

Second Quarter 2015 Progress Report

Whirlpool Facility
Fort Smith, Arkansas

Prepared for:
Whirlpool Corporation

Prepared by:
Ramboll Environ US Corporation

Date:
August 14, 2015

Project Number:
34-37500A

RAMBOLL ENVIRON

Second Quarter 2015 Progress Report
April 1, 2015 through June 31, 2015
Whirlpool Facility - Fort Smith, Arkansas

1. INTRODUCTION

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

2. SUMMARY OF FINDINGS

- Monitoring to assess the impact of ISCO injection events measured decreases in trichloroethene (TCE) concentrations in groundwater source area wells, the supplemental neck area, and Areas 2 and 3 of approximately 91%, 72% and 80%, respectively.
- Natural attenuation of TCE is continuing to occur via biological mechanisms or other natural attenuation mechanisms in both onsite and offsite groundwater.
- The approximate location of the hydraulic divide between the north and south groundwater plume boundaries continued to be south of Ingersoll Avenue, which is generally consistent with previous reporting periods and historic results.
- Second quarter event groundwater monitoring data shows generally stable to decreasing trends for TCE concentrations.
    - Plume boundary well data continue to show results generally consistent with historical TCE concentrations;
    - Offsite well data are similar to previous monitoring events and continue to show generally stable to decreasing TCE concentration trends; and
    - Onsite well data continue to show generally stable to decreasing TCE concentration trends. The data demonstrates the positive influence of the ISCO injections.
- Based on second quarter groundwater data, the average minimum and maximum quantities of TCE in groundwater associated with the Site has been assessed for the north and south groundwater plumes. The quantity of TCE in the north plume is estimated to range from less than 1 to 2 gallons, the quantity of TCE in the south plume is estimated to range from 2 to 8 gallons, and the quantity of TCE in the northeast plume is estimated to contain less than 1 gallon; for a combined volume of TCE in groundwater ranging from 3 to 11 gallons.

- Risk estimates based upon groundwater and soil vapor data for potential vapor intrusion from offsite groundwater continue to be below ADEQ's risk management limits as designated in the RADD.
- There are no known TCE impacts to offsite surface water or sediment.
- The Site human health exposure risks remain unchanged.

3. REVIEW OF ACTIVITIES COMPLETED – SECOND QUARTER 2015

During the week of April 13, Second Quarter of 2015, groundwater samples were collected via low flow sampling methodologies. Groundwater samples were collected from a total of 86 wells to assist in evaluating the northeast corner, Boys and Girls Club property, in-situ chemical oxidation (ISCO) monitoring, and plume definition. The groundwater samples from locations noted in the RADD were analyzed for parameters as outlined in the RADD and the remaining wells were analyzed for VOCs. The Second Quarter 2015 Groundwater Monitoring Report

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

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

- The groundwater potentiometric surface observed during the second quarter event is consistent with that historically observed at the Site.
- The direction of the lateral hydraulic gradient continues to be influenced by a hydraulic divide located just south of Ingersoll Avenue with the hydraulic gradient predominantly in the following directions:
    - Hydraulic gradient north of the divide is in a northeasterly direction; and
    - Hydraulic gradient south of the divide is in a southern/southeasterly direction.
- Second Quarter groundwater monitoring data shows generally stable to decreasing trends for TCE concentrations at a majority of monitoring well locations. Details regarding TCE concentration trends are presented in Attachment A, Second Quarter 2015 Groundwater Monitoring Report, Section 4.
- Second Quarter groundwater monitoring data in conjunction with historical data demonstrate that natural attenuation of TCE is occurring via biological mechanisms in both onsite and offsite groundwater.
- The ISCO events performed in 2014 continue to be effective with TCE concentration reductions as follows:
    - Approximately 91% decrease at source area wells MW-25, MW-85 and MW-86;
    - Supplemental neck area decrease of approximately 72% since May 2014; and
    - Approximately 80% decrease at wells in Areas 2 and 3.

During the Second Quarter of 2015, a soil vapor sampling event was completed on April 22 and 23, 2015. Soil vapor samples were successfully collected from VP-7 and VP-9. Water filled the vapor points at locations VP-5, VP-6, VP-8, VP-10 and VP-12 and water could not be purged from the sampling train. Water samples were collected from these points. At VP-14, water droplets in the sample train prevented the collection of a vapor sample and the water volume was insufficient for sampling despite sustained vacuum for 4 hours.

The Second Quarter 2015 Soil Vapor Monitoring/Vapor Intrusion Report further discusses the sampling event as well as evaluates the water and soil vapor data. This report is included as Attachment B.

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

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

One additional soil vapor monitoring point (VP-15) was installed during the second quarter at the request of the property owner. The location of this point is shown on Figure 2 of Attachment B. This point was sampled during the third quarter and the resulting data will be included in the third quarter progress report.

As discussed in Attachment C, 0.75-inch diameter monitoring wells were properly abandoned and replaced with 2-inch diameter monitoring wells during the weeks of June 22 and 29, 2015. In addition to the 0.75-inch wells, MW-67 was also replaced due to a damaged well screen. After the replacement of these well, the wells were surveyed and the areas surrounding the wells were restored. These replacement activities address ADEQ's comment regarding monitoring well replacement as identified in the associated comments from the Second Quarter 2014 Progress Report.

ADEQ requested the installation of a monitoring well south of the southwest building corner to further define MIP point M-325. This request was received in the comments provided on the Third Quarter 2014 Progress Report. MW-182 was installed to fulfill this request on June 26, 2015. Further discussion regarding the installation of this well can be found in Attachment D.

To date many Declaration of Covenants have been executed for the properties north of the Site. These Declaration of Covenants, Conditions and Restrictions which have been filed are included in Attachment E.

4. QUANTITY OF TCE

Estimated average minimum and maximum quantities of TCE in groundwater were calculated for the Site using the results of the Second Quarter groundwater monitoring event. The total

quantity of TCE distributed throughout the north and south groundwater plumes is calculated based upon the consistent groundwater divide north of the Whirlpool manufacturing facility and south of Ingersoll Avenue. The quantity of TCE calculations are based on separating the northern and southern plumes at the hydraulic divide at the location of MW-24 (see Figures 2A and 2B, Attachment A – Second Quarter 2015 Groundwater Monitoring Report). The Northeast plume is also included.

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

Northern plume parameters:

- Plume area of approximately 486,000 square feet (ft^2) which is an approximate 2% increase in plume size compared to the 2015 First Quarter. The north plume consists of 309,000 ft^2 for the portion of the plume with TCE concentrations ranging from 5 µg/L to 100 µg/L; 177,000 ft^2 for the portion of the plume with TCE concentrations ranging from 100 µg/L to 1,000 µg/L; and, no portion of the plume exhibits TCE concentrations greater than 1,000 µg/L;
- Average saturated thickness of 3.7 feet (see Attachment D, Table 1).
- Total porosity of 0.4.
- TCE specific gravity of 1.465.

Southern plume parameters:

- Plume area of approximately 869,500 ft^2 which is an approximate 0.5% reduction in plume size compared to the 2015 First Quarter. The south plume consists of approximately 446,000 ft^2 for the portion of the plume with TCE concentrations ranging from 5 µg/L to 100 µg/L; 320,900 ft^2 for the portion of the plume with TCE concentrations ranging from 100 µg/L to 1,000 µg/L; and 82,600 ft^2 for the portion of the plume with TCE concentrations ranging from 1,000 µg/L to 10,000 µg/L.
- Average saturated thickness of 8.3 feet (see Attachment D, Table 1).
- Total porosity of 0.4.
- TCE specific gravity of 1.465.

Northeastern plume parameters:

- Plume area of approximately 253,500 ft^2 which is an approximate 5% increase in plume size compared to the 2015 First Quarter. The northeastern plume consists of 183,000 ft^2 for the portion of the plume with TCE concentrations ranging from 5 µg/L to 100 µg/L;

and, 70,500 ft^2 for the portion of the plume with TCE concentrations ranging from 100 µg/L to 1,000 µg/L.

- Average saturated thickness of 4.4 feet (see Attachment D, Table 1).
- Total porosity of 0.4.
- TCE specific gravity of 1.465.

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

Plume Location	Calculated Minimum Volume	Calculated Maximum Volume
Northern Plume	Less than 1 gallon	2 gallons
Southern Plume	2 gallons	8 gallons
Northeastern Plume	Less than 1 gallon	Less than 1 gallon

Therefore the total average minimum and maximum quantities of TCE in groundwater associated with the site are approximately 3 to 11 gallons of TCE.

These calculated quantities document the limited volume of TCE present in groundwater.

5. DATA AVAILABLE IN THIS QUARTER

Analytical data for the 86 wells sampled, including water levels from this sampling event, are included in the Second Quarter 2015 Groundwater Monitoring Report included as Attachment A.

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

Data associated with the installation of wells replacing the 0.75-inch wells are included in Attachment C – Well Replacement Letter Report.

Data associated with the installation of MW-182 on the south side of the property are included in Attachment D – Installation of New Monitoring Well.

Calculations for the estimation of TCE mass for the second quarter are included as Attachment F.

6. ISSUES ENCOUNTERED AND RESOLUTION

The RADD identified five locations where soil vapor monitoring should be performed. These locations included those installed in 2012. As stated in previous quarterly progress reports and other correspondence with ADEQ many of these points had filled with water after installation, therefore these points were abandoned in January 2015. An Addendum to the Soil Vapor

Monitoring Program was submitted to ADEQ on October 2, 2014. Borings were completed in the Fourth Quarter 2014 in accordance with the Shallow Offsite Groundwater Investigation Work Plan submitted to ADEQ on October 30. Offsite soil vapor points and shallow groundwater monitoring wells were installed in January 2015.

7. SCHEDULE

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

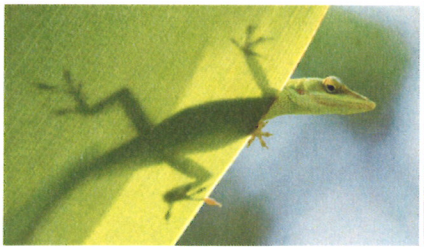
LIST OF ATTACHMENTS

VOLUME 1

Attachment A: Second Quarter 2015 Groundwater Monitoring Report

VOLUME 2

Attachment B: Second Quarter 2015 Soil Vapor Monitoring/Vapor Intrusion Report
Attachment C: Well Replacement Letter Report
Attachment D: Installation of New Monitoring Well
Attachment E: Deed Restrictions/Property Agreements
Attachment F: TCE Mass Calculations



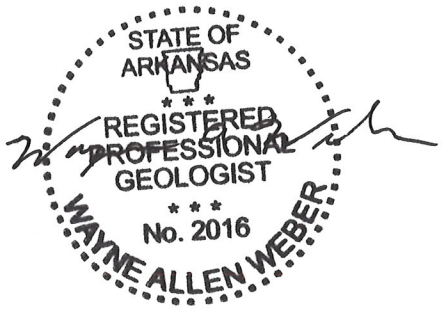
ATTACHMENT A
Second Quarter 2015 Groundwater Monitoring Report
Whirlpool Facility
Fort Smith, Arkansas

Prepared for:
Whirlpool Corporation

Prepared by:
Ramboll Environ US Corporation

Date:
August 2015

Project Number:
3437470A



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1 Introduction

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

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

This report describes the results of the groundwater monitoring event performed between April 13 and 16, 2015. This event included measuring water levels on April 13 from 98 wells and collection of groundwater samples from 86 wells consisting of 55 wells denoted as plume boundary, onsite, or offsite wells according to the RADD plus five wells sampled on the northeast corner of the Whirlpool property (MW-87 through MW-91), four wells sampled on the Boys and Girls Club property (MW-96 through MW-99), nine wells sampled for in-situ chemical oxidation (ISCO) monitoring (MW-23, MW-24, MW-81, MW-82, MW-92 through MW-95 and MW-172) and thirteen additional wells sample to support the evaluation of the source area, plume boundary, and shallow groundwater.

[1] ADEQ Comments on the First Quarter Groundwater Report dated June 13, 2014; Ramboll Environ/Whirlpool responses dated July 15, 2014; ADEQ Supplemental Comments on the First Quarter Groundwater Report dated July 31, 2014; and, Ramboll Environ/Whirlpool response dated September 3, 2014. ADEQ Comments on Second Quarter Progress Report dated September 17, 2014 and Ramboll Environ/Whirlpool responses dated October 22, 2014. ADEQ Comments on the Third Quarter Progress Report dated January 12, 2015 and Ramboll Environ/Whirlpool responses dated February 3, 2015. ADEQ Comments on the Fourth Quarter Progress Report dated May 20, 2015 and Ramboll Environ/Whirlpool responses dated June 25, 2015. ADEQ Comments on the First Quarter 2015 Progress Report dated June 12, 2015 and Ramboll Environ/Whirlpool responses dated July 15, 2015.

2 Groundwater Sample Collection and Onsite Activities

ENVIRON performed the Second Quarter 2015 Groundwater Monitoring Event (second quarter event) on behalf of Whirlpool during the week of April 13, 2015. Activities performed during the monitoring event included measuring water levels in site wells and collecting groundwater samples for analysis of volatile organic compounds (VOCs) and monitored natural attenuation (MNA) parameters.

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

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

2.1 Static Water Level Measurements

On April 13, 2015, static water levels and total well depths were measured in a total of 98 monitoring wells. A groundwater level measurement was not obtained from MW-55, due to the property owner not granting access. Monitoring wells were opened to allow water levels to equilibrate to atmospheric conditions prior to their measurement using an electronic water level meter. The instrument was calibrated by the manufacturer prior to its purchase and therefore does not require calibration in the field. The water levels were measured to the nearest 0.01 foot with an accuracy of 0.02 feet per the manufacturer's specification. The water level meter probe and tape (i.e. the only non-dedicated sampling equipment) were decontaminated prior to use at each well by spraying and scrubbing the probe and tape with Alconox detergent mixed with distilled water and then rinsing the probe and tape with distilled water prior to being wiped dry.

The second quarter event static water level measurements are presented in Table 3 along with eight previous water level measurements recorded from project wells.

2.2 Monitoring Well Sampling

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

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

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

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

The groundwater samples were obtained by directly filling the laboratory provided sampling bottles from the pump discharge. VOCs were collected in three 40 milliliter (ml) glass vials that contained hydrochloric acid as a preservative per standard procedures. Samples for assessing Quality Assurance/Quality Control (QA/QC) metrics were collected by alternately filling investigative and QA/QC sample bottles for each parameter. VOC sample bottles for both the investigative and the QA/QC sample were completely filled, purged of headspace and sealed. All other samples (i.e. for non VOC analysis) were collected in appropriate bottles as specified by the method and/or laboratory. Hach Test Kits (all verified with valid expiration dates) were used to measure ferrous iron in the field. Groundwater samples for analysis of dissolved hydrogen concentration were collected by the Microseeps gas stripping procedure (2014 Microseeps).

A total of 86 groundwater samples, eight field duplicate samples, three matrix spike/matrix spike duplicate (MS/MSD) samples and six equipment blanks were collected during the 2015 second quarter event (i.e. week of April 13). Well access was denied by the property owner at MW-55, therefore samples were not collected during this sampling event. Duplicate samples were taken at a frequency of one duplicate sample per ten groundwater monitoring samples. Duplicate samples were collected from ITMW-10, ITMW-13, ITMW-18, IW-74, MW-33R, MW-41, MW-46R and MW-96.

Because monitoring wells contain dedicated or new tubing, the only equipment transferred and used from well to well is the water level meter used to monitor well water levels during purging and stabilization prior to sampling. Equipment rinsate blanks were collected after each of the six water level meters used during the monitoring event were decontaminated to evaluate field decontamination procedures. Equipment rinsate blanks were collected by pouring ASTM Type II deionized water over the decontaminated water level meter probe and tape into the appropriate sample containers. The rinsate blanks were collected after decontamination procedures at wells MW-68 (EB-07-201504 at 16:45), ITMW-17 (EB-02-201504 at 17:35), MW-93 (EB-05-2010504 at 15:10), ITMW-25 (EB-03-201504 at 15:05), MW-56 (EB-06-201504 at 15:20) and MW-180

(EB-01-201504 at 15:00). 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, MW-63, MW-173, MW-177, MW-178, MW-179, MW-180 and MW-181. 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. Due to flood conditions and standing water surrounding well MW-58; low-flow sampling techniques could not be completed. The casing of this well extends above the surrounding standing water by at least an additional foot; therefore it does not appear that standing water has entered the well. Approximately two liters were purged from the well prior to collecting a grab sample. Adequate sample volume was present for all analytical fractions from the wells designated for sampling with the exception of hydrogen samples from MW-50, MW-56, MW-57, MW-58, MW-60, MW-61 and MW-63. See Section 3.4 Data Quality Assessment for additional information.

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

2.3 Other Site Monitoring Activities

During this quarter, samples were collected from outdoor, crawl space, and indoor air on April 22 and 23 from Parcel #3 on Jacobs Avenue at the request of the property owner. Groundwater samples were also collected from MW-173 through MW-181. These wells are screened shallow to assist in evaluating the potential for vapor intrusion from groundwater and as such the data from these wells is further discussed in Attachment B, Second Quarter 2015 Soil Vapor Monitoring and Vapor Intrusion Assessment Report.

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 from 98 wells at the Site were attempted to be collected, during the second quarter event (Table 3) as discussed in Section 2.1. These wells were monitored during this event to provide potentiometric information regarding flow direction at the site.

As stated in the July 15, 2014, letter to ADEQ titled "Response to ADEQ Correspondence dated June 13, 2014 – First Quarter 2014 Progress Report," MW-58 will be replaced when access is granted by the property owner." Access was granted and the well was replaced with new well MW-58R on June 29, 2015. This well will be sampled during the third quarter sampling event.

The static water level measured in the wells ranged from 1.43 feet to just over 21 feet below top of the well casing (btwc) during the monitoring event (as noted above, the depth to water measurement in MW-58 was excluded from assessment of water levels based upon the discussion above). Figure 1 shows the contours of the groundwater elevations based on the monitoring well static water level measurements completed on April 13, 2015, for this second quarter event. Based on the current potentiometric maps, the lateral hydraulic gradient, as an indication of the likely direction of groundwater flow, appears to be consistent with historical conditions, including the presence of a groundwater gradient divide that trends east to west just north of the facility building. As illustrated on the figure, the hydraulic gradient is near zero in the area that extends from the western portion of the north parking lot to just north of Jacobs Avenue. North of this point, the hydraulic gradient is directed generally to the north/northeast. South of this flat area, the direction of the hydraulic gradient is to the southeast. East of this flat hydraulic gradient area the general direction of flow is to the northeast.

Groundwater elevations from shallow groundwater wells (MW-173 through MW-177 and MW-181 located along the north side of Jacobs Avenue and MW-178 through MW-180 located immediately south of Ingersoll Avenue) were evaluated to horizontal flow gradient. Static water levels along Jacobs Avenue decrease from west to east; from a high of 467.56 feet at MW-181 to a low of 457.61 feet at MW-173. The highest shallow groundwater elevations were measured MW-178 and MW-180 (471.94 feet and 471.76 feet, respectively). These results suggest that the shallow groundwater horizontal flow gradient mimics the deeper groundwater flow gradient to the east/northeast. The number and location of shallow groundwater monitoring wells limit this interpretation. It should be noted that the static water level measurement at MW-179 appears inconsistent with both the nearby shallow and deeper static groundwater measurements.

Groundwater elevations from shallow groundwater wells (MW-173 through MW-177 and MW-181 located along the north side of Jacobs Avenue and MW-178 through MW-180 located immediately south of Ingersoll Avenue) were also compared to groundwater elevations from nearby deeper monitoring wells to evaluate vertical flow gradient. Shallow groundwater

monitoring well MW-175 is not located near an associated deeper groundwater monitoring well and was not included in the evaluation. Based on this evaluation a downward vertical flow gradient was observed three of the four well groupings (MW-177/181 and RW-69/MW-70/MW-71, MW-176 and MW-46R and MW-178/179/180 and MW-83) an upward gradient was observed at the eastern most well pairing (MW-173/174 and MW-63).

3.2 Analytical Methods

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

- VOCs: SW846 5030B/8260B
- Chloroethanol: SW846 8015
- Total Iron: SW846 6010
- Total Manganese: SW846 6010
- Alkalinity: SM 2320B
- Ferric Iron: SM 3500-Fe B#4
- Sulfide: SM 4500-H+B
- Sulfate: EPA 300.0
- Chloride: EPA 300.0
- Ammonia: EPA 350.1
- Nitrate: EPA 353.2
- Nitrite: EPA 353.2
- Total Nitrogen: EPA 353.2
- Carbon Dioxide: SM 4500-CO2 D
- Total Organic Carbon: SM 5310C
- Phosphate: SM 4500P-E
- Volatile Fatty Acids: AM21G
- Methane: AM20GAX
- Ethane: AM20GAX
- Ethene: AM20GAX
- Acetylene: AM20GAX
- Hydrogen: AM20GAX

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

3.3 Analytical Results

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

3.3.1 VOC Results

This section presents an evaluation of the VOC data that were collected from the Site during the 2015 second quarter event. TCE results for the second quarter (April groundwater sampling event) are presented on Figures 2A and 2B.

Plume Boundary Wells

As noted within the RADD, 23 monitoring wells are identified as plume boundary wells (Table 2) at the Site. During this quarter an additional four wells were sampled to assist in the boundary evaluation. These four wells are further discussed below in the northeast corner well section. VOC concentrations were detected above the RADD remedial action levels (RALs) (Table 1) in four of the 23 samples collected from the plume boundary wells. Tabulated VOC concentrations measured in these wells during the 2015 second quarter event are presented in Table 5.

Notable results from the second quarter sampling event include:

- ITMW-6: 1,1-Dichloroethane concentration of 4.0 micrograms per liter (µg/L) (this result is consistent with historical ranges for ITMW-6 and is lower than the highest concentration of 1,1-dichloroethane in October 2013 at 6.7 µg/L);
- MW-36: Bromomethane concentration of 14.4 µg/L; and
- MW-61 and MW-63: TCE concentrations of 10.9 and 9.2 µg/L, respectively.

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

The highest concentration of TCE in a boundary well in this second quarter event of 10.9 µg/L was detected in the sample from MW-61 located south of Jacobs Avenue. The second highest concentration of TCE in a boundary well was identified at MW-63 with a result of 9.2 µg/L. This result is consistent with historical TCE concentrations in this well. In 2006, a result of 11.6 µg/L was detected at MW-63.

TCE concentrations continue to remain above the RAL at MW-61 and a down-gradient well was proposed in the Response to ADEQ's Comments on the Second Quarter Progress Report dated October 22, 2014. The proposed well location is north of the northeast corner of Jenny Lind Road and Brazil Avenue. DP-58 was performed at this location and the TCE concentrations in

soil and groundwater were below detection limits at this location. Access to install a monitoring well at this location has not been denied by the city of Fort Smith, but the pending Jenny Lind road construction project will likely subject a well in the city right-of-way at this location to potential damage.

Offsite Wells

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

During the second quarter event, the highest concentration of TCE detected in groundwater samples from the offsite wells was 495 µg/L collected from MW-56. This data is less than the highest TCE concentration identified at MW-56 which was 618 µg/L in March of 2014.

Since 2011/early 2012 TCE concentrations at MW-46R have been trending downward from a high of 680 µg/L in both 2011 and early 2012, to late 2012 through current concentrations of 220 to 482 µg/L. TCE concentrations at MW-41 have also been trending downward. While historically TCE levels fluctuated from quarter to quarter, since October 2012 with a resulting TCE concentration of 620 µg/L levels have continued a fairly steady decrease to the current concentration of 386 µg/L.

Onsite Wells

In accordance with the RADD, 21 monitoring wells are identified as onsite wells (Table 2). Onsite wells designated by the RADD do not include wells identified as plume boundary wells that are located onsite. Onsite wells include four wells north of Ingersoll Avenue and two wells south of Ingersoll Avenue which are north of the Whirlpool northern property fence line, but still located on property owned by Whirlpool Corporation. The remaining onsite wells are located along the perimeter of the former Whirlpool manufacturing facility, within the source area, or south of the source area which includes wells immediately adjacent to the Whirlpool manufacturing building. During this quarter an additional 13 monitoring wells were sampled to assist in the evaluation of onsite concentrations. Tabulated VOC concentrations measured in onsite wells during the second quarter event are presented in Table 5.

VOCs were detected above the RADD RALs in 31 of the 34 groundwater samples collected from onsite wells. Parameters exceeding RALs include: TCE in all onsite wells (except for ITMW-11, ITMW-14, MW-84, MW-88 and MW-90), bromomethane in six wells, carbon tetrachloride in one well, 1,1-dichloroethane (1,1-DCA) in three wells, 1,1-dichloroethene (1,1-DCE) in six wells, cis-1,2-dichloroethene (cis-1,2-DCE) in eight wells, methylene chloride in two wells, 1,1,2,2-tetrachloroethane (1,1,2,2-TCA) in seven wells, tetrachloroethene (PCE) in four wells and vinyl chloride (VC) in six wells.

During the 2015 second quarter event, the maximum onsite TCE concentration measured was 46,700 µg/L at MW-86. Historically MW-25 had contained the highest concentrations of TCE from the onsite wells (MW-86 is located in the linear drainage feature and less than 25 feet east of MW-25). During the second quarter event the TCE concentration in MW-25 was 4,650 µg/L, down approximately 94% from a 2014 high of 71,700 µg/L during the Third Quarter 2014 monitoring event and down 98% from the historical high of 270,000 µg/L in September 2011. These results further document the successful ISCO remediation events performed at the site.

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

Figures 3 and 4 depict trends in TCE concentration at select onsite wells. Figure 3 depicts TCE concentrations at ITMW-17, ITMW-19 and MW-25 over time. The linear trend for TCE concentration is generally stable to decreasing at these three wells, although TCE concentrations at ITMW-19 and MW-25 have shown dramatic decreases in concentration and limited rebound regarding TCE concentrations within the last two quarters. Figure 4 depicts TCE concentrations at the northern onsite wells (MW-33, MW-34 and MW-35R along Ingersoll Avenue) over time. The concentration results for MW-34 and MW-35R exhibit stable to decreasing linear trends. MW-33 has shown fluctuation in TCE concentrations over time; however, the current TCE result of 624 µg/L (MW-33R) is much less than the maximum detected concentration of 1,700 µg/L, measured in September of 2007.

Figure 5 depicts TCE and cis-1,2-Dichloroethene (cis-1,2-DCE) trends at MW-25 over time. The trend line for TCE shows a stable to slightly decreasing trend whereas the trend for cis-1,2-DCE is increasing. It should be noted that both TCE and cis-1,2-DCE show significant decreases compared to historical monitoring results.

Northeast Corner Wells

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

During the second quarter event, samples were collected from these wells as shown on Figure 2A and the samples were analyzed for VOCs. Wells MW-97 through MW-99, located on the Boys and Girls Club property, did not contain detected levels of any VOCs (presented as Plume Boundary Wells in Table 5). MW-88 and MW-90 are located north of the manufacturing building northeast corner (presented within onsite wells in Table 5). MW-90 did not contain detectable levels of VOCs and MW-88 had a TCE value of 0.58J. MW-89 (presented within onsite wells in Table 5) contained TCE at concentration of 15.9 µg/L which is comparable with the level identified during the initial northeast corner investigation in June 2014. The TCE concentrations in MW-87 and MW-91 have increased during each of the four quarter monitoring events

completed with concentrations ranging from 564 µg/L to 758 µg/L and 234 µg/L to 438 µg/L, respectively. However, TCE concentrations in MW-96 through MW-99 on the Boys and Girls Club property are below detection limits (i.e. less than 0.5 µg/L).

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

3.3.2 MNA Results

In accordance with the RADD, 55 monitoring wells are noted as plume boundary, onsite, or offsite wells which are monitored for natural attenuation parameters. During the second quarter event, 31 additional wells (not listed in the RADD) were monitored for field natural attenuation parameters. These additional wells were not monitored for laboratory MNA parameters. Tabulated results are presented in Table 5.

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

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

- Historical groundwater and/or soil chemistry data that clearly demonstrate a trend of decreasing contaminant mass and/or concentration over time at appropriate monitoring points (USEPA, 1998);
- Hydrogeologic and geochemical data that can be used to establish indirectly the type(s) of natural attenuation processes occurring at the site and the rate at which the processes will reduce contaminant concentrations to the cleanup goal (USEPA, 1998); and
- Data from field or microcosm studies which directly demonstrate the occurrence of a specific natural attenuation process at the site and its capacity to degrade the contaminants of concern (USEPA, 1998).

The MNA assessment evaluates predominant electron acceptors, the variability of these electron acceptors, major nutrients, general groundwater quality, key microbial population and enzyme activities, and dissolved gasses. The assessment uses this data to determine the types of organisms that will be able to effectively flourish in the aquifer, how the geochemistry and chemistry of the aquifer impacts MNA processes, how the indigenous microbial population is being supported, the availability of microbial populations, and the presence of reductive dechlorination occurring in the aquifer.

3.3.2.1 Chemical Lines of Evidence

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

Abiotic and Biotic Pathways for Chlorinated Ethenes and Ethane

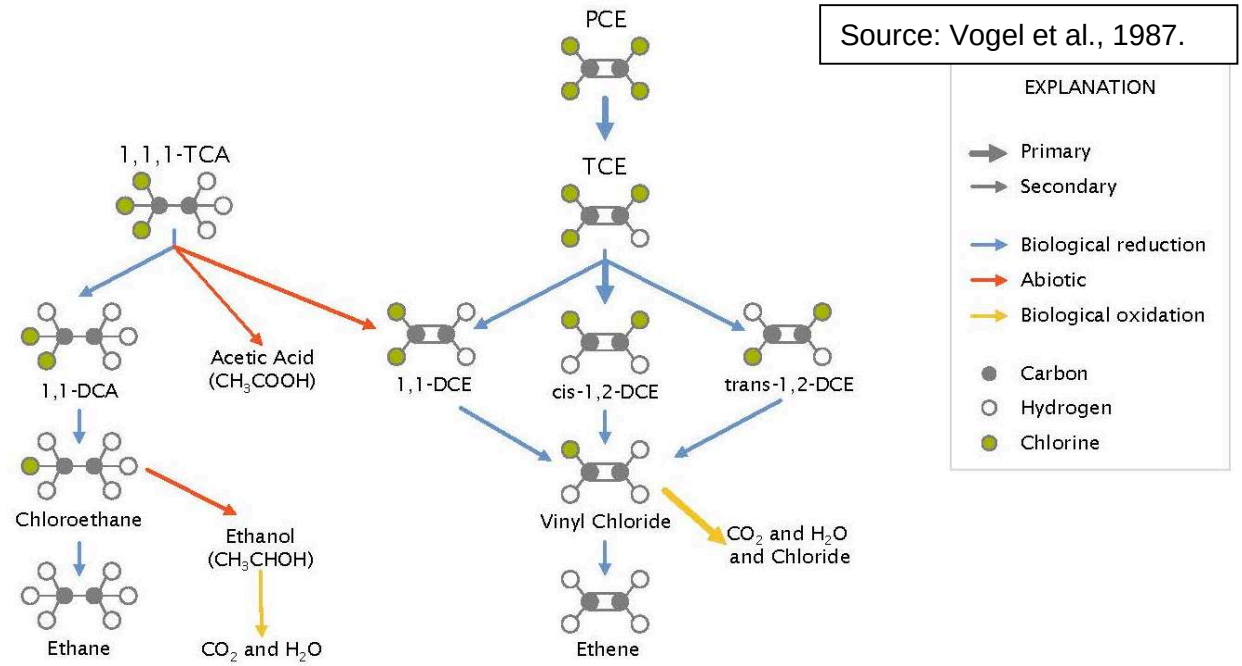

Table 5 presents a summary of analytical results for VOCs in groundwater. These data provide lines of evidence that natural attenuation of TCE is continuing to occur via biological mechanisms in both onsite and offsite groundwater. Groundwater sample results continue to show elevated levels of cis-1,2-DCE in Site monitoring wells, as well as the presence of VC in 14 of the wells monitored. Table 5 also includes the laboratory MNA analytical results and the microbial data.

Sampling MNA parameters at locations where TCE is below 5 µg/L does not provide valuable data when evaluating MNA processes. When TCE concentrations are below 5 µg/L the remedial action level (Maximum Contaminant Level (MCL)) has already been achieved and due to the low concentration further significant reduction in contaminants is not expected within a rapid timeframe. Also in areas where VOC concentrations are at very low levels we're unlikely to observe microbial populations, genes, and other indicator parameters necessary to continue degradation.

3.3.2.2 Geochemical Lines of Evidence

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

Tables 4 and 5 present the groundwater field parameters and MNA analytical and microbial results for the second quarter event. Appendix C includes historical quarterly groundwater field parameters and MNA results. A summary of the key items on Tables 4 and 5 are discussed below:

- The groundwater during this quarter was generally considered to be under bulk aerobic conditions, with 60 out of 86 wells showing dissolved oxygen (DO) concentrations greater than 1 mg/L and only five wells displayed microaerophilic conditions with DO less than 1.5 mg/L. DO levels were low in both the northern and southern plumes.
- The ORP of the groundwater samples ranged from a low of -108.9 millivolts (mV) in MW-22 to a high of 536.3 mV in IW-72 (purged groundwater exhibited a slightly pink color presumably due to ISCO injections in this area in 2009). IW-72 has exhibited the highest ORP measurements during the last year of monitoring. In general, the ORP levels were less than 500 mV in most of the Site monitoring wells, which indicate that the groundwater is under manganese reducing to sulfate reducing conditions.
- In general the northern and southern plumes are under anaerobic to microaerophilic conditions. However when ISCO was applied there was a localized increase in the DO and ORP levels. ISCO injections tend to increase ORP, conductivity, and dissolved oxygen levels.
- The pH of the groundwater ranged from a low of 4.62 in MW-34 to a high of 11.15 in ITMW-19. Although ITMW-11 displayed a pH of 2.74, this low pH does not represent native conditions and was likely due to the ISCO injection. Persulfate decomposition and the formation of sulfuric acid following ISCO injections can lower pH concentrations.
- The alkalinity of the groundwater is relatively low with many of the groundwater samples showing bicarbonate alkalinity concentrations less than 100 mg/L. However, there were thirteen wells that showed alkalinity equal to or greater than 100 mg/L including MW-33R, MW-35R, MW-38, ITMW-6, IW-72, MW-50, MW-60, MW-61, MW-65, MW-66, MW-67 and IW-77. The relatively low alkalinity concentrations in some parts of the plume indicate that the groundwater does not have significant natural buffering capacity in these areas.
- In general pH levels are in the range of 5 to 6 however pH range is affected by ISCO injections for approximately one year. Similar to pH results, the alkalinity also increased

in the northern wells impacted by the ISCO injection. Source area wells have not shown a significant change in alkalinity.

- The temperature of the groundwater ranged from about 14.89° to 22.31° Celsius, with the majority of the temperatures around 15-21° Celsius, which is a range that is conducive to most microbes in groundwater.
- The major competing electron acceptors nitrate, manganese, iron and sulfate were evaluated in Site groundwater samples (Table 5). Nitrate levels were generally present at less than 1 mg/L in most of the monitoring wells. ITMW-6 and ITMW-9, showed elevated levels of nitrate at 22.7 mg/L and 22.3 mg/L, respectively. Manganese concentrations ranged from 0.0049 mg/L in MW-66 to 3.17 mg/L in IW-72. The majority of the wells showed manganese concentrations less than 1 mg/L. Total iron was present in the majority of the groundwater samples at 10 mg/l or less, which was consistent with the low levels of ferrous iron measured in groundwater (<4 mg/L). Elevated total iron levels (>10 mg/L) were observed in MW-33R, MW-50, and MW-63, which are all north of Ingersoll Avenue. MW-41 showed total iron and ferrous iron concentrations at 3.50 mg/L and 3.30 mg/L, respectively, indicating iron reducing conditions are present in the area around this well.). Sulfate concentrations were generally less than 100 mg/L with the exception of IW-76, IW-77, MW-25, MW-32R, MW-34, MW-35R, MW-65, ITMW-5 (102 mg/L), ITMW-11, ITMW-17, ITMW-18, ITMW-19, and IW-80. The wells with the elevated sulfate were likely impacted by ISCO injection. Both the northern and southern plumes displayed low levels of total iron and manganese in the groundwater which appears to represent background levels in the groundwater. These levels were even lower in wells impacted by ISCO in the northern plume. However, the iron and manganese concentration remained fairly consistent throughout the six quarterly sampling events. Throughout the last six quarters of monitoring sulfate, nitrate, and manganese concentrations have generally been stable. Of these compounds, sulfate concentrations were impacted most significantly by ISCO injections.
- The dissolved hydrogen concentrations ranged from 1.4 nanomolar (nM) in MW-27 to 14,000 nM in ITMW-19. The majority of the wells displayed dissolved hydrogen concentrations greater than 1 nM, which indicates that the majority of the plume is under sulfate reducing to methanogenic conditions. Dissolved gasses methane, ethane, and ethane were present in low levels at the site. Ethene levels decrease by more than an order of magnitude in the source area wells after the third ISCO injection. This decrease corresponds to a decrease in the DHC population.
- TOC levels ranged from less than 1 mg/L to a high of 8.8 mg/L in ITMW-4. Similar to the previous quarters more than 80 percent of the groundwater samples displayed TOC levels less than 2 mg/L. Methane, ethane and ethene were detected at low concentrations or were non-detect in groundwater samples throughout the Site (Table 5). These results are likely due to low levels of TOC present in the groundwater, which may be inhibiting bacterial growth.
- Major nutrients, ammonia and phosphate, were evaluated in groundwater and the results in Table 5 indicate that the groundwater contains non-detectable levels of ammonia (< 0.10 mg/L), with the exception of ITMW-4 (0.18 mg/L), ITMW-11 (1.6 mg/L), ITMW-18

(0.25 mg/L), ITMW-19 (0.48 mg/L), IW-77 (0.1 mg/L),) MW-25 (0.49 mg/L), MW-65 (0.47 mg/L), and MW-35R (0.65 mg/L). Phosphate was detected at concentrations ranging from non-detect (< 0.03 mg/L) to a high of 1.2 mg/L in MW-65, which indicates that phosphate is present in non-limiting concentrations to the indigenous microbial community in some areas of the Site groundwater. Average nutrient levels, including ammonia, nitrate, nitrite, and total phosphate have displayed relatively consistent results. In general nitrate levels are slightly higher in the southern plume which may be inhibiting the DHC population. Ammonia and phosphate levels are more elevated in the northern plume than the southern plume which may indicate that key nutrients (nitrogen and phosphorus) may be limiting the microbial population including DHC in the southern plume.

- There are several compounds that have shown non-detect values over the past 6 quarters including volatile fatty acids (lactic acid, propionic acid, butyric acid, pyruvic acid, and acetic acid), sulfide, 2-chloroethanol, and acetylene.

3.3.2.3 Microbial Lines of Evidence

Table 5 provides the microbial results for the groundwater samples which were evaluated using standard groundwater analysis protocols. Table 5 includes the results for the genus DHC, the functional genes, tceA reductase (tceA), BAV1 VC reductase (BVC) and VC reductase (VCR). Historical quarterly microbial results are presented in Appendix C. Similar to the 2014 and first quarter 2015 sampling results, the DHC microbial population was detected at elevated levels in MW-38 (5,900 cells/mL); a location that is relatively close to the source area. Likewise, the BVC gene was also detected at elevated levels (1850 cells/mL) in MW-38, which indicates the potential for complete reductive dechlorination in this area. In addition to MW-38, IW-73 and IW-74 showed elevated levels of DHC (528 and 1140 cells/mL, respectively) and BVC gene (137 and 298 cells/mL, respectively). The following wells displayed DHC concentrations greater than 30 cells/mL: ITMW-18, MW-38, IW-73, IW-74, MW-22, MW-41, MW-46R, MW-58 and RW-69.

