULES, SLIGHTLY STIFF TO STIFF, SLIGHTLY PLASTIC, SLIGHTLY MOIST
470	5	3.6	DP-12 (4.5-5)	40.2		SILTY CLAY AND CLAYEY SILT, STRONG BROWN, SOME YELLOWISH RED, TRACE LIGHT GRAY, WITH BLACK NODULES, SLIGHTLY STIFF TO STIFF, SLIGHTLY PLASTIC, SLIGHTLY MOIST
				18.3		SILTY CLAY, STRONG BROWN, SOME GRAY MOTTLING, SOME BLACK NODULES, VERY STIFF, SLIGHTLY PLASTIC TO PLASTIC, MOIST
465	10	3.1	DP-12 (11.5-12.0)	13.7		SILTY CLAY, STRONG BROWN, WITH LIGHT GRAY MOTTLING, WITH BLACK NODULES, STIFF, SLIGHTLY PLASTIC TO PLASTIC, MOIST
				31.4		SANDY CLAY, STRONG BROWN, WITH LIGHT GRAY MOTTLING, TRACE SUBROUNDED GRAVEL UP TO 1/8", FINE SAND, STIFF, SLIGHTLY PLASTIC, MOIST
460	15	3.3		11.7		SANDY CLAY, STRONG BROWN, WITH LIGHT GRAY MOTTLING, TRACE SUBROUNDED GRAVEL UP TO 1/8", FINE SAND, STIFF, SLIGHTLY PLASTIC, MOIST
				7.8		SANDY CLAY, STRONG BROWN, WITH LIGHT GRAY MOTTLING, WITH SUBROUNDED GRAVEL UP TO 1/8", FINE SAND, STIFF, SLIGHTLY PLASTIC, VERY MOIST TO WET
		4		2.1		SANDY CLAY, STRONG BROWN, WITH LIGHT GRAY MOTTLING, WITH SUBROUNDED GRAVEL UP TO 1/8", FINE SAND, LITTLE BLACK NODULES, STIFF, SLIGHTLY PLASTIC, MOIST TO VERY MOIST
455				4.9		
	20			1.9	CH	SANDY CLAY, STRONG BROWN, TRACE BLACK NODULES, FINE SAND, STICKY, WET
		4		2.2	SC	CLAYEY SAND, STRONG BROWN, TRACE LIGHT GRAY MOTTLING, FINE SAND, COHESIVE, SOFT, MOIST
450					SP	SAND, DARK BROWN, SOME RED AND STRONG BROWN, SOME SUBROUNDED GRAVEL UP TO 1/8", TRACE CLAY, FINE TO MEDIUM SAND, VERY SLIGHTLY COHESIVE, MOIST TO VERY MOIST
	25			5.1	GC	SAND AND GRAVEL, STRONG BROWN, SOME CLAY, SUBROUNDED GRAVEL UP TO 1", MEDIUM TO COARSE SAND, COHESIVE, MOIST
		2		0		
		2		8.4		SAND AND GRAVEL, STRONG BROWN, WITH CLAY, SUBROUNDED GRAVEL UP TO 1", MEDIUM TO COARSE SAND, STICKY, COHESIVE, WET
445					CL	WEATHERED SHALE AND CLAY, STRONG BROWN, TRACE BLACK NODULES, LAMINATED,

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM_NZ2.GPJ; 05/02/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-12
Project Name: **Whirlpool Corporation**
Project Number: **3433253A**

Elevation (ft)	Water Level	Depth (ft)	Sample Interval	Sample No.		PID (ppm)	Graphic Log	USCS Code	Material Description
									STIFF, CRUMBLY WHEN DRY, VERY SLIGHTLY PLASTIC, SLIGHTLY MOIST. IN SHOE OF SAMPLER: BLACK WEATHERED SHALE, CRUMBLES, DRY.
440		35							
435		40							
430		45							
425		50							
420		55							
415		60							
410		65							
405									

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM_NZ2.GPJ; 05/02/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-13	Date(s): **1/10/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**
Contractor: **Mohawk Drilling**	Purpose: **Soil Boring**
Drilling Method: **Direct Push**	Datum: **NAVD88** Elevation: **478 amsl**
Sampling Method: **Continuous Sampler**	North: **368868.56** East: **591041.31**
Remarks:	Borehole Dia.: **2.5 inches** Total Depth: **4.5 feet**
	Project Number: **3433253A**
	Project Name: **Whirlpool Corporation**

Elevation (ft)	Water Level	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description
475		0	1		0			CONCRETE
					0			SAND AND GRAVEL FILL, BROWN AND LIGHT BROWNISH GRAY, MEDIUM SAND, LOOSE, ANGULAR SUBBASE GRAVEL UP TO 3/4", MOIST
			0.5		0			SAND AND GRAVEL FILL, BROWN AND LIGHT BROWNISH GRAY, MEDIUM SAND, LOOSE, REFUSAL AT 4.5' BGS, ANGULAR SUBBASE GRAVEL UP TO 3/4", MOIST
		5						
470								
		10						
465								
		15						
460								
		20						
455								
		25						
450								

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM_NZ2.GPJ; 05/02/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-14	Date(s): **1/9/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**
Contractor: **Mohawk Drilling**	Purpose: **Soil Boring**
Drilling Method: **Direct Push**	Datum: **NAVD88** Elevation: **478 amsl**
Sampling Method: **Continuous Sampler**	North: **368686.91** East: **590899.15**
Remarks:	Borehole Dia.: **2.5 inches** Total Depth: **31.0 feet**
	Project Number: **3433253A**
	Project Name: **Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
						CONCRETE
		4		5.2		SILTY SAND FILL, VERY DARK GRAYISH BROWN, SOME SUBANGULAR GRAVEL UP TO 1/2", FINE SAND, LOOSE, SLIGHTLY MOIST
475				12.2	CL	SILTY CLAY, GRAYISH BROWN, VERY STIFF, SLIGHTLY PLASTIC TO PLASTIC, VERY SLIGHTLY MOIST
	5	4		9.8		SILTY CLAY, STRONG BROWN, WITH GRAY MOTTLING, VERY STIFF, VERY SLIGHTLY MOIST
				14.7		SILTY CLAY, STRONG BROWN, WITH GRAY MOTTLING, LITTLE BLACK NODULES, TRACE SUBROUNDED GRAVEL UP TO 1/8", VERY STIFF, SLIGHTLY PLASTIC TO PLASTIC, VERY SLIGHTLY MOIST
470						
		4		16.8		SILTY CLAY, STRONG BROWN, WITH GRAY MOTTLING, SOME SUBROUNDED GRAVEL UP TO 1/8", TRACE BLACK NODULES, VERY STIFF, SLIGHTLY PLASTIC TO PLASTIC, VERY SLIGHTLY MOIST
	10		DP-14 (11.5-12.0)	20.0		
						SILTY CLAY, STRONG BROWN, WITH GRAY MOTTLING, SOME SUBROUNDED GRAVEL UP TO 1/8", SOME FINE SAND, TRACE BLACK NODULES, VERY STIFF, SLIGHTLY PLASTIC TO PLASTIC, VERY SLIGHTLY MOIST
465		2		0		SILTY CLAY, STRONG BROWN, WITH GRAY MOTTLING, WITH BLACK NODULES, VERY STIFF, SLIGHTLY PLASTIC TO PLASTIC, VERY SLIGHTLY MOIST
	15		DP-14 (15.5-16.0)	31.1		SILTY CLAY, STRONG BROWN, WITH GRAY MOTTLING, VERY STIFF, SLIGHTLY PLASTIC TO PLASTIC, VERY SLIGHTLY MOIST
				14.4		
460		4		7.2		SILTY CLAY, STRONG BROWN AND GRAY, LITTLE FINE SAND, VERY STIFF, SLIGHTLY PLASTIC TO PLASTIC, VERY SLIGHTLY MOIST
	20			11.7		SANDY CLAY, STRONG BROWN, FINE SAND, SLIGHTLY PLASTIC, MOIST
		1.5				SANDY CLAY, STRONG BROWN, VERY FINE TO FINE SAND, SLIGHTLY PLASTIC, MOIST
455				0		
	25	4		19.5	SC	CLAYEY SAND, STRONG BROWN, FINE SAND, STICKY, WET
				78.6	CL	SILTY CLAY, STRONG BROWN AND GRAY, SOME VERY FINE SAND, SLIGHTLY PLASTIC TO PLASTIC, VERY STIFF, SLIGHTLY MOIST
450			DP-14 (28.5-29.0)		SC	CLAYEY SAND, STRONG BROWN, TRACE LIGHT GREENISH GRAY, FINE SAND, COHESIVE, MOIST
				108.4	CL	SILTY CLAY, STRONG BROWN AND GRAY, SOME VERY FINE SAND, SLIGHTLY PLASTIC TO