The DHC population generally peaked during the monitoring event in August 2014. The bulk of the microbial population is located within the source area and the peak occurred in between the second and third ISCO injection events in May and October 2014. To date the highest population of DHC has been identified at MW-38. Pre-ISCO application the population was approximately 50,000 cells/mL. The population peaked at almost 150,000 cells/mL in August 2014, and has since declined to approximately 6,000 cells/mL. In general the DHC population has declined since the last ISCO injection which is to be expected given the oxidative conditions which inhibit the growth and sustainability of DHC. However various field studies have shown that DHC populations can rebound to native levels with time.

The chemical, geochemical and microbial data from the second quarter event are similar to the quarterly monitoring events in 2014 and first quarter 2015. The chlorinated VOC (cVOC) results demonstrate that reductive dechlorination is significantly occurring in various locations of the plume. For example, near monitoring wells MW-38, IW-73, MW-46R, and MW-58, the groundwater samples showed significant levels of DHC, which corresponded to significant levels of cis-1,2-DCE, in comparison to the parent compound TCE. In addition, significant VC

levels were observed in MW-38 and IW-73, in comparison to the parent compound cis-1,2-DCE. The cis-1,2-DCE to TCE micromolar ratio was 0.91 and 0.1 for MW-38 and IW-73, respectively. These results indicate significant levels of TCE was being converted to cis-1,2-DCE in the groundwater around these wells. The VC to cis-1,2-DCE ratio was 0.03 and 0.37 in MW-38 and IW-73, respectively, indicating that cis-1,2-DCE was being converted to VC at a lower level in comparison to TCE to cis-1,2-DCE in MW-38. TOC and ethene were also observed in MW-38, which indicate that there is organic carbon in this area and that complete reductive dechlorination is occurring. The lower levels of reductive dechlorination observed in this plume is likely due to the low levels of TOC observed in various locations throughout the plume and the elevated DO levels.

3.4 Data Quality Assessment

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

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 Ramboll Environ Field Procedures.

3.4.2 Laboratory Analytical Data

All VOC (SW846 5030B/8260B) analytical results for the 55 RADD plume boundary, onsite, and offsite wells received data validation by an ENVIRON Project Chemist. During the data validation process, data validation qualifiers were assigned to the results per USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Review (June 2008), as necessary, to indicate potential limitation on use of the data. In addition, data qualifier codes were added to the results to indicate the reason(s) for qualification and the associated bias direction, if discernable.

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

General Usability Assessment

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

The data quality for VOCs was generally acceptable. A number of analytes were qualified as non-detect due to method and trip blank contamination. This contamination generally originates from carry over on the instrument, from common laboratory contaminants used in the laboratory and from cross contamination during shipping and storage of samples.

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

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

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

- **Precision.** The MS/MSD relative percent difference (RPD) results for VOCs and the field duplicate RPD VOC results satisfied applicable precision criteria. Analyte recovery for trichloroethene from well MW-46R performed at dilution showed relatively low precision performance. Laboratory dilution calculations were reviewed and were determined to be accurate. The more conservative (higher) concentrations were reported in tabular form and are used for the purpose of site evaluation.

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

- **Completeness.** Completeness is a measure of the number of valid measurements obtained in relation to the total number of measurements planned. Completeness is expressed as the percentage of valid or usable measurements to planned measurements. No data were rejected during the validation process. As such, the completeness for the 2015 second quarter event is 100%.

- **Representativeness.** Representativeness is a qualitative parameter which expresses the degree to which sample data accurately and precisely represents a characteristic of a population, parameter variations at a sampling point, or an environmental condition. The agreement between the field duplicate results was used to assess representativeness. The general agreement between the field duplicate results is considered to indicate that the samples collected are adequately representative of the medium sampled.
- **Comparability.** In essence, comparability was maintained by consistency in sampling conditions, selection of sampling procedures, sample preservation methods, analytical methods and data reporting units.

4 Plume Stability

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

Table 6 presents a historical summary of TCE and degradation products, cis-1,2-DCE and VC, concentrations in groundwater samples. These values are used for the analysis of trends described in the remainder of this section. For purposes of the following discussion, the 68 wells at the Site at the time the RADD was issued by ADEQ and 16 monitoring wells installed in 2014 have been categorized as those located in the northern plume (generally MW-24 and wells to the north characterized by groundwater gradient towards the north-northeast), those located in the northeast corner plume (generally northeast of MW-22 characterized by hydraulic gradient to the northeast), those located in the southern plume (generally south of MW-24 characterized by groundwater gradient towards the south-southeast) and source area wells, a subset of the southern plume wells, located near the northwestern corner of the Whirlpool manufacturing building characterized by TCE concentrations greater than 1,000 µg/L. Monitoring wells MW-87 through MW-91, located on Whirlpool property in the vicinity of the northeast corner groundwater plume that extends from the Whirlpool property to property owned by the Boys and Girls Club and monitoring wells MW-92 through MW-95 and MW-172, located near the source area, are included in the plume stability evaluation for the first time this quarter. Monitoring wells MW-97 through MW-99 located on Boys and Girls Club property are not included as there is not enough data to establish temporal trends.

4.1 Lines of Evidence

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

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

4.1.1 Statistical Analysis of Temporal Trends

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

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

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

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

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

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

The trend analysis performed for groundwater concentrations from 2009 (when installation of the last of the current wells used for monitoring in accordance with the RADD was complete) through second quarter 2015 are summarized in Tables 7 and 8. Two wells, MW-42B and MW-43, were abandoned in 2014 and no statistical evaluation was performed for these wells. The following is the list of wells in each category (this list is only presented for evaluation of plume stability):

- **Northern Plume Wells (43 wells)**. MW-23, MW-24, MW-27, MW-28, MW-31, MW-32, MW-33, MW-34, MW-35R, MW-36, MW-39, MW-40, MW-41, MW-46R, MW-50, MW-55, MW-56, MW-57, MW-58, MW-60, MW-61, MW-62, MW-63, MW-65, MW-66, MW-67, MW-68, RW-69, MW-70, MW-71, IW-72, IW-73, IW-74, IW-75, IW-76, IW-77, IW-78, IW-79, IW-80, MW-81, MW-82, MW-83 and MW-84.
- **Northeast Corner Plume Wells (5 wells).** MW-87, MW-88, MW-89, MW-90 and MW-91.
- **Southern Plume Wells (34 wells)**. ITMW-1, ITMW-2, ITMW-3, ITMW-4, ITMW-5, ITMW-6, ITMW-7, ITMW-9, ITMW-10, ITMW-11, ITMW-12, ITMW-13, ITMW-14, ITMW-15, ITMW-16, ITMW-17, ITMW-18, ITMW-19, ITMW-20, ITMW-21, MW-22, MW-25, MW-26, MW-29, MW-30, MW-37, MW 38, MW-85, MW-86, MW-92, MW-93, MW-94, MW-95 and MW-172.
- **Source Area Wells (16 wells)**. ITMW-11, ITMW-12, ITMW-15, ITMW-17, ITMW-18, ITMW-19, MW-25, MW-37, MW-38, MW-85, MW-86, MW-92, MW-93, MW-94, MW-95 and MW-172.

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

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

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

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

- Seven wells exhibit an increasing trend for TCE concentrations.

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

In addition, Table 9 indicates that the average TCE concentration for wells in the northern plume decreased from 384 µg/L in April 2009 to 173 µg/L in April 2015.

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

- Four wells (MW-56, MW-57, MW-66 and MW-67) had concentrations during the 2015 second quarter that were within historical ranges of detected values;
- TCE concentrations at IW-77 have decreased significantly following the second ISCO injection event in May 2014 (decreased from 1,460 µg/L in May 2014 prior to injection to 153 µg/L in April 2015 which is the lowest TCE concentration ever measured at this well (installed and first sampled in 2009));
- MW-61 had a concentration marginally exceeding the historical maximum concentration (10.9 µg/L versus 10.2 µg/L); and
- MW-55 has not been sampled since October 2013 because access has not been granted by the property owner (the property owner provided access since the April monitoring event; therefore, MW-55 has been replaced with new well MW-55R and will be sampled during the third quarter 2015 event).

- **Northeast Corner Plume Wells (five wells):** The five wells located on Whirlpool property in the area of the northeast corner plume have been sampled four times between June 2014 and April 2015. This allows for statistical analysis of temporal trends over this less than one year period but does not allow for the interpretation of long-term temporal trends in these wells. The TCE concentrations in MW-87 and MW-91 have increased during each of the four quarter monitoring events completed with concentrations ranging from 564 µg/L to 758 µg/L and 234 µg/L to 438 µg/L, respectively. However, TCE concentrations in MW-96 through MW-99 on the Boys and Girls Club property are below detection limits (i.e. less than 0.5 µg/L).
- **Southern Plume Wells (34 wells):** As described in more detail below, our determination that a majority of the wells exhibit little or no TCE or a decreasing or stable TCE concentration trend is based on the fact that that 30 of 34 (88%) southern wells exhibit either little or no TCE or a decreasing or stable TCE concentration trend. The trend analysis for the 34 wells associated with monitoring the southern plume indicates the following:
  - Ten wells exhibit a stable trend for TCE concentrations.
  - Fourteen wells exhibit a decreasing trend for TCE concentrations.

- Four wells exhibit no trend regarding TCE concentrations (TCE concentrations at three of these wells, consisting of ITMW-16, ITMW-20 and MW-26, have been non-detect or less than 1 µg/L since October 2011). TCE concentrations at the fourth well with no trend, MW-85, have decreased significantly following the third ISCO injection event in late October and early November 2014 (concentrations decreased at MW-85 from 5,820 µg/L in October 2014 prior to injection to 256 µg/L in April 2015, which is the lowest TCE concentration ever measured at this well).
- Three wells exhibit TCE concentrations below PQLs.
- Three wells (ITMW-6 and ITMW-10 located south of the former manufacturing building and MW-38 located immediately north of Area 1) exhibit an increasing trend for TCE concentrations. MW-38 is a source area well and is discussed further below. ITMW-6 had a TCE concentration of 3.7 µg/L during the 2015 second quarter that was within historical range of detected concentrations and demonstrated an increasing concentration trend for cis-1,2-DCE. ITMW-10 will continue to be monitored regarding the increasing trend of TCE concentrations near the south central boundary of the building.

- **Source Area Wells (16 wells):** The sixteen source area wells showed predominantly decreasing or stable concentration trends for TCE (eight wells decreasing and six wells stable) and cis-1, 2-DCE (five wells decreasing and seven wells stable). Only one of the source area wells, ITMW-38, demonstrated an increasing concentration trend for TCE and the TCE concentration at ITMW-38 during the second quarter event was within historical ranges of detected values. ITMW-17 demonstrated an increasing concentration trend for VC.

4.1.2 Isoconcentration Maps

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

Figure 2A of this report does show TCE concentrations exceeding 5 µg/L on and near the northeast corner of the facility. The presence of TCE in this area does not necessarily represent an expansion of the plume beyond the bounds of its historical maximum extent.

The 2014 second quarter groundwater monitoring event was the first time that the TCE concentration at MW-61 well exceeded 5 µg/L, requiring that the isoconcentration line be extended to include MW-61. This trend continued during the 2015 second quarter event, with a TCE concentration of 10.9 µg/L reported at MW-61. Therefore, MW-61 continues to be included within the 5 µg/L plume boundary.

4.1.3 Concentration vs. Time Plots

The average (arithmetic mean) of the detected TCE, cis-1,2-DCE and VC concentrations were calculated for each of the 16 comprehensive groundwater monitoring events conducted at the Site beginning in 2009 and are summarized in Table 9. Figures 6 through 10 show the average concentrations versus time for the combined northern and southern plume wells, the northern plume wells, the southern plume wells, the source area wells and the northeast corner plume wells, respectively. Decreases in average concentrations for TCE, cis-1,2-DCE and VC are noted for the combined northern and southern plume wells, southern plume wells and source area wells. The average concentrations of TCE, cis-1,2-DCE and VC in the northern plume wells are decreasing, but at a moderate rate compared to the remainder of the wells. Average TCE and cis-1,2-DCE in the northeast corner wells have been increasing over the less than one year time period since they were installed.

TCE and cis-1,2-DCE concentration versus time charts are also provided for pairs of wells located in the southern plume, source area and two located in the northern plume (Figure 11-13). As shown on Figure 11, although TCE concentrations have been increasing in ITMW-10 (primarily during the six most recent sampling events) concentrations of cis-1,2-DCE in ITMW-10 and in nearby ITMW-9 have been decreasing. The concentration of TCE at ITMW-9 shows a stable trend. Figure 12 shows concentration trends for ITMW-19 and MW-25 located in the source area; concentrations are generally decreasing with decreases of one to two orders of magnitude following the third ISCO injection event in the source area. Figure 13 shows that although concentrations of TCE and cis-1,2-DCE have overall increasing trends at IW-77, individual concentrations have been decreasing over the last three quarters and overall trends are decreasing at the next down-gradient monitoring well IW-76. Figure 14 shows TCE concentrations at MW-61 increasing above historical maximums.

4.2 Summary of Plume Stability

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

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

The southern plume is characterized by:

- A relatively flat south, southeast potentiometric gradient;
- Source area (Area 1) TCE concentrations greater than 1,000 µg/L;
- An aerial extent of approximately 869,500 square feet (ft^2) (predominately located under the footprint of the Whirlpool building); and
- A decreasing trend in average TCE concentrations.

The northern plume is characterized by:

- A north-northeast potentiometric gradient that is flat in the south portion of the north plume but steepens to north-northwest;
- TCE concentrations generally between 100 and 1,000 µg/L;
- An aerial extent of approximately 486,000 ft^2 located north of the Whirlpool building and extending to the residential area to the north and northeast; and
- A decreasing trend in average TCE concentrations.

The northeast plume is characterized by:

- An east, northeast potentiometric gradient;
- TCE concentrations generally between 5 and 800 µg/L;
- An aerial extent of approximately 253,500 ft^2 located northeast of the Whirlpool building and extending to property owned by the Boys and Girls Club, but offsite groundwater TCE concentrations are only slightly elevated above MCLs; and
- Concentrations at MW-87 and MW-91 have increased since first installation and sampling in June 2014. There is not enough data to establish long-term temporal trends.

5 ISCO Remedial Effectiveness

This section includes discussion of 2015 second quarter TCE concentrations in groundwater and field measured parameters as they relate to the effectiveness of the three 2014 ISCO injection events completed in Area 1, the supplemental neck area, Area 2 and Area 3. Further discussion of the three 2014 ISCO injection events are found in the 2014 quarterly progress reports and the 2014 Annual Progress Report. The percent reduction in TCE concentrations was calculated for individual wells and for grouping of wells in areas where ISCO injections occurred. If a well had not been sampled in April 2015 the most recent result available was used to calculate the sum of TCE concentrations for each area.

Table 10 presents a comparison of baseline (September and October 2014) and 160-day monitoring results (April 2015) for wells located near Area 1. The post injection 160 day monitoring results indicate TCE concentration decreases in the monitoring wells ranged from 12% to 100% (TCE concentrations increased in four monitoring wells) relative to baseline concentrations. Concentration increases relative to baseline concentrations included an 11.7% increase at ITMW-17 and increases ranging from 6% to 20% at MW-93, MW-94 and MW-95 located outside of the injection area and down-gradient beneath the former Whirlpool manufacturing building. The sum of TCE concentrations decreased from approximately 944,213 µg/L in September/October 2014 to approximately 293,849 µg/L in April 2015 approximately 160 days following injection (~69% decrease).This represents a further decrease relative to post injection 60 day monitoring results in December 2014 when the sum of TCE concentrations had decreased to approximately 323,046 µg/L (~66% decrease).

MW-86 is located near the former linear drainage feature where the highest concentrations of TCE in groundwater have historically been measured. Table 11 presents historic data from May 2014 (prior to the second injection event) for MW-86 and adjacent wells MW-25 and MW-85 through April 2015. The sum of TCE concentrations in these three wells has decreased from approximately 553,470 µg/L in May 2014 to approximately 51,606 µg/L in April 2015 (91% decrease) and has decreased more than 74% relative to the December 2014 sum of 199,320 µg/L.

Table 12 summarizes the TCE concentrations from wells in the supplemental neck area. The sum of TCE concentrations in the supplemental neck area decreased from approximately 1,296 µg/L prior to the second injection event in May 2014 to 367 µg/L in April 2015 (~72% decrease). This represents a further decrease relative to post injection 60 day monitoring results in January 2015 when the sum of TCE concentrations had decreased to approximately 382 µg/L (70% decrease). Similarly, Table 13 summarizes the TCE concentrations from wells in the area of Area 2 and Area 3. The sum of TCE concentrations in Area 2 and Area 3 decreased from approximately 3,864 µg/L prior to the second injection event to 786 µg/L in April 2015 (~80% reduction). This represents a further decrease in TCE concentrations in Area 2 and Area 3 since January 2015 when the sum was 1,211 µg/L (~69% reduction).

The field parameters for Area 1, the supplemental neck area and Areas 2 and 3 are summarized in Tables 14 through 16, respectively. At the end of the injection on November 4, 2014, a persulfate concentration greater than 1% of the concentration of persulfate in the BASP

solution placed in the injection points (approximately 1,200 mg/L) was measured in seven monitoring wells in the Area 1 injection area (ITMW-11, ITMW-15, ITMW-19, MW-25, MW-86, MW-92 and MW-172). In April 2015, roughly 160 days after the last injection event in Area 1, persulfate concentrations have decreased yet are still greater than 1,200 mg/L at seven monitoring wells ITMW-11, ITMW-18, ITMW-19, MW-25, MW-85, MW-86 and MW-172. Persulfate concentrations greater than 1,200 mg/L also are present at two monitoring wells in the supplemental neck area (MW-24 and MW-84) and at three wells in Areas 2 and 3 (MW-35R, MW-65 and IW-77) approximately 10 months following the May/June 2014 injection event.

Similarly, although ORP values have decreased since the last injection event in each area, elevated values remain in many monitoring wells including seven wells (ITMW-11, ITMW-12, ITMW-18, ITMW-19 MW-25, MW-85 and MW-86) in Area 1, three wells in the supplemental neck area (MW-24, MW-83 and MW-84) and MW-77 in Areas 2 and 3. The pH levels in many wells have decreased from the elevated levels that were measured during and immediately after injection in each area yet the pH levels in April 2015 at several wells are slightly higher than baseline levels measured prior to injection.

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

- The sum of the TCE concentrations in wells in Area 1 (IW-127, IW-141, IW-147, IW-152, IW-153, IW-157, MW-25, MW-38, MW-85, MW-86, MW-92, MW-93, MW-94, MW-95, MW-172, ITMW-11, ITMW-12, ITMW-15, ITMW-17, ITMW-18 and ITMW-19) decreased from approximately 944,213 µg/L prior to the third injection event in September and October to approximately 293,849 µg/L in April, roughly 160 days following the last injection event in this area (~69% decrease). Notable decreases in TCE concentrations (greater than 90%) were observed at MW-25, MW-85, ITMW-11, ITMW-15, ITMW-18 and ITMW-19.
- The sum of the TCE concentrations in wells in the supplemental neck area (IW-101, MW-23, MW-24, MW-83 and MW-84) decreased from approximately 1,296 µg/L to approximately 367 µg/L roughly nine months following the last injection event in this area for an approximate 72% decrease.
- The sum of the TCE concentrations in wells in Area 2 and Area 3 (MW-34, MW-35R, MW-36, MW-65, MW-81, MW-82, IW-77, IW-78, IW-79, IW-80 and IW-115) decreased from approximately 3,864 µg/L to approximately 786 µg/L roughly nine months following the last injection event in this area for an approximate 80% decrease.
- Overall TCE concentrations continue to decrease in the area of ISCO injections relative to the preceding sampling event (January 2015) in Area 2 and Area 3 and to a lesser extent in Area 1 and the supplemental neck area.

6 Summary and Conclusion

Ramboll Environ performed the 2015 Second Quarter Groundwater Monitoring Event (second quarter event) on behalf of Whirlpool during the week of April 13, 2015. The quarterly monitoring was conducted for collection of groundwater samples for analysis of VOCs and MNA parameters defined by the RADD as well as additional parameters not included in the RADD.

- The groundwater potentiometric surface observed during the second quarter event is consistent with that historically observed at the Site.
- The direction of the lateral hydraulic gradient continues to be influenced by a divide located just south of Ingersoll Avenue with directions of the hydraulic gradient predominantly to the northeast and south on either side of the general divide.
    - Groundwater north of the divide is flowing in a northeasterly direction; and
    - Groundwater south of the divide is flowing in a southern/southeasterly direction.
- Second quarter event groundwater monitoring data shows generally stable to decreasing trends for TCE concentrations.
    - Plume boundary well data continue to show results generally consistent with historical TCE concentrations;
    - Offsite well data are similar to previous monitoring events and continue to show generally stable to decreasing TCE concentration trends; and
    - Onsite well data continue to show generally stable to decreasing TCE concentration trends; although, the data has been influenced by the ISCO injections.
- Second quarter event groundwater monitoring data in conjunction with historical data demonstrate that natural attenuation of TCE is occurring via biological mechanisms in both onsite and offsite groundwater.
- The ISCO events performed in 2014 continue to be effective with TCE concentration reductions as follows:
    - Approximately 91% decrease at source area wells MW-25, MW-85 and MW-86;
    - Supplemental neck area decrease of approximately 72% since May 2014; and
    - Approximately 80% decrease at wells in Areas 2 and 3.

7 References

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Tables

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

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

Notes:

RADD = Remedial action decision document

µg/L = Micrograms per liter

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

(2) = USEPA tapwater 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		

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

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

TABLE 3
SUMMARY OF MONITORING WELL STATIC WATER LEVEL MEASUREMENTS SECOND QUARTER 2015
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Coordinates		TOC Elevation (feet)	Top of Screen Elevation (feet)	Bottom of Screen Elevation (feet)	Screen Length (feet)	Top of screen Depth	Bottom of screen Depth	Screened Interval (feet)	Static Water Level Elevation (feet)								
	Easting (feet)	Northing (feet)								10/1/2012	10/14/2013	3/5/2014	3/25/2014	5/12/2014	7/28/2014	10/13/2014	1/12/2015	4/13/2015
ITMW-1	591383	368913	476.93	460.43	446.68	13.75	16.50	30.25	16.50 - 30.25	462.88	462.43	461.13	460.84	461.70	462.53	463.49	462.15	462.32
ITMW-2	591189	369021	474.97	462.22	447.77	14.45	12.75	27.20	12.75 - 27.20	465.70	465.92	462.19	461.98	462.89	463.65	464.36	464.27	463.55
ITMW-3	591306	369075	474.72	464.07	449.27	14.80	10.65	25.45	10.65 - 25.45	463.09	467.17	461.67	461.43	462.31	463.08	463.52	460.27	462.96
ITMW-4	591251	368208	478.19	459.99	445.99	14.00	18.20	32.20	18.20 - 32.20	462.62	461.99	461.10	460.81	461.54	462.10	463.09	466.85	462.18
ITMW-5	590982	368205	478.93	459.03	449.28	9.75	19.90	29.65	19.90 - 29.65	462.43	456.54	460.96	460.67	461.37	461.91	462.63	460.83	462.03
ITMW-6	590923	367970	483.04	461.39	446.89	14.50	21.65	36.15	21.65 - 36.15	462.18	454.74	460.85	460.58	461.29	461.68	462.63	466.20	461.94
ITMW-7	590546	368323	481.95	460.05	445.05	15.00	21.90	36.90	21.90 - 36.90	462.49	457.98	461.75	461.70	462.33	462.48	463.40	461.47	463.00
ITMW-9	591256	368146	481.90	461.95	448.45	13.50	19.95	33.45	19.95 - 33.45	462.52	456.53	461.00	460.72	461.45	461.96	462.92	461.68	462.07
ITMW-10	590978	368157	480.84	458.19	447.24	10.95	22.65	33.60	22.65 - 33.60	462.46	458.75	460.95	460.99	461.39	461.92	462.84	460.95	462.03
ITMW-11	590978	369040	474.07	458.82	445.37	13.45	15.25	28.70	15.25 - 28.70	465.82	463.43	462.68	462.52	463.27	463.97	464.82	459.11	464.15
ITMW-12	590998	369007	476.67	461.67	446.67	15.00	15.00	30.00	15.00 - 30.00	463.22	464.77	462.40	462.21	463.12	463.73	464.56	466.49	463.86
ITMW-13	591047	369052	477.79	463.79	448.79	15.00	14.00	29.00	14.00 - 29.00	463.69	464.34	462.40	462.23	463.10	463.74	464.56	464.60	463.84
ITMW-14	591098	369056	477.30	462.50	447.80	14.70	14.80	29.50	14.80 - 29.50	461.72	468.88	462.33	462.14	463.04	463.66	464.46	461.08	463.75
ITMW-15	590944	369043	474.50	459.50	444.50	15.00	15.00	30.00	15.00 - 30.00	465.41	463.54	462.74	462.69	463.40	463.97	464.81	462.39	463.59
ITMW-16	590967	369100	478.79	461.79	446.79	15.00	17.00	32.00	17.00 - 32.00	463.38	466.48	462.74	462.49	463.38	463.87	466.70	468.22	464.07
ITMW-17	590864	369051	477.90	461.90	446.90	15.00	16.00	31.00	16.00 - 31.00	463.19	466.20	462.52	462.39	463.25	463.79	464.57	462.77	463.94
ITMW-18	590976	368955	473.55	458.55	443.55	15.00	15.00	30.00	15.00 - 30.00	463.35	463.99	462.41	462.13	463.09	463.68	464.48	458.99	463.80
ITMW-19	590890	368961	476.25	460.25	445.25	15.00	16.00	31.00	16.00 - 31.00	463.25	463.65	462.51	462.31	463.20	463.76	464.54	465.94	463.80
ITMW-20	590370	369042	477.87	463.87	448.87	15.00	14.00	29.00	14.00 - 29.00	463.51	462.81	463.24	463.03	463.76	464.02	464.83	463.55	464.48
ITMW-21	590629	368898	476.52	460.52	445.52	15.00	16.00	31.00	16.00 - 31.00	463.27	461.71	462.95	463.04	463.54	463.93	464.66	462.56	464.28
MW-22	591853	368913	473.93	459.93	444.93	15.00	14.00	29.00	14.00 - 29.00	463.62	462.92	461.38	461.27	462.08	463.04	463.91	461.91	462.56
MW-23	590892	369238	475.80	461.80	446.80	15.00	14.00	29.00	14.00 - 29.00	463.42	463.37	462.74	462.56	463.28	463.99	464.78	465.50	464.13
MW-24	590876	369134	476.39	458.39	443.39	15.00	18.00	33.00	18.00 - 33.00	463.44	463.37	462.76	462.57	463.47	464.67	464.75	464.37	464.12
MW-25	590743	369006	476.89	459.89	444.89	15.00	17.00	32.00	17.00 - 32.00	463.49	463.44	462.81	462.63	463.51	463.96	464.71	464.27	464.19
MW-26	590566	369230	478.05	459.55	444.55	15.00	18.50	33.50	18.50 - 33.50	463.88	463.73	463.28	463.21	464.04	464.35	465.06	463.74	464.72
MW-27	591077	369226	475.42	460.42	445.42	15.00	15.00	30.00	15.00 - 30.00	463.42	463.35	462.69	462.50	463.41	463.99	464.76	462.91	464.11
MW-28	591324	369209	470.49	457.49	442.49	15.00	13.00	28.00	13.00 - 28.00	463.38	463.31	462.52	462.28	463.26	463.29	464.51	458.86	464.33
MW-29	590181	368371	474.91	458.91	443.91	15.00	16.00	31.00	16.00 - 31.00	462.87	462.68	462.66	462.91	463.38	463.30	464.39	468.30	463.93
MW-30	590579	368432	478.99	457.99	442.99	15.00	21.00	36.00	21.00 - 36.00	462.52	462.58	462.29	462.22	462.91	463.16	463.99	467.41	463.62
MW-31	590824	369286	476.03	458.53	448.53	10.00	17.50	27.50	17.50 - 27.50	463.02	463.48	462.63	462.55	463.42	463.95	464.73	460.52	464.23
MW-32[1]	590909	369279	475.68	458.68	448.68	10.00	17.00	27.00	17.00 - 27.00	463.36	463.33	462.72	462.59	463.43	464.60	464.74	463.43	464.12
MW-33[1]	590994	369276	474.88	459.08	449.08	10.00	15.80	25.80	15.80 - 25.80	463.38	463.48	462.70	462.50	463.43	464.00	464.76	462.96	464.25
MW-34[1]	590932	369336	474.29	454.79	444.79	10.00	19.50	29.50	19.50 - 29.50	463.42	463.35	462.76	462.68	463.47	463.96	464.81	463.18	464.23
MW-35R[3]	590994	369333	473.87	454.37	444.37	10.00	19.50	29.50	19.50 - 29.50	463.42	463.35	462.87	462.57	463.42	463.92	464.69	463.30	464.12
MW-36[1]	591079	369329	473.30	461.30	446.30	15.00	12.00	27.00	12.00 - 27.00	463.44	463.44	462.71	462.75	463.53	464.06	464.85	463.33	464.29
MW-37	590972	369028	473.57	458.57	443.57	15.00	15.00	30.00	15.00 - 30.00	463.46	463.46	462.67	462.52	463.37	463.99	464.82	464.09	463.30
MW-38	590960	369040	474.60	459.60	444.60	15.00	15.00	30.00	15.00 - 30.00	463.42	463.42	462.63	462.51	463.40	463.96	464.82	464.76	465.09
MW-39[1]	590833	369421	475.46	455.96	445.96	10.00	19.50	29.50	19.50 - 29.50	463.36	463.36	461.61	462.62	463.48	463.98	464.78	465.00	464.26
MW-40[1]	590998	369622	473.35	455.60	445.60	10.00	17.75	27.75	17.75 - 27.75	463.29	455.04	462.74	462.55	463.50	463.96	464.76	461.60	464.25
MW-41[1]	591061	369469	472.09	453.34	443.34	10.00	18.75	28.75	18.75 - 28.75	463.64	463.48	462.76	462.63	463.44	464.05	464.45	462.71	464.21
MW-46R	591472	369609	465.76	449.16	444.16	5.00	16.60	21.60	16.60 - 21.60	462.86	462.94	462.53	462.18	463.09	463.62	464.28	457.47	462.82
MW-50	591415	370213	463.11	455.11	445.11	10.00	8.00	18.00	8.00 - 18.00	458.39	458.68	455.90	455.19	456.55	458.82	459.81	453.92	457.39
MW-55[1]	591291	369893	465.50	450.00	445.00	5.00	15.50	20.50	15.50 - 20.50	461.59	463.06	462.70	NM	NM	NM	NM	NM	NM
MW-56[1]	591687	369730	463.22	448.72	443.72	5.00	14.50	19.50	14.50 - 19.50	458.33	459.98	457.03	456.49	459.64	460.27	462.55	459.31	NA
MW-57[1]	591690	369811	462.90	448.90	443.90	5.00	14.00	19.00	14.00 - 19.00	457.65	460.08	458.95	457.65	459.65	459.81	460.35	460.62	461.14
MW-58[1]	591570	369907	462.71	450.21	445.21	5.00	12.50	17.50	12.50 - 17.50	461.85	462.01	NM	462.11	462.27	462.71	462.71	461.01	NA

TABLE 3
SUMMARY OF MONITORING WELL STATIC WATER LEVEL MEASUREMENTS SECOND QUARTER 2015
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Coordinates		TOC Elevation (feet)	Top of Screen Elevation (feet)	Bottom of Screen Elevation (feet)	Screen Length (feet)	Top of screen Depth	Bottom of screen Depth	Screened Interval (feet)	Static Water Level Elevation (feet)								
	Easting (feet)	Northing (feet)								10/1/2012	10/14/2013	3/5/2014	3/25/2014	5/12/2014	7/28/2014	10/13/2014	1/12/2015	4/13/2015
MW-60[1]	591710	370193	460.85	448.85	443.85	5.00	12.00	17.00	12.00 - 17.00	455.93	456.27	453.25	453.05	454.50	456.84	458.07	452.54	455.03
MW-61[1]	592003	370175	459.61	449.11	444.11	5.00	10.50	15.50	10.50 - 15.50	451.27	451.98	448.21	450.92	451.92	453.32	452.46	450.65	452.75
MW-62[1]	591791	369569	464.33	448.83	443.83	5.00	15.50	20.50	15.50 - 20.50	457.82	458.95	456.68	457.61	459.04	460.27	460.58	464.03	459.87
MW-63[1]	591994	369560	463.87	447.87	442.87	5.00	16.00	21.00	16.00 - 21.00	459.28	460.23	458.82	457.91	458.96	460.68	461.43	458.42	459.36
MW-65[3]	590980	369335	473.91	454.41	444.41	10.00	19.50	29.50	19.50 - 29.50	463.43	463.26	462.66	462.63	463.42	463.66	464.73	473.57	464.12
MW-66	592280	369855	462.05	449.45	444.45	5.00	12.60	17.60	12.60 - 17.60	457.17	457.51	456.64	456.71	457.79	458.82	452.57	446.54	458.22
MW-67	592291	370027	459.01	449.41	444.41	5.00	9.60	14.60	9.60 - 14.60	455.14	457.33	453.19	454.78	456.90	458.42	449.31	451.40	456.87
MW-68	591173	369815	469.81	455.81	445.81	10.00	14.00	24.00	14.00 - 24.00	463.08	463.31	462.70	462.49	463.44	463.86	464.74	474.49	464.19
RW-69[3]	591170	369678	471.25	456.25	446.25	10.00	15.00	25.00	15.00 - 25.00	463.34	463.33	462.83	462.50	463.43	463.69	464.44	465.32	464.19
MW-70	591162	369693	471.53	NA	NA	NA	NA	NA	NA	463.31	463.28	462.70	462.52	463.43	464.06	464.91	464.01	464.17
MW-71	591170	369695	471.35	NA	NA	NA	NA	NA	NA	463.36	463.33	462.70	462.55	463.43	463.97	464.82	463.64	464.20
IW-72[3]	591056	369590	471.65	456.65	446.65	10.00	15.00	25.00	15.00 - 25.00	463.06	462.13	462.69	462.32	463.24	463.66	464.56	464.33	464.04
IW-73	591060	369503	471.48	NA	NA	NA	NA	NA	NA	463.38	463.43	462.73	462.61	463.45	463.88	464.46	463.67	464.19
IW-74[2,3]	591058	369545	472.06	457.06	447.06	10.00	15.00	25.00	15.00 - 25.00	463.87	462.38	462.75	462.44	463.34	463.93	464.64	463.90	464.09
IW-75	591072	369605	472.17	NA	NA	NA	NA	NA	NA	463.65	463.58	462.63	462.47	463.44	463.89	464.73	464.29	464.07
IW-76	591050	369426	472.26	NA	NA	NA	NA	NA	NA	463.26	463.20	462.54	462.37	463.25	463.83	464.56	463.32	464.01
IW-77[2]	591027	369380	473.01	453.01	443.01	10.00	20.00	30.00	20.00 - 30.00	463.48	463.39	462.75	462.54	463.43	463.89	464.74	464.25	464.17
IW-78	590984	369338	473.49	NA	NA	NA	NA	NA	NA	463.44	463.19	463.24	462.65	463.44	463.87	464.73	464.12	464.14
IW-79	591018	369335	473.84	NA	NA	NA	NA	NA	NA	463.45	463.39	462.71	462.65	463.45	464.03	464.77	464.40	464.14
IW-80[2,3]	591047	369343	473.30	453.30	443.30	10.00	20.00	30.00	20.00 - 30.00	463.24	463.19	462.57	462.44	463.30	463.77	464.62	463.03	464.00
IW-129	590989	368977	473.54	448.99	443.99	5.00	24.55	29.55	24.55 - 29.55	NA	NA	NA	NA	463.08	NM	NM	NM	NM
IW-130	590924	369186	475.58	452.20	447.28	5.00	23.38	28.30	23.38 - 28.38	NA	NA	NA	NA	463.20	NM	NM	NM	NM
IW-131	591006	369339	473.37	453.65	448.65	5.00	19.72	24.72	19.72 - 24.72	NA	NA	NA	NA	463.21	NM	NM	NM	NM
MW-81	590977	369395	473.54	453.54	448.54	5.00	20.00	25.00	20.00-25.00	NA	NA	NA	NA	NA	NA	NA	463.68	464.15
MW-82	591039	369406	473.60	452.60	447.60	5.00	21.00	26.00	21.00-26.00	NA	NA	NA	NA	NA	NA	NA	463.82	464.15
MW-83	590946	369211	475.48	453.48	448.48	5.00	22.00	27.00	22.00-27.00	NA	NA	NA	NA	NA	NA	NA	463.67	464.02
MW-84	590882	369194	475.53	451.53	446.53	5.00	24.00	29.00	24.00-29.00	NA	NA	NA	NA	NA	NA	NA	463.60	463.93
MW-85	590760	369018	474.41	449.41	444.41	5.00	25.00	30.00	25.00-30.00	NA	NA	NA	NA	NA	NA	NA	463.61	464.00
MW-86	590767	368995	473.19	450.19	445.19	5.00	23.00	28.00	23.00-28.00	NA	NA	NA	NA	NA	NA	NA	463.50	463.74
MW-87	592269	368835	470.78	453.78	443.78	10.00	17.00	27.00	17.00-27.00	NA	NA	NA	NA	NA	NA	NA	459.67	459.66
MW-88	592151	369043	468.89	450.89	440.89	10.00	18.00	28.00	18.00-28.00	NA	NA	NA	NA	NA	NA	NA	460.80	459.38
MW-89	592357	369059	466.91	451.91	441.91	10.00	15.00	25.00	15.00-25.00	NA	NA	NA	NA	NA	NA	NA	458.05	458.10
MW-90	592157	369157	466.71	451.71	441.71	10.00	15.00	25.00	15.00-25.00	NA	NA	NA	NA	NA	NA	NA	460.99	459.90
MW-91	592371	368830	468.90	453.90	443.90	10.00	15.00	25.00	15.00-25.00	NA	NA	NA	NA	NA	NA	NA	459.04	459.03
MW-92	590778	368921	473.74	453.74	443.74	10.00	20.00	30.00	20.00-30.00	NA	NA	NA	NA	NA	NA	NA	463.66	464.06
MW-93	590908	368894	477.81	452.81	442.81	10.00	25.00	35.00	25.00-35.00	NA	NA	NA	NA	NA	NA	NA	463.51	463.86
MW-94	591015	368903	477.86	452.86	442.86	10.00	25.00	35.00	25.00-35.00	NA	NA	NA	NA	NA	NA	NA	463.36	463.70
MW-95	590981	368821	477.63	452.63	442.63	10.00	25.00	35.00	25.00-35.00	NA	NA	NA	NA	NA	NA	NA	463.40	463.77
MW-96	592775	369354	457.83	447.83	442.83	5.00	10.00	15.00	10.00-15.00	NA	NA	NA	NA	NA	NA	NA	450.13	449.59
MW-97	592687	369527	459.43	447.93	442.93	5.00	11.50	16.50	11.50-16.50	NA	NA	NA	NA	NA	NA	NA	448.41	448.80
MW-98	592840	369198	461.62	446.62	441.62	10.00	15.00	20.00	15.00-20.00	NA	NA	NA	NA	NA	NA	NA	450.18	449.16
MW-99	592554	368814	466.80	448.30	443.30	5.00	18.50	23.50	18.50-23.50	NA	NA	NA	NA	NA	NA	NA	458.73	458.70
MW-172	590858	369002	472.94	454.94	444.94	10.00	18.00	28.00	18.00-28.00	NA	NA	NA	NA	NA	NA	NA	NA	464.94
MW-173	591973	369624	463.56	458.56	457.56	1.00	5.00	6.00	5.00-6.00	NA	NA	NA	NA	NA	NA	NA	NA	457.61
MW-174	591976	369644	463.45	452.45	451.45	1.00	11.00	12.00	11.00-12.00	NA	NA	NA	NA	NA	NA	NA	NA	457.67
MW-175	591603	369655	464.17	450.67	449.67	1.00	13.50	14.50	13.50-14.50	NA	NA	NA	NA	NA	NA	NA	NA	460.25