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ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-14
Project Name: **Whirlpool Corporation**
Project Number: **3433253A**

Elevation (ft)	Water Level	Depth (ft)	Sample Interval	Sample No.		PID (ppm)	Graphic Log	USCS Code	Material Description
			3		26.2			SC	PLASTIC, VERY STIFF, SLIGHTLY MOIST
								CL	CLAYEY SAND, STRONG BROWN, TRACE LIGHT GREENISH GRAY, FINE SAND, COHESIVE, MOIST *(continued)*
									SILTY CLAY, BROWN AND GRAY, SOME VERY FINE SAND, SLIGHTLY PLASTIC TO PLASTIC, VERY STIFF, SLIGHTLY MOIST
445		35							
440		40							
435		45							
430		50							
425		55							
420		60							
415		65							
410									

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM_NZ2.GPJ; 05/02/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-15	Date(s): **1/6/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**
Contractor: **Mohawk Drilling**	Purpose: **Soil Boring**
Drilling Method: **Direct Push**	Datum: **NAVD88** Elevation: **478 amsl**
Sampling Method: **Continuous Sampler**	North: **368693.86** East: **590862.95**
Remarks:	Borehole Dia.: **2.5 inches** Total Depth: **32.0 feet**
	Project Number: **3433253A**
	Project Name: **Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
		3.8		1.7	ML	SILT, DARK GRAY, TRACE CLAY, TRACE SUBANGULAR GRAVEL UP TO 1/8", SLIGHTLY STIFF, NON-PLASTIC,
475				1.9	CL	SILTY CLAY, DARK GRAYISH BROWN, WITH RED MOTTLING, STIFF, SLIGHTLY PLASTIC TO PLASTIC, SLIGHTLY MOIST
	5	4		2.0		SILTY CLAY, GRAYISH BROWN, TRACE RED, STIFF, PLASTIC, SLIGHTLY MOIST TO MOIST
470				2.0		
				2.1		SILTY CLAY, STRONG BROWN, SLIGHTLY STIFF, PLASTIC, MOIST, DARK BROWN AT 8.4'-8.5'
	10	4		2.0		SILTY CLAY, STRONG BROWN, SOME LIGHT GRAY MOTTLING, TRACE SUBROUNDED GRAVEL UP TO 1/8", STIFF, SLIGHTLY PLASTIC TO PLASTIC, LIGHTLY MOIST
465		4	DP-15 (14-14.5)	1.7		SILTY CLAY, STRONG BROWN, WITH LIGHT GRAY MOTTLING, SOME SUBROUNDED GRAVEL UP TO 1/4", LITTLE BLACK NODULES, SLIGHTLY PLASTIC TO PLASTIC, VERY STIFF, SLIGHTLY MOIST
	15			2.6		SILTY CLAY, STRONG BROWN, SOME LIGHT GRAY MOTTLING, STIFF, PLASTIC, SLIGHTLY MOIST, SOME DARK BROWN AT 13.5' BGS, WITH FINE SAND LAST 0.6'
		4	DP-15 (18.5-19)	3.9		SILTY CLAY, STRONG BROWN, SOME LIGHT GRAY MOTTLING, SOME BLACK NODULES, LITTLE VERY FINE SAND, SLIGHTLY PLASTIC TO PLASTIC, STIFF, MOIST. TRACE VERY FINE SAND, SLIGHTLY STIFF, PLASTIC, MOIST, LAST 0.4'
460				12.0		
	20			130.6	SC	CLAYEY SAND, STRONG BROWN AND LIGHT GREENISH GRAY, VERY FINE TO FINE SAND, COHESIVE, SLIGHTLY STICKY, WET, VERY MOIST FROM 21.5-23.1' BGS.
		4	DP-15 (22.5-23.0)	231.6	CL	SANDY CLAY, STRONG BROWN, SOME BLACK STREAKING, SLIGHTLY PLASTIC, COHESIVE, SLIGHTLY STIFF, MOIST.
455						
	25		DP-15 (25.0-25.5)	133.7		SANDY CLAY, STRONG BROWN, SOME BLACK STREAKING, SLIGHTLY PLASTIC, COHESIVE, SLIGHTLY STIFF, SLIGHTLY MOIST.
		4		399.4	SC	SAND, SOME CLAY, STRONG BROWN, WITH DARK BROWN, MEDIUM SAND, SLIGHTLY COHESIVE, VERY MOIST
450					SW	SAND, DARK GRAY, SOME BLACK, TRACE CLAY, MEDIUM SAND, VERY SLIGHTLY COHESIVE, VERY MOIST
				399.1	GC	SAND, DARK GRAY, SOME BLACK, TRACE CLAY, SOME GRAVEL UP TO 1/8", MEDIUM SAND, VERY SLIGHTLY COHESIVE, VERY MOIST

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ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-15
Project Name: **Whirlpool Corporation**
Project Number: **3433253A**

Elevation (ft)	Water Level	Depth (ft)	Sample Interval	Sample No.		PID (ppm)	Graphic Log	USCS Code	Material Description
			4		241.5			GC	SAND AND GRAVEL, STRONG BROWN, WITH CLAY, SUBROUNDED GRAVEL UP TO 1" MEDIUM TO COARSE SAND, COHESIVE, STIFF TO SLIGHTLY STIFF, MOIST *(continued)*
445		35							
440		40							
435		45							
430		50							
425		55							
420		60							
415		65							
410									

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ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-16	Date(s): **1/9/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**
Contractor: **Mohawk Drilling**	Purpose: **Soil Boring**
Drilling Method: **Direct Push**	Datum: **NAVD88** Elevation: **478 amsl**
Sampling Method: **Continuous Sampler**	North: **368635.87** East: **590896.42**
Remarks:	Borehole Dia.: **2.5 inches** Total Depth: **30.0 feet**
	Project Number: **3433253A**
	Project Name: **Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
						CONCRETE
		4		8.6		SILTY FILL, VERY DARK BROWN, SOME ANGULAR GRAVEL UP TO 3/4", SOME FINE SAND, LOOSE, VERY SLIGHTLY MOIST
475				22.3	CL	SILTY CLAY, GRAYISH BROWN, WITH GRAY MOTTLING, STIFF, SLIGHTLY PLASTIC TO PLASTIC, SLIGHTLY MOIST
	5	4		82.4		SILTY CLAY, GRAYISH BROWN, WITH GRAY MOTTLING, STIFF, SLIGHTLY PLASTIC TO PLASTIC, SLIGHTLY MOIST
				38.1	ML	CLAYEY SILT, PALE BROWN AND STRONG BROWN, SLIGHTLY STIFF, NON-PLASTIC, SLIGHTLY MOIST
470			DP-16 (9.0-9.5)	32.3	CL	SILTY CLAY, STRONG BROWN, WITH GRAY MOTTLING, TRACE BLACK NODULES, SLIGHTLY PLASTIC TO PLASTIC, HARD, SLIGHTLY MOIST
	10	4		74.5		
						SILTY CLAY, STRONG BROWN, WITH GRAY MOTTLING, SOME BLACK NODULES, SLIGHTLY PLASTIC TO PLASTIC, HARD, SLIGHTLY MOIST
465				10.8	ML	CLAYEY SILT, PALE BROWN TO BROWN, SLIGHTLY STIFF, NON-PLASTIC, SLIGHTLY MOIST
		4			CL	SILTY CLAY, STRONG BROWN, WITH GRAY MOTTLING, SOME BLACK NODULES, SLIGHTLY PLASTIC TO PLASTIC, HARD, SLIGHTLY MOIST
	15			10.8		
				72.1		SILTY CLAY, STRONG BROWN, WITH GRAY MOTTLING, SOME BLACK NODULES, SLIGHTLY PLASTIC TO PLASTIC, HARD, SLIGHTLY MOIST
460		4				
				29.4		SILTY CLAY, STRONG BROWN, WITH LIGHT GREENISH GRAY MOTTLING, TRACE VERY FINE SAND, VERY STIFF, SLIGHTLY PLASTIC, SLIGHTLY MOIST TO MOIST
	20			13.1		SILTY CLAY, STRONG BROWN, TRACE VERY FINE SAND, LIGHT GREENISH GRAY MOTTLING, SLIGHTLY STIFF, PLASTIC, MOIST
		4				
455				35.0		SILTY CLAY, STRONG BROWN, WITH LIGHT GREENISH GRAY MOTTLING, SOME VERY FINE SAND, SLIGHTLY STIFF, PLASTIC, MOIST
						SILTY CLAY, STRONG BROWN, WITH LIGHT GREENISH GRAY MOTTLING, TRACE VERY FINE SAND, SLIGHTLY STIFF, PLASTIC, MOIST
	25			19.1		SILTY CLAY, STRONG BROWN, WITH LIGHT GREENISH GRAY MOTTLING, LITTLE VERY FINE SAND, SLIGHTLY STIFF, PLASTIC, MOIST
		4				
				9.8		
450				7.2		SILTY CLAY, STRONG BROWN, WITH LIGHT GREENISH GRAY MOTTLING, SOME VERY FINE SAND, SLIGHTLY STIFF, PLASTIC, MOIST
		2	DP-16 (29.5-30.0)	5.5	SC	CLAYEY SAND, STRONG BROWN, STICKY, VERY COHESIVE, WET. SILTY CLAY, BROWN AND

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ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-16
Project Name: **Whirlpool Corporation**
Project Number: **3433253A**

Elevation (ft)	Water Level	Depth (ft)	Sample Interval	Sample No.		PID (ppm)	Graphic Log	USCS Code	Material Description
									GRAY, SOME BLACK NODULES, LAMINATED HARD, IN THE SHOE OF SAMPLER
445		35							
440		40							
435		45							
430		50							
425		55							
420		60							
415		65							
410									

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ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-17	Date(s): **1/8/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**
Contractor: **Mohawk Drilling**	Purpose: **Soil Boring**
Drilling Method: **Direct Push**	Datum: **NAVD88** Elevation: **478 amsl**
Sampling Method: **Continuous Sampler**	North: **368689.19** East: **590954.97**
Remarks:	Borehole Dia.: **2.5 inches** Total Depth: **31.5 feet**
	Project Number: **3433253A**
	Project Name: **Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
				1.7		CONCRETE
					GC	SILTY SAND FILL, VERY DARK BROWN, FINE SAND, LOOSE, MOIST
		2.9		2.5		GRAVEL AND SILTY CLAY, STRONG BROWN, WITH SUBANGULAR GRAVEL UP TO 1/2", LITTLE FINE SAND, SLIGHTLY COHESIVE, SLIGHTLY MOIST
475					CL	SILTY CLAY, GRAYISH BROWN, WITH STRONG BROWN, WITH GRAY MOTTLING, TRACE BLACK NODULES, TRACE WHITE NODULES, VERY STIFF, SLIGHTLY PLASTIC TO PLASTIC, SLIGHTLY MOIST
	5	4		4.8		
				3.9		
470			DP-17 (9.0-9.5)			SILTY CLAY, GRAYISH BROWN, WITH STRONG BROWN, WITH GRAY MOTTLING, TRACE TO LITTLE SUBROUNDED GRAVEL UP TO 1/8", LITTLE BLACK NODULES, HARD, SLIGHTLY PLASTIC TO PLASTIC, SLIGHTLY MOIST
	10	4		8.3		
				7.5		
465				7.7		SILTY CLAY, GRAYISH BROWN, WITH STRONG BROWN, WITH GRAY MOTTLING, SOME BLACK NODULES, HARD, SLIGHTLY PLASTIC TO PLASTIC, SLIGHTLY MOIST
	15	4		6.4		
				3.7		SILTY CLAY, GRAYISH BROWN, WITH STRONG BROWN, WITH GRAY MOTTLING, SOME BLACK NODULES, STIFF, PLASTIC, SLIGHTLY MOIST. DIFFICULT TO SEPARATE SLUFF FROM SAMPLE.
460		1		5.6		
	20					
		3.4		4.5		SILTY CLAY, LIGHT GREENISH GRAY, TRACE STRONG BROWN MOTTLING, TRACE FINE SAND, PLASTIC, STIFF, SLIGHTLY MOIST
455				4.8		SILTY CLAY, STRONG BROWN AND LIGHT GREENISH GRAY, TRACE VERY FINE SAND, STIFF, PLASTIC, SLIGHTLY MOIST
						SILTY CLAY, STRONG BROWN AND LIGHT GREENISH GRAY, TRACE TO LITTLE VERY FINE SAND, STIFF, PLASTIC, SLIGHTLY MOIST
	25			3.7		SANDY CLAY, STRONG BROWN, VERY FINE TO FINE SAND, STICKY, PLASTIC, VERY MOIST
		2.8			GC	GRAVEL, SUBROUNDED UP TO 1/2", WET.
				4.1	CL	SANDY CLAY, STRONG BROWN, VERY FINE TO FINE SAND, STICKY, PLASTIC, VERY MOIST.
450				4.4		

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ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-17
Project Name: **Whirlpool Corporation**
Project Number: **3433253A**

Elevation (ft)	Water Level	Depth (ft)	Sample Interval	Sample No.		PID (ppm)	Graphic Log	USCS Code	Material Description
			3.5		14.9			GC	CLAYEY SAND AND GRAVEL, STRONG BROWN, SUBROUNDED GRAVEL UP TO 1/2", MEDIUM TO COARSE SAND, COHESIVE, VERY MOIST.
445		35							
440		40							
435		45							
430		50							
425		55							
420		60							
415		65							
410									