TABLE 3
SUMMARY OF MONITORING WELL STATIC WATER LEVEL MEASUREMENTS SECOND QUARTER 2015
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Coordinates		TOC Elevation (feet)	Top of Screen Elevation (feet)	Bottom of Screen Elevation (feet)	Screen Length (feet)	Top of screen Depth	Bottom of screen Depth	Screened Interval (feet)	Static Water Level Elevation (feet)								
	Easting (feet)	Northing (feet)								10/1/2012	10/14/2013	3/5/2014	3/25/2014	5/12/2014	7/28/2014	10/13/2014	1/12/2015	4/13/2015
MW-176	591474	369675	465.24	452.24	451.24	1.00	13.00	14.00	13.00-14.00	NA	NA	NA	NA	NA	NA	NA	NA	463.81
MW-177	591148	369698	471.50	462.50	461.50	1.00	9.00	10.00	9.00-10.00	NA	NA	NA	NA	NA	NA	NA	NA	466.94
MW-178	590973	369232	475.40	468.40	467.40	1.00	7.00	8.00	7.00-8.00	NA	NA	NA	NA	NA	NA	NA	NA	471.94
MW-179	590984	369232	475.39	463.39	462.39	1.00	12.00	13.00	12.00-13.00	NA	NA	NA	NA	NA	NA	NA	NA	462.70
MW-180	590996	369231	475.32	469.32	468.32	1.00	6.00	7.00	6.00-7.00	NA	NA	NA	NA	NA	NA	NA	NA	471.76
MW-181	591156	369695	471.87	465.87	464.87	1.00	6.00	7.00	6.00-7.00	NA	NA	NA	NA	NA	NA	NA	NA	467.56

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, PE, LS, dated May 12, 2009.
IW-129, IW-130, IW-131, and MW-81 to MW-99 surveyed during 2014
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 (MAY 2014)
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (inches)	Date Sampled	Water Level prior to Purging (ft btoc)	Total Depth of Well Casing (feet)	Set Tubing Depth (feet)	Time Sampled	Water Level after Purging (ft btoc)	Purge Volume (gallons)	Purge Rate (mL/min)	Temperature (°C)	Specific Conductivity (µS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
ITMW-1	4	4/15/2015	14.60	33.87	28.9	11:45	14.65	1.5	100	17.36	557	1.87	6.03	-75	4.51	0.00	Clear	ITMW-1-201504
ITMW-2	4	4/15/2015	11.36	26.70	21.7	08:45	11.42	1.2	100	17.83	474	1.53	5.93	131.8	7.15	0.12	Clear	ITMW-2-201504
ITMW-3^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
ITMW-4	4	4/14/2015	16.11	32.64	27.6	16:40	16.11	1.3	100	18.35	230	0.27	6.15	76.9	11.2	1.94	Clear, red/orange flakes	ITMW-4-201504
ITMW-5^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
ITMW-6	4	4/14/2015	21.25	39.30	34.3	14:35	21.25	1.0	100	17.76	1146	2.11	6.11	196.1	5.7	0.00	Clear	ITMW-6-201504
ITMW-7	4	4/14/2015	19.08	38.08	33.1	14:55	19.17	1.5	100	19.37	861	7.50	5.02	207.8	0.88	0.02	Slightly Murky	ITMW-7-201504
ITMW-9	4	4/15/2015	19.80	36.05	31.1	11:20	19.82	1.5	100	18.10	697	2.37	5.83	206	3.75	0.11	Slightly Murky	ITMW-9-201504
ITMW-10	4	4/15/2015	18.81	36.69	28.0	14:35	18.91	0.7	100	20.01	635	2.64	6.19	139.8	4.01	0.02	Clear	ITMW-10-201504
ITMW-11	4	4/15/2015	9.88	29.92	24.9	16:40	9.87	2.0	100	19.45	22280	7.24	2.74	510.6	7.93	0.17	Brown hue	ITMW-11-201504
ITMW-12	4	4/15/2015	12.76	33.62	28.6	14:20	12.76	1.8	100	18.48	926	3.34	5.78	447.8	1.24	0.02	Clear	ITMW-12-201504
ITMW-13	4	4/15/2015	13.89	31.70	26.7	14:30	13.96	3.0	100	17.80	237	1.34	6.04	-86.5	9.95	0.00	Clear	ITMW-13-201504
ITMW-14	4	4/15/2015	13.49	32.57	27.6	09:05	13.57	2.0	100	15.33	162	1.36	6.14	188.4	4.48	0.00	Clear	ITMW-14-201504
ITMW-15	4	4/15/2015	10.29	30.03	25.0	16:00	10.29	1.5	100	20.66	2452	4.98	6.98	49.4	2.98	0.00	Clear	ITMW-15-201504
ITMW-16	4	4/14/2015	14.36	35.87	30.9	17:14	14.81	1.5	100	17.86	82	6.97	6.49	212.7	106.9	0.03	Brown	ITMW-16-201504
ITMW-17	4	4/15/2015	13.87	29.94	24.9	16:30	13.87	1.5	100	19.54	1277	12.69	5.27	39.3	2.83	0.00	Clear	ITMW-17-201504
ITMW-18	4	4/16/2015	9.74	29.31	25.3	10:55	9.84	2.0	100	17.28	5836	5.90	5.82	497.5	5.06	0.03	Clear	ITMW-18-201504
ITMW-19	4	4/15/2015	12.26	34.45	30.5	16:22	12.44	1.8	100	18.35	5710	6.70	11.15	257.7	1.04	0.02	Clear	ITMW-19-201504
ITMW-20	4	4/13/2015	13.41	30.95	24.0	15:35	13.98	0.2	100	17.83	457	4.28	6.53	161.3	0.76	0.00	Clear	ITMW-20-201504
ITMW-21	4	4/14/2015	12.78	33.15	28.2	12:15	12.74	1.8	100	17.69	1801	3.76	5.25	186.7	0.72	0.00	Clear	ITMW-21-201504
MW-22	4	4/13/2015	11.37	29.02	24.0	16:45	11.6	4.8	175	18.18	163	0.90	5.40	-108.9	0.68	0.00	Clear	MW-22-201504
MW-23	4	4/14/2015	11.67	27.86	22.86	17:09	11.66	2.00	100	19.11	1892	0.73	4.92	-84.4	2.17	0.00	Clear	MW-23-201504
MW-24	4	4/16/2015	12.28	32.31	27.31	11:30	12.28	0.66	100	19.68	2775	0.17	4.23	549.3	1.98	NM	Clear	MW-24-201504
MW-25	4	4/16/2015	12.68	34.45	29.5	13:25	12.86	2.0	100	20.26	12454	8.67	5.35	520.6	14.5	0.15	Clear	MW-25-201504
MW-26	4	4/13/2015	13.35	34.92	28.0	15:40	13.55	1.1	100	16.47	1127	1.95	5.18	162.1	1.81	0.00	Clear	MW-26-201504
MW-27	4	4/13/2015	11.31	30.00	25.0	16:15	11.33	3.0	100	17.87	202	2.08	5.77	229	21.8	0.00	Clear	MW-27-201504
MW-28	4	4/13/205	16.60	27.24	22.0	15:00	17	1.2	100	18.11	315	0.84	6.37	42.9	2.48	0.00	Clear	MW-28-201504
MW-29	4	4/14/2015	11.03	30.07	25.1	12:25	11.09	1.5	100	17.80	181	5.34	5.19	167.2	6.01	0.00	Clear	MW-29-201504
MW-30^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-31R	2	4/14/2015	11.76	27.50	22.0	17:45	11.79	2.5	100	18.31	553	0.49	5.50	205.6	4.68	1.66	Clear	MW-31-201504
MW-32R	2	4/15/2015	11.51	29.82	24.0	09:20	11.54	1.4	100	18.22	1359	0.31	5.03	366.3	5.46	0.00	Clear	MW-32-201504
MW-33R	2	4/15/2015	11.64	29.15	24.0	11:55	11.1	1.4	100	18.32	793	0.15	6.22	75.3	43.2	0.05	Clear	MW-33-201504
MW-34	0.75	4/14/2015	10.10	28.40	23.0	15:50	10.25	2.0	100	17.56	1745	5.14	4.62	333.1	2.9	0.00	Clear	MW-34-201504
MW-35R	4	4/14/2015	9.75	31.70	26.7	17:15	9.88	2.5	100	17.82	15767	2.04	6.74	201.7	0.18	0.01	Clear	MW-35R-201504
MW-36	0.75	4/14/2015	9.09	25.58	20.0	13:45	9.27	2.5	100	17.72	1398	7.14	4.88	315.2	1.26	0.00	Clear	MW-36-201504
MW-37^	2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-38	2	4/16/2015	11.04	30.31	25.3	11:00	11.17	2.25	100	19.78	784	0.72	6.61	49.8	15.7	0.07	Clear	MW-38-201504
MW-39	0.75	4/14/2015	11.34	29.40	24.0	10:55	12.39	2	100	16.48	1096	0.95	4.94	226.5	1.51	0.00	Clear	MW-39-201504
MW-40	0.75	4/14/2015	9.25	27.75	22.0	09:05	9.38	2	100	17.05	815	0.77	5.13	225.9	0.99	0.00	Clear	MW-40-201504
MW-41	0.75	4/15/2015	8.80	28.35	23.4	15:20	8.83	2.5	100	17.40	1199	0.45	5.45	171.4	1.28	3.30	Clear	MW-41-201504
MW-46R	2	4/14/2015	2.03	21.34	16.0	13:55	2.49	1	100	16.92	837	0.36	5.89	-35.9	6.40	0.00	Clear	MW-46R-201504
MW-50	0.75	4/14/2015	5.93	17.90	15.5	12:10	Dry	0.5	20	15.07	1104	5.22	6.7	62.7	168	0.76	Turbid	MW-50-201504
MW-56	0.75	4/16/2015	12.70	19.48	17.5	13:25	Dry	0.4	100	14.89	319	5.32	6.6	-35	14.2	0.00	Cloudy	MW-56-201504
MW-57	0.75	4/16/2015	1.10	19.00	16.5	12:30	Dry	0.4	100	15.24	1017	2.10	5.41	230.3	157	0.00	Yellow, Slightly Cloudy	MW-57-201504
MW-58	0.75	4/16/2015	0.60	17.67	15.0	10:15	0	0	0	0.00	0	0.00	0	0	0	0.00	Slightly Yellow	MW-58-201504
MW-60	0.75	4/14/2015	8.87	17.00	14.5	15:00	Dry	0.75	25	16.19	1128	7.54	7.28	125.4	57	1.13	Light Brown	MW-60-201504
MW-61	0.75	4/14/2015	6.92	19.65	13.0	17:15	Dry	0.5	25	15.63	599	4.91	6.57	132.8	53.0	1.68	Off White	MW-61-201504
MW-62	0.75	4/14/2015	4.91	19.65	17.0	11:25	8.24	1	100	15.72	639	1.82	6.39	-4	2.7	0.00	Clear	MW-62-201504
MW-63	0.75	4/14/2015	3.68	19.44	17.0	15:40	Dry	0.5	100	14.88	608	5.18	6.55	-4.8	346.40	0.00	Brown/yellow	MW-63-201504
MW-65	2	4/15/2015	9.74	31.39	26.4	9:50	9.91	2.5	100	17.26	10973	2.80	10.65	109.8	2.10	0.00	Brown Hue	MW-65-201504
MW-66	2	4/15/2015	4.20	17.46	15.0	10:55	4.56	1.2	100	16.16	773	2.01	7.04	-26.2	4.81	0.00	Clear	MW-66-201504
MW-67	2	4/15/2015	2.20	12.97	10.0	8:50	4.49	1	75	15.05	895	3.67	7.55	1.8	57.90	0.42	Slightly Yellow/Brown	MW-67-201504
MW-68	2	4/13/2015	5.71	20.05	15.1	14:45	5.89	1	100	15.89	1039	1.21	5.55	38.7	0.86	0.08	Clear	MW-68-201504
MW-70^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-71	2	4/14/2015	7.31	27.20	22.2	9:50	7.33	1.34	100	15.57	899	1.21	5.13	162.2	9.27	0.51	Clear	MW-71-201504
RW-69	4	4/14/2015	7.20	28.39	23.4	10:00	7.25	2.0	100	15.76	1008	3.09	5.43	201.8	2.94	0.01	Clear	RW-69-201504
IW-72	2	4/15/2015	7.55	24.62	19.6	9:25	7.68	2.5	100	15.98	769	3.13	6.03	536.3	3.4	0.02	Slightly Pink	IW-72-201504
IW-73	2	4/15/2015	9.36	26.65	21.7	14:30	9.36	4.5	100	17.53	514	0.43	5.77	157.1	35.60	1.15	Slightly Cloudy	IW-73-201504
IW-74	2	4/15/2015	7.91	27.15	22.2	11:20	7.99	2.5	100	16.78	1023	1.07	5.90	343.6	2.91	0.12	Clear	IW-74-201504

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

Location	Well Casing Diameter (inches)	Date Sampled	Water Level prior to Purging (ft btoc)	Total Depth of Well Casing (feet)	Set Tubing Depth (feet)	Time Sampled	Water Level after Purging (ft btoc)	Purge Volume (gallons)	Purge Rate (mL/min)	Temperature (°C)	Specific Conductivity (µS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
IW-75^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
IW-76	2	4/15/2015	9.45	27.21	22.2	12:45	9.46	2.5	100	16.39	1776	1.37	5.47	124.5	0.28	0.02	Clear	IW-76-201504
IW-77	2	4/14/2015	9.00	28.43	23.4	9:20	9.01	2	100	16.47	5108	0.67	5.59	175.5	1.21	0.07	Clear	IW-77-201504
IW-78^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
IW-79^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
IW-80	2	4/14/2015	9.38	29.29	24.3	13:30	9.43	2	100	17.23	1295	4.36	5.72	127.7	2.64	0.00	Clear	IW-80-201504
MW-81	2	4/15/2015	9.36	24.31	21.8	16:25	9.46	0.9	100	17.99	141	4.18	6.68	142.4	26.10	NM	Slightly Cloudy	MW-81-201504
MW-82	2	4/15/2015	9.28	25.80	23.3	17:12	9.29	2	100	17.53	1388	5.01	5.82	121.7	11.34	NM	Clear	MW-82-201504
MW-83	2	4/16/2015	11.43	26.53	24.0	13:50	11.44	1.8	100	22.31	2231	0.45	6.32	389.7	7.57	NM	Clear	MW-83-201504
MW-84	2	4/16/2015	11.52	23.46	21.0	8:45	11.64	1.8	100	18.88	8756	2.08	9.59	252.7	1.46	NM	Clear	MW-84-201504
MW-85	2	4/16/2015	10.41	27.82	25.3	14:58	10.45	1.5	100	19.73	5056	3.40	5.23	137.8	8.82	0.00	Slightly Turbid	MW-85-201504
MW-86	2	4/16/2015	9.38	27.90	25.4	13:40	9.75	2	100	20.15	10951	7.87	6.15	82.1	4.44	0.00	Slightly Turbid	MW-86-201504
MW-87	2	4/16/2015	11.10	26.70	22.0	12:25	11.24	1.056	100	20.67	376	0.45	5.96	154.5	8.56	NM	Clear	MW-87-201504
MW-88	2	4/16/2015	9.30	28.15	23.0	9:00	11.43	1.58	100	19.82	230	2.29	6.79	44	42.10	0.41	Clear	MW-88-201504
MW-89	2	4/16/2015	8.70	24.95	20.0	10:05	9.86	0.92	100	17.82	943	0.35	5.63	151.6	13.80	0.00	Clear	MW-89-201504
MW-90	2	4/15/2015	6.67	25.04	20.0	17:00	15.31	1.36	100	20.04	787	0.11	6.55	-25.5	11.57	3.30	Clear	MW-90-201504
MW-91	2	4/16/2015	9.92	25.60	20.0	11:15	10.10	1.056	100	20.39	332	0.30	6.08	136.6	13.30	0.00	Clear	MW-91-201504
MW-92	2	4/16/2015	9.75	29.16	24.2	12:05	9.77	2.5	100	17.74	3029	0.58	6.92	-73.0	28.30	0.00	Brown/Turbid	MW-92-201504
MW-93	2	4/16/2015	13.96	34.00	29.0	14:05	14.00	1.321	100	18.91	1094	0.69	5.29	219.9	5.78	0.05	Clear	MW-93-201504
MW-94	2	4/16/2015	14.53	34.72	29.7	13:10	14.55	1.5	100	19.02	631	0.84	5.64	20.5	6.47	0.03	Clear	MW-94-201504
MW-95	2	4/16/2015	14.42	34.89	29.8	15:01	14.45	2.00	100	19.57	1156	1.20	5.57	-11.3	12.50	0.01	Clear	MW-95-201504
MW-96	2	4/16/2015	5.26	14.32	11.8	9:46	5.67	1.00	100	16.19	214	0.52	5.54	108.3	3.14	NM	Clear	MW-96-201504
MW-97	2	4/16/2015	9.07	15.02	12.5	8:50	11.86	1.50	50	15.37	373	2.16	6.45	128.2	14.40	NM	Slight brown hue	MW-97-201504
MW-98	2	4/16/2015	9.74	19.52	17.0	12:47	15.05	2.50	50	19.66	314	1.58	9.05	139.3	11.20	NM	Clear	MW-98-201504
MW-99	2	4/16/2015	8.06	22.55	20.1	11:04	8.22	1.00	100	17.81	157	2.55	6.36	127.1	83.00	NM	White haze/Cloudy	MW-99-201504
MW-172	2	4/16/2015	8.93	27.71	22.71	9:52	8.96	2.5	100	18.4	1649	2.28	5.96	-55.7	12.58	0.00	Brown	MW-172-201504
MW-173	2	4/14/2015	Top of well	5.95	5.45	9:43	Dry	NM	NM	NM	NM	NM	NM	NM	NM	NM	Clear	MW-173-201504
MW-174	2	4/14/2015	5.41	12.16	11.66	12:12	10.97	1.5	100	16.42	518	0.34	7.75	-246	28.3	0.90	Clear	MW-174-201504
MW-175	2	4/15/2015	1.7	14.31	14	8:57	7.44	1.5	100	15.18	7957	5.48	12.61	-179.6	2.21	0.00	Slight Oil Sheen	MW-175-201504
MW-176	2	4/14/2015	1.59	13.8	13.3	14:45	5.45	2	100	18.87	894	0.92	6.72	-172.3	19.7	0.00	Slightly Turbid	MW-176-201504
MW-177	2	4/14/2015	4.04	9.85	8.85	10:15	Dry	1.00	100	13.58	422	3.71	6.18	-98.7	10.96	0.00	Clear	MW-177-201504
MW-178	2	4/16/2015	3.11	7.77	6.77	14:15	Dry	0.74	100	18.12	763	6.59	11.43	163.6	108.5	NM	Slightly Cloudy	MW-178-201504
MW-179	2	4/16/2015	9.66	12.79	10.29	14:30	Dry	1.2	100	16.92	176	4.46	6.18	76.5	131	NM	Orange/Cloudy	MW-179-201504
MW-180	2	4/16/2015	3.14	6.78	5.78	14:45	Dry	0.53	100	18.64	115	3.58	6.76	164.6	22.8	NM	Clear	MW-180-201504
MW-181	2	4/14/2015	4.15	6.18	5.18	15:40	Dry	0.11	100	14.33	192	8.02	6.02	-85.2	14.5	NM	Clear	MW-181-201504

Notes:

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

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

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

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	ITMW-1	ITMW-7	ITMW-9	ITMW-10	ITMW-10	ITMW-11	ITMW-12	ITMW-13	ITMW-13	ITMW-14	ITMW-15	ITMW-17	ITMW-18	ITMW-18	ITMW-19	ITMW-21	IW-80	MW-25	MW-32R	MW-33R
ENVIRON Sample ID		ITMW-1-201504	ITMW-7-201504	ITMW-9-201504	ITMW-10-201504	DUP-08-201504	ITMW-11-201504	ITMW-12-201504	ITMW-13-201504	DUP-03-201504	ITMW-14-201504	ITMW-15-201504	ITMW-17-201504	ITMW-18-201504	DUP-04-201504	ITMW-19-201504	ITMW-21-201504	IW-80-201504	MW-25-201504	MW-32R-201504	MW-33R-201504
Lab Sample ID(s)		60191960009, 152360019	60191868007, 152350005, 152370013,	60191960007, 152350002, 043MD037	60191960002, 152350003, 043MD040	60192103013	60191960016, 152350014, 043MD043	60191960003, 152350013, 043MD030	60191960010, 152350018, 043MD032	60191960023	60191960019, 152350019, 043MD046	60191960001, 152350016, 043MD039	60191960017, 152350017, 043MD044	60192103003, 152350012, 043MD051	60192103007	60191960015, 152350011, 043MD045	60191868010, 152350006, 152370016,	60191868016, 152360006, 152370022,	60192103004, 043MD052	60191960005, 152360002, 043MD036	60191960006, 152360008, 043MD038
Sample Date		4/15/2015	4/14/2015	4/14/2015	4/14/2015	4/16/2015	4/14/2015	4/14/2015	4/14/2015	4/15/2015	4/14/2015	4/14/2015	4/14/2015	4/14/2015	4/16/2015	4/14/2015	4/14/2015	4/14/2015	4/14/2015	4/15/2015	4/15/2015
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments						Field Duplicate				Field Duplicate					Field Duplicate						
Volatile Organic Compounds																					
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (1.9)	U (1.9)	U (5.0)	U (1.9)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (1.9)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (1.9)
Benzene	5	U (0.50)	U (0.50)	U (0.50)	0.12 J (0.060)	0.12 J (0.060)	U (0.50)	0.11 J (0.060)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.17 J (0.060)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.30 J (0.060)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.19)	U (0.19)	U (0.50)	U (0.19)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.19)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	5.3 (0.50)	U (0.50)	U (0.19)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.070)	U (0.070)	U (0.50)	1.1 (0.070)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.070)	U (0.50)	U (0.50)	3.2 (0.50)	U (0.50)	1.1 (0.50)	6.9 (0.50)	U (0.50)	U (0.070)
Bromomethane	7	U (2.5)	U (2.5)	U (2.5)	U (0.16)	U (0.16)	3.2 J (2.5)	U (0.16)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (0.16)	30.4 (2.5)	29.7 (2.5)	U (2.5)	U (2.5)	3.0 J (2.5)	64.9 (2.5)	6.0 (2.5)	U (0.16)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (0.59)	U (0.59)	U (5.0)	0.98 J (0.59)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (0.59)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	1.3 J (0.59)
Carbon Disulfide	720	U (2.5)	U (2.5)	U (2.5)	U (0.12)	U (0.12)	U (2.5)	0.15 J (0.12)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	0.14 J (0.12)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	3.0 J (2.5)	U (2.5)	1.4 J (0.12)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.18)	U (0.18)	U (0.50)	U (0.18)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.18)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.18)
Chlorobenzene	100	U (0.50)	1.1 (0.50)	U (0.50)	U (0.21)	U (0.21)	U (0.50)	U (0.21)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.21)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.21)
Chloroethane	12000	U (0.50)	U (0.50)	0.57 J (0.50)	U (0.15)	U (0.15)	U (0.50)	U (0.15)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.15)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.2 (0.50)	U (0.50)	U (0.15)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	0.22 J (0.14)	0.22 J (0.14)	U (0.50)	1.3 (0.14)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.2 (0.14)	0.69 J (0.50)	0.70 J (0.50)	2.3 (0.50)	U (0.50)	U (0.50)	14.9 (0.50)	U (0.50)	0.20 J (0.14)
Chloromethane	190	U (0.50)	U (0.50)	U (0.50)	U (0.080)	0.22 (0.080)	U (0.50)	U (0.080)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.080)	10.7 (0.50)	7.6 (0.50)	1.1 (0.50)	U (0.50)	U (0.50)	110 (0.50)	6.1 (0.50)	U (0.080)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.21)	U (0.21)	U (0.50)	U (0.21)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.21)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	3.5 (0.50)	U (0.50)	U (0.21)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	2.7 (0.050)	2.8 (0.050)	U (0.50)	0.53 J (0.050)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.13 J (0.050)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.6 (0.50)	U (0.50)	U (0.050)
1,2-Dichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.12)	U (0.12)	U (0.50)	U (0.12)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.12)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.12)
1,1-Dichloroethene	7	U (0.50)	U (0.50)	0.73 J (0.50)	3.2 (0.20)	3.6 (0.20)	U (0.50)	U (0.20)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.78 J (0.20)	0.83 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.55 J (0.20)	U (0.50)	0.55 J (0.20)
cis-1,2-Dichloroethene	70	9.7 (0.50)	9.2 (0.50)	35.4 (0.50)	34.8 (0.080)	36.1 (0.080)	U (0.50)	149 (0.080)	26.5 (0.50)	26.7 (0.50)	10.7 (0.50)	7.5 (0.50)	142 (0.080)	1.6 (0.50)	1.7 (0.50)	2.2 (0.50)	U (0.50)	U (0.50)	204 (4.0)	U (0.50)	12.2 (0.080)
trans-1,2-Dichloroethene	100	U (0.50)	0.64 J (0.50)	1.8 (0.50)	0.29 J (0.20)	0.29 J (0.20)	U (0.50)	25.8 (0.20)	0.74 J (0.50)	0.65 J (0.50)	U (0.50)	U (0.50)	21.9 (0.20)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	37.4 (0.50)	U (0.50)	1.4 (0.20)
2-Hexanone	34	U (5.0)	U (5.0)	U (5.0)	U (1.2)	U (1.2)	U (5.0)	U (1.2)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (1.2)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (1.2)
4-Methyl-2-pentanone	1000	U (2.5)	U (2.5)	U (2.5)	U (0.42)	U (0.42)	U (2.5)	U (0.42)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (0.42)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (0.42)
Methylene Chloride	5	U (0.50)	U (0.50)	U (0.50)	0.57 J (0.15)	0.66 J (0.15)	U (0.50)	1.3 (0.15)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.65 J (0.15)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	17.9 (0.50)	U (0.50)	0.39 J (0.15)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.15)	U (0.15)	U (0.50)	0.53 J (0.15)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.29 J (0.15)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	41.6 (0.50)	U (0.50)	U (0.15)
Tetrachloroethene	5	U (0.50)	U (0.50)	U (0.50)	0.46 J (0.10)	0.45 J (0.10)	U (0.50)	1.1 (0.10)	U (0.50)	U (0.50)	18.5 (0.50)	U (0.50)	1.5 (0.10)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	4.8 (0.50)	U (0.50)	0.13 J (0.10)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	0.48 J (0.17)	0.46 J (0.17)	U (0.50)	U (0.17)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.17)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.17)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.11)	U (0.11)	U (0.50)	U (0.11)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.36 J (0.11)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	4.1 (0.50)	U (0.50)	U (0.11)
1,1,2-Trichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.20)	U (0.20)	U (0.50)	0.25 J (0.20)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.42 J (0.20)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.74 J (0.50)	U (0.50)	U (0.20)
Trichloroethene	5	19.2 (0.50)	29.3 (0.50)	100 (0.50)	258 (0.85)	303 (0.85)	U (0.50)	2260 (4.2)	43.1 (0.50)	47.7 (0.50)	5.0 (0.50)	101 (0.50)	3920 (8.5)	43.5 (0.50)	42.8 (0.50)	594 (5.0)	12.7 (0.50)	9.2 (0.50)	4650 (8.5)	11.2 (0.50)	570 (3.4)
Vinyl Chloride	2	U (0.50)	U (0.50)	U (0.50)	0.98 J (0.13)	1.2 (0.13)	U (0.50)	U (0.13)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.13)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	6.4 (0.50)	U (0.50)	0.37 J (0.13)
Metals																					
Iron	NE	473 (50.0)	28.4 J (50.0)	85.0 (50.0)	75.1 (50.0)	NM	5510 (50.0)	55.0 (50.0)	444 (50.0)	NM	492 (50.0)	206 (50.0)	286 (50.0)	223 (50.0)	NM	U (50.0)	31.8 J (50.0)	122 (50.0)	1550 (50.0)	327 (50.0)	10300 (50.0)
Manganese	NE	16.9 (5.0)	66.2 (5.0)	92.2 (5.0)	159 (5.0)	NM	106 (5.0)	46.4 (5.0)	11.4 (5.0)	NM	9.7 (5.0)	10.4 (5.0)	124 (5.0)	9.8 (5.0)	NM	15.2 (5.0)	284 (5.0)	44.0 (5.0)	937 (5.0)	1320 (5.0)	12800 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)																					
Acetic acid	NE	U (5000)	U (5000)	U (5000)	U (5000)	NM	U (5000)	U (5000)	U (5000)	NM	U (5000)	U (5000)	U (5000)	U (5000)	NM	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)
Acetylene	NE	U (0.50)	U (0.50)	U (0.50)	U (0.50)	NM	U (0.50)	U (0.50)	U (0.50)	NM	U (0.50)	U (0.50)	U (0.50)	U (0.50)	NM	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.8 (0.50)
Alkalinity	NE	76000 (20000)	11200 J (20000)	45400 (20000)	87400 (20000)	NM	U (20000)	37400 (20000)	76600 (20000)	NM	53300 (20000)	40300 (20000)	13100 J (20000)	85800 (20000)	NM	77100 (20000)	13300 J (20000)	90900 (20000)	36400 (20000)	10100 J (20000)	110000 (20000)
Ammonia	NE	U (100)	89 J (100)	U (100)	U (100)	NM	1600 (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	250 (100)	NM	480 (100)	U (100)	U (100)	490 (100)	U (100)	U (100)
Bicarbonate Alkalinity	NE	76000 (20000)	11200 J (20000)	45400 (20000)	87400 (20000)	NM	U (20000)	37400 (20000)	76600 (20000)	NM	53300 (20000)	5000 J (20000)	13100 J (20000)	85800 (20000)	NM	U (20000)	13300 J (20000)	90900 (20000)	36400 (20000)	10100 J (20000)	110000 (20000)
Butyric acid	NE	U (5000)	U (5000)	U (5000)	U (5000)	NM	U (5000)	U (5000)	U (5000)	NM	U (5000)	U (5000)	U (5000)	U (5000)	NM	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)
Carbon Dioxide	NE	209000 (20000)	U (20000)	174000 (20000)	190000 (20000)	NM	U (20000)	157000 (20000)	207000 (20000)	NM	124000 (20000)	U (20000)	U (20000)	335000 (20000)	NM	U (20000)	U (20000)	1230000 (20000)	358000 (20000)	U (20000)	228000 (20000)
Organic Carbo(total)	NE	U (1000)	U (1000)	540 J (1000)	1000 (1000)	NM	U (1000)	1100 (1000)	560 J (1000)	NM	730 J (1000)	2400 (1000)	630 J (1000)	510 J (1000)	NM	1200 (1000)	U (1000)	U (1000)	3400 (1000)	U (1000)	580 J (1000)
Carbonate Alkalinity	NE	U (20000)	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	NM	U (20000)	35300 (20000)	U (20000)	U (20000)	NM	40100 (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	106000 (10000)	261000 (20000)	107000 (10000)	132000 (10000)	NM	17000 (10000)	22500 (2000)	20700 (2000)	NM	7400 (1000)	13200 (1000)	279000 (50000)	127000 (10000)	NM	255000 (50000)	623000 (50000)	250000 (20000)	451000 (50000)	255000 (50000)	182000 (20000)
Iron, Ferric	NE	470 (200)	U (200)	U (200)	U (200)	NM	5300 (200)	U (200)	440 (200)	NM	490 (200)	210 (200)	290 (200)	U (200)	NM	U (200)	U (200)	U (200)	1400 (200)	330 (200)	10200 (200)
2-Chloroethanol	NE	U (10000)	U (10000)	U (10000)	U (10000)	NM	U (10000)	U (10000)	U (10000)	NM	U (10000)	U (10000)	U (10000)	U (10000)	NM	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)
Lactic Acid	NE	U (10000)	U (10000)	U (10000)	U (10000)	NM	U (10000)	U (10000)	U (10000)	NM	U (10000)	U (10000)	U (10000)	U (10000)	NM	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)
Nitrogen	NE	1000 (100)	3000 (100)	22300 (1000)	5600 (200)	NM	4600 (100)	450 (100)	130 (100)	NM	490 (100)	120 (100)	220 (100)	3100 (100)	NM	2000 (100)	250 (100)	420 (100)	1600 (100)	240 (100)	850 (100)
Nitrogen, Nitrate (As N)	NE	1000 (100)	3000 (100)	22300 (1000)	5600 (200)	NM	4600 (100)	450 (100)	130 (100)	NM	490 (100)	120 (100)	220 (100)	3100 (100)	NM	2000 (100)	250 (100)	420 (100)	1600 (100)	240 (100)	850 (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (1000)	U (200)	NM	U (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
pH [STD UNITS]	NE	6.0 (0.10)	5.0 (0.10)	5.8 (0.10)	6.2 (0.10)	NM	2.7 (0.10)	5.8 (0.10)	6.0 (0.10)	NM	6.1 (0.10)	7.0 (0.10)	5.3 (0.10)	5.8 (0.10)	NM	11.2 (0.10)	5.2 (0.10)	5.2 (0.10)	5.4 (0.10)	5.0 (0.10)	6.2 (0.10)
Phosphates (total)	NE	100 (30)	32 (30)	100 (30)	66 (30)	NM	240 (30)	74 (30)	100 (30)	NM	U (30)	32 (30)	32 (30)	210 (30)	NM	U (30)	32 (30)	560 (30)	240 (30)	32 (30)	110 (30)
Propionic Acid	NE	U (5000)	U (5000)	U (5000)	U (5000)	NM	U (5000)	U (5000)	U (5000)	NM	U (5000)	U (5000)	U (5000)	U (5000)	NM	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)
Pyruvic Acid	NE	U (5000)	U (5000)	U (5000)	U (5000)	NM	U (5000)	U (5000)	U (5000)	NM	U (5000)	U (5000)	U (5000)	U (5000)	NM	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)
Sulfide (total)	NE	U (50)	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	16700 (1000)	9400 (1000)	23400 (2000)	34400 (5000)	NM	150000 (1000000)	218000 (20000)	9600 (1000)	NM	12900 (1000)	11400 (1000)	113000 (10000)	1200000 (100000)	NM	1370000 (200000)	3600 (1000)	292000 (20000)	3960000 (500000)	322000 (50000)	43400 (5000)
Gasses																					
Methane	NE	U (0.50)	0.92 (0.50)	0.90 (0.50)	1.9 (0.50)	NM	0.56 (0.50)	100 (0.50)	2.3 (0.50)	NM	0.53 (0.50)	0.59 (0.50)	18 (0.50)	1.9 (0.50)	NM	5.3 (0.50)	U (0.50)	1.0 (0.50)	64 (0.50)	6.2 (0.50)	18 (0.50)
Ethane	NE	U (0.10)	U (0.10)	U (0.10)	U (0.10)	NM	U (0.10)	2.7 (0.10)	0.10 (0.10)	NM	U (0.10)	U (0.10)	0.17 (0.10)	U (0.10)	NM	U (0.10)	U (0.10)	U (0.10)	4.4 (0.10)	0.27 (0.10)	10 (0.10)
Ethene	NE	U (0.10)	U (0.10)	U (0.10)	U (0.10)	NM	U (0.10)	U (0.10)	U (0.10)	NM	U (0.10)	U (0.10)	U (0.10)	U (0.10)	NM	U (0.10)	U (0.10)	U (0.10)	0.26 (0.10)	0.55 (0.10)	12 (0.10)
Hydrogen [nM] [4]	NE	2.7 (0.60)	2.4 (0.60)	2.9 (0.60)	2.1 (0.60)	NM	3.5 (0.60)	75 (12)	2.4 (0.60)	NM	2.3 (0.60)	6.8 (0.60)	2.5 (0.60)	150 (12)	NM	14000 (300)	2.1 (0.60)	12 (0.60)	3500 (60)	1500 (120)	4.8 (0.60)
Molecular Analyses																					
V1 Vinyl Chloride Reductase [cells/mL]	NE	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	3.9 (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	37.1 (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	9.9 (0.5)	U (0.5)	U (0.5)
tceA Reductase [cells/mL]	NE	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	1.1 (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
yl Chloride Reductase (vrcA) [cells/mL]	NE	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)

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

U = Not detected
J = Estimated concentration
( ) = Method detection limit for VOCs; reporting limit for all other parameters
* = Sampled on different day than other parameters with different method
RADD = Remedial action decision document
ADEQ = Arkansas Department of Environmental Quality
VOC = Volatile organic compounds
µg/L = Micrograms per Liter
mL = Milliliters
NE = Not established
NM = Not measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