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM_NZ2.GPJ; 05/02/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-18	Date(s): **1/9/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**
Contractor: **Mohawk Drilling**	Purpose: **Soil Boring**
Drilling Method: **Direct Push**	Datum: **NAVD88** Elevation: **478 amsl**
Sampling Method: **Continuous Sampler**	North: **368701.79** East: **591195.98**
Remarks:	Borehole Dia.: **2.5 inches** Total Depth: **28.0 feet**
	Project Number: **3433253A**
	Project Name: **Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
						CONCRETE
		4		4.2	CL	SILTY CLAY, GRAYISH BROWN AND STRONG BROWN, TRACE BLACK NODULES, SLIGHTLY STIFF, SLIGHTLY PLASTIC, SLIGHTLY MOIST, SLIGHTLY MOIST, INCREASED SILT FROM 1-2' BGS
475				5.1		
	5	4		5.8		SILTY CLAY, GRAYISH BROWN AND STRONG BROWN, TRACE BLACK NODULES, SLIGHTLY STIFF, SLIGHTLY PLASTIC, SLIGHTLY MOIST, SLIGHTLY MOIST
				6.8		SILTY CLAY, STRONG BROWN, WITH GRAY MOTTLING, WITH BLACK NODULES, PLASTIC, STIFF TO VERY STIFF, SLIGHTLY MOIST.
470				7.0		SILTY CLAY, STRONG BROWN, WITH GRAY MOTTLING, SOME BLACK NODULES, TRACE SUBROUNDED GRAVEL UP TO 1/8", SLIGHTLY PLASTIC TO PLASTIC, VERY STIFF, SLIGHTLY MOIST.
	10	4		7.5		SILTY CLAY, STRONG BROWN, WITH GRAY MOTTLING, SOME BLACK NODULES, TRACE SUBROUNDED GRAVEL UP TO 1/8", SLIGHTLY PLASTIC TO PLASTIC, HARD, SLIGHTLY MOIST.
465		4		4.8		SILTY CLAY, STRONG BROWN, WITH GRAY MOTTLING, SOME BLACK NODULES, TRACE SUBROUNDED GRAVEL UP TO 1/8", SLIGHTLY PLASTIC TO PLASTIC, HARD, SLIGHTLY MOIST.
	15			22.3		SILTY CLAY, STRONG BROWN, WITH LIGHT GREENISH GRAY MOTTLING, WITH FINE SAND, TRACE BLACK NODULES, STIFF TO VERY STIFF, SLIGHTLY PLASTIC TO PLASTIC, SLIGHTLY MOIST
		4		12.7		SILTY CLAY, STRONG BROWN, WITH LIGHT GREENISH GRAY MOTTLING, WITH FINE SAND, TRACE BLACK NODULES, STIFF TO VERY STIFF, SLIGHTLY PLASTIC TO PLASTIC, SLIGHTLY MOIST
460				32.9		SANDY CLAY, STRONG BROWN, SOME LIGHT GREENISH GRAY MOTTLING, SOME BLACK STREAKING, FINE SAND, STIFF TO SLIGHTLY STIFF, PLASTIC
	20			23.6		SANDY CLAY, STRONG BROWN, SOME LIGHT GREENISH GRAY MOTTLING, SOME SUBROUNDED GRAVEL UP TO 1/4", SOME BLACK STREAKING, FINE SAND, STIFF TO SLIGHTLY STIFF, PLASTIC
		4		37.5	SC	CLAYEY SAND, STRONG BROWN, LITTLE LIGHT GREENISH GRAY MOTTLING, SOME SUBROUNDED GRAVEL UP TO 1/4", FINE TO MEDIUM SAND, COHESIVE, MOIST
455						
	25			22.3		CLAYEY SAND, STRONG BROWN, LITTLE LIGHT GREENISH GRAY MOTTLING, SOME SUBROUNDED GRAVEL UP TO 1/4", FINE TO MEDIUM SAND, COHESIVE, MOIST
		3.5	DP-18 (27.5-28.0)			CLAYEY SAND, STRONG BROWN, SOME SUBROUNDED GRAVEL UP TO 1/8", FINE TO MEDIUM SAND, STICKY, COHESIVE, WET
				28.7	GC	SAND AND GRAVEL, STRONG BROWN, SUBROUNDED GRAVEL UP TO 1", TRACE CLAY, MEDIUM SAND, SLIGHTLY COHESIVE, WET.
450						

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM_NZ2.GPJ; 05/02/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-19	Date(s): **1/11/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**
Contractor: **Mohawk Drilling**	Purpose: **Soil Boring**
Drilling Method: **Direct Push**	Datum: **NAVD88** Elevation: **478 amsl**
Sampling Method: **Continuous Sampler**	North: **368293.84** East: **590857.76**
Remarks:	Borehole Dia.: **2.5 inches** Total Depth: **19.2 feet**
	Project Number: **3433253A**
	Project Name: **Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	PID (ppm)	USCS Code	Material Description
			0		GRAVEL, SUBBASE
		4	0	CH	SILTY FILL AND GRAVEL, DARK BROWN, SLIGHTLY STIFF, VERY SLIGHTLY MOIST
475					
	5		0	ML	CLAYEY SILT FILL, VERY DARK GRAYISH BROWN, WITH SUBANGULAR GRAVEL UP TO 1", SLIGHTLY STIFF, CRUMBLY, MOIST
		4	0		
470					
			0		CLAYEY SILT FILL, VERY DARK GRAYISH BROWN, WITH SUBANGULAR GRAVEL UP TO 1", SOME SILTY CLAY, SLIGHTLY STIFF, CRUMBLY, MOIST
	10	2	0		
			0		
465			0	CH	SILTY CLAY, STRONG BROWN, SOME GRAY MOTTLING, TRACE BLACK NODULES, VERY STIFF, SLIGHTLY PLASTIC, VERY SLIGHTLY MOIST, ABUNDANT SILT FIRST 0.5'
		4			
	15		0		NATIVE SOIL WITH MOTTLING, GRAY.
					NATIVE SOIL WITH MOTTLING, GRAY, AND BLACK NODULES, SLUFF
			0		
460		3.2	0		NATIVE SOIL WITH MOTTLING, GRAY, AND BLACK NODULES, SLUFF, HARD
	20				
455					
	25				
450					

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM_NZ2.GPJ; 05/02/14

ENVIRON

2118 N. Tyler Road, Wichita, Kansas 67212

Site ID: DP-22	Date(s): **1/10/2014**
Location: **Fort Smith, Arkansas**	
Logged By: **N. Zurweller**	
Consulting Firm: **ENVIRON**	Checked By: **K. Stonestreet**
Contractor: **Mohawk Drilling**	Purpose: **Soil Boring**
Drilling Method: **Direct Push**	Datum: **NAVD88** Elevation: **478 amsl**
Sampling Method: **Continuous Sampler**	North: **368822.35** East: **592096.76**
Remarks:	Borehole Dia.: **2.5 inches** Total Depth: **28.5 feet**
	Project Number: **3433253A**
	Project Name: **Whirlpool Corporation**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
						SAND FILL, LIGHT BROWN, TRACE GRAVEL, FINE GRAIN, SLIGHTLY MOIST
		3		4.3	MH	CLAYEY SILT, STRONG BROWN, SOME BLACK NODULES, STIFF, VERY SLIGHTLY MOIST
475				5.9		CLAYEY SILT, STRONG BROWN, SOME BLACK NODULES, STIFF, VERY SLIGHTLY MOIST
	5	4		5.8	CL	SILTY CLAY, STRONG BROWN, TRACE GRAY MOTTLING, TRACE SUBROUNDED GRAVEL UP TO 1/8", TRACE BLACK NODULES, SLIGHTLY STIFF, VERY SLIGHTLY MOIST.
470			DP-22 (8.5-9.0)	6.8	MH	CLAYEY SILT, STRONG BROWN AND PALE BROWN, TRACE LIGHT GRAY MOTTLING, SOME WHITE NODULES, TRACE BLACK NODULES, VERY SLIGHTLY PLASTIC, DRY
	10	4		6.1		
				6.2		
465		4		5.1		CLAYEY SILT, STRONG BROWN AND PALE BROWN, TRACE LIGHT GRAY MOTTLING, SOME WHITE NODULES, TRACE BLACK NODULES, VERY SLIGHTLY PLASTIC, DRY
	15			5.2		CLAYEY SILT, STRONG BROWN, WITH SUBROUNDED GRAVEL UP TO 1/4", WITH BLACK NODULES, VERY SLIGHTLY PLASTIC, STIFF, SLIGHTLY MOIST
		4		4.7	CL	CLAYEY SILT, STRONG BROWN, WITH SUBROUNDED GRAVEL UP TO 1/4", WITH BLACK NODULES, VERY SLIGHTLY PLASTIC, STIFF, SLIGHTLY MOIST
460				6.6		SILTY CLAY, STRONG BROWN, TRACE GRAY MOTTLING, STIFF, PLASTIC, SLIGHTLY MOIST
	20	4		4.3	CH	SILTY CLAY, STRONG BROWN, TRACE GRAY MOTTLING, STIFF, PLASTIC, SLIGHTLY MOIST
455				5.9		
						SILTY CLAY, STRONG BROWN, SOME FINE TO VERY FINE SAND, SLIGHTLY STIFF TO STIFF, SLIGHTLY MOIST
	25	4		6.6		SILTY CLAY, STRONG BROWN, WITH LIGHT GRAY MOTTLING, SOME FINE TO VERY FINE SAND, SLIGHTLY STIFF TO STIFF, SLIGHTLY MOIST
			DP-22 (27.5-28)	7.1		SANDY CLAY, STRONG BROWN, WITH LIGHT GREENISH GRAY MOTTLING, VERY FINE TO FINE SAND, SLIGHTLY STIFF, SLIGHTLY MOIST
450		0.5		6.2	SC	CLAYEY SAND WITH GRAVEL, STRONG BROWN, SUBROUNDED GRAVEL UP TO 1/4", FINE SAND, STIFF, SLIGHTLY MOIST TO MOIST
					GC	SAND AND GRAVEL, STRONG BROWN, SOME CLAY, SUBROUNDED GAVEL UP TO 1", FINE TO MEDIUM SAND, MOIST.

Report: SOIL_LOG_REV_1_MKE2; File: TUESDAY_12PM_NZ2.GPJ; 05/02/14

FILE: D:\GIS\PROJECTW\HIRLPOOL\DOCs\2014_Q1_REPORT\Figure 1 - Tracer Test Well Array - April 30.mxd

Injection Well
Existing Monitoring Well
Tracer Test Work Area
Approximate Property Boundary

MW-32
MW-33
MW-23
150 ft
150 ft
150 ft
101
102
103
104
105
106
107
108
109
110
111
112
130

0 20 40
Feet
1 inch = 20 feet

ENVIRON

TRACER TEST WELL ARRAY
APRIL 30, 2014

Whirlpool Facility - Fort Smith, Arkansas

Figure
1

DRAFTED BY: KTS
DATE: 05/01/2014
PROJECT: 3433253A

ATTACHMENT D
SUMMARY OF TRACER ANALYTICAL RESULTS - MARCH 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial Action Levels per ADEQ RADD Issued Jan 2014	IW-101	IW-101	IW-102	IW-102	IW-102
ENVIRON Sample ID		IW-101-20140311	IW-101-20140319	IW-102-20140312	IW-102-20140314	IW-102-20140319
Lab Sample IDs		60164895004	60165292002	60164895014	60165058002	60165292003
Sample Date		03/11/2014	03/19/2014	03/12/2014	03/14/2014	03/19/2014
Comments						
Tracer Analyte						
Bromide	NE	4400 (1000)	4600 (1000)	3700 (1000)	16800 (1000)	19500 (1000)

Notes:

1 All concentrations are presented in ug/L.

2 Only compounds with at least one detection are shown.

Abbreviations:

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

ATTACHMENT D
SUMMARY OF TRACER ANALYTICAL RESULTS - MARCH 2014
Whirlpool Corporation; Fort Smith, AR

Location ENVIRON Sample ID Lab Sample IDs Sample Date Comments	Remedial Action Levels per ADEQ RADD Issued Jan 2014	IW-103 IW-103-20140311 60164895005 03/11/2014	IW-103 IW-103-20140319 60165292004 03/19/2014	IW-104 IW-104-20140319 60165292005 03/19/2014	IW-105 IW-105-20140311 60164895002 03/11/2014	IW-105 IW-105-20140313 60164895015 03/13/2014
Tracer Analyte						
Bromide	NE	2300 (1000)	1000 (1000)	14000 (1000)	3200 (1000)	3200 (1000)

Notes:

1 All concentrations are presented in ug/L.

2 Only compounds with at least one detection are shown.

Abbreviations:

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

ATTACHMENT D
SUMMARY OF TRACER ANALYTICAL RESULTS - MARCH 2014
Whirlpool Corporation; Fort Smith, AR

Location ENVIRON Sample ID Lab Sample IDs Sample Date Comments	Remedial Action Levels per ADEQ RADD Issued Jan 2014	IW-105 IW-105-20140315 60165058006 03/15/2014	IW-105 IW-105-20140317 60165058008 03/17/2014	IW-105 IW-105-20140319 60165292006 03/19/2014	IW-106 IW-106-20140314 60165058003 03/14/2014	IW-106 IW-106-20140319 60165292007 03/19/2014
Tracer Analyte						
Bromide	NE	3700 (1000)	4300 (1000)	4900 (1000)	12300 (1000)	9300 (1000)

Notes:

1 All concentrations are presented in ug/L.

2 Only compounds with at least one detection are shown.

Abbreviations:

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

ATTACHMENT D
SUMMARY OF TRACER ANALYTICAL RESULTS - MARCH 2014
Whirlpool Corporation; Fort Smith, AR

Location ENVIRON Sample ID Lab Sample IDs Sample Date Comments	Remedial Action Levels per ADEQ RADD Issued Jan 2014	IW-107 IW-107-20140311 60164895006 03/11/2014	IW-107 IW-107-20140314 60165058004 03/14/2014	IW-107 IW-107-20140319 60165292008 03/19/2014	IW-108 IW-108-20140319 60165292009 03/19/2014	IW-109 IW-109-20140311 60164895001 03/11/2014
Tracer Analyte						
Bromide	NE	4400 (1000)	6900 (1000)	78800 (10000)	9700 (1000)	4500 (1000)

Notes:

1 All concentrations are presented in ug/L.

2 Only compounds with at least one detection are shown.

Abbreviations:

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

ATTACHMENT D
SUMMARY OF TRACER ANALYTICAL RESULTS - MARCH 2014
Whirlpool Corporation; Fort Smith, AR

Location		IW-109		IW-110		IW-110		IW-110		IW-110	
ENVIRON Sample ID	Remedial Action Levels per ADEQ RADD Issued Jan 2014	IW-109-20140319 0		TRACER TEST 1 0		TRACER TEST 2 0		TRACER TEST 3		IW-110-20140314	
Lab Sample IDs		60165292010		60164895017		60164895011		60164895009		60165058005	
Sample Date		03/19/2014		03/12/2014		03/12/2014		03/12/2014		03/14/2014	
Comments											
Tracer Analyte											
Bromide	NE	403000	(50000)	4000	(1000)	4000	(1000)	4600	(1000)	8700	(1000)

Notes:

1 All concentrations are presented in ug/L.

2 Only compounds with at least one detection are shown.

Abbreviations:

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

ATTACHMENT D
SUMMARY OF TRACER ANALYTICAL RESULTS - MARCH 2014
Whirlpool Corporation; Fort Smith, AR

Location ENVIRON Sample ID Lab Sample IDs Sample Date Comments	Remedial Action Levels per ADEQ RADD Issued Jan 2014	IW-110 IW-110-20140319 60165292011 03/19/2014	IW-111 IW-111-20140311 60164895003 03/11/2014	IW-111 IW-111-20140319 60165292012 03/19/2014	IW-112 2 TRACER TEST 1 60164895013 03/12/2014	IW-112 2 TRACER TEST 2 60164895010 03/12/2014
Tracer Analyte						
Bromide	NE	7300 (1000)	4400 (1000)	63100 (10000)	4300 (1000)	4200 (1000)

Notes:

1 All concentrations are presented in ug/L.

2 Only compounds with at least one detection are shown.

Abbreviations:

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

ATTACHMENT D
SUMMARY OF TRACER ANALYTICAL RESULTS - MARCH 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial Action Levels per ADEQ RADD Issued Jan 2014	IW-112	IW-112	IW-112	IW-112	IW-112
ENVIRON Sample ID		2 TRACER TEST 3	2 TRACER TEST 4	IW-112-20140313	IW-112-20140314	IW-112-20140315
Lab Sample IDs		60164895019	60164895016	60164895018	60165058001	60165058007
Sample Date		03/12/2014	03/12/2014	03/13/2014	03/14/2014	03/15/2014
Comments						
Tracer Analyte						
Bromide	NE	4200 (1000)	12300 (1000)	239000 (20000)	144000 (20000)	148000 (20000)

Notes:

1 All concentrations are presented in ug/L.

2 Only compounds with at least one detection are shown.

Abbreviations:

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

ATTACHMENT D
SUMMARY OF TRACER ANALYTICAL RESULTS - MARCH 2014
Whirlpool Corporation; Fort Smith, AR

Location ENVIRON Sample ID Lab Sample IDs Sample Date Comments	Remedial Action Levels per ADEQ RADD Issued Jan 2014	IW-112 IW-112-20140317 60165058009 03/17/2014	IW-112 IW-112-20140319 60165292013 03/19/2014	IW-130 IW-130-20140319 60165292001 03/19/2014	ITMW-16 ITMW-16-201403 60165292014 03/19/2014	MW-23 MW-23 60165292015 03/19/2014
Tracer Analyte						
Bromide	NE	139000 (20000)	122000 (10000)	1050000 (100000)	U (1000)	3600 (1000)

Notes:

1 All concentrations are presented in ug/L.

2 Only compounds with at least one detection are shown.

Abbreviations:

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

ATTACHMENT D
SUMMARY OF TRACER ANALYTICAL RESULTS - MARCH 2014
Whirlpool Corporation; Fort Smith, AR