RAMBOLL ENVIRON

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

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-33R	MW-34	MW-35R	MW-38	MW-65	MW-83	MW-84	MW-85	MW-86	MW-87	MW-88	MW-89	MW-90	MW-91	MW-92	MW-93	MW-94	MW-95	ITMW-2	ITMW-4
ENVIRON Sample ID		DUP-01-201504	MW-34-201504	MW-35R-201504	MW-38-201504	MW-65-201504	MW-83-201504	MW-84-201504	MW-85-201504	MW-86-201504	MW-87-201504	MW-88-201504	MW-89-201504	MW-90-201504	MW-91-201504	MW-92-201504	MW-93-201504	MW-94-201504	MW-95-201504	ITMW-2-201504	ITMW-4-201504
Lab Sample ID(s)		60191960022	60191868015, 152360003, 152370021,	60191868018, 152360005, 152370024,	60192103001, 152350015, 043MD049	60191960014, 152360004, 043MD034	60192139001	60192139002	60192139009	60192139010	60192139017	60192139014	60192139015	60192015001	60192139016	60192139011	60192139013	60192139005	60192139004	60191960018, 152360020, 043MD047	60191868012, 152350001, 152370018,
Sample Date		4/15/2015	4/14/2015	4/14/2015	4/14/2015	4/15/2015	4/16/2015	4/16/2015	4/16/2015	4/16/2015	4/16/2015	4/16/2015	4/16/2015	4/15/2015	4/16/2015	4/16/2015	4/16/2015	4/16/2015	4/16/2015	4/15/2015	4/14/2015
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments		Field Duplicate																			
Volatile Organic Compounds																					
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (1.9)	U (5.0)	17.1 (5.0)	89.1 (5.0)	104 (5.0)	186 (1.9)	U (1.9)	U (5.0)	U (5.0)	U (5.0)	U (1.9)	14.2 (5.0)	U (1.9)	U (1.9)	U (1.9)	U (5.0)	U (1.9)
Benzene	5	U (0.50)	U (0.50)	U (0.50)	0.62 J (0.060)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.29 J (0.060)	0.12 J (0.060)	U (0.50)	U (0.50)	U (0.50)	U (0.060)	U (0.50)	0.16 J (0.060)	0.37 J (0.060)	U (0.060)	U (0.50)	U (0.060)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.19)	U (0.50)	U (0.50)	U (0.50)	0.68 J (0.50)	2.4 (0.19)	U (0.19)	U (0.50)	U (0.50)	U (0.50)	U (0.19)	U (0.50)	U (0.19)	U (0.19)	0.39 J (0.19)	U (0.50)	U (0.19)
Bromoform	80	U (0.50)	2.1 (0.50)	U (0.50)	U (0.070)	U (0.50)	0.54 J (0.50)	1.9 (0.50)	10.5 (0.50)	7.8 (0.070)	U (0.070)	U (0.50)	U (0.50)	U (0.50)	U (0.070)	6.3 (0.50)	U (0.070)	U (0.070)	U (0.070)	U (0.50)	U (0.070)
Bromomethane	7	U (2.5)	6.9 (2.5)	22.9 (2.5)	U (0.16)	3.8 J (2.5)	U (2.5)	8.5 (2.5)	24.4 B (2.5)	6.7 B (0.16)	0.50 (0.16)	U (2.5)	3.2 J (2.5)	U (2.5)	0.40 (0.16)	8.9 B (2.5)	U (0.16)	U (0.16)	0.43 (0.16)	U (2.5)	U (0.16)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (0.59)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	33.2 (0.59)	U (0.59)	U (5.0)	U (5.0)	U (5.0)	U (0.59)	U (5.0)	U (0.59)	U (0.59)	U (0.59)	U (5.0)	U (0.59)
Carbon Disulfide	720	U (2.5)	U (2.5)	U (2.5)	0.81 J (0.12)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	1.5 J (0.12)	U (0.12)	U (2.5)	U (2.5)	U (2.5)	U (0.12)	U (2.5)	U (0.12)	U (0.12)	U (0.12)	U (2.5)	0.30 J (0.12)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.18)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	5.3 (0.18)	U (0.18)	U (0.50)	U (0.50)	U (0.50)	U (0.18)	U (0.50)	0.49 J (0.18)	U (0.18)	0.38 J (0.18)	U (0.50)	U (0.18)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.21)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.21)	U (0.21)	U (0.50)	U (0.50)	U (0.50)	U (0.21)	U (0.50)	U (0.21)	U (0.21)	U (0.21)	U (0.50)	0.61 J (0.21)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.15)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.15)	U (0.15)	U (0.50)	U (0.50)	U (0.50)	U (0.15)	U (0.50)	U (0.15)	U (0.15)	U (0.15)	U (0.50)	U (0.15)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	0.73 J (0.14)	U (0.50)	U (0.50)	U (0.50)	2.2 (0.50)	47.5 (0.14)	0.25 J (0.14)	U (0.50)	U (0.50)	U (0.50)	0.16 J (0.14)	U (0.50)	5.6 (0.14)	3.2 (0.14)	6.8 (0.14)	U (0.50)	0.28 J (0.14)
Chloromethane	190	U (0.50)	4.8 (0.50)	29.2 (0.50)	U (0.080)	2.6 (0.50)	2.5 (0.50)	14.5 (0.50)	8.2 (0.50)	4.6 (0.080)	0.13 (0.080)	U (0.50)	U (0.50)	U (0.50)	0.20 (0.080)	12.9 (0.50)	0.19 (0.080)	0.21 (0.080)	0.32 (0.080)	U (0.50)	0.30 (0.080)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.21)	U (0.50)	U (0.50)	U (0.50)	2.8 (0.50)	2.8 (0.21)	U (0.21)	U (0.50)	U (0.50)	U (0.50)	U (0.21)	2.6 (0.50)	U (0.21)	U (0.21)	U (0.21)	U (0.50)	U (0.21)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	0.16 J (0.050)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	7.8 (0.050)	2.5 (0.050)	U (0.50)	U (0.50)	U (0.50)	1.5 (0.050)	U (0.50)	0.52 J (0.050)	2.6 (0.050)	0.50 J (0.050)	U (0.50)	0.68 J (0.050)
1,2-Dichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.12)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.46 J (0.12)	U (0.12)	U (0.50)	U (0.50)	U (0.50)	U (0.12)	U (0.50)	0.21 J (0.12)	U (0.12)	0.21 J (0.12)	U (0.50)	U (0.12)
1,1-Dichloroethene	7	0.52 J (0.50)	U (0.50)	U (0.50)	23.8 (0.20)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	9.1 (0.20)	7.3 (0.20)	U (0.50)	U (0.50)	U (0.50)	4.0 (0.20)	0.92 J (0.50)	32.9 (0.20)	120 (0.20)	41.9 (0.20)	U (0.50)	U (0.20)
cis-1,2-Dichloroethene	70	10.5 (0.50)	U (0.50)	1.3 (0.50)	2060 (8.0)	U (0.50)	2.8 (0.50)	U (0.50)	16.8 (0.50)	128 (0.080)	58.6 (0.080)	U (0.50)	U (0.50)	U (0.50)	36.6 (0.080)	5.4 (0.50)	160 (0.080)	325 (16.0)	184 (0.080)	U (0.50)	2.6 (0.080)
trans-1,2-Dichloroethene	100	1.3 (0.50)	U (0.50)	U (0.50)	47.1 (0.20)	U (0.50)	0.59 J (0.50)	U (0.50)	2.9 (0.50)	20.6 (0.20)	0.66 J (0.20)	U (0.50)	U (0.50)	U (0.50)	0.42 J (0.20)	0.61 J (0.50)	1.5 (0.20)	8.8 (0.20)	1.4 (0.20)	U (0.50)	U (0.20)
2-Hexanone	34	U (5.0)	U (5.0)	U (5.0)	U (1.2)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	3.0 J (1.2)	U (1.2)	U (5.0)	U (5.0)	U (5.0)	U (1.2)	U (5.0)	U (1.2)	U (1.2)	U (1.2)	U (5.0)	U (1.2)
4-Methyl-2-pentanone	1000	U (2.5)	U (2.5)	U (2.5)	U (0.42)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (0.42)	U (0.42)	U (2.5)	U (2.5)	U (2.5)	U (0.42)	U (2.5)	U (0.42)	U (0.42)	U (0.42)	U (2.5)	U (0.42)
Methylene Chloride	5	U (0.50)	U (0.50)	U (0.50)	0.37 J (0.15)	U (0.50)	U (0.50)	U (0.50)	5.7 (0.50)	21.0 (0.15)	0.20 J (0.15)	U (0.50)	U (0.50)	U (0.50)	U (0.15)	U (0.50)	3.8 (0.15)	0.76 J (0.15)	4.1 (0.15)	U (0.50)	2.9 (0.15)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	0.85 J (0.15)	U (0.50)	U (0.50)	U (0.50)	4.6 (0.50)	518 J (300)	U (0.15)	U (0.50)	U (0.50)	U (0.50)	U (0.15)	U (0.50)	U (0.15)	U (0.15)	U (0.15)	U (0.50)	U (0.15)
Tetrachloroethene	5	U (0.50)	U (0.50)	U (0.50)	1.9 (0.10)	U (0.50)	U (0.50)	U (0.50)	1.5 (0.50)	27.9 (0.10)	4.1 (0.10)	U (0.50)	U (0.50)	U (0.50)	1.8 (0.10)	U (0.50)	5.9 (0.10)	2.8 (0.10)	7.6 (0.10)	U (0.50)	U (0.10)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	0.67 J (0.17)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.1 (0.17)	U (0.17)	U (0.50)	U (0.50)	U (0.50)	U (0.17)	U (0.50)	0.18 J (0.17)	U (0.17)	U (0.17)	U (0.50)	U (0.17)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.11)	U (0.50)	U (0.50)	U (0.50)	9.0 (0.50)	612 J (220)	U (0.11)	U (0.50)	U (0.50)	U (0.50)	U (0.11)	0.81 J (0.50)	0.73 J (0.11)	U (0.11)	U (0.11)	U (0.50)	U (0.11)
1,1,2-Trichloroethane	5	U (0.50)	U (0.50)	U (0.50)	0.27 J (0.20)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	5.1 (0.20)	U (0.20)	U (0.50)	U (0.50)	U (0.50)	U (0.20)	U (0.50)	1.9 (0.20)	0.71 J (0.20)	2.3 (0.20)	U (0.50)	U (0.20)
Trichloroethene	5	624 (10.0)	13.8 (0.50)	39.5 (0.50)	3060 (17.0)	16.0 (0.50)	151 (0.50)	U (0.50)	256 (2.5)	46700 (340)	758 (5.0)	0.58 J (0.50)	15.9 (0.50)	U (0.50)	438 (2.5)	736 (12.5)	21500 (100)	11800 (34.0)	26700 (100)	U (0.50)	1.6 (0.17)
Vinyl Chloride	2	U (0.50)	U (0.50)	U (0.50)	33.7 (0.13)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	5.8 (0.13)	0.33 J (0.13)	U (0.50)	U (0.50)	U (0.50)	0.18 J (0.13)	2.1 (0.50)	3.9 (0.13)	1.3 (0.13)	14.9 (0.13)	U (0.50)	0.84 J (0.13)
Metals																					
Iron	NE	NM	62.6 (50.0)	67.8 (50.0)	1680 (50.0)	217 (50.0)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	589 (50.0)	3040 (50.0)
Manganese	NE	NM	43.2 (5.0)	47.4 (5.0)	2900 (5.0)	64.6 (5.0)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	18.3 (5.0)	3450 (5.0)
Monitored Natural Attenuation Parameters (Laborato																					
Acetic acid	NE	NM	U (5000)	U (5000)	U (5000)	U (5000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (5000)	U (5000)
Acetylene	NE	NM	U (0.50)	U (0.50)	U (0.50)	U (0.50)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (0.50)	U (0.50)
Alkalinity	NE	NM	4000 J (20000)	620000 (20000)	242000 (20000)	363000 (20000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	63900 (20000)	91000 (20000)
Ammonia	NE	NM	U (100)	650 (100)	U (100)	470 (100)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (100)	180 (100)
Bicarbonate Alkalinity	NE	NM	4000 J (20000)	620000 (20000)	242000 (20000)	U (20000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	63900 (20000)	91000 (20000)
Butyric acid	NE	NM	U (5000)	U (5000)	U (5000)	U (5000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (5000)	U (5000)
Carbon Dioxide	NE	NM	U (20000)	771000 (20000)	332000 (20000)	153000 (20000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	206000 (20000)	209000 (20000)
Organic Carbo(total)	NE	NM	U (1000)	1400 (1000)	1700 (1000)	2700 (1000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (1000)	8800 (1000)
Carbonate Alkalinity	NE	NM	U (20000)	U (20000)	U (20000)	348000 (20000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (20000)	U (20000)
Chloride	NE	NM	224000 (20000)	268000 (20000)	30600 (2000)	296000 (50000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	116000 (10000)	6600 (1000)
Iron, Ferric	NE	NM	U (200)	U (200)	1600 (200)	220 (200)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	470 (200)	1100 (200)
2-Chloroethanol	NE	NM	U (10000)	U (10000)	U (10000)	U (10000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (10000)	U (10000)
Lactic Acid	NE	NM	U (10000)	U (10000)	U (10000)	U (10000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (10000)	U (10000)
Nitrogen	NE	NM	350 (100)	2300 (100)	U (100)	3000 (100)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1000 (100)	U (100)
Nitrogen, Nitrate (As N)	NE	NM	350 (100)	2300 (100)	U (100)	2900 (100)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1000 (100)	U (100)
Nitrogen, Nitrite	NE	NM	U (100)	U (100)	U (100)	120 (100)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (100)	U (100)
pH [STD UNITS]	NE	NM	4.6 (0.10)	6.7 (0.10)	6.6 (0.10)	10.6 (0.10)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	5.9 (0.10)	6.2 (0.10)
Phosphates (total)	NE	NM	U (30)	32 (30)	240 M1 (30)	1200 (30)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	32 (30)	32 (30)
Propionic Acid	NE	NM	U (5000)	U (5000)	U (5000)	U (5000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (5000)	U (5000)
Pyruvic Acid	NE	NM	U (5000)	U (5000)	U (5000)	U (5000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (5000)	U (5000)
Sulfide (total)	NE	NM	U (50)	U (50)	U (50)	U (50)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (50)	U (50)
Sulfate	NE	NM	326000 (20000)	5740000 (500000)	102000 (10000)	3210000 (200000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	18400 (2000)	16400 (1000)
Gasses																					
Methane	NE	NM	3.0 (0.50)	16 (0.50)	26 (0.50)	8.0 (0.50)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1.2 (0.50)	36 (0.50)
Ethane	NE	NM	U (0.10)	0.35 (0.10)	0.84 (0.10)	0.20 (0.10)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (0.10)	U (0.10)
Ethene	NE	NM	U (0.10)	U (0.10)	0.88 (0.10)	U (0.10)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (0.10)	U (0.10)
Hydrogen [nM] [4]	NE	NM	31 (0.60)	1000 (60)	3.0 (0.60)	190 (12)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	2.8 (0.60)	2.1 (0.60)
Molecular Analyses																					
V1 Vinyl Chloride Reductase [cells/mL]	NE	NM	U (0.5)	U (0.5)	1850 (0.5)	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (0.5)	0.8 (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	NM	U (0.5)	U (0.5)	5900 (0.5)	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (0.5)	5.4 (0.5)
tceA Reductase [cells/mL]	NE	NM	U (0.5)	U (0.5)	0.8 (0.5)	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (0.5)	U (0.5)
yl Chloride Reductase (vrcA) [cells/mL]	NE	NM	U (0.5)	U (0.5)	0.1 J (0.5)	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (0.5)	U (0.5)

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

Onsite Wells
Offsite Wells
Plume Boundary Wells

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

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	ITMW-6	ITMW-16	ITMW-20	IW-72	MW-22	MW-23	MW-24	MW-26	MW-27	MW-28	MW-29	MW-31R	MW-36	MW-39	MW-40	MW-50	MW-60	MW-61	MW-62	MW-63
ENVIRON Sample ID		ITMW-6-201504	ITMW-16-201504	ITMW-20-201504	IW-72-201504	MW-22-201504	MW-23-201504	MW-24-201504	MW-26-201504	MW-27-201504	MW-28-201504	MW-29-201504	MW-31R-201504	MW-36-201504	MW-39-201504	MW-40-201504	MW-50-201504	MW-60-201504	MW-61-201504	MW-62-201504	MW-63-201504
Lab Sample ID(s)		60191868013, 152350004, 152370019,	60191868022, 152360024, 043MD053	60191794002, 152350007, 152370002,	60191960011, 152360012, 043MD048	60191794006, 152360021, 152370004,	60191895003	60192139007	60191794007, 152350008, 152370005,	60191794009, 152360023, 152370006,	60191794003, 152360022, 152370003,	60191868009, 152350010, 152370015,	60191868021, 152360001, 043MD026	60191868017, 152360007, 152370023,	60191868002, 152360018, 152370008,	60191868003, 152360013, 152370009,	60191868008, 152370014, 043MD014	60191868006, 152370012, 043MD012	60191868019, 043MD027	60191868014, 152350021, 152370020,	60191868011, 152370017
Sample Date		4/14/2015	4/14/2015	4/13/2015	4/15/2015	4/13/2015	4/14/2015	4/16/2015	4/13/2015	4/13/2015	4/13/2015	4/14/2015	4/14/2015	4/14/2015	4/14/2015	4/14/2015	4/14/2015	4/14/2015	4/14/2015	4/14/2015	4/14/2015
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments																					
Volatile Organic Compounds																					
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	35.9 (5.0)	71.2 (5.0)	7.5 J (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Benzene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	3.2 (0.50)	U (0.50)	2.3 (0.50)	8.7 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	6.6 (2.5)	42.6 (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	14.4 (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Carbon Disulfide	720	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.4 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.64 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.52 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	190	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	7.2 (0.50)	22.6 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	5.7 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	4.0 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	70	5.3 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.1 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.99 J (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
2-Hexanone	34	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
4-Methyl-2-pentanone	1000	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Methylene Chloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	5	3.7 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	57.5 (0.50)	18.8 (0.50)	U (0.50)	0.59 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	10.9 (0.50)	U (0.50)	9.2 (0.50)
Vinyl Chloride	2	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Metals																					
Iron	NE	183 (50.0)	7120 (50.0)	34.8 J (50.0)	129 (50.0)	44.6 J (50.0)	NM	NM	18.6 J (50.0)	1600 (50.0)	242 (50.0)	307 (50.0)	1490 (50.0)	209 (50.0)	56.5 (50.0)	11.5 J (50.0)	11900 (50.0)	2400 (50.0)	6480 (50.0)	2490 (50.0)	50900 (50.0)
Manganese	NE	142 (5.0)	98.7 (5.0)	6.6 (5.0)	3170 (5.0)	103 (5.0)	NM	NM	150 (5.0)	32.4 (5.0)	37.3 (5.0)	124 (5.0)	1280 (5.0)	625 (5.0)	395 (5.0)	225 (5.0)	281 (5.0)	800 (5.0)	61.4 (5.0)	68.5 (5.0)	422 (5.0)
Monitored Natural Attenuation Parameters (Laborato																					
Acetic acid	NE	U (5000)	NM	U (5000)	U (5000)	U (5000)	NM	NM	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)
Acetylene	NE	U (0.50)	NM	U (0.50)	U (0.50)	U (0.50)	NM	NM	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Alkalinity	NE	145000 (20000)	30000 (20000)	81600 (20000)	111000 (20000)	51600 (20000)	NM	NM	25900 (20000)	40200 (20000)	99900 (20000)	7000 J (20000)	37300 (20000)	12600 J (20000)	11600 J (20000)	14700 J (20000)	225000 (20000)	409000 (20000)	129000 (20000)	40000 (20000)	43600 (20000)
Ammonia	NE	U (100)	U (100)	U (100)	U (100)	U (100)	NM	NM	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)
Bicarbonate Alkalinity	NE	145000 (20000)	30000 (20000)	81600 (20000)	111000 (20000)	51600 (20000)	NM	NM	25900 (20000)	40200 (20000)	99900 (20000)	7000 J (20000)	37300 (20000)	12600 J (20000)	11600 J (20000)	14700 J (20000)	225000 (20000)	409000 (20000)	129000 (20000)	40000 (20000)	43600 (20000)
Butyric acid	NE	U (5000)	NM	U (5000)	U (5000)	U (5000)	NM	NM	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)
Carbon Dioxide	NE	352000 (20000)	45900 (20000)	120000 (20000)	305000 (20000)	456000 (20000)	NM	NM	365000 (20000)	172000 (20000)	173000 (20000)	U (20000)	269000 (20000)	U (20000)	U (20000)	U (20000)	288000 (20000)	403000 (20000)	183000 (20000)	67700 (20000)	63000 (20000)
Organic Carbo(total)	NE	540 (1000)	2800 (1000)	U (1000)	U (1000)	600 J (1000)	NM	NM	U (1000)	720 J (1000)	540 J (1000)	1100 (1000)	530 J (1000)	U (1000)	U (1000)	U (1000)	U (1000)	550 J (1000)	U (1000)	U (1000)	570 J (1000)
Carbonate Alkalinity	NE	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	NM	NM	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	150000 (10000)	1000 (1000)	107000 (10000)	190000 (20000)	13300 (1000)	NM	NM	312000 (20000)	46700 (5000)	20300 (2000)	42900 (5000)	116000 (10000)	243000 (20000)	308000 (20000)	222000 (20000)	239000 (20000)	135000 (10000)	105000 (10000)	154000 (10000)	141000 (10000)
Iron, Ferric	NE	U (200)	7100 (200)	U (200)	U (200)	U (200)	NM	NM	U (200)	1600 (200)	2400 (200)	310 (200)	U (200)	210 (200)	U (200)	U (200)	11100 (200)	1300 (200)	4800 (200)	2500 (200)	50900 (200)
2-Chloroethanol	NE	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	NM	NM	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)
Lactic Acid	NE	U (10000)	NM	U (10000)	U (10000)	U (10000)	NM	NM	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)
Nitrogen	NE	22700 M1 (500)	610 (100)	1100 (100)	1200 (100)	U (100)	NM	NM	2900 (100)	330 (100)	U (100)	920 (100)	40 J (100)	23 J (100)	U (100)	U (100)	U (100)	U (100)	1800 (100)	820 (100)	250 (100)
Nitrogen, Nitrate (As N)	NE	22700 M1 (500)	610 (100)	1100 (100)	1200 (100)	U (100)	NM	NM	2900 (100)	330 (100)	U (100)	920 (100)	40 J (100)	23 J (100)	U (100)	U (100)	U (100)	U (100)	1800 (100)	820 (100)	250 (100)
Nitrogen, Nitrite	NE	U (500)	U (100)	U (100)	U (100)	U (100)	NM	NM	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)
pH [STD UNITS]	NE	6.1 (0.10)	6.5 (0.10)	6.5 (0.10)	6.0 (0.10)	5.4 (0.10)	NM	NM	5.2 (0.10)	5.8 (0.10)	6.4 (0.10)	5.2 (0.10)	5.5 (0.10)	4.9 (0.10)	4.9 (0.10)	5.1 (0.10)	6.7 (0.10)	7.3 (0.10)	6.6 (0.10)	6.4 (0.10)	6.6 (0.10)
Phosphates (total)	NE	100 (30)	520 (30)	25 J (30)	170 (30)	U (30)	NM	NM	U (30)	1400 (30)	170 M1 (30)	100 (30)	U (30)	730 (30)	32 (30)	32 (30)	350 (30)	170 (30)	350 (30)	170 (30)	1600 (30)
Propionic Acid	NE	U (5000)	NM	U (5000)	U (5000)	U (5000)	NM	NM	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)
Pyruvic Acid	NE	U (5000)	NM	U (5000)	U (5000)	U (5000)	NM	NM	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)
Sulfide (total)	NE	U (50)	U (50)	U (50)	U (50)	U (50)	NM	NM	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)
Sulfate	NE	86700 (10000)	10800 (1000)	15900 (1000)	7500 (1000)	14300 (1000)	NM	NM	9700 (1000)	14100 (1000)	39900 (2000)	29700 (2000)	26800 (2000)	86900 (10000)	13300 (1000)	2600 (1000)	1400 (1000)	27000 (2000)	13300 (1000)	4000 (1000)	9500 (1000)
Gasses																					
Methane	NE	U (0.50)	NM	U (0.50)	0.55 (0.50)	2.2 (0.50)	NM	NM	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.82 (0.50)	3.4 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Ethane	NE	U (0.10)	NM	U (0.10)	U (0.10)	U (0.10)	NM	NM	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)
Ethene	NE	U (0.10)	NM	U (0.10)	U (0.10)	U (0.10)	NM	NM	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)
Hydrogen [nM] [4]	NE	2.4 (0.60)	5.7 (0.60)	2.8 (0.60)	8.0 (0.60)	2.9 (0.60)	NM	NM	2.3 (0.60)	1.4 (0.60)	2.5 (0.60)	10 (0.60)	2.2 (0.60)	75 (6.0)	2.6 (0.60)	8.7 (0.60)	NM	NM	NM	2.4 (0.60)	NM
Molecular Analyses																					
V1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	1.6 (0.5)	NM	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (2)	U (0.5)	NM
Dehalococcoides (DHC) [cells/mL]	NE	U (0.5)	0.6 (0.5)	U (0.5)	U (0.5)	66.7 (0.5)	NM	NM	U (0.5)	1 (0.5)	8 (0.5)	U (0.5)	0.6 (0.5)	U (0.5)	6.3 (0.5)	12.1 (0.5)	U (0.5)	3.4 (0.5)	U (2)	U (0.5)	NM
tceA Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NM	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (2)	U (0.5)	NM
yl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NM	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (2)	U (0.5)	NM

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

Onsite Wells
Offsite Wells
Plume Boundary Wells

RAMBOLL ENVIRON

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

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-66	MW-67	MW-68	MW-96	MW-96	MW-97	MW-98	MW-99	IW-73	IW-74	IW-74	IW-76	IW-77	MW-41	MW-41	MW-46R	MW-46R	MW-56	MW-57	MW-58
ENVIRON Sample ID		MW-66-201504	MW-67-201504	MW-68-201504	MW-96-201504	DUP-06-201504	MW-97-201504	MW-98-201504	MW-99-201504	IW-73-201504	IW-74-201504	DUP-05-201504	IW-76-201504	IW-77-201504	MW-41-201504	DUP-02-201504	MW-46R-201504	DUP-07-201504	MW-56-201504	MW-57-201504	MW-58-201504
Lab Sample ID(s)		60191960008, 152360017, 043MD028	60191960013, 152360016, 043MD033	60191794001, 152350024, 152370001,	60192138004	60192138003	60192138001	60192138005	60192138002	60191960021, 152360010, 043MD042	60191960012, 152360011, 043MD031	60191960024	60191960004, 152360015, 043MD029	60191868001, 152360009, 152370007,	60191960020, 152360014, 043MD041	60191960032	60191868020, 152350020, 043MD025	60191868023	60192103005	60192103006	60192103002, 043MD050
Sample Date		4/15/2015	4/15/2015	4/13/2015	4/16/2015	4/16/2015	4/16/2015	4/16/2015	4/16/2015	4/15/2015	4/15/2015	4/15/2015	4/15/2015	4/14/2015	4/15/2015	4/15/2015	4/14/2015	4/14/2015	4/16/2015	4/16/2015	4/16/2015
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments						Field Duplicate						Field Duplicate				Field Duplicate		Field Duplicate			
Volatile Organic Compounds																					
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (1.9)	U (5.0)	U (1.9)	U (1.9)	U (1.9)	U (5.0)	U (1.9)
Benzene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.51 J (0.50)	0.50 J (0.50)	U (0.50)	U (0.50)	U (0.060)	U (0.50)	U (0.060)	U (0.060)	U (0.060)	U (0.50)	U (0.060)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.19)	U (0.50)	U (0.19)	U (0.19)	U (0.19)	U (0.50)	U (0.19)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	8.4 (0.50)	U (0.50)	U (0.070)	U (0.50)	U (0.070)	U (0.070)	U (0.070)	U (0.50)	U (0.070)
Bromomethane	7	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	7.7 (2.5)	11.1 (2.5)	U (0.16)	U (2.5)	U (0.16)	U (0.16)	U (0.16)	U (2.5)	0.35 (0.16)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (0.59)	U (5.0)	U (0.59)	U (0.59)	3.7 J (0.59)	U (5.0)	U (0.59)
Carbon Disulfide	720	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (0.12)	U (2.5)	U (0.12)	U (0.12)	U (0.12)	U (2.5)	0.12 J (0.12)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.18)	U (0.50)	U (0.18)	U (0.18)	U (0.18)	U (0.50)	U (0.18)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.21)	U (0.50)	U (0.21)	U (0.21)	U (0.21)	U (0.50)	U (0.21)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.15)	U (0.50)	U (0.15)	U (0.15)	U (0.15)	U (0.50)	U (0.15)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.14)	U (0.50)	U (0.14)	U (0.14)	U (0.14)	U (0.50)	U (0.14)
Chloromethane	190	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.8 (0.50)	17.0 (0.50)	U (0.080)	U (0.50)	U (0.080)	U (0.080)	U (0.080)	U (0.50)	0.41 (0.080)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.21)	U (0.50)	U (0.21)	U (0.21)	U (0.21)	U (0.50)	U (0.21)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.050)	U (0.50)	U (0.050)	U (0.050)	U (0.050)	U (0.50)	U (0.050)
1,2-Dichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.12)	U (0.50)	U (0.12)	U (0.12)	U (0.12)	U (0.50)	U (0.12)
1,1-Dichloroethene	7	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.2 (0.50)	U (0.50)	U (0.50)	0.81 J (0.50)	U (0.50)	1.3 (0.20)	1.2 (0.50)	1.4 (0.20)	1.4 (0.20)	0.47 J (0.20)	0.67 J (0.50)	2.6 (0.20)
cis-1,2-Dichloroethene	70	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	6.8 (0.50)	5.0 (0.50)	4.8 (0.50)	11.2 (0.50)	2.9 (0.50)	15.2 (0.080)	13.5 (0.50)	13.8 (0.080)	13.9 (0.080)	8.2 (0.080)	4.8 (0.50)	19.7 (0.080)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.1 (0.50)	0.51 J (0.50)	U (0.20)	0.70 J (0.50)	0.47 J (0.20)	0.57 J (0.20)	U (0.20)	U (0.50)	0.34 J (0.20)
2-Hexanone	34	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (1.2)	U (5.0)	U (1.2)	U (1.2)	U (1.2)	U (5.0)	U (1.2)
4-Methyl-2-pentanone	1000	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (0.42)	U (2.5)	U (0.42)	U (0.42)	U (0.42)	U (2.5)	U (0.42)
Methylene Chloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.15)	U (0.50)	U (0.15)	0.18 J (0.15)	U (0.15)	U (0.50)	U (0.15)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.15)	U (0.50)	U (0.15)	U (0.15)	U (0.15)	U (0.50)	U (0.15)
Tetrachloroethene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.10)	U (0.50)	U (0.10)	0.11 J (0.10)	U (0.10)	U (0.50)	U (0.10)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.17)	U (0.50)	U (0.17)	U (0.17)	0.18 J (0.17)	U (0.50)	U (0.17)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.11)	U (0.50)	U (0.11)	U (0.11)	U (0.11)	U (0.50)	U (0.11)
1,1,2-Trichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.20)	U (0.50)	U (0.20)	U (0.20)	U (0.20)	U (0.50)	U (0.20)
Trichloroethene	5	2.6 (0.50)	0.77 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	96.8 (0.50)	147 (0.50)	153 (0.50)	354 (2.5)	153 (0.50)	386 (1.7)	410 (5.0)	220 J (2.5)	482 (1.7)	495 (2.5)	194 (0.50)	356 (2.5)
Vinyl Chloride	2	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.6 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.27 J (0.13)	U (0.50)	0.47 J (0.13)	0.51 J (0.13)	U (0.13)	U (0.50)	1.5 (0.13)
Metals																					
Iron	NE	272 (50.0)	2110 (50.0)	24.9 J (50.0)	NM	NM	NM	NM	NM	2220 (50.0)	73.3 (50.0)	NM	15.2 J (50.0)	103 (50.0)	3500 (50.0)	NM	231 (50.0)	NM	3280 (50.0)	4220 (50.0)	4290 (50.0)
Manganese	NE	4.9 J (5.0)	17.5 (5.0)	851 (5.0)	NM	NM	NM	NM	NM	1850 (5.0)	788 (5.0)	NM	46.4 (5.0)	20.4 (5.0)	5080 (5.0)	NM	120 (5.0)	NM	175 (5.0)	326 (5.0)	415 (5.0)
Monitored Natural Attenuation Parameters (Laborato																					
Acetic acid	NE	U (5000)	U (5000)	U (5000)	NM	NM	NM	NM	NM	U (5000)	U (5000)	NM	U (5000)	U (5000)	U (5000)	NM	U (5000)	NM	U (5000)	U (5000)	U (5000)
Acetylene	NE	U (0.50)	U (0.50)	U (0.50)	NM	NM	NM	NM	NM	U (0.50)	U (0.50)	NM	U (0.50)	U (0.50)	U (0.50)	NM	U (0.50)	NM	U (0.50)	U (0.50)	U (0.50)
Alkalinity	NE	102000 (20000)	276000 (20000)	11300 J (20000)	NM	NM	NM	NM	NM	59900 (20000)	83400 (20000)	NM	21300 (20000)	107000 (20000)	36500 (20000)	NM	13200 J (20000)	NM	27900 (20000)	15500 J (20000)	20200 (20000)
Ammonia	NE	U (100)	U (100)	U (100)	NM	NM	NM	NM	NM	U (100)	U (100)	NM	U (100)	100 (100)	U (100)	NM	U (100)	NM	U (100)	U (100)	U (100)
Bicarbonate Alkalinity	NE	102000 (20000)	276000 (20000)	11300 J (20000)	NM	NM	NM	NM	NM	59900 (20000)	83400 (20000)	NM	21300 (20000)	107000 (20000)	36500 (20000)	NM	13200 J (20000)	NM	27900 (20000)	15500 J (20000)	20200 (20000)
Butyric acid	NE	U (5000)	U (5000)	U (5000)	NM	NM	NM	NM	NM	U (5000)	U (5000)	NM	U (5000)	U (5000)	U (5000)	NM	U (5000)	NM	U (5000)	U (5000)	U (5000)
Carbon Dioxide	NE	108000 (20000)	258000 (20000)	U (20000)	NM	NM	NM	NM	NM	256000 (20000)	283000 (20000)	NM	163000 (20000)	643000 (20000)	291000 (20000)	NM	U (20000)	NM	38500 (20000)	U (20000)	NM
Organic Carbo(total)	NE	U (1000)	U (1000)	U (1000)	NM	NM	NM	NM	NM	1400 (1000)	U (1000)	NM	U (1000)	U (1000)	U (1000)	NM	U (1000)	NM	910 J (1000)	830 J (1000)	U (1000)
Carbonate Alkalinity	NE	U (20000)	U (20000)	U (20000)	NM	NM	NM	NM	NM	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	NM	U (20000)	NM	U (20000)	U (20000)	U (20000)
Chloride	NE	170000 (20000)	117000 (10000)	329000 (50000)	NM	NM	NM	NM	NM	159000 (20000)	278000 (50000)	NM	388000 (50000)	276000 (20000)	366000 (50000)	NM	224000 (20000)	NM	96800 (10000)	292000 (50000)	258000 (20000)
Iron, Ferric	NE	270 (200)	1700 (200)	U (200)	NM	NM	NM	NM	NM	1100 (200)	U (200)	NM	U (200)	U (200)	200 (200)	NM	230 (200)	NM	3300 (200)	4200 (200)	4300 (200)
2-Chloroethanol	NE	U (10000)	U (10000)	U (10000)	NM	NM	NM	NM	NM	U (10000)	U (10000)	NM	U (10000)	U (10000)	U (10000)	NM	U (10000)	NM	U (10000)	U (10000)	U (10000)
Lactic Acid	NE	U (10000)	U (10000)	U (10000)	NM	NM	NM	NM	NM	U (10000)	U (10000)	NM	U (10000)	U (10000)	U (10000)	NM	U (10000)	NM	U (10000)	U (10000)	U (10000)
Nitrogen	NE	220 (100)	160 (100)	U (100)	NM	NM	NM	NM	NM	24 (100)	420 (100)	NM	530 (100)	2300 (100)	36 J (100)	NM	U (100)	NM	39 J (100)	150 (100)	U (100)
Nitrogen, Nitrate (As N)	NE	220 (100)	160 (100)	U (100)	NM	NM	NM	NM	NM	24 J (100)	420 (100)	NM	530 (100)	2300 (100)	36 J (100)	NM	U (100)	NM	39 J (100)	150 (100)	U (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (100)	NM	NM	NM	NM	NM	U (100)	U (100)	NM	U (100)	U (100)	U (100)	NM	U (100)	NM	U (100)	U (100)	U (100)
pH [STD UNITS]	NE	7.0 (0.10)	7.6 (0.10)	5.6 (0.10)	NM	NM	NM	NM	NM	5.8 (0.10)	5.9 (0.10)	NM	5.5 (0.10)	5.6 (0.10)	5.4 (0.10)	NM	5.9 (0.10)	NM	6.6 (0.10)	5.4 (0.10)	NM
Phosphates (total)	NE	100 (30)	32 (30)	100 (30)	NM	NM	NM	NM	NM	U (30)	170 (30)	NM	140 (30)	600 (30)	U (30)	NM	U (30)	NM	240 (30)	U (30)	280 (30)
Propionic Acid	NE	U (5000)	U (5000)	U (5000)	NM	NM	NM	NM	NM	U (5000)	U (5000)	NM	U (5000)	U (5000)	U (5000)	NM	U (5000)	NM	U (5000)	U (5000)	U (5000)
Pyruvic Acid	NE	U (5000)	U (5000)	U (5000)	NM	NM	NM	NM	NM	U (5000)	U (5000)	NM	U (5000)	U (5000)	U (5000)	NM	U (5000)	NM	U (5000)	U (5000)	U (5000)
Sulfide (total)	NE	U (50)	U (50)	U (50)	NM	NM	NM	NM	NM	U (50)	U (50)	NM	U (50)	U (50)	U (50)	NM	U (50)	NM	U (50)	U (50)	U (50)
Sulfate	NE	6300 (1000)	7500 (1000)	940 J (1000)	NM	NM	NM	NM	NM	4200 (1000)	3200 (1000)	NM	232000 (50000)	1240000 (100000)	2800 (1000)	NM	690 J (1000)	NM	8500 (1000)	14000 (2000)	2100 (1000)
Gasses																					
Methane	NE	U (0.50)	U (0.50)	2.0 (0.50)	NM	NM	NM	NM	NM	3.1 (0.50)	U (0.50)	NM	10 (0.50)	2.9 (0.50)	9.5 (0.50)	NM	23 (0.50)	NM	U (0.50)	1.3 (0.50)	47 (0.50)
Ethane	NE	U (0.10)	U (0.10)	U (0.10)	NM	NM	NM	NM	NM	U (0.10)	U (0.10)	NM	U (0.10)	U (0.10)	U (0.10)	NM	U (0.10)	NM	U (0.10)	U (0.10)	U (0.10)
Ethene	NE	U (0.10)	U (0.10)	U (0.10)	NM	NM	NM	NM	NM	U (0.10)	U (0.10)	NM	U (0.10)	U (0.10)	U (0.10)	NM	U (0.10)	NM	U (0.10)	U (0.10)	U (0.10)
Hydrogen [nM] [4]	NE	3.2 (0.60)	8.8 (0.60)	4.0 (0.60)	NM	NM	NM	NM	NM	2.5 (0.60)	2.6 (0.60)	NM	13 (0.60)	26 (0.60)	8.4 (0.60)	NM	2.4 (0.60)	NM	NM	NM	NM
Molecular Analyses																					
V1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	U (1)	U (0.5)	NM	NM	NM	NM	NM	137 (0.5)	298 (0.5)	NM	U (0.5)	U (0.5)	14.6 (0.5)	NM	29.8 (0.5)	NM	NM	NM	3.9 (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	0.8 (0.5)	U (1)	3.8 (0.5)	NM	NM	NM	NM	NM	528 (0.5)	1140 (0.5)	NM	U (0.5)	U (0.5)	208 (0.5)	NM	289 (0.5)	NM	NM	NM	42.5 (0.5)
tceA Reductase [cells/mL]	NE	U (0.5)	U (1)	U (0.5)	NM	NM	NM	NM	NM	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	NM	NM	NM	U (0.5)
yl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	U (1)	U (0.5)	NM	NM	NM	NM	NM	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	NM	NM	NM	U (0.5)