Location ENVIRON Sample ID Lab Sample IDs Sample Date Comments	Remedial Action Levels per ADEQ RADD Issued Jan 2014	MW-32 MW-32-20140312 60164895007 03/12/2014	MW-33 MW-33-20140312 60164895012 03/12/2014	MW-33 MW-33 60165292016 03/19/2014
Tracer Analyte				
Bromide	NE	4500 (1000)	2500 (1000)	2500 (1000)

Notes:

1 All concentrations are presented in ug/L.

2 Only compounds with at least one detection are shown.

Abbreviations:

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

FILE: D:\GIS\PROJECT\WHIRLPOOL\DOCs\20140404_IW_Array_Maps\01_InjectionWellArraysInstalledFeb-Mar2014_wLabels.mxd

Injection Well (IW) - Installed February and March, 2014
Existing Monitoring or Injection Well
Underground Injection Control (UIC) – Approved Injection Area
Treatment Areas 1, 2 and 3 from RADD
Approximate Property Boundary

MW-41
IW-76
MW-39
Area 3
IW-77
Injection Array 2
121 122 123 120 117 118 119 124 114 115 116 131
IW-80
MW-65
IW-78
113
IW-79
MW-36
Area 2
MW-34
MW-35R
MW-31
MW-32
MW-33
MW-23
MW-27
Injection Array 1
101 108 109 102 107 112 130 110 103 106 111 104 105
MW-24
ITMW-16
ITMW-14
ITMW-13
ITMW-17
ITMW-15
ITMW-11
MW-38
MW-37
Area 1
ITMW-12
MW-25
Injection Array 3
128 125 129 126 127
ITMW-19
ITMW-18

0 40 80
Feet
1 inch = 40 feet

NOTE: A final figure with injection well designations will be submitted to ADEQ after the boring logs and well construction diagrams are completed.

ENVIRON

INJECTION WELL ARRAYS
Installed February and March 2014

Whirlpool Facility - Fort Smith, Arkansas

Figure
1

DRAFTED BY: CCS
DATE: 04/22/2014
PROJECT: 3433253A

APPENDIX E
SUMMARY OF PHASE I ISCO ANALYTICAL RESULTS RECEIVED TO DATE
Whirlpool Corporation; Fort Smith, AR

Location ENVIRON Sample ID Lab Sample ID Sample Method Sample Date Comments	Remedial Action Levels per ADEQ RADD Isssued 2014	IW-101 IW-101-20140323 60165578011 03/23/2014	IW-102 IW-102-20140323 60165578004 03/23/2014	IW-103 IW-103-20140323 60165578019 03/23/2014	IW-104 IW-104-20140323 60165578013 03/23/2014	IW-105 IW-105-20140323 60165578022 03/23/2014	IW-106 IW-106-20140323 60165578005 03/23/2014	IW-107 IW-107-20140323 60165578015 03/23/2014	IW-108 IW-108-20140323 60165578020 03/23/2014	IW-109 IW-109-20140323 60165578016 03/23/2014	IW-110 IW-110-20140323 60165578010 03/23/2014
Volatile Organic Compounds											
Preservation pH [STD Units]	NE	1 (0.1)	1 (0.1)	1 (0.1)	1 (0.1)	1 (0.1)	1 (0.1)	1 (0.1)	1 (0.1)	1 (0.1)	1 (0.1)
Acetone	12000	2.4 J (10)	U (10)	4.6 J (10)	2 J (10)	U (10)	U (10)	3 J (10)	U (10)	2.1 J (10)	4 J (10)
Benzene	5.0	U (5)	U (5)	0.43 J (5)	U (5)	U (5)	U (5)	U (5)	0.11 J (5)	U (5)	U (5)
Bromodichloromethane	80	0.67 J (5)	U (5)	U (5)	U (5)	0.45 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Bromoform	80	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
2-Butanone	4900	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Carbon Disulfide	720	U (10)	U (10)	U (10)	U (10)	U (10)	0.22 J (10)	U (10)	U (10)	U (10)	U (10)
Chloroform	80	2.1 J (5)	0.54 J (5)	0.39 J (5)	0.73 J (5)	2.6 J (5)	0.51 J (5)	0.37 J (5)	0.83 J (5)	1.3 J (5)	0.32 J (5)
Chloromethane	190	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Dibromochloromethane	80	0.41 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,1-Dichloroethane	2.4	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)
1,2-Dichloroethane	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,1-Dichloroethene	7.0	0.6 J (5)	1.3 J (5)	1.3 J (5)	1.3 J (5)	1.3 J (5)	0.31 J (5)	0.35 J (5)	2.1 J (5)	0.59 J (5)	0.8 J (5)
cis-1,2-Dichloroethene	70	7.5 (5)	14.6 (5)	13.1 (5)	13.5 (5)	14.4 (5)	4.2 J (5)	4.3 J (5)	27.8 (5)	7.4 (5)	9.8 (5)
trans-1,2-Dichloroethene	100	U (5)	1.4 J (5)	1.4 J (5)	1.4 J (5)	1.1 J (5)	U (5)	U (5)	2.2 J (5)	U (5)	1.2 J (5)
1,2-Dichloropropane	5.0	U (5)	U (5)	U (5)	U (5)	3.1 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Ethyl Benzene	700	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Methylene Chloride	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Tetrachloroethene	5.0	0.16 J (5)	0.25 J (5)	0.97 J (5)	0.17 J (5)	0.22 J (5)	U (5)	U (5)	0.4 J (5)	0.51 J (5)	U (5)
Toluene	1000	0.37 J (5)	U (5)	U (5)	U (5)	0.19 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,1,2-Trichloroethane	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Trichloroethene	5.0	314 (25)	685 (50)	692 (50)	637 (50)	901 (50)	198 (5)	198 (5)	1280 (125)	362 (25)	464 (25)
Vinyl Chloride	2.0	0.21 J (2)	0.45 J (2)	0.76 J (2)	0.69 J (2)	0.54 J (2)	U (2)	0.14 J (2)	0.83 J (2)	0.23 J (2)	0.5 J (2)
Metals											
Iron	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Manganese	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

Notes:

1 All concentrations are presented in ug/L.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the ALs for Fort Smith ADEQ RADD issued Jan 2014 are double underlined.

Abbreviations:

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

APPENDIX E
SUMMARY OF PHASE I ISCO ANALYTICAL RESULTS RECEIVED TO DATE
Whirlpool Corporation; Fort Smith, AR