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

Onsite Wells
Offsite Wells
Plume Boundary Wells

RAMBOLL ENVIRON

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

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-71	MW-81	MW-82	RW-69	MW-172	MW-173	MW-174	MW-175	MW-176	MW-177	MW-178	MW-179	MW-180	MW-181
ENVIRON Sample ID		MW-71-201504	MW-81-201504	MW-82-201504	RW-69-201504	MW-172-201504	MW-173-201504	MW-174-201504	MW-175-201504	MW-176-201504	MW-177-201504	MW-178-201504	MW-179-201504	MW-180-201504	MW-181-201504
Lab Sample ID(s)		60191868004, 152350022, 152370010,	60192015003	60192015002	60191868005, 152350023, 152370011,	60192139012	60192016002	60192016001	60192014001	60191896001	60191895001	60192139008	60192139003	60192139006	60191895002
Sample Date		4/14/2015	4/15/2015	4/15/2015	4/14/2015	4/16/2015	4/15/2015	4/14/2015	4/15/2015	4/14/2015	4/14/2015	4/16/2015	4/16/2015	4/16/2015	4/14/2015
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments															
Volatile Organic Compounds															
Acetone	12000	U (5.0)	14.5 (5.0)	U (5.0)	U (5.0)	8.8 J (5.0)	474 (5.0)	36.2 (5.0)	26.0 (5.0)	7.5 J (1.9)	U (5.0)	7.1 J (5.0)	5.7 J (5.0)	U (5.0)	U (5.0)
Benzene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.060)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.19)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	4.5 (0.50)	U (0.50)	U (0.50)	5.8 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.070)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7	U (2.5)	10.6 (2.5)	U (2.5)	U (2.5)	5.9 B (2.5)	U (2.5)	U (2.5)	U (2.5)	0.44 (0.16)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	83.6 (5.0)	12.0 (5.0)	U (5.0)	10.0 (0.59)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Carbon Disulfide	720	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (0.12)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.18)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.21)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.15)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.4 (0.50)	0.71 J (0.50)	U (0.50)	U (0.50)	U (0.14)	0.61 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	190	U (0.50)	6.2 (0.50)	U (0.50)	U (0.50)	2.7 (0.50)	U (0.50)	U (0.50)	0.68 J (0.50)	0.13 (0.080)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.21)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.050)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.12)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7	1.7 (0.50)	0.77 J (0.50)	U (0.50)	0.76 J (0.50)	0.64 J (0.50)	U (0.50)	U (0.50)	U (0.50)	2.7 (0.20)	U (0.50)	U (0.50)	0.62 J (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	70	5.7 (0.50)	4.2 (0.50)	U (0.50)	4.5 (0.50)	11.9 (0.50)	U (0.50)	U (0.50)	1.5 (0.50)	16.7 (0.080)	U (0.50)	1.3 (0.50)	1.6 (0.50)	3.8 (0.50)	U (0.50)
trans-1,2-Dichloroethene	100	0.53 J (0.50)	0.64 J (0.50)	U (0.50)	U (0.50)	1.4 (0.50)	U (0.50)	U (0.50)	U (0.50)	0.87 J (0.20)	U (0.50)	U (0.50)	U (0.50)	0.88 J (0.50)	U (0.50)
2-Hexanone	34	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (1.2)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
4-Methyl-2-pentanone	1000	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	2.5 J (2.5)	U (2.5)	U (2.5)	U (0.42)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Methylene Chloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.72 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.15)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.95 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.15)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.85 J (0.50)	U (0.50)	U (0.50)	U (0.50)	0.14 J (0.10)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.17)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.11)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.20)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	5	156 (0.50)	198 (0.50)	U (0.50)	113 (0.50)	1740 (12.5)	U (0.50)	0.68 J (0.50)	98.8 (0.50)	528 (1.7)	U (0.50)	5.0 (0.50)	41.2 (0.50)	21.4 (0.50)	U (0.50)
Vinyl Chloride	2	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.92 J (0.50)	U (0.50)	U (0.50)	U (0.50)	0.69 J (0.13)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Metals															
Iron	NE	984 (50.0)	NM	NM	243 (50.0)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Manganese	NE	1070 (5.0)	NM	NM	1040 (5.0)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Monitored Natural Attenuation Parameters (Laborato															
Acetic acid	NE	U (5000)	NM	NM	U (5000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Acetylene	NE	U (0.50)	NM	NM	U (0.50)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Alkalinity	NE	21800 (20000)	NM	NM	16300 J (20000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Ammonia	NE	U (100)	NM	NM	U (100)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Bicarbonate Alkalinity	NE	21800 (20000)	NM	NM	16300 J (20000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Butyric acid	NE	U (5000)	NM	NM	U (5000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Carbon Dioxide	NE	343000 (20000)	NM	NM	U (20000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Organic Carbo(total)	NE	U (1000)	NM	NM	U (1000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Carbonate Alkalinity	NE	U (20000)	NM	NM	U (20000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Chloride	NE	251000 (20000)	NM	NM	287000 (20000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Iron, Ferric	NE	470 (200)	NM	NM	230 (200)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
2-Chloroethanol	NE	U (10000)	NM	NM	U (10000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Lactic Acid	NE	U (10000)	NM	NM	U (10000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Nitrogen	NE	U (100)	NM	NM	U (100)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Nitrogen, Nitrate (As N)	NE	U (100)	NM	NM	U (100)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Nitrogen, Nitrite	NE	U (100)	NM	NM	U (100)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
pH [STD UNITS]	NE	5.1 (0.10)	NM	NM	5.4 (0.10)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Phosphates (total)	NE	170 (30)	NM	NM	32 (30)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Propionic Acid	NE	U (5000)	NM	NM	U (5000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Pyruvic Acid	NE	U (5000)	NM	NM	U (5000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Sulfide (total)	NE	U (50)	NM	NM	U (50)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Sulfate	NE	3900 (1000)	NM	NM	2800 (1000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Gasses															
Methane	NE	34 (0.50)	NM	NM	4.0 (0.50)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Ethane	NE	U (0.10)	NM	NM	U (0.10)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Ethene	NE	U (0.10)	NM	NM	U (0.10)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Hydrogen [nM] [4]	NE	2.6 (0.60)	NM	NM	130 (12)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Molecular Analyses															
V1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	NM	NM	55.9 (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Dehalococcoides (DHC) [cells/mL]	NE	14.5 (0.5)	NM	NM	524 (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
tceA Reductase [cells/mL]	NE	U (0.5)	NM	NM	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
yl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	NM	NM	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM

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

Onsite Wells
Offsite Wells
Plume Boundary Wells

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-1	11/1/1989	ND	NT	ND
ITMW-1	1/1/1990	ND	NT	ND
ITMW-1	11/1/1993	10	NT	ND
ITMW-1	12/1/1996	21	NT	ND
ITMW-1	2/1/1999	37	ND	ND
ITMW-1	3/1/2000	125	8	ND
ITMW-1	9/19/2000	30.7	7.45	< 10 U
ITMW-1	3/27/2001	30	6	< 10 U
ITMW-1	9/11/2001	27	9	< 10 U
ITMW-1	9/10/2002	35	9	< 10 U
ITMW-1	2/27/2003	29.6	7.14	< 10 U
ITMW-1	9/23/2003	25	12	< 10 U
ITMW-1	4/13/2004	42.2	11.1	< 10 U
ITMW-1	9/21/2004	26	16.7	< 10 U
ITMW-1	9/21/2004	26.1	15.8	< 10 U
ITMW-1	9/28/2005	34.7	11.3	< 10 U
ITMW-1	10/14/2006	20	11	< 10 UJ
ITMW-1	9/20/2007	18	13	< 10 U
ITMW-1	12/9/2008	14	7.3	< 5 U
ITMW-1	10/27/2011	17	8.2	< 5 U
ITMW-1	4/18/2012	32	13	< 5 U
ITMW-1	10/19/2012	10	8.3	< 0.11 U
ITMW-1	4/24/2013	26	9.1	< 0.11 U
ITMW-1	10/15/2013	7.2	5.8	< 0.11 U
ITMW-1	3/8/2014	23.4	8.9	< 0.13 U
ITMW-1	5/13/2014	21.3	8.7	< 0.13 U
ITMW-1	7/30/2014	9.2	5.7	< 0.50 U
ITMW-1	7/30/2014	8.9	5.4	< 0.50 U
ITMW-1	10/15/2014	6.1	4.5 J	< 0.50 U
ITMW-1	1/14/2015	22.7	9.7	< 0.50 U
ITMW-1	4/15/2015	19.2	9.7	< 0.50 U
ITMW-2	10/1/1989	ND	NT	ND
ITMW-2	11/1/1989	ND	NT	ND
ITMW-2	1/1/1990	ND	NT	ND
ITMW-2	1/1/1990	ND	NT	ND
ITMW-2	3/1/1991	ND	NT	ND
ITMW-2	11/1/1993	4	NT	ND
ITMW-2	12/1/1996	3.4	NT	ND
ITMW-2	3/1/2000	ND	ND	ND

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-2	9/19/2000	< 5 U	< 5 U	< 10 U
ITMW-2	3/27/2001	< 5 U	< 5 U	< 10 U
ITMW-2	9/13/2001	< 5 U	< 5 U	< 10 U
ITMW-2	9/11/2002	< 5 U	< 5 U	< 10 U
ITMW-2	2/27/2003	< 5 U	< 5 U	< 10 U
ITMW-2	9/23/2003	< 5 U	< 5 U	< 10 U
ITMW-2	4/13/2004	< 5 U	< 5 U	< 10 U
ITMW-2	4/13/2004	< 5 U	< 5 U	< 10 U
ITMW-2	9/21/2004	< 5 U	< 5 U	< 10 U
ITMW-2	9/21/2004	< 5 U	< 5 U	< 10 U
ITMW-2	9/29/2005	< 5 U	< 5 U	< 10 U
ITMW-2	10/14/2006	4 J	< 5 U	< 10 U
ITMW-2	9/20/2007	< 5 U	< 5 U	< 10 U
ITMW-2	12/9/2008	< 5 U	< 5 U	< 5 U
ITMW-2	11/3/2010	< 5 U	< 5 U	< 5 U
ITMW-2	10/26/2011	< 5 U	< 5 U	< 5 U
ITMW-2	4/17/2012	< 5 U	< 5 U	< 5 U
ITMW-2	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-2	4/24/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-2	10/14/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-2	3/6/2014	0.23 J	0.4 J	< 0.13 U
ITMW-2	3/6/2014	0.28 J	0.51 J	< 0.13 U
ITMW-2	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
ITMW-2	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-2	10/15/2014	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-2	1/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-2	4/15/2015	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-3	10/1/1989	ND	NT	ND
ITMW-3	1/1/1990	ND	NT	ND
ITMW-3	11/1/1993	3	NT	ND
ITMW-3	12/1/1996	1.7	NT	ND
ITMW-3	2/1/1999	ND	ND	ND
ITMW-3	3/1/2000	ND	ND	ND
ITMW-3	3/1/2000	ND	ND	ND
ITMW-3	9/19/2000	< 5 U	< 5 U	< 10 U
ITMW-3	3/27/2001	< 5 U	< 5 U	< 10 U
ITMW-3	9/11/2001	< 5 U	< 5 U	< 10 U
ITMW-3	9/10/2002	15	< 5 U	< 10 U
ITMW-3	2/27/2003	< 5 U	< 5 U	< 10 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

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

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-4	1/13/2015	1.7	2.3	< 0.50 U
ITMW-4	4/14/2015	1.6	2.6	0.84 J
ITMW-5	10/1/1989	ND	NT	ND
ITMW-5	1/1/1990	ND	NT	ND
ITMW-5	12/1/1996	21	NT	ND
ITMW-5	2/1/1999	86	39	ND
ITMW-5	3/1/2000	73	59	ND
ITMW-5	9/20/2000	85	64.4	< 10 U
ITMW-5	3/28/2001	100	46	< 10 U
ITMW-5	9/13/2001	72	64	< 10 U
ITMW-5	9/10/2002	108	72	< 10 U
ITMW-5	2/28/2003	90.4	68.7	< 10 U
ITMW-5	9/24/2003	97.3	73.7	< 10 U
ITMW-5	4/14/2004	83.9	55.4	< 10 U
ITMW-5	9/22/2004	105	75.8	< 10 U
ITMW-5	4/6/2005	93.2	72.6	< 10 U
ITMW-5	4/6/2005	87	71	< 10 U
ITMW-5	9/28/2005	79	53.5	< 10 U
ITMW-5	9/28/2005	82.1	54.4	< 10 U
ITMW-5	3/14/2006	92	66.1	< 10 U
ITMW-5	3/14/2006	98.4	66.1	< 10 U
ITMW-5	10/10/2006	110	51	4 J
ITMW-5	4/18/2007	115	39.3	< 10 U
ITMW-5	9/20/2007	120	49	4 J
ITMW-5	4/29/2008	120	43	< 10 U
ITMW-5	12/9/2008	200 E	42	< 5 U
ITMW-5	4/27/2009	160	34	< 5 U
ITMW-5	5/11/2010	190 EF	40	< 5 U
ITMW-5	11/6/2010	350	50	< 5 U
ITMW-5	3/22/2011	370	39	< 5 U
ITMW-5	10/25/2011	150	35	< 5 U
ITMW-5	4/17/2012	290	26	< 5 U
ITMW-5	10/18/2012	260	33	0.64 J
ITMW-5	4/25/2013	220	20	0.5 J
ITMW-5	10/16/2013	260	27	0.55 J
ITMW-6	10/1/1989	ND	NT	ND
ITMW-6	1/1/1990	ND	NT	ND
ITMW-6	12/1/1996	6.8	NT	ND
ITMW-6	5/1/1997	7	ND	ND

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-6	2/1/1999	25	ND	ND
ITMW-6	2/1/1999	6	ND	ND
ITMW-6	3/1/2000	ND	ND	ND
ITMW-6	9/20/2000	< 5 U	< 5 U	< 10 U
ITMW-6	3/28/2001	< 5 U	< 5 U	< 10 U
ITMW-6	9/13/2001	< 5 U	< 5 U	< 10 U
ITMW-6	9/10/2002	< 5 U	< 5 U	< 10 U
ITMW-6	9/10/2002	< 5 U	< 5 U	< 10 U
ITMW-6	2/27/2003	< 5 U	< 5 U	< 10 U
ITMW-6	9/24/2003	< 5 U	< 5 U	< 10 U
ITMW-6	4/14/2004	< 5 U	< 5 U	< 10 U
ITMW-6	9/22/2004	< 5 U	< 5 U	< 10 U
ITMW-6	9/28/2005	< 5 U	< 5 U	< 10 U
ITMW-6	10/11/2006	< 5 U	4 J	< 10 U
ITMW-6	9/20/2007	< 5 U	< 5 U	< 10 U
ITMW-6	12/10/2008	< 5 U	< 5 U	< 5 U
ITMW-6	10/28/2009	< 5 U	2.1 J	< 5 U
ITMW-6	5/10/2010	< 5 U	1.9 J	< 5 U
ITMW-6	10/25/2011	< 5 U	2.7 J	< 5 U
ITMW-6	10/25/2011	< 5 U	2.4 J	< 5 U
ITMW-6	4/17/2012	< 5 U	2.9 J	< 5 U
ITMW-6	10/17/2012	< 1.6 U	3.1 J	< 0.11 U
ITMW-6	4/22/2013	< 1.6 U	2.1 J	0.33 J
ITMW-6	10/14/2013	3.4 J	5.5	0.18 J
ITMW-6	3/6/2014	2.7 J	4.9 J	0.18 J
ITMW-6	5/13/2014	3.6 J	5.3	0.17 J
ITMW-6	7/30/2014	4.4 J	6.7	< 0.50 U
ITMW-6	10/15/2014	3.1 J	5.2	< 0.50 U
ITMW-6	1/13/2015	3.7	5.7	< 0.50 U
ITMW-6	4/14/2015	3.7	5.3 J	< 0.50 U
ITMW-7	11/1/1989	ND	NT	ND
ITMW-7	1/1/1990	ND	NT	ND
ITMW-7	12/1/1996	290	NT	3
ITMW-7	5/1/1997	380	180	ND
ITMW-7	2/1/1999	ND	ND	ND
ITMW-7	6/1/1999	320	144	ND
ITMW-7	6/1/1999	300	140	ND
ITMW-7	3/1/2000	262	100	ND
ITMW-7	3/1/2000	207	92	ND

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-7	9/19/2000	207	100	< 10 U
ITMW-7	9/21/2000	109	< 5 U	< 10 U
ITMW-7	3/28/2001	161	66	< 10 U
ITMW-7	9/13/2001	139	68	< 10 U
ITMW-7	9/10/2002	137	56	< 10 U
ITMW-7	9/10/2002	128	54	< 10 U
ITMW-7	2/27/2003	172	92.5	< 10 U
ITMW-7	9/24/2003	125	57.3	< 10 U
ITMW-7	4/14/2004	201	80.7	< 10 U
ITMW-7	9/22/2004	132	48.4	< 10 U
ITMW-7	4/7/2005	122	39	< 10 U
ITMW-7	9/28/2005	100	30.5	< 10 U
ITMW-7	3/14/2006	153	59.5	< 10 U
ITMW-7	10/10/2006	140	44	1 J
ITMW-7	4/17/2007	83	29.4	< 10 U
ITMW-7	9/21/2007	72	22	< 10 U
ITMW-7	4/30/2008	70	18	< 10 U
ITMW-7	12/11/2008	66	19	< 5 U
ITMW-7	4/27/2009	87	26	< 5 U
ITMW-7	10/28/2009	60	20	< 5 U
ITMW-7	5/10/2010	73	18	< 5 U
ITMW-7	3/23/2011	225 EF	93.2	56.5
ITMW-7	10/25/2011	99	26	< 5 U
ITMW-7	4/18/2012	100	20	< 5 U
ITMW-7	10/18/2012	63	17	< 0.11 U
ITMW-7	4/25/2013	69	16	0.27 J
ITMW-7	10/17/2013	47	12	< 0.11 U
ITMW-7	3/8/2014	37.4	10	0.24 J
ITMW-7	5/14/2014	37	11.1	0.22 J
ITMW-7	7/30/2014	36.7	11.2	< 0.50 U
ITMW-7	10/15/2014	33.7	10.3	< 0.50 U
ITMW-7	1/14/2015	34.7	10.5	< 0.50 U
ITMW-7	4/14/2015	29.3	9.2	< 0.50 U
ITMW-9	1/1/1990	ND	NT	ND
ITMW-9	12/1/1996	230	NT	ND
ITMW-9	5/1/1997	7	ND	ND
ITMW-9	2/1/1999	40	24	ND
ITMW-9	3/1/2000	69	45	ND
ITMW-9	9/20/2000	57.3	14.3	< 10 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-9	9/20/2000	54.8	14	< 10 U
ITMW-9	3/28/2001	40	12	< 10 U
ITMW-9	9/13/2001	40	12	< 10 U
ITMW-9	9/10/2002	61	21	< 10 U
ITMW-9	2/28/2003	54.2	37.2	< 10 U
ITMW-9	9/23/2003	91	49.5	< 10 U
ITMW-9	9/23/2003	97.6	53.9	< 10 U
ITMW-9	4/14/2004	71.8	38.8	< 10 U
ITMW-9	9/22/2004	80.7	21.1	< 10 U
ITMW-9	4/6/2005	79	30.4	< 10 U
ITMW-9	9/27/2005	98.8	54.6	< 10 U
ITMW-9	3/14/2006	101	78.7	< 10 U
ITMW-9	10/11/2006	110	77	6 J
ITMW-9	4/17/2007	79	39.6	< 10 U
ITMW-9	9/20/2007	76	26	< 10 U
ITMW-9	4/28/2008	82	37	< 10 U
ITMW-9	12/9/2008	90	62	< 5 U
ITMW-9	4/27/2009	110	51	< 5 U
ITMW-9	10/27/2009	120	67	5.7
ITMW-9	10/27/2009	120	71	6.1
ITMW-9	5/11/2010	130	38	< 5 U
ITMW-9	3/22/2011	120	48	2.4 J
ITMW-9	10/25/2011	90	57	< 5 U
ITMW-9	4/17/2012	150	50	2.5 J
ITMW-9	10/18/2012	120	53	5.2
ITMW-9	4/24/2013	140	44	1.6 J
ITMW-9	10/17/2013	83	42	16
ITMW-9	3/8/2014	112	40.4	0.41 J
ITMW-9	5/14/2014	113	42.2	0.64 J
ITMW-9	7/30/2014	143	43.9	0.54 J
ITMW-9	7/30/2014	141	44.4	0.53 J
ITMW-9	10/15/2014	75.3	38.8	1.7 J
ITMW-9	10/15/2014	76.9	39.1	1.8 J
ITMW-9	1/13/2015	89.4	39.1	1.4
ITMW-9	1/13/2015	89.6	39.1	1.4
ITMW-9	4/15/2015	100	35.4	< 0.50 U
ITMW-10	1/1/1990	ND	NT	ND
ITMW-10	12/1/1996	4	NT	ND
ITMW-10	2/1/1999	25	13	ND

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-10	3/1/2000	23	17	ND
ITMW-10	9/20/2000	18.1	15.9	< 10 U
ITMW-10	3/28/2001	40	21	< 10 U
ITMW-10	9/13/2001	29	28	< 10 U
ITMW-10	9/13/2001	30	27	< 10 U
ITMW-10	9/10/2002	55	38	< 10 U
ITMW-10	2/28/2003	57.6	50.9	< 10 U
ITMW-10	7/16/2003	55.3	49.2	< 10 U
ITMW-10	9/23/2003	65.9	56.5	< 10 U
ITMW-10	4/14/2004	80	57.4	< 10 U
ITMW-10	9/22/2004	59.6	50	< 10 U
ITMW-10	4/6/2005	72.1	57.7	< 10 U
ITMW-10	9/28/2005	57.6	41.6	< 10 U
ITMW-10	3/14/2006	82	67.2	< 10 U
ITMW-10	10/10/2006	88	54	5 J
ITMW-10	4/17/2007	76	52.4	< 10 U
ITMW-10	9/20/2007	67	48	5 J
ITMW-10	4/28/2008	61	46	< 10 U
ITMW-10	12/9/2008	78	50	< 5 U
ITMW-10	4/27/2009	87	52	4.4 J
ITMW-10	10/27/2009	110	50	4.2 J
ITMW-10	5/11/2010	85	46	2.4 J
ITMW-10	3/22/2011	92	42	2.7 J
ITMW-10	10/25/2011	94	39	2.5 J
ITMW-10	10/18/2012	100	37	2.5
ITMW-10	10/15/2013	100	32	3.1
ITMW-10	3/6/2014	166	32.3	1.2 J
ITMW-10	5/14/2014	184	32.4	1.4 J
ITMW-10	7/30/2014	273	38.3	1.8 J
ITMW-10	10/15/2014	243	32.3	1.7 J
ITMW-10	1/14/2015	403	38.9	1.4
ITMW-10	4/15/2015	258	34.8	0.98 J
ITMW-11	1/1/1990	19000	NT	180
ITMW-11	11/1/1990	4700	NT	93
ITMW-11	2/1/1991	3400	NT	ND
ITMW-11	11/1/1993	2300	NT	43
ITMW-11	12/1/1996	510	NT	ND
ITMW-11	2/1/1999	650	10	ND
ITMW-11	3/1/2000	3370	206	ND

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-11	9/19/2000	8030	327	11.7
ITMW-11	3/27/2001	7000	200	< 10 U
ITMW-11	9/13/2001	6000	183	< 10 U
ITMW-11	11/20/2001	< 5 U	< 5 U	< 10 U
ITMW-11	9/9/2002	7100	206	10
ITMW-11	9/9/2002	800	72	< 10 U
ITMW-11	2/26/2003	4110	346	58.8
ITMW-11	2/26/2003	3630	306	60.7
ITMW-11	9/24/2003	3990	269	11.8
ITMW-11	4/13/2004	3160	240	37.8
ITMW-11	9/21/2004	3450	204	< 10 U
ITMW-11	4/7/2005	4210	282	66.7
ITMW-11	9/29/2005	3910	199	18
ITMW-11	3/16/2006	14600	1290	482
ITMW-11	3/16/2006	12800	1210	381
ITMW-11	10/13/2006	8000	340	47
ITMW-11	4/19/2007	3970	199	< 200 U
ITMW-11	9/21/2007	7600	180	21
ITMW-11	4/30/2008	4500	210	58
ITMW-11	12/10/2008	5800	190	27
ITMW-11	4/27/2009	2500	200	24
ITMW-11	5/11/2010	6200	290	28
ITMW-11	5/11/2010	6200	290	45
ITMW-11	3/23/2011	9700	520	130
ITMW-11	10/26/2011	8800	310	16
ITMW-11	10/19/2012	1400	34	2.4
ITMW-11	10/17/2013	180	8.7	2.9
ITMW-11	3/8/2014	2980	187 M1	22.5
ITMW-11	5/15/2014	1470	107	4.9
ITMW-11	5/15/2014	1590	99.5	5.5
ITMW-11	7/31/2014	7380	156	6.9
ITMW-11	10/15/2014	2050	70.4	3.5
ITMW-11	12/4/2014	1530	55	6.4
ITMW-11	1/15/2015	68.3	9.8	1.9
ITMW-11	4/15/2015	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-12	11/1/1990	2400	NT	140
ITMW-12	2/1/1991	2100	NT	ND
ITMW-12	11/1/1993	2500	NT	35
ITMW-12	12/1/1996	1200	NT	ND

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-12	2/1/1999	3100	480	34
ITMW-12	3/1/2000	3110	320	19
ITMW-12	9/19/2000	3350	180	12
ITMW-12	3/27/2001	3900	200	20
ITMW-12	9/13/2001	3100	159	< 10 U
ITMW-12	11/20/2001	2400	300	20
ITMW-12	9/11/2002	4200	300	< 10 U
ITMW-12	2/26/2003	3460	287	< 10 U
ITMW-12	2/26/2003	3940	308	< 10 U
ITMW-12	9/24/2003	2920	242	< 10 U
ITMW-12	4/13/2004	2410	245	< 10 U
ITMW-12	9/21/2004	1780	238	< 10 U
ITMW-12	9/29/2005	2120	273	< 10 U
ITMW-12	10/13/2006	3500	310	9 J
ITMW-12	9/21/2007	2100	220	< 10 U
ITMW-12	12/9/2008	1500	180	< 5 U
ITMW-12	10/26/2011	1600	230	1.8 J
ITMW-12	10/19/2012	2500	200	3.6
ITMW-12	10/17/2013	2300	190	3.2
ITMW-12	10/17/2013	2300	160	4.1
ITMW-12	3/8/2014	1910	148	3.4
ITMW-12	3/8/2014	2400	207	3.4
ITMW-12	5/14/2014	2740	164	14
ITMW-12	7/31/2014	2710	173	13.6
ITMW-12	10/15/2014	2950	192	3.7
ITMW-12	10/15/2014	2570	188	3.5
ITMW-12	12/4/2014	468	51.1	0.88 J
ITMW-12	1/15/2015	59.3	4.8	< 0.50 U
ITMW-12	1/15/2015	57.1	4.2	< 0.50 U
ITMW-12	4/15/2015	2260	149	< 0.13 U
ITMW-13	11/1/1990	34	NT	18
ITMW-13	2/1/1991	32	NT	35
ITMW-13	11/1/1993	NT	NT	29
ITMW-13	12/1/1996	36	NT	36
ITMW-13	2/1/1999	36	140	48
ITMW-13	3/1/2000	37	121	53
ITMW-13	9/19/2000	22.4	112	50.5
ITMW-13	3/28/2001	44	92	40
ITMW-13	9/13/2001	35	111	80

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-13	9/9/2002	99	110	10
ITMW-13	9/9/2002	81	86	20
ITMW-13	2/26/2003	70.2	85.5	< 10 U
ITMW-13	9/24/2003	159	130	< 10 U
ITMW-13	4/13/2004	48.4	87.2	< 10 U
ITMW-13	9/21/2004	25.5	71.6	< 10 U
ITMW-13	4/7/2005	71.8	103	< 10 U
ITMW-13	9/30/2005	72.7	114	17.9
ITMW-13	3/16/2006	141	187	< 10 U
ITMW-13	10/14/2006	100	150	17
ITMW-13	4/18/2007	83.1	78	4.3 J
ITMW-13	9/20/2007	28	40	< 10 U
ITMW-13	4/29/2008	69	72	< 10 U
ITMW-13	12/10/2008	26	23	< 5 U
ITMW-13	4/27/2009	79	78	< 5 U
ITMW-13	10/27/2009	18	22	< 5 U
ITMW-13	5/12/2010	97	72	< 5 U
ITMW-13	3/23/2011	130	83	< 5 U
ITMW-13	10/27/2011	64	40	< 5 U
ITMW-13	10/27/2011	65	41	< 5 U
ITMW-13	4/19/2012	97	63	< 5 U
ITMW-13	10/18/2012	400	260	1 J
ITMW-13	4/25/2013	86	52	0.14 J
ITMW-13	10/16/2013	150	74	< 0.11 U
ITMW-13	3/8/2014	69.3	45.3	< 0.13 U
ITMW-13	5/14/2014	54	34.7	0.17 J
ITMW-13	7/30/2014	36.5	27.5	< 0.50 U
ITMW-13	10/15/2014	40.8	25.9	< 0.50 U
ITMW-13	1/14/2015	45.8	28.5	< 0.50 U
ITMW-13	4/15/2015	43.1	26.5	< 0.50 U
ITMW-14	11/1/1990	ND	NT	13
ITMW-14	2/1/1991	ND	NT	ND
ITMW-14	11/1/1993	6	NT	ND
ITMW-14	12/1/1996	ND	NT	ND
ITMW-14	2/1/1999	ND	29	20
ITMW-14	3/1/2000	ND	24	12
ITMW-14	9/19/2000	< 5 U	13.6	< 10 U
ITMW-14	3/27/2001	< 5 U	24	10
ITMW-14	9/13/2001	< 5 U	5	< 10 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-14	9/11/2002	41	6	< 10 U
ITMW-14	2/26/2003	< 5 U	< 5 U	< 10 U
ITMW-14	9/24/2003	< 5 U	< 5 U	< 10 U
ITMW-14	4/13/2004	< 5 U	< 5 U	< 10 U
ITMW-14	9/21/2004	< 5 U	< 5 U	< 10 U
ITMW-14	9/30/2005	< 5 U	< 5 U	< 10 U
ITMW-14	10/14/2006	4 J	8	< 10 UJ
ITMW-14	9/21/2007	5 J	9	< 10 U
ITMW-14	12/10/2008	5.7	9.3	< 5 U
ITMW-14	11/4/2010	110	14	< 5 U
ITMW-14	10/27/2011	6.3	11	< 5 U
ITMW-14	4/19/2012	7.6	16	< 5 U
ITMW-14	10/19/2012	5.4	11	< 0.11 U
ITMW-14	4/25/2013	6.8	14	< 0.11 U
ITMW-14	10/16/2013	2.9 J	4.9 J	< 0.11 U
ITMW-14	3/8/2014	6.1	11.9	< 0.13 U
ITMW-14	5/14/2014	5.3	11.3	< 0.13 U
ITMW-14	7/30/2014	4 J	9.2	< 0.50 U
ITMW-14	10/15/2014	4.1 J	9.4	< 0.50 U
ITMW-14	1/14/2015	4.9	11.5	< 0.50 U
ITMW-14	4/15/2015	5	10.7	< 0.50 U
ITMW-15	11/1/1990	2500	NT	55
ITMW-15	2/1/1991	1700	NT	ND
ITMW-15	4/15/1991	2000	NT	ND
ITMW-15	4/19/1991	2100	NT	ND
ITMW-15	4/20/1991	2400	NT	ND
ITMW-15	11/1/1993	4300	NT	10
ITMW-15	12/1/1996	240	NT	ND
ITMW-15	2/1/1999	400	120	ND
ITMW-15	3/1/2000	339	97	ND
ITMW-15	9/19/2000	362	92.7	< 10 U
ITMW-15	9/19/2000	376	91	< 10 U
ITMW-15	3/28/2001	290	57	< 10 U
ITMW-15	9/13/2001	380	87	< 10 U
ITMW-15	9/13/2001	370	80	< 10 U
ITMW-15	11/20/2001	157	30	< 10 U
ITMW-15	9/11/2002	320	75	< 10 U
ITMW-15	2/26/2003	301	98.7	< 10 U
ITMW-15	9/25/2003	490	91.9	< 10 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-15	4/14/2004	334	126	< 10 U
ITMW-15	9/21/2004	774	118	< 10 U
ITMW-15	4/7/2005	685	133	< 10 U
ITMW-15	9/29/2005	862	189	< 10 U
ITMW-15	3/16/2006	908	183	12
ITMW-15	10/13/2006	680	140	7 J
ITMW-15	4/19/2007	591	110	8.5 J
ITMW-15	9/21/2007	1000	190	27
ITMW-15	4/29/2008	100	18	< 10 U
ITMW-15	12/10/2008	1100	150	< 5 U
ITMW-15	4/27/2009	2800	130	17
ITMW-15	5/11/2010	2800	160	11
ITMW-15	10/26/2011	1100	74	< 5 U
ITMW-15	10/19/2012	240	14	1.1 J
ITMW-15	10/16/2013	2800	170	14
ITMW-15	3/8/2014	1630	152	11.6
ITMW-15	5/14/2014	899	61.7	4.4
ITMW-15	5/14/2014	729	60.7	4.1
ITMW-15	7/30/2014	1850	82.8	3
ITMW-15	7/30/2014	1820	82.5	3.1
ITMW-15	10/16/2014	1660	66.4	1.8 J
ITMW-15	10/16/2014	1490	63	2
ITMW-15	12/5/2014	63	< 0.50 U	< 0.50 U
ITMW-15	1/15/2015	61.7	3.8	< 0.50 U
ITMW-15	1/15/2015	56.5	2.9	< 0.50 U
ITMW-15	4/15/2015	101	7.5	< 0.50 U
ITMW-16	2/1/1991	31	NT	ND
ITMW-16	11/1/1993	41	NT	7
ITMW-16	12/1/1996	ND	NT	ND
ITMW-16	2/1/1999	ND	ND	ND
ITMW-16	3/1/2000	7	ND	ND
ITMW-16	9/21/2000	< 5 U	< 5 U	< 10 U
ITMW-16	3/26/2001	< 5 U	< 5 U	< 10 U
ITMW-16	9/13/2001	< 5 U	< 5 U	< 10 U
ITMW-16	9/11/2002	< 5 U	< 5 U	< 10 U
ITMW-16	2/27/2003	< 5 U	< 5 U	< 10 U
ITMW-16	9/25/2003	< 5 U	< 5 U	< 10 U
ITMW-16	4/15/2004	< 5 U	< 5 U	< 10 U
ITMW-16	9/23/2004	< 5 U	< 5 U	< 10 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-16	9/29/2005	< 5 U	< 5 U	< 10 U
ITMW-16	9/29/2005	< 5 U	< 5 U	< 10 U
ITMW-16	10/14/2006	< 5 U	< 5 U	< 10 U
ITMW-16	9/20/2007	< 5 U	< 5 U	< 10 U
ITMW-16	12/10/2008	< 5 U	< 5 U	< 5 U
ITMW-16	11/6/2010	17	< 5 U	< 5 U
ITMW-16	10/27/2011	< 5 U	< 5 U	< 5 U
ITMW-16	4/18/2012	< 5 U	< 5 U	< 5 U
ITMW-16	10/18/2012	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-16	4/24/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-16	10/16/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-16	3/7/2014	0.3 J	< 0.080 U	< 0.13 U
ITMW-16	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
ITMW-16	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-16	10/15/2014	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-16	1/14/2015	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-16	4/14/2015	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-17	2/1/1991	21000	NT	ND
ITMW-17	4/15/1991	21000	NT	ND
ITMW-17	4/24/1991	21000	NT	ND
ITMW-17	11/1/1993	18000	NT	15
ITMW-17	12/1/1996	9300	NT	ND
ITMW-17	2/1/1999	11000	240	ND
ITMW-17	3/1/2000	6780	171	ND
ITMW-17	9/19/2000	5500	180	< 10 U
ITMW-17	1/5/2001	8310	179	< 10 U
ITMW-17	3/28/2001	6700	134	< 10 U
ITMW-17	9/13/2001	6300	158	< 10 U
ITMW-17	9/11/2002	6500	153	< 10 U
ITMW-17	2/26/2003	4380	134	< 10 U
ITMW-17	9/25/2003	6090	136	< 10 U
ITMW-17	4/14/2004	5050	184	< 10 U
ITMW-17	4/14/2004	4920	182	< 10 U
ITMW-17	9/21/2004	5760	156	< 10 U
ITMW-17	4/7/2005	5750	156	< 10 U
ITMW-17	9/29/2005	5460	111	< 10 U
ITMW-17	3/15/2006	15900	211 E	26.3
ITMW-17	10/12/2006	19000	220	21
ITMW-17	4/18/2007	13000	298	< 10 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-17	9/21/2007	11000	210	3 J
ITMW-17	4/29/2008	6200	140	< 10 U
ITMW-17	12/10/2008	5600	130	< 5 U
ITMW-17	4/27/2009	5200	130	< 5 U
ITMW-17	5/11/2010	4500	85	< 5 U
ITMW-17	11/4/2010	5400	110	< 5 U
ITMW-17	3/22/2011	5300	100	< 5 U
ITMW-17	10/26/2011	4500	98	< 5 U
ITMW-17	4/19/2012	4700	110	< 5 U
ITMW-17	10/19/2012	3500	100	0.48 J
ITMW-17	4/25/2013	5600	130	0.9 J
ITMW-17	10/17/2013	4800	79	< 0.11 U
ITMW-17	3/8/2014	3770	86.1	0.57 J
ITMW-17	3/8/2014	4040	87.3	0.74 J
ITMW-17	5/15/2014	3370	88.5	1.1 J
ITMW-17	5/15/2014	3630	82.9	1.3 J
ITMW-17	7/30/2014	2260	64.7	< 0.50 U
ITMW-17	10/16/2014	3510	70.5	3.2
ITMW-17	12/5/2014	4630	210	7.7
ITMW-17	1/15/2015	3840	110	1.5
ITMW-17	4/15/2015	3920	142	< 0.13 U
ITMW-18	2/1/1991	3700	NT	ND
ITMW-18	11/1/1993	4500	NT	6
ITMW-18	12/1/1996	1600	NT	ND
ITMW-18	2/1/1999	6300	480	ND
ITMW-18	3/1/2000	3560	401	ND
ITMW-18	9/19/2000	4080	409	< 10 U
ITMW-18	3/27/2001	4000	400	< 10 U
ITMW-18	3/27/2001	4200	370	< 100 U
ITMW-18	9/11/2001	4100	300	< 10 U
ITMW-18	9/11/2002	6700	300	< 10 U
ITMW-18	2/26/2003	5110	290	< 10 U
ITMW-18	9/24/2003	7700	415	< 10 U
ITMW-18	4/13/2004	7740	410	< 10 U
ITMW-18	9/21/2004	7050	380	< 10 U
ITMW-18	4/8/2005	7080	389	< 10 U
ITMW-18	9/29/2005	4660	241	< 10 U
ITMW-18	3/15/2006	5750	373	< 50 U
ITMW-18	10/13/2006	6600	300	< 10 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-18	4/18/2007	15000	387	< 10 U
ITMW-18	9/21/2007	8300	310	< 100 U
ITMW-18	4/30/2008	9000	350	< 10 U
ITMW-18	12/9/2008	7200	320	< 5 U
ITMW-18	4/27/2009	7100	320	< 5 U
ITMW-18	10/27/2009	7800	360	< 5 U
ITMW-18	5/11/2010	11000	360	< 5 U
ITMW-18	10/26/2011	8500	290	< 5 U
ITMW-18	4/19/2012	9800	360	2.9 J
ITMW-18	10/19/2012	7600	260	1.2 J
ITMW-18	4/25/2013	7200	270	0.9 J
ITMW-18	10/17/2013	7000	280	0.64 J
ITMW-18	3/8/2014	9380	285	< 6.5 U
ITMW-18	3/8/2014	8550	242 J	1.7 J
ITMW-18	5/15/2014	2500	108	< 0.13 U
ITMW-18	5/15/2014	2940	101	< 0.13 U
ITMW-18	7/31/2014	5360	139	1.6 J
ITMW-18	10/15/2014	3540	68.5	< 0.50 U
ITMW-18	12/4/2014	3690	74.3	< 0.50 U
ITMW-18	1/15/2015	488	26.5	< 0.50 U
ITMW-18	4/16/2015	43.5	1.6	< 0.50 U
ITMW-19	2/1/1991	9900	NT	ND
ITMW-19	11/1/1993	27000	NT	7
ITMW-19	12/1/1996	25000	NT	ND
ITMW-19	2/1/1999	33000	150	ND
ITMW-19	3/1/2000	33100	128	ND
ITMW-19	9/19/2000	35700	197	< 10 U
ITMW-19	1/5/2001	34000	166	< 10 U
ITMW-19	3/28/2001	38000	119	< 10 U
ITMW-19	9/13/2001	19000	132	< 10 U
ITMW-19	9/11/2002	27000	167	< 10 U
ITMW-19	2/26/2003	16200	126	< 10 U
ITMW-19	9/24/2003	27300	186	< 10 U
ITMW-19	4/13/2004	19400	186	< 10 U
ITMW-19	9/21/2004	20000	148	< 10 U
ITMW-19	4/7/2005	18300	146	< 10 U
ITMW-19	4/7/2005	16200	145	< 10 U
ITMW-19	9/29/2005	25700	144	< 10 U
ITMW-19	3/15/2006	21300	177	< 100 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-19	10/12/2006	16000	150	2 J
ITMW-19	4/18/2007	20000	131	< 10 U
ITMW-19	9/21/2007	19000	110	< 200 U
ITMW-19	4/29/2008	17000	98	< 100 U
ITMW-19	12/10/2008	11000	93	< 5 U
ITMW-19	4/27/2009	13000	100	< 5 U
ITMW-19	5/11/2010	19000	130	< 5 U
ITMW-19	11/4/2010	19000	150	< 5 U
ITMW-19	11/4/2010	18000	140	< 5 U
ITMW-19	3/22/2011	16000	110	1 J
ITMW-19	10/26/2011	17000	120	< 5 U
ITMW-19	4/19/2012	15000	110	< 5 U
ITMW-19	4/19/2012	18000	110	< 5 U
ITMW-19	10/19/2012	15000	110	0.89 J
ITMW-19	4/25/2013	13000	110	0.57 J
ITMW-19	10/18/2013	16000	91 J	< 0.11 U
ITMW-19	10/18/2013	14000	100 J	< 0.11 U
ITMW-19	3/8/2014	8850	66.7	0.57 J
ITMW-19	3/8/2014	8270	60.8 J	< 6.5 U
ITMW-19	5/15/2014	15300 J	67.2	0.87 J
ITMW-19	5/15/2014	9780 J	65.8	0.85 J
ITMW-19	7/31/2014	13300	85.5	0.96 J
ITMW-19	10/16/2014	12800	76.7	1.9 J
ITMW-19	12/5/2014	33.5	< 0.50 U	< 0.50 U
ITMW-19	1/15/2015	17.4	< 0.50 U	< 0.50 U
ITMW-19	4/15/2015	594	2.2	< 0.50 U
ITMW-20	3/1/1991	ND	NT	ND
ITMW-20	11/1/1993	ND	NT	ND
ITMW-20	12/1/1996	290	NT	ND
ITMW-20	5/1/1997	ND	ND	ND
ITMW-20	2/1/1999	ND	ND	ND
ITMW-20	3/1/2000	ND	ND	ND
ITMW-20	9/21/2000	< 5 U	< 5 U	< 10 U
ITMW-20	3/27/2001	< 5 U	< 5 U	< 10 U
ITMW-20	9/11/2001	21	< 5 U	< 10 U
ITMW-20	9/10/2002	< 5 U	< 5 U	< 10 U
ITMW-20	2/27/2003	< 5 U	< 5 U	< 10 U
ITMW-20	9/24/2003	< 5 U	< 5 U	< 10 U
ITMW-20	4/14/2004	< 5 U	< 5 U	< 10 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-20	9/22/2004	< 5 U	< 5 U	< 10 U
ITMW-20	9/29/2005	< 5 U	< 5 U	< 10 U
ITMW-20	10/12/2006	< 5 U	< 5 U	< 10 U
ITMW-20	9/19/2007	< 5 U	< 5 U	< 10 U
ITMW-20	12/10/2008	< 5 U	< 5 U	< 5 U
ITMW-20	10/29/2009	< 5 U	< 5 U	< 5 U
ITMW-20	5/12/2010	< 5 U	< 5 U	< 5 U
ITMW-20	11/5/2010	15	< 5 U	< 5 U
ITMW-20	10/26/2011	< 5 U	< 5 U	< 5 U
ITMW-20	10/26/2011	< 5 U	< 5 U	< 5 U
ITMW-20	4/18/2012	< 5 U	< 5 U	< 5 U
ITMW-20	10/18/2012	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-20	4/23/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-20	10/14/2013	< 1.6 U	< 0.56 U	< 0.11 U
ITMW-20	3/5/2014	< 0.17 U	< 0.080 U	0.15 J
ITMW-20	5/12/2014	0.21 J	< 0.080 U	< 0.13 U
ITMW-20	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-20	10/15/2014	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-20	1/12/2015	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-20	4/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
ITMW-21	3/1/1991	21	NT	ND
ITMW-21	11/1/1993	37	NT	ND
ITMW-21	12/1/1996	150	NT	ND
ITMW-21	2/1/1999	190	ND	ND
ITMW-21	3/1/2000	196	ND	ND
ITMW-21	9/19/2000	192	< 5 U	< 10 U
ITMW-21	3/28/2001	123	< 5 U	< 10 U
ITMW-21	9/13/2001	116	< 5 U	< 10 U
ITMW-21	9/10/2002	13	< 5 U	< 10 U
ITMW-21	2/26/2003	39.5	< 5 U	< 10 U
ITMW-21	9/23/2003	9.09	< 5 U	< 10 U
ITMW-21	4/14/2004	52.9	< 5 U	< 10 U
ITMW-21	9/22/2004	7.8	< 5 U	< 10 U
ITMW-21	9/28/2005	6.45	< 5 U	< 10 U
ITMW-21	10/12/2006	9	< 5 U	< 10 U
ITMW-21	9/21/2007	10	< 5 U	< 10 U
ITMW-21	12/9/2008	15	< 5 U	< 5 U
ITMW-21	10/27/2009	14	< 5 U	< 5 U
ITMW-21	11/4/2010	1100	4.4 J	< 5 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
ITMW-21	3/22/2011	24	< 5 U	< 5 U
ITMW-21	10/25/2011	11	< 5 U	< 5 U
ITMW-21	4/17/2012	30	< 5 U	< 5 U
ITMW-21	10/19/2012	7.7	< 0.56 U	< 0.11 U
ITMW-21	4/24/2013	18	< 0.56 U	< 0.11 U
ITMW-21	10/15/2013	20	< 0.56 U	< 0.11 U
ITMW-21	3/6/2014	14.8	< 0.080 U	< 0.13 U
ITMW-21	5/14/2014	17.6	< 0.080 U	< 0.13 U
ITMW-21	7/30/2014	9.3	< 0.50 U	< 0.50 U
ITMW-21	7/30/2014	9.4	< 0.50 U	< 0.50 U
ITMW-21	10/15/2014	6	< 0.50 U	< 0.50 U
ITMW-21	1/14/2015	10.8	< 0.50 U	< 0.50 U
ITMW-21	4/14/2015	12.7	< 0.50 U	< 0.50 U
MW-22	12/1/1996	ND	NT	ND
MW-22	5/1/1997	ND	5	ND
MW-22	2/1/1999	ND	5	ND
MW-22	3/1/2000	ND	ND	ND
MW-22	9/19/2000	< 5 U	< 5 U	< 10 U
MW-22	3/27/2001	< 5 U	< 5 U	< 10 U
MW-22	9/13/2001	< 5 U	< 5 U	< 10 U
MW-22	9/10/2002	9	< 5 U	< 10 U
MW-22	2/27/2003	< 5 U	< 5 U	< 10 U
MW-22	9/23/2003	< 5 U	< 5 U	< 10 U
MW-22	9/23/2003	< 5 U	< 5 U	< 10 U
MW-22	4/13/2004	< 5 U	< 5 U	< 10 U
MW-22	9/21/2004	< 5 U	< 5 U	< 10 U
MW-22	9/30/2005	< 5 U	< 5 U	< 10 U
MW-22	10/14/2006	< 5 U	< 5 U	< 10 UJ
MW-22	9/20/2007	< 5 U	< 5 U	< 10 U
MW-22	12/9/2008	< 5 U	< 5 U	< 5 U
MW-22	10/27/2009	< 5 U	< 5 U	< 5 U
MW-22	11/3/2010	< 5 U	< 5 U	< 5 U
MW-22	10/27/2011	2.1 J	< 5 U	< 5 U
MW-22	4/18/2012	< 5 U	< 5 U	< 5 U
MW-22	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-22	4/23/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-22	10/14/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-22	3/5/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-22	5/12/2014	< 0.17 U	< 0.080 U	< 0.13 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-22	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-22	10/15/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-22	1/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-22	4/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-23	12/1/1996	210	NT	ND
MW-23	5/1/1997	2400	NT	ND
MW-23	2/1/1999	350	10	ND
MW-23	2/1/1999	440	10	ND
MW-23	3/1/2000	147	ND	ND
MW-23	9/21/2000	67	< 5 U	< 10 U
MW-23	1/5/2001	137	< 5 U	< 10 U
MW-23	3/26/2001	87	< 5 U	< 10 U
MW-23	9/11/2001	23	< 5 U	< 10 U
MW-23	9/11/2002	111	< 5 U	< 10 U
MW-23	9/11/2002	105	< 5 U	< 10 U
MW-23	2/27/2003	54	< 5 U	< 10 U
MW-23	9/25/2003	83.9	< 5 U	< 10 U
MW-23	4/15/2004	70.3	< 5 U	< 10 U
MW-23	9/22/2004	73.4	< 5 U	< 10 U
MW-23	4/5/2005	55.5	< 5 U	< 10 U
MW-23	9/29/2005	65.8	< 5 U	< 10 U
MW-23	3/17/2006	47.1	< 5 U	< 10 U
MW-23	10/14/2006	59	< 5 U	< 10 UJ
MW-23	4/19/2007	39.9	9.79	< 10 U
MW-23	9/19/2007	47	< 5 U	< 10 U
MW-23	4/29/2008	29	< 5 U	< 10 U
MW-23	12/10/2008	69	< 5 U	< 5 U
MW-23	4/27/2009	32	< 5 U	< 5 U
MW-23	10/29/2009	45	< 5 U	< 5 U
MW-23	5/12/2010	55	< 5 U	< 5 U
MW-23	5/12/2010	52	< 5 U	< 5 U
MW-23	11/5/2010	76	< 5 U	< 5 U
MW-23	3/23/2011	46	< 5 U	< 5 U
MW-23	10/27/2011	41	< 5 U	< 5 U
MW-23	4/18/2012	36	< 5 U	< 5 U
MW-23	10/19/2012	43	< 0.56 U	< 0.11 U
MW-23	4/25/2013	20	< 0.56 U	< 0.11 U
MW-23	10/16/2013	54	< 0.56 U	< 0.11 U
MW-23	5/22/2014	22.8	< 0.080 U	< 0.13 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-23	7/8/2014	27.8	0.68 J	< 0.50 U
MW-23	9/12/2014	62.1	1.8 J	< 0.50 U
MW-23	10/23/2014	189	3.5 J	< 0.50 U
MW-23	1/15/2015	115	2.2	< 0.50 U
MW-23	4/14/2015	57.5	1.1	< 0.50 U
MW-24	2/1/1999	1400	49	ND
MW-24	3/1/2000	403	25	ND
MW-24	3/1/2000	595	24	ND
MW-24	9/21/2000	128	11	< 10 U
MW-24	1/5/2001	247	12	< 10 U
MW-24	3/26/2001	330	11	< 10 U
MW-24	9/11/2001	124	6	< 10 U
MW-24	9/11/2002	199	6	< 10 U
MW-24	2/27/2003	253	7.01	< 10 U
MW-24	9/25/2003	155	< 5 U	< 10 U
MW-24	4/15/2004	181	5.12	< 10 U
MW-24	9/23/2004	116	< 5 U	< 10 U
MW-24	4/6/2005	152	6.04	< 10 U
MW-24	9/29/2005	161	< 5 U	< 10 U
MW-24	3/16/2006	347	7.57	< 10 U
MW-24	10/14/2006	620	11	2 J
MW-24	4/19/2007	196	11.6	< 10 U
MW-24	9/20/2007	140	< 5 U	< 10 U
MW-24	9/20/2007	150	< 5 U	< 10 U
MW-24	4/29/2008	150	3 J	< 10 U
MW-24	12/10/2008	150	3.4 J	< 5 U
MW-24	12/10/2008	130	3.4 J	< 5 U
MW-24	4/27/2009	120	< 5 U	< 5 U
MW-24	10/29/2009	110	2.6 J	< 5 U
MW-24	5/12/2010	150	4.3 J	< 5 U
MW-24	3/23/2011	170	3.6 J	< 5 U
MW-24	10/27/2011	170	1.9 J	< 5 U
MW-24	10/27/2011	170	1.4 J	< 5 U
MW-24	4/18/2012	150	2.9 J	< 5 U
MW-24	10/19/2012	190	3.7 J	< 0.11 U
MW-24	4/25/2013	110	3.5 J	0.23 J
MW-24	5/22/2014	79.7	1.2 J	< 0.13 U
MW-24	7/8/2014	102	1.4 J	< 0.50 U
MW-24	9/12/2014	55.7	0.66 J	< 0.50 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-24	10/23/2014	33.1	< 0.50 U	< 0.50 U
MW-24	1/15/2015	26.9	< 0.50 U	< 0.50 U
MW-24	4/16/2015	18.8	< 0.50 U	< 0.50 U
MW-25	2/1/1999	29000	170	100
MW-25	2/1/1999	27000	180	110
MW-25	12/1/1999	94500	ND	ND
MW-25	3/1/2000	35900	245	63
MW-25	9/21/2000	59000	300	50
MW-25	3/28/2001	34000	117	60
MW-25	9/13/2001	60000	300	< 200 U
MW-25	9/9/2002	157000	440	180
MW-25	9/9/2002	56000	370	200
MW-25	2/26/2003	45900	557	75.7
MW-25	7/17/2003	62200	621	243
MW-25	9/24/2003	103000	775	< 500 U
MW-25	4/14/2004	25600	255	31.8
MW-25	9/21/2004	85200	819	422
MW-25	4/7/2005	21100	353	61.1
MW-25	9/28/2005	136000	837	< 500 U
MW-25	3/15/2006	36300	774	< 200 U
MW-25	10/12/2006	64000	1300	610
MW-25	10/12/2006	65000	1400	600
MW-25	4/18/2007	19000	321	20
MW-25	4/18/2007	18000	319	20
MW-25	9/21/2007	54000	1200	800
MW-25	9/21/2007	55000	1200	780
MW-25	4/29/2008	23000	470	10 J
MW-25	4/29/2008	25000	510	10 J
MW-25	12/10/2008	100000	1200	430
MW-25	4/27/2009	36000	2100	140
MW-25	4/27/2009	39000	2000	190
MW-25	10/27/2009	140000	1500	570
MW-25	5/11/2010	81000	1400	11
MW-25	11/4/2010	270000	1500	400
MW-25	3/22/2011	57000	2400	34
MW-25	10/26/2011	120000	2100	< 250 U
MW-25	4/17/2012	18000	690	18
MW-25	10/19/2012	56000	4200	1500
MW-25	10/19/2012	49000	3600	1500

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-25	4/25/2013	9100	330	7.9
MW-25	4/25/2013	9500	380	11
MW-25	10/18/2013	43000	2900	1300
MW-25	3/8/2014	14500	625	33.6 J
MW-25	5/15/2014	18500	600 J	30.3
MW-25	7/9/2014	49900	1750	< 0.50 U
MW-25	7/31/2014	71700	2310 J	< 500 U
MW-25	10/16/2014	42500	2870 J	540 J
MW-25	10/24/2014	59800	2650 J	0.66 J
MW-25	12/5/2014	2620 J	31.5	2.1
MW-25	1/15/2015	2510	126	1.6
MW-25	4/16/2015	4650	204	6.4
MW-26	2/1/1999	360	150	ND
MW-26	6/1/1999	ND	ND	ND
MW-26	3/1/2000	ND	ND	ND
MW-26	9/21/2000	< 5 U	< 5 U	< 10 U
MW-26	3/26/2001	< 5 U	< 5 U	< 10 U
MW-26	9/11/2001	< 5 U	< 5 U	< 10 U
MW-26	9/11/2001	< 5 U	< 5 U	< 10 U
MW-26	9/10/2002	< 5 U	< 5 U	< 10 U
MW-26	2/27/2003	< 5 U	< 5 U	< 10 U
MW-26	9/24/2003	< 5 U	< 5 U	< 10 U
MW-26	4/14/2004	< 5 U	< 5 U	< 10 U
MW-26	9/22/2004	< 5 U	< 5 U	< 10 U
MW-26	9/29/2005	< 5 U	< 5 U	< 10 U
MW-26	10/12/2006	< 5 U	< 5 U	< 10 U
MW-26	9/19/2007	< 5 U	< 5 U	< 10 U
MW-26	12/10/2008	< 5 U	< 5 U	< 5 U
MW-26	10/29/2009	< 5 U	< 5 U	< 5 U
MW-26	5/12/2010	< 5 U	< 5 U	< 5 U
MW-26	11/5/2010	22	< 5 U	< 5 U
MW-26	10/26/2011	< 5 U	< 5 U	< 5 U
MW-26	4/18/2012	< 5 U	< 5 U	< 5 U
MW-26	10/18/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-26	4/23/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-26	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-26	3/5/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-26	5/12/2014	0.25 J	< 0.080 U	< 0.13 U
MW-26	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-26	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-26	1/14/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-26	4/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-27	12/1/1999	ND	ND	ND
MW-27	12/7/1999	< 5 U	< 5 U	< 10 U
MW-27	12/9/1999	< 5 U	< 5 U	< 10 U
MW-27	3/1/2000	ND	ND	ND
MW-27	9/21/2000	< 5 U	< 5 U	< 10 U
MW-27	1/5/2001	< 5 U	< 5 U	< 10 U
MW-27	1/5/2001	5.55	< 5 U	< 10 U
MW-27	3/26/2001	< 5 U	< 5 U	< 10 U
MW-27	9/11/2001	< 5 U	< 5 U	< 10 U
MW-27	9/11/2002	< 5 U	< 5 U	< 10 U
MW-27	9/11/2002	< 5 U	< 5 U	< 10 U
MW-27	2/27/2003	< 5 U	< 5 U	< 10 U
MW-27	9/25/2003	< 5 U	< 5 U	< 10 U
MW-27	4/15/2004	< 5 U	< 5 U	< 10 U
MW-27	9/22/2004	< 5 U	< 5 U	< 10 U
MW-27	9/29/2005	< 5 U	< 5 U	< 10 U
MW-27	10/14/2006	2 J	< 5 U	< 10 U
MW-27	9/19/2007	< 5 U	< 5 U	< 10 U
MW-27	12/10/2008	< 5 U	< 5 U	< 5 U
MW-27	5/12/2010	3.1 J	< 5 U	< 5 U
MW-27	11/5/2010	42	< 5 U	< 5 U
MW-27	10/27/2011	< 5 U	< 5 U	< 5 U
MW-27	4/18/2012	2.6 J	< 5 U	< 5 U
MW-27	10/18/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-27	4/24/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-27	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-27	3/7/2014	0.31 J	< 0.080 U	< 0.13 U
MW-27	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-27	7/30/2014	0.63 J	< 0.50 U	< 0.50 U
MW-27	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-27	1/14/2015	0.84 J	0.59 J	< 0.50 U
MW-27	4/13/2015	0.59 J	< 0.50 U	< 0.50 U
MW-28	12/1/1999	ND	ND	ND
MW-28	12/9/1999	< 5 U	< 5 U	< 10 U
MW-28	12/9/1999	< 5 U	< 5 U	< 10 U
MW-28	3/1/2000	ND	ND	ND

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-28	9/21/2000	< 5 U	< 5 U	< 10 U
MW-28	3/27/2001	< 5 U	< 5 U	< 10 U
MW-28	3/27/2001	< 5 U	< 5 U	< 10 U
MW-28	9/11/2001	< 5 U	< 5 U	< 10 U
MW-28	9/11/2002	< 5 U	< 5 U	< 10 U
MW-28	2/27/2003	< 5 U	< 5 U	< 10 U
MW-28	9/25/2003	< 5 U	< 5 U	< 10 U
MW-28	4/15/2004	< 5 U	< 5 U	< 10 U
MW-28	9/22/2004	< 5 U	< 5 U	< 10 U
MW-28	9/30/2005	< 5 U	< 5 U	< 10 U
MW-28	10/14/2006	< 5 U	< 5 U	< 10 UJ
MW-28	9/19/2007	< 5 U	< 5 U	< 10 U
MW-28	12/10/2008	< 5 U	< 5 U	< 5 U
MW-28	10/29/2009	< 5 U	< 5 U	< 5 U
MW-28	5/12/2010	2.6 J	< 5 U	< 5 U
MW-28	11/5/2010	54	< 5 U	< 5 U
MW-28	3/23/2011	1.6 J	< 5 U	< 5 U
MW-28	10/27/2011	< 5 U	< 5 U	< 5 U
MW-28	4/19/2012	< 5 U	< 5 U	< 5 U
MW-28	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-28	4/24/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-28	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-28	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-28	5/13/2014	0.3 J	< 0.080 U	< 0.13 U
MW-28	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-28	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-28	1/14/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-28	4/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-29	12/1/1999	ND	ND	ND
MW-29	12/9/1999	< 5 U	< 5 U	< 10 U
MW-29	3/1/2000	ND	ND	ND
MW-29	9/20/2000	< 5 U	< 5 U	< 10 U
MW-29	3/27/2001	< 5 U	< 5 U	< 10 U
MW-29	9/11/2001	< 5 U	< 5 U	< 10 U
MW-29	9/10/2002	< 5 U	< 5 U	< 10 U
MW-29	2/27/2003	< 5 U	< 5 U	< 10 U
MW-29	9/24/2003	< 5 U	< 5 U	< 10 U
MW-29	4/14/2004	< 5 U	< 5 U	< 10 U
MW-29	9/22/2004	< 5 U	< 5 U	< 10 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-29	9/28/2005	< 5 U	< 5 U	< 10 U
MW-29	10/12/2006	< 5 U	< 5 U	< 10 U
MW-29	9/19/2007	< 5 U	< 5 U	< 10 U
MW-29	12/10/2008	< 5 U	< 5 U	< 5 U
MW-29	12/10/2008	< 5 U	< 5 U	< 5 U
MW-29	10/29/2009	< 5 U	< 5 U	< 5 U
MW-29	10/25/2011	< 5 U	< 5 U	< 5 U
MW-29	4/18/2012	< 5 U	< 5 U	< 5 U
MW-29	10/18/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-29	4/23/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-29	10/14/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-29	3/5/2014	0.52 J	< 0.080 U	< 0.13 U
MW-29	5/13/2014	0.18 J	< 0.080 U	< 0.13 U
MW-29	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-29	10/15/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-29	1/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-29	4/14/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-30	12/1/1999	115	34	ND
MW-30	12/9/1999	115	34	< 10 U
MW-30	3/1/2000	86	25	ND
MW-30	9/20/2000	102	25	< 10 U
MW-30	3/27/2001	43	11	< 10 U
MW-30	9/11/2001	63	18	< 10 U
MW-30	9/10/2002	48	14	< 10 U
MW-30	2/27/2003	60	20.3	< 10 U
MW-30	9/24/2003	46.8	13.7	< 10 U
MW-30	4/14/2004	36.6	11.8	< 10 U
MW-30	9/22/2004	36.2	12.1	< 10 U
MW-30	9/28/2005	59.6	15.6	< 10 U
MW-30	10/12/2006	53	15	< 10 U
MW-30	9/20/2007	39	11	< 10 U
MW-30	12/10/2008	37	11	< 5 U
MW-30	11/3/2010	50	15	< 5 U
MW-30	10/26/2011	57	16	< 5 U
MW-30	4/18/2012	150	32	< 5 U
MW-30	10/18/2012	65	19	< 0.11 U
MW-30	4/25/2013	49	18	0.49 J
MW-30	10/14/2013	40	16	< 0.11 U
MW-31	1/5/2001	< 5 U	< 5 U	< 10 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-31	3/26/2001	< 5 U	< 5 U	< 10 U
MW-31	9/13/2001	< 5 U	< 5 U	< 10 U
MW-31	9/11/2002	< 5 U	< 5 U	< 10 U
MW-31	2/28/2003	< 5 U	< 5 U	< 10 U
MW-31	9/25/2003	< 5 U	< 5 U	< 10 U
MW-31	4/15/2004	< 5 U	< 5 U	< 10 U
MW-31	9/23/2004	< 5 U	< 5 U	< 10 U
MW-31	4/5/2005	< 5 U	< 5 U	< 10 U
MW-31	9/27/2005	< 5 U	< 5 U	< 10 U
MW-31	3/15/2006	< 5 U	< 5 U	< 10 U
MW-31	10/11/2006	3 J	< 5 U	< 10 U
MW-31	4/19/2007	< 5 U	< 5 U	< 10 U
MW-31	9/18/2007	< 5 U	< 5 U	< 10 U
MW-31	4/30/2008	2 J	< 5 U	< 10 U
MW-31	12/11/2008	< 5 U	< 5 U	< 5 U
MW-31	4/25/2009	< 5 U	< 5 U	< 5 U
MW-31	5/12/2010	< 5 U	< 5 U	< 5 U
MW-31	11/7/2010	48	< 5 U	< 5 U
MW-31	3/23/2011	< 5 U	< 5 U	< 5 U
MW-31	10/26/2011	< 5 U	< 5 U	< 5 U
MW-31	10/19/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-31	10/18/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-31	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-31	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-31	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-31	7/30/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-31	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-31	1/12/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-31R	1/19/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-31R	4/14/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-32	1/5/2001	108	< 5 U	< 10 U
MW-32	3/27/2001	174	< 5 U	< 10 U
MW-32	9/13/2001	95	< 5 U	< 10 U
MW-32	9/11/2002	109	< 5 U	< 10 U
MW-32	2/28/2003	133	< 5 U	< 10 U
MW-32	9/25/2003	32.3	< 5 U	< 10 U
MW-32	4/15/2004	76.9	< 5 U	< 10 U
MW-32	9/23/2004	51.4	< 5 U	< 10 U
MW-32	4/5/2005	158	< 5 U	< 10 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-32	9/27/2005	97.6	< 5 U	< 10 U
MW-32	3/15/2006	111	< 5 U	< 10 U
MW-32	10/12/2006	85	4 J	< 10 U
MW-32	4/19/2007	66.3	10.1	< 10 U
MW-32	9/18/2007	78	< 5 U	< 10 U
MW-32	4/30/2008	70	2 J	< 10 U
MW-32	12/11/2008	60	< 5 U	< 5 U
MW-32	4/25/2009	47	< 5 U	< 5 U
MW-32	10/28/2009	68	1.8 J	< 5 U
MW-32	5/12/2010	58	< 5 U	< 5 U
MW-32	11/6/2010	120	< 5 U	< 5 U
MW-32	3/24/2011	66	1.4 J	< 5 U
MW-32	10/26/2011	73	< 5 U	< 5 U
MW-32	10/19/2012	61	1.2 J	< 0.11 U
MW-32	10/18/2013	48	1.4 J	< 0.11 U
MW-32	3/8/2014	36.8	1.1 J	< 0.13 U
MW-32	5/13/2014	33.1	0.19 J	< 0.13 U
MW-32	7/29/2014	37.2	1 J	< 0.50 U
MW-32	10/14/2014	29.7	0.8 J	< 0.50 U
MW-32	1/14/2015	20.2	0.55 J	< 0.50 U
MW-32R	1/19/2015	12.9	< 0.50 U	< 0.50 U
MW-32R	4/15/2015	11.2	< 0.50 U	< 0.50 U
MW-33	1/5/2001	120	< 5 U	< 10 U
MW-33	3/27/2001	260	7	< 10 U
MW-33	9/13/2001	310	8	< 10 U
MW-33	9/11/2002	450	8	< 10 U
MW-33	2/28/2003	274	6.62	< 10 U
MW-33	9/25/2003	198	5.95	< 10 U
MW-33	4/15/2004	871	21.3	< 10 U
MW-33	9/23/2004	798	15.3	< 10 U
MW-33	4/5/2005	1430	24.5	< 10 U
MW-33	9/27/2005	1030	15.2	< 10 U
MW-33	3/15/2006	1610	20.5	< 10 U
MW-33	10/12/2006	1300	19	< 10 U
MW-33	4/19/2007	1430	9.2 J	< 50 U
MW-33	9/18/2007	1700	25	< 10 U
MW-33	4/30/2008	1100	16	< 10 U
MW-33	12/11/2008	1200	18	< 5 U
MW-33	4/25/2009	1200	19	< 5 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-33	5/27/2009	1000	19	< 5 U
MW-33	10/28/2009	1200	20	< 5 U
MW-33	5/12/2010	1100	21	< 5 U
MW-33	11/6/2010	1200	17	< 5 U
MW-33	3/4/2011	500	14	< 0.85 U
MW-33	5/23/2011	1300	18	NT
MW-33	10/26/2011	1000	16	< 5 U
MW-33	10/19/2012	1300	18	0.56 J
MW-33	10/18/2013	1100	19	< 0.11 U
MW-33	3/8/2014	918	15.9	0.56 J
MW-33	5/14/2014	954	15.1	0.56 J
MW-33	7/29/2014	1600	20.8	0.59 J
MW-33	10/15/2014	1290	15.3	< 0.50 U
MW-33	1/14/2015	1080	13.9	< 0.50 U
MW-33R	1/18/2015	799	9.9	< 0.50 U
MW-33R	4/15/2015	570	12.2	0.37
MW-34	3/28/2001	83	< 5 U	< 10 U
MW-34	9/13/2001	61	< 5 U	< 10 U
MW-34	9/9/2002	84	< 5 U	< 10 U
MW-34	2/28/2003	< 5 U	< 5 U	< 10 U
MW-34	9/25/2003	28.4	< 5 U	< 10 U
MW-34	11/14/2003	121	< 5 U	< 10 U
MW-34	4/15/2004	119	< 5 U	< 10 U
MW-34	9/23/2004	81.1	< 5 U	< 10 U
MW-34	12/9/2004	93.3	< 5 U	< 10 U
MW-34	4/5/2005	65.8	< 5 U	< 10 U
MW-34	9/30/2005	83.7	< 5 U	< 10 U
MW-34	3/14/2006	77.1	< 5 U	< 10 U
MW-34	10/11/2006	63	4 J	< 10 U
MW-34	4/18/2007	41	9.79	< 10 U
MW-34	9/19/2007	61	< 5 U	< 10 U
MW-34	4/30/2008	32	< 5 U	< 10 U
MW-34	12/10/2008	53	< 5 U	< 5 U
MW-34	4/24/2009	43	< 5 U	< 5 U
MW-34	5/27/2009	12	< 5 U	< 5 U
MW-34	10/28/2009	34	< 5 U	< 5 U
MW-34	5/12/2010	38	< 5 U	< 5 U
MW-34	11/7/2010	70	< 5 U	< 5 U
MW-34	11/7/2010	73	< 5 U	< 5 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-34	3/24/2011	40	< 5 U	< 5 U
MW-34	3/24/2011	42	< 5 U	< 5 U
MW-34	10/26/2011	56	< 5 U	< 5 U
MW-34	10/20/2012	90	1.6 J	< 0.11 U
MW-34	10/17/2013	43	0.9 J	< 0.11 U
MW-34	3/8/2014	28.7	0.61 J	< 0.13 U
MW-34	5/13/2014	19.9	< 0.080 U	< 0.13 U
MW-34	7/29/2014	78.2	1.7 J	< 0.50 U
MW-34	10/15/2014	47.7	0.96 J	< 0.50 U
MW-34	1/13/2015	22	< 0.50 U	< 0.50 U
MW-34	4/14/2015	13.8	< 0.50 U	< 0.50 U
MW-35R	3/28/2001	960	34	< 10 U
MW-35R	9/13/2001	1030	40	< 20 U
MW-35R	9/9/2002	900	31	< 10 U
MW-35R	2/28/2003	246	15.1	< 10 U
MW-35R	9/25/2003	297	19.8	< 10 U
MW-35R	11/14/2003	990	34.9	< 10 U
MW-35R	4/15/2004	1150	45.8	< 10 U
MW-35R	9/23/2004	685	28.4	< 10 U
MW-35R	12/9/2004	880	42	< 10 U
MW-35R	4/6/2005	886	35	< 10 U
MW-35R	9/30/2005	804	29.3	< 10 U
MW-35R	3/14/2006	858	24.2	< 10 U
MW-35R	4/6/2006	1540	52.5	< 10 U
MW-35R	10/11/2006	910	29	< 10 U
MW-35R	4/18/2007	900	27.6	< 10 U
MW-35R	9/19/2007	1100	28	< 10 U
MW-35R	4/30/2008	1100	33	< 10 U
MW-35R	12/11/2008	790	27	< 5 U
MW-35R	4/24/2009	1100	37	< 5 U
MW-35R	5/7/2009	< 5 U	< 5 U	< 5 U
MW-35R	5/27/2009	< 5 U	< 5 U	< 5 U
MW-35R	11/5/2010	240	9.9	< 5 U
MW-35R	3/4/2011	180	8.4	< 0.85 U
MW-35R	5/23/2011	260	13	NT
MW-35R	10/25/2011	280	12	< 5 U
MW-35R	10/20/2012	280	10	< 0.11 U
MW-35R	10/17/2013	200	12	< 0.11 U
MW-35R	10/17/2013	220	13	< 0.11 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-35R	3/8/2014	345	14.9	< 0.13 U
MW-35R	5/13/2014	183	6.1	< 0.13 U
MW-35R	7/30/2014	64.7	2.8 J	< 0.50 U
MW-35R	10/14/2014	79.2	2.6 J	< 0.50 U
MW-35R	1/13/2015	10.9	< 0.50 U	< 0.50 U
MW-35R	4/14/2015	39.5	1.3	< 0.50 U
MW-36	3/28/2001	< 5 U	< 5 U	< 10 U
MW-36	9/13/2001	< 5 U	< 5 U	< 10 U
MW-36	9/9/2002	< 5 U	< 5 U	< 10 U
MW-36	2/28/2003	< 5 U	< 5 U	< 10 U
MW-36	9/25/2003	< 5 U	< 5 U	< 10 U
MW-36	11/14/2003	< 5 U	< 5 U	< 10 U
MW-36	4/15/2004	< 5 U	< 5 U	< 10 U
MW-36	9/23/2004	< 5 U	< 5 U	< 10 U
MW-36	4/6/2005	< 5 U	< 5 U	< 10 U
MW-36	9/30/2005	< 5 U	< 5 U	< 10 U
MW-36	3/17/2006	< 5 U	< 5 U	< 10 U
MW-36	10/11/2006	< 5 U	< 5 U	< 10 U
MW-36	4/18/2007	< 5 U	< 5 U	< 10 U
MW-36	9/20/2007	< 5 U	< 5 U	< 10 U
MW-36	4/30/2008	< 5 U	< 5 U	< 10 U
MW-36	12/11/2008	< 5 U	< 5 U	< 5 U
MW-36	4/24/2009	< 5 U	< 5 U	< 5 U
MW-36	5/7/2009	< 5 U	< 5 U	< 5 U
MW-36	5/8/2009	< 5 U	< 5 U	< 5 U
MW-36	5/28/2009	< 5 U	< 5 U	< 5 U
MW-36	10/28/2009	< 5 U	< 5 U	< 5 U
MW-36	5/12/2010	< 5 U	< 5 U	< 5 U
MW-36	11/7/2010	9.9	< 5 U	< 5 U
MW-36	3/24/2011	< 5 U	< 5 U	< 5 U
MW-36	10/26/2011	< 5 U	< 5 U	< 5 U
MW-36	10/19/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-36	10/17/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-36	3/6/2014	0.22 J	< 0.080 U	< 0.13 U
MW-36	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-36	7/29/2014	0.61 J	< 0.50 U	< 0.50 U
MW-36	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-36	1/12/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-36	4/14/2015	< 0.50 U	< 0.50 U	< 0.50 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-37	9/14/2001	5000	340	< 100 U
MW-37	11/20/2001	< 5 U	< 5 U	< 10 U
MW-37	9/11/2002	1400	10000	300
MW-37	2/27/2003	4050	5660	2500
MW-37	7/17/2003	2560	1710	316
MW-37	9/24/2003	3700	7020	973
MW-37	4/13/2004	5190	3160	1180
MW-37	9/21/2004	5030	5650	1370
MW-37	4/5/2005	5310	2360	1030 E
MW-37	9/29/2005	6780	3210	910 E
MW-37	3/16/2006	11200	5020	1730
MW-37	10/13/2006	13000	5300	1200
MW-37	10/13/2006	13000	5000	1200
MW-37	4/19/2007	9490	3010	780
MW-37	9/21/2007	22000	9100	2800
MW-37	4/30/2008	16000	3300	1800
MW-37	12/10/2008	24000	6300	1800
MW-37	4/27/2009	11000	3200	1200
MW-37	10/27/2009	37000	7400	2200
MW-37	5/11/2010	33000	7200	2400
MW-37	11/4/2010	54000	10000	2200
MW-37	3/22/2011	36000	6000	2300
MW-37	10/26/2011	57000	9700	2500
MW-37	4/18/2012	29000	5300	2100
MW-37	10/19/2012	4800	1100	230
MW-37	4/25/2013	1700	900	230
MW-37	10/17/2013	1100	1500	1300
MW-38	9/14/2001	620	90	< 20 U
MW-38	9/29/2005	< 5 U	98.9	2150
MW-38	10/13/2006	26	130	2000 J
MW-38	12/10/2008	44	110	1400
MW-38	10/26/2011	580	870	1100
MW-38	10/18/2012	1000	750	700
MW-38	10/16/2013	2300	1200	560
MW-38	3/8/2014	1790	535	68.4
MW-38	5/14/2014	2040	426 J	98.2
MW-38	5/14/2014	1650	428	97.9
MW-38	7/31/2014	1720	637	197
MW-38	10/16/2014	6970	869	370