Location ENVIRON Sample ID Lab Sample ID Sample Method Sample Date Comments	Remedial Action Levels per ADEQ RADD Isssued 2014	IW-110 IW-110 60167279013 04/16/2014	IW-111 IW-111-20140323 60165578021 03/23/2014	IW-112 IW-112-20140323 60165578008 03/23/2014	IW-112 IW-112 60167279014 04/16/2014	IW-113 IW-113-20140324 60165578018 03/24/2014	IW-113 IW-113 60167279001 04/14/2014	IW-114 IW-114-20140324 60165578017 03/24/2014	IW-114 IW-114 60167279002 04/14/2014	IW-115 IW-115-20140324 60165578002 03/24/2014	IW-115 IW-115-20140407 60166526001 04/07/2014
Volatile Organic Compounds											
Preservation pH [STD Units]	NE	NM	1 (0.1)	1 (0.1)	NM	1 (0.1)	NM	1 (0.1)	NM	1 (0.1)	NM
Acetone	12000	24 (10)	2.3 J (10)	3.2 J (10)	28.7 (10)	162 (10)	31.1 (10)	122 (10)	26.1 (10)	63.4 (10)	40.9 (100)
Benzene	5.0	U (5)	0.28 J (5)	U (5)	U (5)	U (5)	0.12 (5)	U (5)	0.17 (5)	U (5)	U (50)
Bromodichloromethane	80	U (5)	0.31 J (5)	U (5)	U (5)	0.27 J (5)	U (5)	0.23 J (5)	U (5)	U (5)	U (50)
Bromoform	80	1.7 (5)	U (5)	U (5)	U (5)	U (5)	1.4 (5)	U (5)	U (5)	U (5)	U (50)
2-Butanone	4900	U (10)	U (10)	U (10)	U (10)	121 (10)	12.1 (10)	101 (10)	1.2 (10)	20.9 (10)	129 (100)
Carbon Disulfide	720	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (100)
Chloroform	80	0.46 (5)	1.4 J (5)	0.53 J (5)	0.28 (5)	1.3 J (5)	0.44 (5)	1 J (5)	0.48 (5)	0.97 J (5)	U (50)
Chloromethane	190	U (10)	U (10)	U (10)	0.19 (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (100)
Dibromochloromethane	80	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (50)
1,1-Dichloroethane	2.4	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (24)
1,2-Dichloroethane	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	0.18 (5)	U (5)	U (5)	U (5)	U (50)
1,1-Dichloroethene	7.0	0.66 (5)	1.3 J (5)	0.63 J (5)	U (5)	0.96 J (5)	U (5)	0.73 J (5)	U (5)	1.1 J (5)	U (50)
cis-1,2-Dichloroethene	70	9.4 (5)	14 (5)	4.9 J (5)	4.8 (5)	11.1 (5)	8.7 (5)	9.7 (5)	8.1 (5)	14 (5)	9.1 J (50)
trans-1,2-Dichloroethene	100	0.61 (5)	1.5 J (5)	U (5)	0.8 (5)	1.2 J (5)	1.6 (5)	1.2 J (5)	0.91 (5)	1.6 J (5)	U (50)
1,2-Dichloropropane	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (50)
Ethyl Benzene	700	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (50)
Methylene Chloride	5.0	0.25 (5)	U (5)	U (5)	0.26 (5)	U (5)	0.23 (5)	U (5)	0.19 (5)	U (5)	16.4 J (50)
Tetrachloroethene	5.0	U (5)	0.66 J (5)	U (5)	U (5)	U (5)	U (5)	0.15 J (5)	U (5)	0.27 J (5)	U (50)
Toluene	1000	U (5)	0.92 J (5)	U (5)	U (5)	0.43 J (5)	U (5)	0.51 J (5)	0.27 (5)	0.22 J (5)	U (50)
1,1,2-Trichloroethane	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (50)
Trichloroethene	5.0	397 (25)	704 (50)	219 (25)	200 (10)	510 (25)	435 (25)	397 (50)	336 (25)	622 (50)	455 (50)
Vinyl Chloride	2.0	0.17 (2)	0.63 J (2)	0.23 J (2)	U (2)	0.43 J (2)	U (2)	0.25 J (2)	U (2)	0.25 J (2)	U (20)
Metals											
Iron	NE	NM	NM	NM	NM	154 (50)	NM	NM	NM	NM	NM
Manganese	NE	NM	NM	NM	NM	232 (5)	NM	NM	NM	NM	NM

Notes:

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Abbreviations:

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APPENDIX E
SUMMARY OF PHASE I ISCO ANALYTICAL RESULTS RECEIVED TO DATE
Whirlpool Corporation; Fort Smith, AR

Location ENVIRON Sample ID Lab Sample ID Sample Method Sample Date Comments	Remedial Action Levels per ADEQ RADD Isssued 2014	IW-115 IW-115 60167279003 04/14/2014	IW-116 IW-116-20140324 60165578006 03/24/2014	IW-116 IW-116 60167279004 04/15/2014	IW-117 IW-117-20140324 60165578014 03/24/2014	IW-117 IW-117 60167279005 04/15/2014	IW-118 IW-118-20140324 60165578007 03/24/2014	IW-118 IW-118 60167279006 04/15/2014	IW-119 IW-119-20140324 60165578001 03/24/2014	IW-119 IW-119-20140407 60166526002 04/07/2014	IW-119 IW-119 60167279007 04/15/2014
Volatile Organic Compounds											
Preservation pH [STD Units]	NE	NM	1 (0.1)	NM	1 (0.1)	NM	1 (0.1)	NM	1 (0.1)	NM	NM
Acetone	12000	32.8 (10)	191 (10)	22 (10)	163 (10)	42.4 (10)	37.3 (10)	20.4 (10)	10.7 (10)	U (100)	19.8 (10)
Benzene	5.0	U (5)	U (5)	0.15 (5)	U (5)	U (5)	U (5)	0.3 (5)	U (5)	U (50)	U (5)
Bromodichloromethane	80	U (5)	0.21 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	0.28 J (5)	U (50)	U (5)
Bromoform	80	1.3 (5)	U (5)	U (5)	U (5)	1.5 (5)	U (5)	3.7 (5)	U (5)	U (50)	U (5)
2-Butanone	4900	11.6 (10)	137 (10)	0.64 (10)	236 (10)	26.6 (10)	U (10)	U (10)	U (10)	U (100)	U (10)
Carbon Disulfide	720	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (100)	U (10)
Chloroform	80	0.36 (5)	0.92 J (5)	0.37 (5)	0.72 J (5)	0.32 (5)	1.1 J (5)	0.5 (5)	1.1 J (5)	U (50)	0.4 (5)
Chloromethane	190	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (100)	U (10)
Dibromochloromethane	80	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (50)	U (5)
1,1-Dichloroethane	2.4	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (24)	U (2.4)
1,2-Dichloroethane	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (50)	U (5)
1,1-Dichloroethene	7.0	U (5)	0.75 J (5)	0.88 (5)	0.62 J (5)	U (5)	0.89 J (5)	U (5)	1.1 J (5)	U (50)	0.36 (5)
cis-1,2-Dichloroethene	70	9.3 (5)	10.9 (5)	10.8 (5)	9.1 (5)	9.9 (5)	11.6 (5)	9.7 (5)	11.5 (5)	9.1 J (50)	11.3 (5)
trans-1,2-Dichloroethene	100	1.2 (5)	1.3 J (5)	U (5)	1.3 J (5)	1.4 (5)	1.3 J (5)	1.7 (5)	U (5)	U (50)	0.96 (5)
1,2-Dichloropropane	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (50)	U (5)
Ethyl Benzene	700	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (50)	U (5)
Methylene Chloride	5.0	0.28 (5)	U (5)	0.31 (5)	U (5)	0.22 (5)	U (5)	0.3 (5)	U (5)	17.1 J (50)	0.21 (5)
Tetrachloroethene	5.0	U (5)	0.13 J (5)	0.22 (5)	U (5)	U (5)	0.14 J (5)	0.2 (5)	0.15 J (5)	U (50)	U (5)
Toluene	1000	U (5)	0.42 J (5)	U (5)	0.47 J (5)	U (5)	0.49 J (5)	U (5)	0.37 J (5)	U (50)	U (5)
1,1,2-Trichloroethane	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (50)	U (5)
Trichloroethene	5.0	449 (25)	486 (25)	546 (50)	384 (25)	384 (25)	496 (25)	395 (25)	524 (50)	478 (50)	509 (50)
Vinyl Chloride	2.0	U (2)	0.33 J (2)	0.34 (2)	0.23 J (2)	U (2)	0.34 J (2)	U (2)	0.33 J (2)	U (20)	U (2)
Metals											
Iron	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Manganese	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

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APPENDIX E
SUMMARY OF PHASE I ISCO ANALYTICAL RESULTS RECEIVED TO DATE
Whirlpool Corporation; Fort Smith, AR