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-38	10/16/2014	6750	781	321
MW-38	12/4/2014	3190	697	193
MW-38	1/15/2015	3910	1190	143
MW-38	1/15/2015	5440	1900	133
MW-38	4/16/2015	3060	2060	33.7
MW-39	7/18/2003	< 5 U	< 5 U	< 10 U
MW-39	9/25/2003	< 5 U	< 5 U	< 10 U
MW-39	11/14/2003	< 5 U	< 5 U	< 10 U
MW-39	4/15/2004	< 5 U	< 5 U	< 10 U
MW-39	9/23/2004	< 5 U	< 5 U	< 10 U
MW-39	4/8/2005	< 5 U	< 5 U	< 10 U
MW-39	9/30/2005	< 5 U	< 5 U	< 10 U
MW-39	3/17/2006	< 5 U	< 5 U	< 10 U
MW-39	10/11/2006	< 5 U	< 5 U	< 10 U
MW-39	4/18/2007	< 5 U	< 5 U	< 10 U
MW-39	9/19/2007	< 5 U	< 5 U	< 10 U
MW-39	4/30/2008	< 5 U	< 5 U	< 10 U
MW-39	12/9/2008	< 5 U	< 5 U	< 5 U
MW-39	4/24/2009	< 5 U	< 5 U	< 5 U
MW-39	10/27/2009	< 5 U	< 5 U	< 5 U
MW-39	5/11/2010	< 5 U	< 5 U	< 5 U
MW-39	11/7/2010	20	< 5 U	< 5 U
MW-39	3/24/2011	< 5 U	< 5 U	< 5 U
MW-39	10/26/2011	< 5 U	< 5 U	< 5 U
MW-39	10/19/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-39	10/18/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-39	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-39	5/13/2014	0.23 J	< 0.080 U	< 0.13 U
MW-39	7/29/2014	0.79 J	< 0.50 U	< 0.50 U
MW-39	10/13/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-39	1/12/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-39	4/14/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-40	7/18/2003	< 5 U	< 5 U	< 10 U
MW-40	9/25/2003	< 5 U	< 5 U	< 10 U
MW-40	11/14/2003	< 5 U	< 5 U	< 10 U
MW-40	11/14/2003	< 5 U	< 5 U	< 10 U
MW-40	4/15/2004	< 5 U	< 5 U	< 10 U
MW-40	9/23/2004	< 5 U	< 5 U	< 10 U
MW-40	4/7/2005	< 5 U	< 5 U	< 10 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-40	9/29/2005	< 5 U	< 5 U	< 10 U
MW-40	3/14/2006	< 5 U	< 5 U	< 10 U
MW-40	10/10/2006	< 5 U	< 5 U	< 10 U
MW-40	4/18/2007	< 5 U	< 5 U	< 10 U
MW-40	9/18/2007	< 5 U	< 5 U	< 10 U
MW-40	4/28/2008	< 5 U	< 5 U	< 10 U
MW-40	12/11/2008	< 5 U	< 5 U	< 5 U
MW-40	4/24/2009	< 5 U	< 5 U	< 5 U
MW-40	5/27/2009	< 5 U	< 5 U	< 5 U
MW-40	10/29/2009	< 5 U	< 5 U	< 5 U
MW-40	5/12/2010	< 5 U	< 5 U	< 5 U
MW-40	11/4/2010	< 5 U	< 5 U	< 5 U
MW-40	3/23/2011	< 5 U	< 5 U	< 5 U
MW-40	10/26/2011	< 5 U	< 5 U	< 5 U
MW-40	4/18/2012	3.9 J	< 5 U	< 5 U
MW-40	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-40	4/23/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-40	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-40	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-40	5/12/2014	0.76 J	< 0.080 U	< 0.13 U
MW-40	7/29/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-40	10/13/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-40	1/12/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-40	4/14/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-41	7/18/2003	972	50.6	< 10 U
MW-41	7/18/2003	964	45.5	< 10 U
MW-41	9/25/2003	722	37.8	< 10 U
MW-41	11/14/2003	331	205	< 10 U
MW-41	4/15/2004	760	54.2	< 10 U
MW-41	9/23/2004	1060	48	< 10 U
MW-41	4/7/2005	1170	58	< 10 U
MW-41	9/30/2005	1120	55.8	< 10 U
MW-41	3/17/2006	917	52.5	< 10 U
MW-41	10/13/2006	970	43	< 10 UJ
MW-41	4/18/2007	900	30.1	< 10 U
MW-41	9/20/2007	850	32	< 10 U
MW-41	4/30/2008	730	31	< 10 U
MW-41	12/11/2008	820	29	< 5 U
MW-41	4/24/2009	660	25	< 5 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-41	5/7/2009	180	4.7 J	< 5 U
MW-41	5/8/2009	180	4.7 J	< 5 U
MW-41	5/27/2009	230	16	< 5 U
MW-41	10/28/2009	180	4 J	< 5 U
MW-41	5/13/2010	610	19	< 5 U
MW-41	11/5/2010	930	31	< 5 U
MW-41	3/4/2011	120	20	< 0.85 U
MW-41	5/23/2011	370	15	NT
MW-41	10/25/2011	420	18	< 5 U
MW-41	10/20/2012	620	23	< 0.11 U
MW-41	10/20/2012	550	21	< 0.11 U
MW-41	10/16/2013	520	24	< 0.11 U
MW-41	3/7/2014	501	19.7	0.68 J
MW-41	5/14/2014	518	18	0.5 J
MW-41	7/30/2014	511	19.1	< 0.50 U
MW-41	7/30/2014	480	19.7	< 0.50 U
MW-41	10/15/2014	491	16.9	< 0.50 U
MW-41	1/14/2015	425	15.6	< 0.50 U
MW-41	4/15/2015	386	15.2	0.27 J
MW-42B	11/14/2003	481	21.1	< 10 U
MW-42B	4/15/2004	856	29.3	< 10 U
MW-42B	9/23/2004	400	19.8	< 10 U
MW-42B	4/5/2005	1310	32	< 10 U
MW-42B	9/27/2005	1470	27.3	< 10 U
MW-42B	3/15/2006	2270	37.2	< 10 U
MW-42B	10/10/2006	2000	35	2 J
MW-42B	4/17/2007	1600	36.8	< 10 U
MW-42B	9/18/2007	2100	39	4 J
MW-42B	4/29/2008	1600	33	3 J
MW-42B	12/9/2008	1100	30	< 5 U
MW-42B	4/25/2009	1500	35	< 5 U
MW-43	11/14/2003	223	18.5	< 10 U
MW-43	4/15/2004	510	12.1	< 10 U
MW-43	9/23/2004	64.7	6.31	< 10 U
MW-43	4/5/2005	304	11.9	< 10 U
MW-43	9/27/2005	518	21.3	< 10 U
MW-43	3/15/2006	1300	35	< 10 U
MW-43	10/11/2006	920	30	< 10 U
MW-43	4/17/2007	220	14.1	< 10 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-43	9/18/2007	350	13	< 10 U
MW-43	4/28/2008	120	4 J	< 10 U
MW-43	12/9/2008	150	5.3	< 5 U
MW-43	4/25/2009	120	< 5 U	< 5 U
MW-43	5/7/2009	180	6	< 5 U
MW-43	5/8/2009	180	6	< 5 U
MW-46R	11/14/2003	39.9	< 5 U	< 10 U
MW-46R	4/15/2004	77.1	27.2	< 10 U
MW-46R	9/23/2004	142	21.2	< 10 U
MW-46R	4/6/2005	210	28.4	< 10 U
MW-46R	9/28/2005	222	15.6	< 10 U
MW-46R	3/16/2006	111	6.37	< 10 U
MW-46R	4/6/2006	300	< 5 U	< 10 U
MW-46R	10/11/2006	450	8	< 10 U
MW-46R	4/17/2007	440	12.5	< 10 U
MW-46R	9/18/2007	420	9	< 10 U
MW-46R	4/29/2008	430	8	< 10 U
MW-46R	12/9/2008	310	19	< 5 U
MW-46R	4/25/2009	460	11	< 5 U
MW-46R	5/27/2009	< 5 U	< 5 U	< 5 U
MW-46R	10/27/2009	390	12	< 5 U
MW-46R	12/21/2009	410	10	< 1.6 U
MW-46R	5/11/2010	610	13	< 5 U
MW-46R	11/5/2010	650	12	< 5 U
MW-46R	3/7/2011	670	14	< 0.85 U
MW-46R	3/22/2011	680	11	< 5 U
MW-46R	5/23/2011	610	13	NT
MW-46R	10/26/2011	460	10	< 5 U
MW-46R	4/18/2012	680	14	< 5 U
MW-46R	10/20/2012	410	7.9	0.44 J
MW-46R	4/23/2013	470	7.6	0.91 J
MW-46R	10/18/2013	410	11	< 0.11 U
MW-46R	3/7/2014	469	12.8	0.46 J
MW-46R	5/14/2014	471	12.8	0.76 J
MW-46R	7/29/2014	472	13.7	0.64 J
MW-46R	10/16/2014	373	25.2	< 0.50 U
MW-46R	10/16/2014	410	24.6	< 0.50 U
MW-46R	1/13/2015	452	11.6	0.71 J
MW-46R	4/14/2015	482	13.9	0.51 J

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-50	4/15/2004	6.51	< 5 U	< 10 U
MW-50	9/23/2004	< 5 U	< 5 U	< 10 U
MW-50	12/10/2004	< 5 U	< 5 U	< 10 U
MW-50	4/6/2005	< 5 U	< 5 U	< 10 U
MW-50	9/28/2005	< 5 U	< 5 U	< 10 U
MW-50	3/17/2006	< 5 U	< 5 U	< 10 U
MW-50	10/12/2006	< 5 U	< 5 U	< 10 U
MW-50	4/19/2007	< 5 U	< 5 U	< 10 U
MW-50	9/19/2007	< 5 U	< 5 U	< 10 U
MW-50	4/29/2008	< 5 U	< 5 U	< 10 U
MW-50	12/10/2008	< 5 U	< 5 U	< 5 U
MW-50	4/24/2009	< 5 U	< 5 U	< 5 U
MW-50	10/27/2009	< 5 U	< 5 U	< 5 U
MW-50	5/11/2010	< 5 U	< 5 U	< 5 U
MW-50	11/5/2010	< 5 U	< 5 U	< 5 U
MW-50	3/23/2011	< 5 U	< 5 U	< 5 U
MW-50	10/25/2011	< 5 U	< 5 U	< 5 U
MW-50	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-50	10/16/2013	1.6 J	< 0.56 U	< 0.11 U
MW-50	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-50	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-50	7/28/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-50	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-50	1/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-50	4/14/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-55	12/9/2004	< 5 U	< 5 U	< 10 U
MW-55	4/8/2005	< 5 U	< 5 U	< 10 U
MW-55	9/28/2005	< 5 U	< 5 U	< 10 U
MW-55	3/16/2006	< 5 U	< 5 U	< 10 U
MW-55	10/13/2006	2 J	< 5 U	< 10 UJ
MW-55	4/19/2007	2.6 J	< 5 U	< 10 U
MW-55	9/19/2007	5 J	< 5 U	< 10 U
MW-55	4/29/2008	< 5 U	< 5 U	< 10 U
MW-55	12/10/2008	< 5 U	< 5 U	< 5 U
MW-55	4/24/2009	< 5 U	< 5 U	< 5 U
MW-55	10/27/2009	3.6 J	< 5 U	< 5 U
MW-55	5/12/2010	4.2 J	< 5 U	< 5 U
MW-55	11/6/2010	14	< 5 U	< 5 U
MW-55	3/23/2011	5.5	< 5 U	< 5 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-55	10/25/2011	7	< 5 U	< 5 U
MW-55	10/20/2012	9.2	< 0.56 U	< 0.11 U
MW-55	10/16/2013	13	< 0.56 U	< 0.11 U
MW-56	12/10/2004	90.2	< 5 U	< 10 U
MW-56	4/8/2005	88.2	< 5 U	< 10 U
MW-56	9/28/2005	207	< 5 U	< 10 U
MW-56	3/16/2006	8.7	< 5 U	< 10 U
MW-56	10/14/2006	110	2 J	< 10 UJ
MW-56	4/19/2007	< 5 U	< 5 U	< 10 U
MW-56	9/19/2007	38	< 5 U	< 10 U
MW-56	4/29/2008	4 J	< 5 U	< 10 U
MW-56	12/10/2008	93	< 5 U	< 5 U
MW-56	4/24/2009	14	< 5 U	< 5 U
MW-56	10/27/2009	8.7	< 5 U	< 5 U
MW-56	5/12/2010	230	6.4	< 5 U
MW-56	3/23/2011	71	2.6 J	< 5 U
MW-56	10/25/2011	150	11	1.9 J
MW-56	10/20/2012	470	11	< 0.11 U
MW-56	10/17/2013	590	17	< 0.11 U
MW-56	3/7/2014	618	15.3	0.15 J
MW-56	6/11/2014	307	17.6	0.16 J
MW-56	7/29/2014	516	19.3	< 0.50 U
MW-56	10/15/2014	408	12.1	< 0.50 U
MW-56	1/13/2015	326	10	< 0.50 U
MW-56	4/16/2015	495	8.2	< 0.13 U
MW-57	12/10/2004	207	6.72	< 10 U
MW-57	4/8/2005	282	6.83	< 10 U
MW-57	9/28/2005	96	< 5 U	< 10 U
MW-57	3/16/2006	254	7.56	< 10 U
MW-57	10/13/2006	64	< 5 U	< 10 UJ
MW-57	4/19/2007	201	3.77 J	< 10 U
MW-57	9/20/2007	250	5 J	< 10 U
MW-57	4/30/2008	14	< 5 U	< 10 U
MW-57	12/10/2008	130	7.4	< 5 U
MW-57	4/24/2009	96	4.2 J	< 5 U
MW-57	10/27/2009	100	2.6 J	< 5 U
MW-57	5/12/2010	210	6	< 5 U
MW-57	3/23/2011	110	2.3 J	< 5 U
MW-57	10/25/2011	59	2 J	< 5 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-57	10/20/2012	120	5.1	< 0.11 U
MW-57	10/17/2013	210	7.4	< 0.11 U
MW-57	3/7/2014	134	3 J	0.14 J
MW-57	6/11/2014	167	4.4 J	< 0.13 U
MW-57	7/29/2014	308	8.2	< 0.50 U
MW-57	10/15/2014	172	4.2 J	< 0.50 U
MW-57	1/13/2015	177	5.4	< 0.50 U
MW-57	4/16/2015	194	4.8	< 0.50 U
MW-58	12/9/2004	526	14.5	< 10 U
MW-58	4/7/2005	809	18.8	< 10 U
MW-58	9/28/2005	486	10.9	< 10 U
MW-58	3/16/2006	421	8.66	< 10 U
MW-58	10/13/2006	620	14	< 10 UJ
MW-58	4/19/2007	784	30.7	< 25 U
MW-58	4/19/2007	717	9.54 J	< 25 U
MW-58	9/19/2007	650	17	< 10 U
MW-58	9/19/2007	640	16	< 10 U
MW-58	4/30/2008	630	15	< 10 U
MW-58	4/30/2008	580	14	< 10 U
MW-58	12/11/2008	530	12	< 5 U
MW-58	12/11/2008	510	13	< 5 U
MW-58	4/25/2009	590	14	< 5 U
MW-58	4/25/2009	580	15	< 5 U
MW-58	10/28/2009	480	11	< 5 U
MW-58	10/28/2009	480	11	< 5 U
MW-58	5/12/2010	660	14	< 5 U
MW-58	11/6/2010	560	11	< 5 U
MW-58	11/6/2010	580	12	< 5 U
MW-58	3/24/2011	710	12	< 5 U
MW-58	3/24/2011	700	14	1.1 J
MW-58	10/20/2012	440	18	0.84 J
MW-58	10/17/2013	410	13	1.5 J
MW-58	10/17/2013	420	12	1.1 J
MW-58	3/7/2014	293	22.3	0.93 J
MW-58	5/12/2014	397	12.1	0.72 J
MW-58	7/29/2014	399	12.7	0.76 J
MW-58	10/15/2014	360	10.8	0.68 J
MW-58	1/14/2015	385	14.7	0.71 J
MW-58	4/16/2015	356	19.7	1.5

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-60	4/1/2005	< 5 U	< 5 U	< 10 U
MW-60	9/30/2005	< 5 U	< 5 U	< 10 U
MW-60	3/17/2006	< 5 U	< 5 U	< 10 U
MW-60	10/12/2006	< 5 U	< 5 U	< 10 U
MW-60	4/19/2007	< 5 U	< 5 U	< 10 U
MW-60	9/19/2007	< 5 U	< 5 U	< 10 U
MW-60	4/29/2008	< 5 U	< 5 U	< 10 U
MW-60	12/10/2008	< 5 U	< 5 U	< 5 U
MW-60	4/24/2009	< 5 U	< 5 U	< 5 U
MW-60	10/27/2009	< 5 U	< 5 U	< 5 U
MW-60	5/11/2010	< 5 U	< 5 U	< 5 U
MW-60	11/4/2010	< 5 U	< 5 U	< 5 U
MW-60	3/23/2011	< 5 U	< 5 U	< 5 U
MW-60	10/25/2011	< 5 U	< 5 U	< 5 U
MW-60	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-60	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-60	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-60	5/13/2014	0.21 J	< 0.080 U	< 0.13 U
MW-60	7/28/2014	1 J	< 0.50 U	< 0.50 U
MW-60	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-60	1/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-60	4/14/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-61	4/1/2005	< 5 U	< 5 U	< 10 U
MW-61	4/1/2005	< 5 U	< 5 U	< 10 U
MW-61	9/30/2005	< 5 U	< 5 U	< 10 U
MW-61	3/17/2006	< 5 U	< 5 U	< 10 U
MW-61	10/12/2006	< 5 U	< 5 U	< 10 U
MW-61	4/19/2007	< 5 U	< 5 U	< 10 U
MW-61	9/19/2007	< 5 U	< 5 U	< 10 U
MW-61	4/29/2008	< 5 U	< 5 U	< 10 U
MW-61	12/10/2008	< 5 U	< 5 U	< 5 U
MW-61	4/24/2009	4 J	< 5 U	< 5 U
MW-61	10/27/2009	< 5 U	< 5 U	< 5 U
MW-61	5/11/2010	< 5 U	< 5 U	< 5 U
MW-61	11/4/2010	< 5 U	< 5 U	< 5 U
MW-61	3/23/2011	1.8 J	< 5 U	< 5 U
MW-61	10/25/2011	< 5 U	< 5 U	< 5 U
MW-61	10/17/2012	2.4 J	< 0.56 U	< 0.11 U
MW-61	10/16/2013	4 J	< 0.56 U	< 0.11 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-61	3/6/2014	4.7 J	< 0.080 U	< 0.13 U
MW-61	5/13/2014	6.6	< 0.080 U	< 0.13 U
MW-61	7/28/2014	8.1	< 0.50 U	< 0.50 U
MW-61	10/14/2014	7.9	< 0.50 U	< 0.50 U
MW-61	1/13/2015	10.2	< 0.50 U	< 0.50 U
MW-61	4/14/2015	10.9	< 0.50 U	< 0.50 U
MW-62	4/1/2005	< 5 U	< 5 U	< 10 U
MW-62	9/30/2005	< 5 U	< 5 U	< 10 U
MW-62	3/16/2006	< 5 U	< 5 U	< 10 U
MW-62	10/12/2006	< 5 U	< 5 U	< 10 U
MW-62	4/19/2007	< 5 U	< 5 U	< 10 U
MW-62	9/19/2007	< 5 U	< 5 U	< 10 U
MW-62	4/29/2008	< 5 U	< 5 U	< 10 U
MW-62	12/10/2008	< 5 U	< 5 U	< 5 U
MW-62	4/24/2009	< 5 U	< 5 U	< 5 U
MW-62	10/27/2009	< 5 U	< 5 U	< 5 U
MW-62	5/11/2010	< 5 U	< 5 U	< 5 U
MW-62	3/23/2011	< 5 U	< 5 U	< 5 U
MW-62	10/25/2011	1.9 J	< 5 U	< 5 U
MW-62	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-62	10/17/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-62	3/7/2014	0.18 J	< 0.080 U	< 0.13 U
MW-62	5/14/2014	0.62 J	< 0.080 U	< 0.13 U
MW-62	7/29/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-62	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-62	1/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-62	4/14/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-63	4/1/2005	8.14	< 5 U	< 10 U
MW-63	9/30/2005	< 5 U	< 5 U	< 10 U
MW-63	3/16/2006	9.76	< 5 U	< 10 U
MW-63	4/6/2006	11.6	< 5 U	< 10 U
MW-63	10/12/2006	4 J	< 5 U	< 10 U
MW-63	4/19/2007	4.08 J	< 5 U	< 10 U
MW-63	9/19/2007	8	< 5 U	< 10 U
MW-63	4/30/2008	3 J	< 5 U	< 10 U
MW-63	12/10/2008	< 5 U	< 5 U	< 5 U
MW-63	4/24/2009	4.3 J	< 5 U	< 5 U
MW-63	10/27/2009	7.7	< 5 U	< 5 U
MW-63	5/11/2010	7.6	< 5 U	< 5 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-63	11/6/2010	11	< 5 U	< 5 U
MW-63	3/23/2011	12	< 5 U	< 5 U
MW-63	10/25/2011	9.8	< 5 U	< 5 U
MW-63	10/19/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-63	10/17/2013	7.5	< 0.56 U	< 0.11 U
MW-63	3/7/2014	9.4	1.3 J	< 0.13 U
MW-63	5/14/2014	12.2	0.61 J	0.13 J
MW-63	7/28/2014	8.3	0.99 J	< 0.50 U
MW-63	10/14/2014	9.4	0.98 J	< 0.50 U
MW-63	1/13/2015	8.2	1	< 0.50 U
MW-63	4/14/2015	9.2	0.99 J	< 0.50 U
MW-65	10/11/2006	470	19	< 10 U
MW-65	10/11/2006	560	18	< 10 U
MW-65	4/19/2007	1350	23.4	< 10 U
MW-65	9/20/2007	580	17	< 10 U
MW-65	4/30/2008	570	16	< 10 U
MW-65	12/11/2008	460	11	< 5 U
MW-65	4/24/2009	620	19	< 5 U
MW-65	11/7/2010	400	11	< 5 U
MW-65	3/4/2011	370	13	< 0.85 U
MW-65	10/25/2011	310	10	< 5 U
MW-65	10/20/2012	280	8.9	< 0.11 U
MW-65	10/17/2013	220	8.6	< 0.11 U
MW-65	3/8/2014	199	6.6	< 0.13 U
MW-65	5/14/2014	195	6.9	< 0.13 U
MW-65	7/30/2014	17.1	< 0.50 U	< 0.50 U
MW-65	10/14/2014	30.8	0.54 J	< 0.50 U
MW-65	1/13/2015	19.2	< 0.50 U	< 0.50 U
MW-65	4/15/2015	16	< 0.50 U	< 0.50 U
MW-66	4/6/2006	< 5 U	< 5 U	< 10 U
MW-66	10/12/2006	2 J	< 5 U	< 10 U
MW-66	4/18/2007	< 5 U	< 5 U	< 10 U
MW-66	9/19/2007	4 J	< 5 U	< 10 U
MW-66	4/29/2008	< 5 U	< 5 U	< 10 U
MW-66	12/10/2008	< 5 U	< 5 U	< 5 U
MW-66	4/25/2009	< 5 U	< 5 U	< 5 U
MW-66	10/28/2009	< 5 U	< 5 U	< 5 U
MW-66	5/11/2010	< 5 U	< 5 U	< 5 U
MW-66	11/3/2010	< 5 U	< 5 U	< 5 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-66	3/24/2011	1.6 J	< 5 U	< 5 U
MW-66	10/26/2011	1.8 J	< 5 U	< 5 U
MW-66	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-66	10/17/2013	2.1 J	< 0.56 U	< 0.11 U
MW-66	3/7/2014	3.5 J	< 0.080 U	< 0.13 U
MW-66	5/13/2014	3.1 J	< 0.080 U	< 0.13 U
MW-66	7/28/2014	2.6 J	< 0.50 U	< 0.50 U
MW-66	10/13/2014	2.3 J	< 0.50 U	< 0.50 U
MW-66	1/14/2015	2.4	< 0.50 U	< 0.50 U
MW-66	4/15/2015	2.6	< 0.50 U	< 0.50 U
MW-67	4/6/2006	< 5 U	< 5 U	< 10 U
MW-67	10/12/2006	1 J	< 5 U	< 10 U
MW-67	4/19/2007	< 5 U	< 5 U	< 10 U
MW-67	9/18/2007	< 5 U	< 5 U	< 10 U
MW-67	4/29/2008	< 5 U	< 5 U	< 10 U
MW-67	12/10/2008	< 5 U	< 5 U	< 5 U
MW-67	4/25/2009	< 5 U	< 5 U	< 5 U
MW-67	10/28/2009	< 5 U	< 5 U	< 5 U
MW-67	5/11/2010	< 5 U	< 5 U	< 5 U
MW-67	11/3/2010	< 5 U	< 5 U	< 5 U
MW-67	3/24/2011	< 5 U	< 5 U	< 5 U
MW-67	10/26/2011	< 5 U	< 5 U	< 5 U
MW-67	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-67	10/17/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-67	3/7/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-67	5/13/2014	< 0.17 U	< 0.080 U	< 0.13 U
MW-67	7/28/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-67	10/13/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-67	1/12/2015	1.3	< 0.50 U	< 0.50 U
MW-67	4/15/2015	0.77 J	< 0.50 U	< 0.50 U
MW-68	1/15/2009	< 5 U	< 5 U	< 5 U
MW-68	4/24/2009	< 5 U	< 5 U	< 5 U
MW-68	10/28/2009	< 5 U	< 5 U	< 5 U
MW-68	5/13/2010	< 5 U	< 5 U	< 5 U
MW-68	11/6/2010	9.5	< 5 U	< 5 U
MW-68	10/26/2011	< 5 U	< 5 U	< 5 U
MW-68	10/17/2012	< 1.6 U	< 0.56 U	< 0.11 U
MW-68	10/16/2013	< 1.6 U	< 0.56 U	< 0.11 U
MW-68	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-68	5/14/2014	0.49 J	< 0.080 U	< 0.13 U
MW-68	7/29/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-68	10/14/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-68	1/12/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-68	4/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
RW-69	1/15/2009	170	7.1	< 5 U
RW-69	4/24/2009	62	< 5 U	< 5 U
RW-69	5/27/2009	290	10	< 5 U
RW-69	12/21/2009	200	6.3	< 1.6 U
RW-69	5/13/2010	170	8.2	< 5 U
RW-69	11/4/2010	320	9	< 5 U
RW-69	3/3/2011	200	7.1	< 0.85 U
RW-69	5/23/2011	130	3 J	NT
RW-69	10/26/2011	210	5.7	< 5 U
RW-69	4/18/2012	150	3.6 J	< 5 U
RW-69	10/18/2012	180	5	< 0.11 U
RW-69	4/23/2013	190	2.8 J	< 0.11 U
RW-69	10/16/2013	190	7.7	< 0.11 U
RW-69	3/7/2014	105	3.5 J	0.41 J
RW-69	5/13/2014	110	3.3 J	0.3 J
RW-69	7/29/2014	164	5.6	0.5 J
RW-69	10/14/2014	173	6.9	< 0.50 U
RW-69	1/14/2015	115	4.7	< 0.50 U
RW-69	4/14/2015	113	4.5	< 0.50 U
MW-70	11/4/2010	540	14	< 5 U
MW-70	3/22/2011	170	9.2	1.2 J
MW-70	10/26/2011	320	7.7	< 5 U
MW-70	4/18/2012	330	11	< 5 U
MW-70	10/18/2012	200	11	< 0.11 U
MW-70	4/23/2013	180	3.6 J	0.32 J
MW-70	10/16/2013	270	7.2	0.3 J
MW-71	10/28/2009	190	6.3	< 5 U
MW-71	5/13/2010	160	7.4	< 5 U
MW-71	11/4/2010	250	7.2	< 5 U
MW-71	3/22/2011	76	1.6 J	< 5 U
MW-71	10/26/2011	130	2.7 J	< 5 U
MW-71	4/18/2012	160	5.3	< 5 U
MW-71	10/20/2012	210	7.3	< 0.11 U
MW-71	4/23/2013	220	4.8 J	0.23 J

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-71	10/16/2013	160	6.1	0.57 J
MW-71	3/7/2014	166	5.8	0.19 J
MW-71	5/13/2014	164	5.3	0.33 J
MW-71	7/29/2014	181	6.4	< 0.50 U
MW-71	10/14/2014	185	6	< 0.50 U
MW-71	1/14/2015	170	6	< 0.50 U
MW-71	4/14/2015	156	5.7	< 0.50 U
IW-72	1/16/2009	27	< 5 U	< 5 U
IW-72	4/23/2009	40	< 5 U	< 5 U
IW-72	5/8/2009	40	< 5 U	< 5 U
IW-72	3/3/2011	3.1 J	< 0.56 U	< 0.85 U
IW-72	5/19/2011	< 1.6 U	< 0.56 U	NT
IW-72	10/24/2011	< 5 U	< 5 U	< 5 U
IW-72	4/17/2012	3.8 J	< 5 U	< 5 U
IW-72	10/19/2012	< 1.6 U	< 0.56 U	< 0.11 U
IW-72	4/24/2013	< 1.6 U	< 0.56 U	< 0.11 U
IW-72	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
IW-72	3/6/2014	< 0.17 U	< 0.080 U	< 0.13 U
IW-72	5/12/2014	< 0.17 U	< 0.080 U	< 0.13 U
IW-72	7/29/2014	< 0.50 U	< 0.50 U	< 0.50 U
IW-72	10/13/2014	< 0.50 U	< 0.50 U	< 0.50 U
IW-72	1/12/2015	< 0.50 U	< 0.50 U	< 0.50 U
IW-72	4/15/2015	< 0.50 U	< 0.50 U	< 0.50 U
IW-73	4/23/2009	400	16	< 5 U
IW-73	5/19/2011	160	3.6 J	NT
IW-73	10/25/2011	250	4.9 J	< 5 U
IW-73	4/17/2012	180	5.8	< 5 U
IW-73	10/20/2012	170	7	< 0.11 U
IW-73	4/24/2013	200	6.5	< 0.11 U
IW-73	4/24/2013	180	6.4	< 0.11 U
IW-73	10/15/2013	140	47	6.3
IW-73	3/7/2014	183	20.9	4.6
IW-73	5/14/2014	31.9	0.81 J	< 0.13 U
IW-73	7/29/2014	138	24.3	26.1
IW-73	10/14/2014	8.5	0.84 J	1.1 J
IW-73	1/14/2015	70.8	6.3	4.1
IW-73	4/15/2015	96.8	6.8	1.6
IW-74	4/23/2009	260	8.1	< 5 U
IW-74	5/19/2011	74	< 0.56 U	NT

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
IW-74	10/25/2011	150	3.1 J	< 5 U
IW-74	4/17/2012	130	2.4 J	< 5 U
IW-74	10/20/2012	160	3.4 J	< 0.11 U
IW-74	4/24/2013	160	4.8 J	< 0.11 U
IW-74	10/15/2013	190	5.7	< 0.11 U
IW-74	3/7/2014	135	4.3 J	1.5 J
IW-74	3/7/2014	151	4.5 J	2.2
IW-74	5/14/2014	169	4.3 J	0.8 J
IW-74	7/29/2014	177	5.8	0.91 J
IW-74	10/14/2014	143	3.3 J	< 0.50 U
IW-74	10/14/2014	144	3.3 J	< 0.50 U
IW-74	1/14/2015	139	3.5	< 0.50 U
IW-74	1/14/2015	141	3.8	< 0.50 U
IW-74	4/15/2015	147	5	< 0.50 U
IW-75	1/16/2009	140	2.4 J	< 5 U
IW-75	10/25/2011	< 5 U	< 5 U	< 5 U
IW-75	4/17/2012	2.9 J	< 5 U	< 5 U
IW-75	10/18/2012	< 1.6 U	< 0.56 U	< 0.11 U
IW-75	10/15/2013	< 1.6 U	< 0.56 U	< 0.11 U
IW-76	4/23/2009	730	28	< 5 U
IW-76	5/7/2009	460	28	< 5 U
IW-76	3/4/2011	380	11	< 0.85 U
IW-76	5/23/2011	460	12	NT
IW-76	10/25/2011	130	2.2 J	< 5 U
IW-76	4/17/2012	400	8.9	< 5 U
IW-76	10/20/2012	610	16	< 0.11 U
IW-76	4/24/2013	420	13	0.39 J
IW-76	10/15/2013	450	8.7	< 0.11 U
IW-76	3/8/2014	127	1.5 J	< 0.13 U
IW-76	5/14/2014	10.3	< 0.080 U	< 0.13 U
IW-76	7/29/2014	319	2.7 J	< 0.50 U
IW-76	10/15/2014	214	6.7	< 0.50 U
IW-76	1/14/2015	288	8.8	< 0.50 U
IW-76	4/15/2015	354	11.2	< 0.50 U
IW-77	4/23/2009	570	20	< 5 U
IW-77	5/7/2009	300	17	< 5 U
IW-77	5/27/2009	250	13	< 5 U
IW-77	10/28/2009	380	13	< 5 U
IW-77	12/21/2009	250	12	< 1.6 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
IW-77	5/13/2010	260	11	< 5 U
IW-77	11/5/2010	1400	41	< 5 U
IW-77	3/4/2011	430	14	< 0.85 U
IW-77	5/23/2011	440	15	NT
IW-77	10/25/2011	1400	32	< 5 U
IW-77	4/17/2012	520	20	< 5 U
IW-77	4/17/2012	510	23	< 5 U
IW-77	10/19/2012	1000	32	0.65 J
IW-77	4/24/2013	530	21	< 0.11 U
IW-77	10/16/2013	1000	39	1.6 J
IW-77	10/16/2013	990	39	0.49 J
IW-77	3/8/2014	546	24.4	0.22 J
IW-77	5/14/2014	1460	36	0.66 J
IW-77	7/9/2014	1200	21.1	< 0.50 U
IW-77	7/29/2014	1540	35.2	< 0.50 U
IW-77	10/15/2014	741	15.8	< 0.50 U
IW-77	10/23/2014	554	11.9	< 0.50 U
IW-77	1/14/2015	201	4.8	< 0.50 U
IW-77	4/14/2015	153	2.9	< 0.50 U
IW-78	10/25/2011	350	12	< 5 U
IW-78	4/18/2012	120	2.3 J	< 5 U
IW-78	10/20/2012	310	8.7	< 0.11 U
IW-78	4/24/2013	7	< 0.56 U	< 0.11 U
IW-78	10/17/2013	190	4.6 J	< 0.11 U
IW-78	5/28/2014	255	6.2	< 0.13 U
IW-78	9/11/2014	39.6	1.2 J	< 0.50 U
IW-79	10/25/2011	570	13	< 5 U
IW-79	4/17/2012	430	2.1 J	< 5 U
IW-79	10/20/2012	670	20	0.45 J
IW-79	10/20/2012	480	16	< 0.11 U
IW-79	4/24/2013	420	9	< 0.11 U
IW-79	10/17/2013	440	12	< 0.11 U
IW-79	5/28/2014	426	6.9	< 0.13 U
IW-79	9/11/2014	105	1.8 J	< 0.50 U
IW-80	4/23/2009	170	4 J	< 5 U
IW-80	5/7/2009	69	< 5 U	< 5 U
IW-80	5/19/2011	27	< 0.56 U	NT
IW-80	10/25/2011	9.7	< 5 U	< 5 U
IW-80	4/17/2012	55	2.2 J	< 5 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
IW-80	10/19/2012	48	< 0.56 U	< 0.11 U
IW-80	4/24/2013	40	< 0.56 U	< 0.11 U
IW-80	10/17/2013	58	2.4 J	< 0.11 U
IW-80	10/17/2013	62	2.4 J	< 0.11 U
IW-80	3/8/2014	79.1 J	2.7 J	< 0.13 U
IW-80	5/13/2014	24.2	< 0.080 U	< 0.13 U
IW-80	7/30/2014	25.6	0.85 J	< 0.50 U
IW-80	10/14/2014	11.8	< 0.50 U	< 0.50 U
IW-80	1/13/2015	7.1	< 0.50 U	< 0.50 U
IW-80	4/14/2015	9.2	< 0.50 U	< 0.50 U
MW-81	5/29/2014	512	14.3	0.21 J
MW-81	7/9/2014	518	11.4	< 0.50 U
MW-81	9/11/2014	463	13.5	< 0.50 U
MW-81	1/13/2015	385	9.9	< 0.50 U
MW-81	4/15/2015	198	4.2	< 0.50 U
MW-82	5/28/2014	285	4.8 J	0.14 J
MW-82	7/9/2014	48.2	1.2 J	< 0.50 U
MW-82	9/11/2014	50	1.1 J	< 0.50 U
MW-82	1/13/2015	66	1.2	< 0.50 U
MW-82	4/15/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-83	5/23/2014	470	8.3	< 0.13 U
MW-83	9/12/2014	213	4.9 J	< 0.50 U
MW-83	10/23/2014	210	5.2	< 0.50 U
MW-83	1/15/2015	101	1.8	< 0.50 U
MW-83	4/16/2015	151	2.8	< 0.50 U
MW-84	5/27/2014	214	4.6 J	0.16 J
MW-84	9/12/2014	0.93 J	< 0.50 U	< 0.50 U
MW-84	10/23/2014	0.68 J	< 0.50 U	< 0.50 U
MW-84	1/14/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-84	4/16/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-85	5/29/2014	1970	99.4	23.1
MW-85	7/8/2014	3780	133	3.9
MW-85	9/11/2014	5820	226 J	35.3
MW-85	12/5/2014	27700	280	7.7
MW-85	1/15/2015	5940	167	1.1
MW-85	4/16/2015	256	16.8	< 0.50 U
MW-86	5/29/2014	533000	1220 J	341 J
MW-86	9/11/2014	129000	91.6	4.1
MW-86	12/5/2014	169000	290 E	24.7

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-86	1/15/2015	81200	128	4.5
MW-86	4/16/2015	46700	128	5.8
MW-87	6/25/2014	564	41.8	< 0.50 U
MW-87	10/16/2014	594	47.8	< 0.50 U
MW-87	1/14/2015	661	51.3	< 0.50 U
MW-87	4/16/2015	758	58.6	0.33 J
MW-88	6/24/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-88	10/16/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-88	1/13/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-88	4/16/2015	0.58 J	< 0.50 U	< 0.50 U
MW-89	6/24/2014	19.5	< 0.50 U	< 0.50 U
MW-89	10/15/2014	11.3	< 0.50 U	< 0.50 U
MW-89	1/13/2015	11.4	< 0.50 U	< 0.50 U
MW-89	4/16/2015	15.9	< 0.50 U	< 0.50 U
MW-90	6/25/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-90	10/16/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-90	1/12/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-90	4/15/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-91	6/25/2014	234	21.7	< 0.50 U
MW-91	10/16/2014	319	28.8	< 0.50 U
MW-91	1/13/2015	354	31.5	< 0.50 U
MW-91	4/16/2015	438	36.6	0.18 J
MW-92	10/22/2014	2160	16	7.2
MW-92	12/4/2014	2200	23.4	10.3
MW-92	1/15/2015	1410	10.4	4.6
MW-92	4/16/2015	736	5.4	2.1
MW-93	10/22/2014	18200	145	5
MW-93	12/4/2014	14600	85.7	2.5
MW-93	1/15/2015	18000	131	3.4
MW-93	4/16/2015	21500	160	3.9
MW-94	10/22/2014	11100	309 J	2.5
MW-94	12/4/2014	9570	250 J	3
MW-94	1/15/2015	9530	297	2.4
MW-94	4/16/2015	11800	325	1.3
MW-95	10/22/2014	22300	151	25.7
MW-95	12/4/2014	20900	159	29.9
MW-95	1/15/2015	21100	177	25.6
MW-95	4/16/2015	26700	184	14.9
MW-96	10/22/2014	< 0.50 U	< 0.50 U	< 0.50 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-96	1/15/2015	0.59 J	< 0.50 U	< 0.50 U
MW-96	4/16/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-97	10/22/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-97	1/15/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-97	4/16/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-98	10/29/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-98	1/15/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-98	4/16/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-99	10/22/2014	< 0.50 U	< 0.50 U	< 0.50 U
MW-99	1/15/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-99	4/16/2015	< 0.50 U	< 0.50 U	< 0.50 U
IW-101	3/23/2014	314	7.5	0.21 J
IW-101	4/30/2014	794	18.9	< 0.13 U
IW-101	5/23/2014	509	11.2	< 0.13 U
IW-101	7/8/2014	150	4.5 J	< 0.50 U
IW-101	9/12/2014	139	3.4 J	< 0.50 U
IW-102	3/23/2014	685	14.6	0.45 J
IW-102	4/30/2014	239	5.4	< 0.13 U
IW-103	3/23/2014	692	13.1	0.76 J
IW-103	4/30/2014	729	22.8	0.83 J
IW-104	3/23/2014	637	13.5	0.69 J
IW-104	4/30/2014	527	12.6	< 0.13 U
IW-105	3/23/2014	901	14.4	0.54 J
IW-105	4/30/2014	185	4.9 J	< 0.13 U
IW-106	3/23/2014	198	4.2 J	< 2 U
IW-106	4/30/2014	163	6.8	< 0.13 U
IW-106	5/23/2014	132	2.6 J	< 0.13 U
IW-107	3/23/2014	198	4.3 J	0.14 J
IW-107	4/30/2014	110	3.3 J	< 0.13 U
IW-108	3/23/2014	1280	27.8	0.83 J
IW-108	4/29/2014	72.1	4.1 J	< 0.13 U
IW-108	5/23/2014	59	1.5 J	< 0.13 U
IW-109	3/23/2014	362	7.4	0.23 J
IW-109	4/29/2014	91.2	2.5 J	< 0.13 U
IW-109	5/23/2014	110	1.9 J	< 0.13 U
IW-110	3/23/2014	464	9.8	0.5 J
IW-110	4/16/2014	397	9.4	0.17 J
IW-110	4/30/2014	268	8.2	0.33 J
IW-111	3/23/2014	704	14	0.63 J

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
IW-111	4/29/2014	260	6.4	< 0.13 U
IW-112	3/23/2014	219	4.9 J	0.23 J
IW-112	4/16/2014	200	4.8 J	< 0.13 U
IW-112	4/30/2014	104	3.8 J	< 0.13 U
IW-113	3/24/2014	510	11.1	0.43 J
IW-113	4/14/2014	435	8.7	< 0.13 U
IW-114	3/24/2014	397	9.7	0.25 J
IW-114	4/14/2014	336	8.1	< 0.13 U
IW-115	3/24/2014	622	14	0.25 J
IW-115	4/7/2014	455	9.1 J	< 1.3 U
IW-115	4/14/2014	449	9.3	< 0.13 U
IW-115	5/28/2014	504	11.2	0.27 J
IW-115	7/9/2014	352	7.4	< 0.50 U
IW-115	9/11/2014	355	8	< 0.50 U
IW-116	3/24/2014	486	10.9	0.33 J
IW-116	4/15/2014	546	10.8	0.34 J
IW-117	3/24/2014	384	9.1	0.23 J
IW-117	4/15/2014	384	9.9	< 0.13 U
IW-118	3/24/2014	496	11.6	0.34 J
IW-118	4/15/2014	395	9.7	< 0.13 U
IW-118	5/28/2014	437	9.3	< 0.13 U
IW-119	3/24/2014	524	11.5	0.33 J
IW-119	4/7/2014	478	9.1 J	< 1.3 U
IW-119	4/15/2014	509	11.3	< 0.13 U
IW-120	3/24/2014	289	7.9	0.14 J
IW-120	4/15/2014	390	10.2	< 0.13 U
IW-121	3/24/2014	402	8.9 J	< 10 U
IW-121	4/15/2014	445	11.7	< 0.13 U
IW-122	3/24/2014	473	11.5	0.29 J
IW-122	4/15/2014	384	10	< 0.13 U
IW-123	3/24/2014	532	12.2	0.4 J
IW-123	4/7/2014	539	8.8 J	< 1.3 U
IW-123	4/15/2014	488	10	< 0.13 U
IW-124	3/24/2014	455	6.8 J	< 10 U
IW-124	4/15/2014	448	8.7	0.26 J
IW-125	3/25/2014	2140	207	3.1
IW-125	5/29/2014	17.1	2.9 J	< 0.13 U
IW-125	9/11/2014	7.3	1 J	< 0.50 U
IW-126	3/25/2014	2020	197	10.4