Location	Remedial Action Levels per ADEQ RADD Isssued 2014	IW-120	IW-120	IW-121	IW-121	IW-122	IW-122	IW-123	IW-123	IW-123	IW-124
ENVIRON Sample ID		IW-120-20140324	IW-120	IW-121-20140324	IW-121	IW-122-20140324	IW-122	IW-123-20140324	IW-123-20140407	IW-123	IW-124-20140324
Lab Sample ID		60165578012	60167279008	60165578025	60167279009	60165630002	60167279010	60165630001	60166526003	60167279011	60165578024
Sample Method											
Sample Date		03/24/2014	04/15/2014	03/24/2014	04/15/2014	03/24/2014	04/15/2014	03/24/2014	04/07/2014	04/15/2014	03/24/2014
Comments											
Volatile Organic Compounds											
Preservation pH [STD Units]	NE	1 (0.1)	NM	1 (0.1)	NM	NM	NM	NM	NM	NM	1 (0.1)
Acetone	12000	U (10)	28.5 (10)	U (50)	21.1 (10)	U (10)	19.7 (10)	2.2 J,B (10)	U (100)	24.3 (10)	U (50)
Benzene	5.0	U (5)	U (5)	U (25)	U (5)	U (5)	U (5)	U (5)	U (50)	U (5)	U (25)
Bromodichloromethane	80	U (5)	U (5)	U (25)	U (5)	U (5)	U (5)	0.22 J (5)	U (50)	U (5)	U (25)
Bromoform	80	U (5)	3.5 (5)	U (25)	2 (5)	U (5)	U (5)	U (5)	U (50)	1.5 (5)	U (25)
2-Butanone	4900	U (10)	1 (10)	U (50)	0.69 (10)	U (10)	U (10)	U (10)	U (100)	U (10)	U (50)
Carbon Disulfide	720	U (10)	U (10)	U (50)	U (10)	U (10)	U (10)	U (10)	U (100)	0.14 (10)	U (50)
Chloroform	80	1.1 J (5)	0.69 (5)	U (25)	0.33 (5)	0.73 J (5)	0.41 (5)	0.78 J (5)	U (50)	0.39 (5)	U (25)
Chloromethane	190	U (10)	U (10)	U (50)	U (10)	U (10)	U (10)	U (10)	U (100)	U (10)	U (50)
Dibromochloromethane	80	U (5)	U (5)	U (25)	U (5)	U (5)	U (5)	U (5)	U (50)	U (5)	U (25)
1,1-Dichloroethane	2.4	U (2.4)	U (2.4)	U (12)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (24)	U (2.4)	U (12)
1,2-Dichloroethane	5.0	U (5)	U (5)	U (25)	0.15 (5)	U (5)	U (5)	U (5)	U (50)	U (5)	U (25)
1,1-Dichloroethene	7.0	0.63 J (5)	U (5)	U (25)	U (5)	0.8 J (5)	0.39 (5)	1 J (5)	U (50)	U (5)	1.1 J (25)
cis-1,2-Dichloroethene	70	7.9 (5)	10.2 (5)	8.9 J (25)	11.7 (5)	11.5 (5)	10 (5)	12.2 (5)	8.8 J (50)	10 (5)	6.8 J (25)
trans-1,2-Dichloroethene	100	1.2 J (5)	1.9 (5)	U (25)	1.5 (5)	1.5 J (5)	0.71 (5)	1.1 J (5)	U (50)	1.9 (5)	U (25)
1,2-Dichloropropane	5.0	U (5)	U (5)	U (25)	U (5)	U (5)	U (5)	U (5)	U (50)	U (5)	U (25)
Ethyl Benzene	700	U (5)	U (5)	U (25)	U (5)	U (5)	U (5)	U (5)	U (50)	U (5)	U (25)
Methylene Chloride	5.0	U (5)	0.3 (5)	U (25)	0.23 (5)	U (5)	0.27 (5)	U (5)	12.9 J (50)	0.21 (5)	U (25)
Tetrachloroethene	5.0	U (5)	U (5)	U (25)	U (5)	U (5)	U (5)	0.25 J (5)	U (50)	U (5)	U (25)
Toluene	1000	0.33 J (5)	U (5)	U (25)	U (5)	0.32 J (5)	U (5)	0.78 J (5)	U (50)	U (5)	U (25)
1,1,2-Trichloroethane	5.0	U (5)	U (5)	U (25)	U (5)	U (5)	U (5)	U (5)	U (50)	U (5)	U (25)
Trichloroethene	5.0	289 (25)	390 (25)	402 (25)	445 (25)	473 (25)	384 (25)	532 (25)	539 (50)	488 (50)	455 (25)
Vinyl Chloride	2.0	0.14 J (2)	U (2)	U (10)	U (2)	0.29 J (2)	U (2)	0.4 J (2)	U (20)	U (2)	U (10)
Metals											
Iron	NE	NM	NM	268 (50)	NM	597 (50)	NM	272 (50)	NM	NM	NM
Manganese	NE	NM	NM	348 (5)	NM	556 (5)	NM	270 (5)	NM	NM	NM

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Whirlpool Corporation; Fort Smith, AR

Location ENVIRON Sample ID Lab Sample ID Sample Method Sample Date Comments	Remedial Action Levels per ADEQ RADD Isssued 2014	IW-124 IW-124 60167279012 04/15/2014	IW-125 IW-125-20140325 60165630005 03/25/2014	IW-126 IW-126-20140325 60165630006 03/25/2014	IW-127 IW-127-20140324 60165578003 03/24/2014	IW-128 IW-128-20140325 60165630003 03/25/2014	IW-129 IW-129-20140325 60165630004 03/25/2014	IW-130 IW-130-20140323 60165578023 03/23/2014	IW-131 IW-131-20140324 60165578009 03/24/2014
Volatile Organic Compounds									
Preservation pH [STD Units]	NE	NM	NM	NM	1 (0.1)	NM	NM	1 (0.1)	1 (0.1)
Acetone	12000	U (10)	U (10)	3.1 J,B (10)	2.8 J (10)	2.3 J,B (10)	44.2 (10)	U (50)	261 (10)
Benzene	5.0	U (5)	0.21 J (5)	0.17 J (5)	0.21 J (5)	0.13 J (5)	0.17 J (5)	U (25)	U (5)
Bromodichloromethane	80	U (5)	0.88 J (5)	U (5)	U (5)	U (5)	4.7 J (5)	U (25)	U (5)
Bromoform	80	U (5)	0.66 J (5)	0.38 J (5)	U (5)	U (5)	4 J (5)	U (25)	U (5)
2-Butanone	4900	U (10)	U (10)	U (10)	U (10)	U (10)	43.4 (10)	U (50)	341 (10)
Carbon Disulfide	720	U (10)	U (10)	U (10)	0.15 J (10)	U (10)	U (10)	U (50)	U (10)
Chloroform	80	0.62 (5)	6.1 (5)	2.5 J (5)	1.4 J (5)	0.26 J (5)	31.5 (5)	U (25)	1.9 J (5)
Chloromethane	190	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (50)	U (10)
Dibromochloromethane	80	U (5)	0.71 J (5)	0.36 J (5)	U (5)	U (5)	3.3 J (5)	U (25)	U (5)
1,1-Dichloroethane	2.4	U (2.4)	0.21 J (2.4)	0.19 J (2.4)	0.26 J (2.4)	0.23 J (2.4)	0.2 J (2.4)	U (12)	U (2.4)
1,2-Dichloroethane	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (25)	U (5)
1,1-Dichloroethene	7.0	0.83 (5)	4.1 J (5)	3.1 J (5)	9.1 (5)	12.4 (5)	U (5)	U (25)	0.96 J (5)
cis-1,2-Dichloroethene	70	8.7 (5)	207 (125)	197 (5)	219 J (250)	178 (5)	192 (5)	7.6 J (25)	11.5 (5)
trans-1,2-Dichloroethene	100	U (5)	7.6 (5)	5.1 (5)	8 (5)	6 (5)	29 (5)	U (25)	1.4 J (5)
1,2-Dichloropropane	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (25)	U (5)
Ethyl Benzene	700	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (25)	0.41 J (5)
Methylene Chloride	5.0	0.15 (5)	U (5)	U (5)	U (5)	0.6 J (5)	U (5)	U (25)	U (5)
Tetrachloroethene	5.0	U (5)	0.86 J (5)	0.73 J (5)	1 J (5)	1 J (5)	1 J (5)	U (25)	U (5)
Toluene	1000	U (5)	0.19 J (5)	0.24 J (5)	0.34 J (5)	U (5)	U (5)	U (25)	0.38 J (5)
1,1,2-Trichloroethane	5.0	U (5)	0.31 J (5)	U (5)	0.34 J (5)	0.22 J (5)	0.39 J (5)	U (25)	U (5)
Trichloroethene	5.0	448 (25)	2140 (125)	2020 (125)	3700 (250)	2980 (125)	2540 (125)	358 (25)	526 (25)
Vinyl Chloride	2.0	0.26 (2)	3.1 (2)	10.4 (2)	7.6 (2)	11.7 (2)	U (2)	U (10)	0.35 J (2)
Metals									
Iron	NE	NM	NM	NM	NM	NM	NM	NM	NM
Manganese	NE	NM	NM	NM	NM	NM	NM	NM	NM

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