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
IW-126	5/29/2014	787	59.1	< 0.13 U
IW-127	3/24/2014	3700	219 J	7.6
IW-127	5/29/2014	639	34.7	< 0.13 U
IW-127	9/11/2014	1020	38.5	2.6
IW-127	12/4/2014	182	7.2	< 0.50 U
IW-128	3/25/2014	2980	178	11.7
IW-128	4/29/2014	1250	68.4	4.9
IW-128	5/29/2014	1190	62.7	< 0.13 U
IW-129	3/25/2014	2540	192	< 0.13 U
IW-129	5/29/2014	25.8	1.8 J	< 0.13 U
IW-130	3/23/2014	358	7.6 J	< 10 U
IW-130	5/23/2014	75.5	0.78 J	< 0.13 U
IW-131	3/24/2014	526	11.5	0.35 J
IW-131	4/30/2014	318	8.5	0.31 J
IW-131	5/28/2014	443	8.8	0.3 J
IW-132	10/23/2014	714	3.5 J	< 0.50 U
IW-135	10/23/2014	3840	43.3	2
IW-141	10/23/2014	368000	< 1000 U	82.6
IW-141	12/5/2014	46300	232 E	31
IW-143	10/23/2014	13100	44.8	2.5
IW-147	10/23/2014	199000	1640 J	< 1000 U
IW-147	12/5/2014	91600	1420 J	176
IW-152	10/22/2014	17600	224 J	8.2
IW-152	12/4/2014	< 0.50 U	< 0.50 U	< 0.50 U
IW-153	10/23/2014	293	85.3	12.3
IW-153	12/4/2014	1.6 J	< 0.50 U	< 0.50 U
IW-155	10/23/2014	14600	36.4	5.8
IW-157	10/23/2014	74200	712 J	195
IW-157	12/5/2014	31700	391 E	66.8
IW-169	10/22/2014	163	1.7 J	< 0.50 U
MW-172	10/22/2014	3010	21.4	2.4
MW-172	12/5/2014	1810	15.6	1.3 J
MW-172	1/15/2015	3600	22.4	1.2
MW-172	4/16/2015	1740	11.9	0.92 J
MW-173	4/15/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-174	1/20/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-174	4/14/2015	0.68 J	< 0.50 U	< 0.50 U
MW-175	1/20/2015	123	2	< 0.50 U

TABLE 6
HISTORICAL SUMMARY OF GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Well ID	Date	Trichloroethene (µg/L)	cis-1,2-Dichloroethene (µg/L)	Vinyl Chloride (µg/L)
MW-175	4/15/2015	98.8	1.5	< 0.50 U
MW-176	1/20/2015	720	16.8	0.57 J
MW-176	4/14/2015	528	16.7	0.69 J
MW-177	1/21/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-177	4/14/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-178	1/18/2015	5.2	0.99 J	< 0.50 U
MW-178	4/16/2015	5	1.3	< 0.50 U
MW-179	4/16/2015	41.2	1.6	< 0.50 U
MW-180	1/19/2015	23.7	3.4	< 0.50 U
MW-180	4/16/2015	21.4	3.8	< 0.50 U
MW-181	1/21/2015	< 0.50 U	< 0.50 U	< 0.50 U
MW-181	4/14/2015	< 0.50 U	< 0.50 U	< 0.50 U

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

TABLE 7
SUMMARY OF STATISTICAL TEMPORAL TREND ANALYSIS (2009-2015)
Whirpool Facility - Fort Smith, Arkansas

Well ID	Start Date	End Date	Number of Samples	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
Northern Plume Wells						
MW-23	4/27/2009	4/14/2015	16	Stable	Increasing	ND
MW-24	4/27/2009	4/16/2015	14	Decreasing	<PQL	<PQL
MW-27	5/12/2010	4/13/2015	13	No Trend	<PQL	ND
MW-28	10/29/2009	4/13/2015	15	Decreasing	ND	ND
MW-31	4/25/2009	4/14/2015	13	No Trend	ND	ND
MW-32	4/25/2009	4/15/2015	14	Decreasing	<PQL	ND
MW-33	4/25/2009	4/15/2015	16	Stable	Decreasing	<PQL
MW-34	4/24/2009	4/14/2015	15	Stable	<PQL	ND
MW-35R	4/24/2009	4/14/2015	16	No Trend	No Trend	ND
MW-36	4/24/2009	4/14/2015	17	No Trend	ND	ND
MW-39	4/24/2009	4/14/2015	14	No Trend	ND	ND
MW-40	4/24/2009	4/14/2015	17	<PQL	ND	ND
MW-41	4/24/2009	4/15/2015	18	Stable	Stable	<PQL
MW-46R	4/25/2009	4/14/2015	20	Stable	Increasing	<PQL
MW-50	4/24/2009	4/14/2015	14	<PQL	ND	ND
MW-55	4/24/2009	10/16/2013	8	Increasing	ND	ND
MW-56	4/24/2009	4/16/2015	13	Increasing	Increasing	<PQL
MW-57	4/24/2009	4/16/2015	13	Increasing	Stable	<PQL
MW-58	4/25/2009	4/16/2015	15	Decreasing	Stable	Increasing
MW-60	4/24/2009	4/14/2015	14	<PQL	ND	ND
MW-61	4/24/2009	4/14/2015	14	Increasing	ND	ND
MW-62	4/24/2009	4/14/2015	13	<PQL	ND	ND
MW-63	4/24/2009	4/14/2015	14	Stable	Increasing	<PQL
MW-65	4/24/2009	4/15/2015	12	Decreasing	Decreasing	ND
MW-66	4/25/2009	4/15/2015	14	Increasing	ND	ND
MW-67	4/25/2009	4/15/2015	14	Increasing	ND	ND
MW-68	1/15/2009	4/13/2015	14	No Trend	ND	ND
RW-69	1/15/2009	4/14/2015	19	Decreasing	Decreasing	<PQL
MW-70	11/4/2010	10/16/2013	7	Stable	Decreasing	<PQL
MW-71	10/28/2009	4/14/2015	15	Stable	Stable	<PQL
IW-72	1/16/2009	4/15/2015	16	Decreasing	ND	ND
IW-73	4/23/2009	4/15/2015	13	Decreasing	No Trend	Increasing
IW-74	4/23/2009	4/15/2015	13	Stable	Stable	No Trend
IW-75	1/16/2009	10/15/2013	5	No Trend	<PQL	ND
IW-76	4/23/2009	4/15/2015	15	Decreasing	Decreasing	No Trend
IW-77	4/23/2009	4/14/2015	22	Increasing	Stable	<PQL
IW-78	10/25/2011	9/11/2014	7	Stable	Stable	ND
IW-79	10/25/2011	9/11/2014	7	Decreasing	Stable	<PQL
IW-80	4/23/2009	4/14/2015	14	Decreasing	<PQL	ND
MW-81	5/29/2014	4/15/2015	5	Decreasing	Decreasing	<PQL
MW-82	5/28/2014	4/15/2015	5	No Trend	Decreasing	<PQL
MW-83	5/23/2014	4/16/2015	5	Decreasing	Stable	ND
MW-84	5/27/2014	4/16/2015	5	Decreasing	No Trend	<PQL
Southern Plume Wells (includes Source Area Wells as indicated by bold font well ID)						
ITMW-1	10/27/2011	4/15/2015	11	Stable	Stable	ND
ITMW-2	11/3/2010	4/16/2015	13	<PQL	<PQL	ND
ITMW-3	10/25/2011	4/14/2015	9	Decreasing	<PQL	No Trend
ITMW-4	10/28/2009	4/14/2015	13	Decreasing	Stable	No Trend
ITMW-5	4/27/2009	4/14/2015	16	Stable	Decreasing	<PQL
ITMW-6	4/27/2009	4/15/2015	15	Increasing	Increasing	<PQL
ITMW-7	4/27/2009	4/15/2015	13	Decreasing	Decreasing	No Trend
ITMW-9	4/27/2009	4/15/2015	13	Stable	Decreasing	No Trend
ITMW-10	10/26/2011	4/15/2015	11	Increasing	Decreasing	Decreasing
ITMW-11	4/27/2009	4/15/2015	15	Decreasing	Decreasing	Decreasing
ITMW-12	11/4/2010	4/15/2015	12	Stable	Decreasing	No Trend
ITMW-13	4/27/2009	4/15/2015	12	Decreasing	Decreasing	<PQL
ITMW-14	11/6/2010	4/14/2015	12	Decreasing	ND	ND
ITMW-15	4/27/2009	4/15/2015	16	Decreasing	Stable	Decreasing
ITMW-16	4/27/2009	4/16/2015	15	No Trend	Decreasing	ND
ITMW-17	4/27/2009	4/15/2015	16	Decreasing	Decreasing	Increasing
ITMW-18	10/29/2009	4/13/2015	14	Decreasing	ND	<PQL
ITMW-19	10/27/2009	4/14/2015	14	Decreasing	<PQL	<PQL
ITMW-20	10/27/2009	4/13/2015	13	No Trend	ND	<PQL
ITMW-21	4/27/2009	4/14/2015	17	Decreasing	Increasing	ND
MW-22	4/27/2009	4/16/2015	14	<PQL	<PQL	ND
MW-25	4/27/2009	4/16/2015	17	Decreasing	Decreasing	Decreasing
MW-26	10/29/2009	4/13/2015	14	No Trend	ND	ND
MW-29	10/29/2009	4/14/2015	12	<PQL	ND	ND
MW-30	11/3/2010	10/14/2013	6	Stable	Stable	<PQL
MW-37	4/27/2009	10/17/2013	10	Decreasing	Decreasing	Stable
MW-38	10/26/2011	4/16/2015	10	Increasing	Stable	Decreasing
MW-85	5/29/2014	4/16/2015	6	No Trend	Stable	Decreasing
MW-86	5/29/2014	4/16/2015	5	Decreasing	No Trend	No Trend
MW-92	10/22/2014	4/16/2015	4	Stable	Stable	Stable
MW-93	10/22/2014	4/16/2015	4	Stable	Stable	Stable
MW-94	10/22/2014	4/16/2015	4	Stable	Stable	Stable
MW-95	10/22/2014	4/16/2015	4	Stable	Increasing	Stable
MW-172	10/22/2014	4/16/2015	4	Stable	Stable	Decreasing
North Eastern Plume Wells						
MW-87	6/25/2014	4/16/2015	4	Increasing	Increasing	<PQL
MW-88	6/24/2014	4/16/2015	4	<PQL	ND	ND
MW-89	6/25/2014	4/16/2015	4	Stable	ND	ND
MW-90	6/25/2014	4/15/2015	4	ND	ND	ND
MW-91	6/25/2014	4/16/2015	4	Increasing	Increasing	<PQL

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

TABLE 8
SUMMARY TEMPORAL TREND ANALYSIS BY WELL CATEGORY
Whirlpool Facility - Fort Smith, Arkansas

Chemical	Increasing	Decreasing	Stable	No Trend	Not Detected Above the Reporting Limit
Northern Plume Wells					
Trichloroethene	7	14	10	8	4
cis-1,2-Dichloroethene	4	7	9	3	20
Vinyl Chloride	2	0	0	2	39
Southern Plume Wells (includes Source Area Wells)					
Trichloroethene	3	14	10	4	3
cis-1,2-Dichloroethene	3	11	10	1	9
Vinyl Chloride	1	7	5	6	15
North Eastern Plume Wells					
Trichloroethene	2	0	1	0	1
cis-1,2-Dichloroethene	2	0	0	0	2
Vinyl Chloride	0	0	0	1	3
Source Area Wells					
Trichloroethene	1	7	2	1	0
cis-1,2-Dichloroethene	0	4	4	1	2
Vinyl Chloride	1	5	1	2	2

TABLE 9
SUMMARY OF AVERAGE DETECTED CONCENTRATIONS (2009-2015)
Whirlpool Facility - Fort Smith, Arkansas

Date	TCE			c-1,2-DCE			VC		
	Concentration (µg/L)	# of Detects	# of Samples	Concentration (µg/L)	# of Detects	# of Samples	Concentration (µg/L)	# of Detects	# of Samples
All Wells (excluding Northeast Wells)									
4/24/2009	2,570	35	46	266	25	46	287	5	46
10/28/2009	8,560	22	38	559	17	38	695	4	38
5/13/2010	5,600	29	43	433	23	43	494	5	43
11/4/2010	10,825	33	41	632	19	41	1,300	2	41
3/22/2011	4,889	26	34	555	17	34	281	9	34
10/26/2011	4,918	46	65	394	36	65	604	6	65
4/18/2012	2,790	30	39	275	25	39	531	4	39
10/18/2012	2,348	43	66	191	39	66	129	19	66
4/23/2013	1,561	26	38	89	23	38	16	16	38
10/16/2013	1,895	46	65	177	39	65	189	17	66
3/7/2014	1,184	43	55	71	35	55	6	25	55
5/15/2014	1,159	46	55	62	31	55	7	23	55
7/30/2014	2,764	41	55	121	33	55	18	14	55
10/16/2014	2,174	37	55	135	33	55	80	11	55
1/12/2015	437	39	55	81	30	55	16	9	55
4/16/2015	472	40	57	94	30	57	5.8	8	57
North Wells									
4/24/2009	384	23	34	19	13	34		0	34
10/28/2009	228	14	25	8	9	25		0	25
5/13/2010	255	17	28	11	10	28		0	28
11/4/2010	333	21	27	16	10	27		0	27
3/22/2011	144	15	23	6	8	23	1	2	23
10/26/2011	262	25	38	10	17	38	2	1	38
4/18/2012	197	17	18	7	12	18		0	18
10/18/2012	328	24	39	11	20	39	1	5	39
4/23/2013	228	13	17	8	10	17	0	5	17
10/16/2013	268	26	38	13	20	38	2	5	38
3/7/2014	214	23	32	10	18	32	1	11	32
5/15/2014	209	25	31	10	15	31	0.5	10	31
7/29/2014	281	23	31	11	16	31	4.9	6	31
10/14/2014	251	19	31	8	16	31	0.9	2	31
1/12/2015	186	21	31	7	15	31	1.8	3	31
4/16/2015	173	21	31	8	14	31	1.0	4	31
South Wells									
4/24/2009	6,760	12	12	535	12	12	287	5	12
10/28/2009	23,140	8	13	1,178	8	13	695	4	13
5/13/2010	13,173	12	15	757	13	15	494	5	15
11/4/2010	29,188	12	14	1,316	9	14	1,300	2	14
3/22/2011	11,360	11	11	944	10	11	361	7	11
10/26/2011	10,461	21	27	739	19	27	724	5	27
4/18/2012	6,181	13	21	523	13	21	531	4	21
10/18/2012	4,899	19	27	380	19	27	175	14	27
4/23/2013	2,893	13	21	151	13	21	22	11	21
10/16/2013	4,010	20	27	350	19	27	291	11	27
3/7/2014	2,300	20	23	135	17	23	10	14	23
5/15/2014	2,404	20	23	111	16	23	12	13	23
7/30/2014	6,280	17	23	237	16	23	28	8	23
10/15/2014	4,449	17	23	270	16	23	110	8	23
1/12/2015	770	17	23	155	15	23	23	6	23
4/16/2015	947	16	23	180	15	23	11	4	23
Source Wells									
4/24/2009	11,600	6	6	883	7	7	358	4	7
10/28/2009	73,900	2	2	3,087	3	3	1,385	2	3
5/13/2010	20,750	6	6	1,375	7	7	617	4	7
11/4/2010	98,133	3	3	2,940	4	4	1,300	2	4
3/22/2011	22,000	4	4	1,826	5	5	616	4	5
10/26/2011	20,260	8	8	1,532	9	9	904	4	9
4/18/2012	12,625	4	4	1,314	5	5	707	3	5
10/18/2012	10,905	8	8	752	9	9	271	9	9
4/23/2013	8,825	4	4	358	5	5	49	5	5
10/16/2013	9,798	8	8	714	9	9	455	7	9
3/7/2014	5,696	8	8	268	8	8	18	8	8
5/15/2014	5,955	8	8	203	8	8	22	7	8
7/31/2014	13,281	8	8	456	8	8	37	6	8
10/16/2014	9,401	8	8	524	8	8	146	6	8
1/12/2015	1,560	8	8	311	7	8	35	4	8
4/16/2015	2090	7	8	243	14	15	20	2	8
Northeast Corner Wells									
7/31/2014	273	3	5	32	2	5	0	0	5
10/16/2014	308	3	5	38	2	5	0	0	5
1/12/2015	342	3	5	41	2	5	0	0	5
4/16/2015	303	4	5	48	2	5	0.3	2	5

Notes:
µg/L: Micrograms per liter

TABLE 10
SUMMARY OF TCE CONCENTRATIONS (AREA 1)
SEPTEMBER 2014 - APRIL 2015
Whirlpool Facility - Fort Smith, Arkansas

	TCE Concentrations (µg/L)												
Date(s)	**IW-127**	**IW-141**	**IW-147**	**IW-152**	**IW-153**	**IW-157**	**MW-25**	**MW-38**	**MW-85**	**MW-86**	**MW-92**	**MW-93**	
9/11/2014	1020	nm	nm	nm	nm	nm	nm	nm	5820	129000	nm	nm	
10/15/2014	nm	nm	nm	nm	nm	nm	nm	6750	nm	nm	nm	nm	
10/23/2014	nm	368000	199000	17600	293	74200	59800	nm	nm	nm	2160	18200	
12/4/2014	182	46300	91600	5	1.6	31700	2620	3190	27700	169000	2200	14600	
1/15/2015	nm	nm	nm	nm	nm	nm	2510	5440	5940	81200	1410	18000	
4/15-16/2015	nm	nm	nm	nm	nm	nm	4650	3060	256	46700	736	21500	
Percent Reduction	82.2%	87%	54%	100%	99%	57%	96%	52.7%	-375.9%	-31.0%	-2%	20%	**4th Quarter 2014**
	-	-	-	-	-	-	96%	19.4%	-2.1%	37.1%	35%	1%	**1st Quarter 2015**
	-	-	-	-	-	-	92%	54.7%	95.6%	63.8%	66%	-18%	**2nd Quarter 2015**

Notes:
nd = not detected
nm = not measured
µg/L = micrograms per liter
U = Not detected above noted method detection limit

TABLE 10
SUMMARY OF TCE CONCENTRATIONS (AREA 1)
SEPTEMBER 2014 - APRIL 2015
Whirlpool Facility - Fort Smith, Arkansas

	TCE Concentrations (µg/L)										
Date(s)	**MW-94**	**MW-95**	**MW-172**	**ITMW-11**	**ITMW-12**	**ITMW-15**	**ITMW-17**	**ITMW-18**	**ITMW-19**	**Total TCE Reduction (all wells)**	
9/11/2014	nm	nm	nm	nm	nm	nm	nm	nm	nm	944213	
10/15/2014	nm	nm	nm	2050	2570	1490	3510	3540	12800		
10/23/2014	11100	22300	3010	nm	nm	nm	nm	nm	nm		
12/4/2014	9570	20900	1810	1530	468	63	4630	3690	33.5	431793	
1/15/2015	9530	21100	3600	68.3	57.1	56.5	3840	488	17.4	323046	
4/15-16/2015	11800	26700	1740	0.5 U	2260	101	3920	43.5	594	293849	
Percent Reduction	14%	6%	40%	25.4%	81.8%	95.8%	-31.9%	-4.2%	99.7%	54.3%	**4th Quarter 2014**
	14%	5%	-20%	96.7%	97.8%	96.2%	-9.4%	86.2%	99.9%	65.8%	**1st Quarter 2015**
	-6%	-20%	42%	100.0%	12.1%	93.2%	-11.7%	98.8%	95.4%	68.9%	**2nd Quarter 2015**

Notes:
nd = not detected
nm = not measured
µg/L = micrograms per liter
U = Not detected above noted method detection limit

TABLE 11
SUMMARY OF TCE CONCENTRATIONS (MW-25, MW-85 and MW-86)
MAY 2014 - APRIL 2015
Whirlpool Facility - Fort Smith, Arkansas

	TCE Concentrations (µg/L)				
Date(s)	**MW-25**	**MW-85**	**MW-86**	**Total TCE Reduction (all wells)**	
5/15/2014	18500	nm	nm	553470	
5/29/2014	nm	1970	533000		
7/8/2014	49900	3780	nm		
7/31/2014	71700	nm	nm		
9/11/2014	nm	5820	129000		
10/24/2014	59800	nm	nm		
12/5/2014	2620	27700	169000	199320	
1/15/2015	2510	5940	81200	89650	
4/16/2015	4650	256	46700	51606	
Percent Reduction	85.8%	-1306.1%	68.3%	64.0%	**4th Quarter 2014**
	86.4%	-201.5%	84.8%	83.8%	**1st Quarter 2015**
	74.9%	87.0%	91.2%	90.7%	**2nd Quarter 2015**

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

TABLE 12
SUMMARY OF TCE CONCENTRATIONS (SUPPLEMENTAL NECK AREA)
MAY 2014 - APRIL 2015
Whirlpool Facility - Fort Smith, Arkansas

	TCE Concentrations (µg/L)						
Date(s)	**IW-101**	**MW-23**	**MW-24**	**MW-83**	**MW-84**	**Total TCE Reduction (all wells)**	
5/22/2014	nm	22.8	79.7	470	214	1296	
5/23/2014	509	nm	nm	nm	nm		
7/8/2014	150	27.8	102	nm	nm		
9/12/2014	139	62.1	55.7	213	0.93	572	
10/23/2014	nm	189	33.1	210	0.68		
1/14-15/2015	nm	115	26.9	101	0.5 U	382	
4/14-16/2015	nm	57.5	18.8	151	0.5 U	367	
Percent Reduction	72.7%	-728.9%	58.5%	55.3%	99.7%	55.9%	**4th Quarter 2014**
	-	-404.4%	66.2%	78.5%	99.8%	70.5%	**1st Quarter 2015**
	-	-152.2%	76.4%	67.9%	99.8%	71.7%	**2nd Quarter 2015**

Notes:
nm = Not measured
µg/L = Micrograms per liter
U = Not detected above noted method detection limit

TABLE 13
SUMMARY OF TCE CONCENTRATIONS (AREAS 2 AND 3)
MAY 2014 - APRIL 2015
Whirlpool Facility - Fort Smith, Arkansas

	TCE Concentrations (µg/L)												
Date(s)	**IW-115**	**MW-81**	**MW-82**	**IW-77**	**IW-78**	**IW-79**	**MW-34**	**MW-35R**	**MW-36**	**MW-65**	**IW-80**	**Total TCE Reduction (all wells)**	
5/13-14/2014	nm	nm	nm	1460	nm	nm	19.9	183	0.5 U	195	24.2	3864	
5/28-30/2014	504	512	285	nm	255	426	nm	nm	nm	nm	nm		
7/8-7/9/2014	352	518	48.2	1200	nm	nm	nm	nm	nm	nm	nm		
7/29-30/2014	nm	nm	nm	1540	nm	nm	78.2	64.7	0.61	17.1	25.6		
9/11/2014	355	463	50	nm	39.6	105	nm	nm	nm	nm	nm	1736	
10/14-15/2014	nm	nm	nm	741	nm	nm	47.7	79.2	0.5 U	30.8	11.8		
10/23/2014	nm	nm	nm	554	nm	nm	nm	nm	nm	nm	nm		
1/12-14/2015	nm	385	66	201	nm	nm	22	10.9	0.5 U	19.2	7.1	1211	
4/14-15/2015	nm	198	0.5 U	153	nm	nm	13.8	39.5	0.5 U	16	9.2	786	
Percent Reduction	29.6%	9.6%	82.5%	62.1%	84.5%	75.4%	-139.7%	56.7%	-	84.2%	51.2%	55.1%	**4th Quarter 2014**
	-	24.8%	76.8%	86.2%	-	-	-10.6%	94.0%	-	90.2%	70.7%	68.7%	**1st Quarter 2015**
	-	61.3%	99.8%	89.5%	-	-	30.7%	78.4%	-	91.8%	62.0%	79.7%	**2nd Quarter 2015**

Notes:
nm = not measured
µg/L = micrograms per liter
U = Not detected above noted method detection limit

TABLE 14
SUMMARY OF FIELD PARAMETERS (AREA 1)
MARCH 2014 - APRIL 2015
Whirlpool Facility - Fort Smith, Arkansas

Well	Time - Time Stamp	TOC Elevation (feet)	Level/Depth TOC (feet)	Groundwater Elevation (feet)	Temperature (°C)	Conductivity (µS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Sodium Persulfate (mg/L)	H2O2 (µg/L)
ITMW-11	3/8/2014 0:00	473.94	12.3	461.64	17.32	282	1.99	6.56	515.3	nm	nm
ITMW-11	3/30/2014 0:00	473.94	11.35	462.59	18.65	260	15	6.33	255	nm	nm
ITMW-11	5/15/2014 8:55	473.94	10.91	463.03	18.02	271	1.38	6.41	211.5	nm	nm
ITMW-11	7/31/2014 10:40	473.94	10.1	463.84	22.75	284	0.46	6.23	127.9	nm	nm
ITMW-11	10/15/2014 15:11	473.94	9.69	464.25	24.52	236	0.27	5.83	121	nm	nm
ITMW-11	11/1/2014 16:25	473.94	8.8	465.14	21.97	521	1.84	7.38	121.8	630	nm
ITMW-11	11/3/2014 13:48	473.94	9.09	464.85	21.72	3766	1.07	6.45	311.3	12600	nm
ITMW-11	11/4/2014 12:37	473.94	9.07	464.87	20.71	5175	5.33	6.2	374.5	16800	nm
ITMW-11	12/4/2014 16:44	473.94	9.86	464.08	17.54	358	0.31	6.17	262	560	nm
ITMW-11	1/15/2015 10:22	473.94	10.3	463.64	14.68	5937	2.75	4.83	572.5	6300	nm *
ITMW-11	4/15/2015 16:40	473.94	9.87	464.07	19.45	22280	7.24	2.74	510.6	17500	nm
ITMW-12	3/8/2014 0:00	476.86	14.17	462.69	16.22	246	1.85	6.12	581.4	nm	nm
ITMW-12	3/30/2014 0:00	476.86	14.17	462.69	18.78	249	1.5	6.03	77.7	nm	nm
ITMW-12	5/14/2014 17:00	476.86	13.81	463.05	18.06	240	0.78	5.84	259	nm	nm
ITMW-12	7/31/2014 11:05	476.86	12.97	463.89	21.58	298	0.35	6.12	289.2	nm	nm
ITMW-12	10/15/2014 16:36	476.86	12.56	464.3	23.01	247	0.83	5.99	116.3	0	nm
ITMW-12	11/1/2014 15:37	476.86	11.68	465.18	23.05	737	2.85	6.74	199.7	210	nm
ITMW-12	11/3/2014 1:07	476.86	11.95	464.91	21.25	890	3.98	6.54	252	nm	560
ITMW-12	11/4/2014 11:54	476.86	11.93	464.93	22.01	582	72.2	6.15	258	280	nm *
ITMW-12	12/4/2014 14:50	476.86	12.76	464.1	19.17	2776	3.09	8.63	148.3	1400	nm
ITMW-12	1/15/2015 9:32	476.86	13.14	463.72	11.48	4158	0.94	5.8	361.5	4200	nm
ITMW-12	4/15/2015 14:20	476.86	12.76	464.1	18.48	926	3.34	5.78	447.8	420	nm *
ITMW-15	3/8/2014 0:00	474.31	11.76	462.55	17.33	2195	5.28	11.99	-105.4	nm	nm
ITMW-15	3/30/2014 0:00	474.31	11.64	462.67	20.91	1620	4.67	11.73	15.1	nm	nm
ITMW-15	5/14/2014 17:05	474.31	11.31	463	19.1	683	7.11	11.33	85.9	nm	nm *
ITMW-15	7/30/2014 16:00	474.31	10.42	463.89	24.47	969	0.72	7.21	131.4	nm	nm
ITMW-15	10/16/2014 8:25	474.31	14.85	459.46	18.23	840	2.99	7.04	138.2	nm	nm
ITMW-15	11/1/2014 16:15	474.31	9.14	465.17	22.13	1301	4.74	7.24	231.2	1680	nm
ITMW-15	11/3/2014 13:37	474.31	9.52	464.79	22.51	7468	2.73	6.68	355.8	14700	nm
ITMW-15	11/4/2014 12:29	474.31	9.51	464.8	23.15	3617	6.48	6.8	343.3	10500	nm *
ITMW-15	12/5/2014 7:35	474.31	10.17	464.14	19.29	18628	7.97	6.37	400	3200	nm *
ITMW-15	1/15/2015 11:54	474.31	16.38	457.93	16.31	8803	4.7	6.47	385.9	8400	nm
ITMW-15	4/15/2015 16:00	474.31	10.29	464.02	20.66	2452	4.98	6.98	49.4	600	nm *
ITMW-16	3/7/2014 0:00	478.76	16.02	462.74	16.14	170	3.33	6.66	256.8	nm	nm
ITMW-16	5/13/2014 9:15	478.76	14.61	464.15	18.47	146	7.43	6.42	208.3	nm	nm
ITMW-16	6/6/2014 9:09	478.76	14.23	464.53	19.82	226	4.63	6.3	265.9	21	nm
ITMW-16	6/11/2014 7:52	478.76	14.41	464.35	20.08	251	6.23	5.93	277.7	0	nm
ITMW-16	7/8/2014 15:00	478.76	14.75	464.01	21.9	497	3.94	7.93	228	210	nm
ITMW-16	7/30/2014 4:20	478.76	14.85	463.91	21.53	233	0.42	5.78	172.6	nm	nm
ITMW-16	10/15/2014 8:50	478.76	14.45	464.31	19.76	216	6.6	7.03	92.7	nm	nm
ITMW-16	11/1/2014 16:34	478.76	13.62	465.14	21.44	168	3.74	8.18	128.1	0	nm
ITMW-16	11/3/2014 13:55	478.76	13.84	464.92	21.76	186	2.98	8.18	178.8	0	nm
ITMW-16	11/4/2014 12:43	478.76	13.84	464.92	21.2	180	2.34	7.43	287.3	1.4	nm
ITMW-16	12/3/2014 0:00	478.76	14.72	464.04	nm	nm	nm	nm	nm	nm	nm
ITMW-16	1/14/2015 12:35	478.76	15.54	463.22	16.02	222	5.73	6.92	59	0	nm
ITMW-16	4/14/2015 17:14	478.76	14.81	463.95	17.86	82	6.97	6.49	212.7	nm	nm
ITMW-17	3/8/2014 0:00	477.96	16.48	461.48	15.53	1015	5.58	5.34	584.4	nm	nm
ITMW-17	3/30/2014 0:00	477.96	15.28	462.68	19.68	1051	3.38	5.11	311.8	nm	nm
ITMW-17	5/15/2014 8:50	477.96	14.91	463.05	17.89	1052	4.21	5.36	316.8	nm	nm *
ITMW-17	7/30/2014 15:11	477.96	14.01	463.95	22.84	999	3.16	5.28	-8	nm	nm
ITMW-17	10/16/2014 8:51	477.96	13.7	464.26	18.31	908	0.28	5.03	307.4	nm	nm *
ITMW-17	10/30/2014 15:02	477.96	12.83	465.13	22.74	955	24.37	5.82	333.1	nm	0
ITMW-17	11/1/2014 16:03	477.96	12.58	465.38	21.72	967	20.73	6.39	266.2	0	nm
ITMW-17	11/3/2014 13:32	477.96	13.1	464.86	22.46	965	23.31	6.32	273.4	70	0
ITMW-17	11/4/2014 12:22	477.96	13.09	464.87	20.6	1287	8.95	5.84	330	280	0.8
ITMW-17	12/5/2014 9:43	477.96	13.83	464.13	19.58	1392	10.68	5.46	282.3	280	nm
ITMW-17	1/15/2015 9:47	477.96	14.28	463.68	14.29	1273	11.68	5.78	287	0	nm
ITMW-17	4/15/2015 16:30	477.96	13.87	464.09	19.54	1277	12.69	5.27	39.3	140	nm *
ITMW-18	3/8/2014 0:00	473.9	11.09	462.81	16.36	556	1.91	5.57	510.3	nm	nm
ITMW-18	3/30/2014 0:00	473.90	11.11	462.79	16.86	794	2.49	5.42	86.1	nm	nm
ITMW-18	5/15/2014 8:55	473.90	10.71	463.19	16.91	1149	1.79	5.91	179.6	nm	nm
ITMW-18	7/31/2014 9:25	473.90	9.87	464.03	20.9	1785	0.37	5.84	455.8	1400	nm
ITMW-18	10/15/2014 16:10	473.90	9.52	464.38	21.53	1989	2.15	5.71	237.6	nm	nm *
ITMW-18	11/1/2014 15:52	473.90	8.42	465.48	20.65	932	4	6.33	379.7	560	nm
ITMW-18	11/3/2014 13:14	473.90	8.82	465.08	21.53	315	4.42	6.35	244.5	70	nm
ITMW-18	11/4/2014 12:01	473.90	8.85	465.05	20.19	894	2.68	6.05	271.8	560	nm
ITMW-18	12/4/2014 13:19	473.90	9.69	464.21	17.86	2052	0.31	6.03	254.7	1400	nm
ITMW-18	1/15/2015 10:00	473.90	10.23	463.67	12.05	467	6.4	10.08	151.5	140	nm
ITMW-18	4/16/2015 10:55	473.90	9.84	464.06	17.28	5836	5.9	5.82	497.5	3400	nm
ITMW-19	3/8/2014 0:00	476.33	13.72	462.61	14.36	1207	5.09	6.62	56.5	nm	nm
ITMW-19	3/30/2014 0:00	476.33	13.57	462.76	19.42	1119	3.82	6.46	81.8	nm	nm
ITMW-19	5/15/2014 10:40	476.33	13.3	463.03	18	1131	3.42	6.71	228.6	nm	nm
ITMW-19	7/31/2014 9:20	476.33	12.41	463.92	20.29	1204	1.16	6.08	160.4	nm	nm
ITMW-19	10/16/2014 8:35	476.33	12.06	464.27	18.64	1029	0.31	6.32	184.2	nm	nm
ITMW-19	10/30/2014 15:11	476.33	10.73	465.6	20.89	1074	18.35	6.05	338.3	nm	0
ITMW-19	11/1/2014 15:58	476.33	10.85	465.48	20.42	24060	13.11	12.75	140.8	14000	nm
ITMW-19	11/3/2014 13:24	476.33	11.44	464.89	20.22	51788	3.27	13.02	210.6	>35000	nm
ITMW-19	11/4/2014 12:08	476.33	11.47	464.86	19.73	52405	3.29	13.03	228.9	>35000	INT
ITMW-19	12/5/2014 8:00	476.33	12.26	464.07	16.96	38653	52.29	15.58	357.7	21000	nm
ITMW-19	1/15/2015 13:10	476.33	12.95	463.38	13.85	35689	15.89	8.37	419.6	28000	nm
ITMW-19	4/15/2015 16:22	476.33	12.44	463.89	18.35	5710	6.7	11.15	257.7	2100	nm
MW-24	10/23/2014 10:25	476.28	12.19	464.09	22.27	2986	0.18	4.1	441.6	1400	nm
MW-24	11/3/2014 13:59	476.28	11.4	464.88	22.03	1383	2.39	5.46	336.5	70	nm
MW-24	11/4/2014 12:51	476.28	11.4	464.88	20.58	3147	2.27	3.7	485.6	2800	nm
MW-24	12/3/2014 0:00	476.28	12.31	463.97	nm	nm	nm	nm	nm	nm	nm
MW-24	1/15/2015 15:40	476.28	12.5	463.78	18.43	3516	0.26	3.76	375.9	420	nm
MW-24	4/16/2015 11:30	476.28	12.28	464	19.68	2775	0.17	4.23	549.3	1,400	nm

TABLE 14
SUMMARY OF FIELD PARAMETERS (AREA 1)
MARCH 2014 - APRIL 2015
Whirlpool Facility - Fort Smith, Arkansas

Well	Time - Time Stamp	TOC Elevation (feet)	Level/Depth TOC (feet)	Groundwater Elevation (feet)	Temperature (°C)	Conductivity (µS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Sodium Persulfate (mg/L)	H2O2 (µg/L)
MW-25	3/8/2014 16:50	476.76	14.04	462.72	14.62	1343	1.36	4.83	413.2	nm	nm
MW-25	3/30/2014 15:45	476.76	13.85	462.91	20.09	1278	0.99	5.03	339.6	nm	nm
MW-25	5/15/2014 10:30	476.76	13.65	463.11	17.11	1290	1.45	4.88	320.1	nm	--
MW-25	6/6/2014 8:18	476.76	12.57	464.19	19.67	31946	26.7	12.06	267.9	35000	nm
MW-25	6/11/2014 7:01	476.76	12.58	464.18	18.64	17429	20.47	6.73	298.6	14000	nm
MW-25	7/9/2014 8:00	476.76	12.75	464.01	20.69	7014	8.04	5.87	188.7	14700	nm
MW-25	7/31/2014 23:50	476.76	12.83	463.93	21.13	5282	6.79	5.55	379.2	nm	nm
MW-25	9/11/2014 19:49	476.76	12.89	463.87	21.96	3302	4.71	5.53	339	1680	nm
MW-25	10/16/2014 10:08	476.76	12.44	464.32	21.62	2571	1.42	5.26	539.8	2100	--
MW-25	10/24/2014 10:45	476.76	12.56	464.2	21.48	1759	1.04	5.09	262.3	nm	nm
MW-25	10/30/2014 16:49	476.76	11.71	465.05	22.49	2370	27.25	2.93	495.1	nm	1000
MW-25	11/2/2014 8:17	476.76	12.01	464.75	18.45	3145	29.29	2.51	538.9	1900	1000
MW-25	11/3/2014 14:43	476.76	9.64	467.12	20.91	5157	21.32	6.33	272.6	2100	1000
MW-25	11/4/2014 13:30	476.76	11.85	464.91	19.91	5311	19.49	5.96	296.9	5600	1000
MW-25	12/5/2014 10:13	476.76	12.75	464.01	16.24	3999	83.89	2.34	529.3	210	nm
MW-25	1/15/2015 0:00	476.76	13.2	463.56	17.48	14020	0.36	4.11	441.7	3,500	nm
MW-25	4/16/2015 13:25	476.76	12.86	463.9	20.26	12454	8.67	5.35	520.6	4,200	nm
MW-37	11/4/2014 14:13	473.43	8.57	464.86	21.32	762	1	7	176.2	0	nm
MW-38	3/8/2014 13:13	474.44	12	462.44	18.16	422	1.4	6.27	57.2	nm	nm
MW-38	3/30/2014 23:55	474.44	11.84	462.6	20.02	372	0.6	6.24	83.1	nm	nm
MW-38	5/14/2014 14:35	474.44	11.49	462.95	17.52	364	1.52	5.76	114.8	nm	nm
MW-38	7/31/2014 9:15	474.44	10.53	463.91	22.09	348	0.22	6.03	94.5	nm	nm
MW-38	10/16/2014 11:25	474.44	10.18	464.26	22.27	1069	4.21	6.79	89.2	nm	nm
MW-38	11/1/2014 16:20	474.44	8.27	466.17	22.58	416	1.14	7.51	5.7	3.5	nm
MW-38	11/3/2014 13:40	474.44	8.59	465.85	22.83	460	1.07	7.18	75.3	0	nm
MW-38	11/4/2014 12:32	474.44	8.61	465.83	21.77	493	1.09	7.19	261.2	49	nm *
MW-38	12/4/2014 16:03	474.44	10.38	464.06	18.86	872	0.32	6.6	210.1	140	nm *
MW-38	1/15/2015 11:55	474.44	11.9	462.54	15.5	1042	0.21	6.63	179.5	70	nm
MW-38	4/16/2015 11:00	474.44	11.04	463.4	19.78	784	7.9	6.61	49.8	70	nm
MW-85	5/29/2014 16:38	474.41	10.35	464.06	20.1	1074	0.11	5.05	-147.3	nm	nm
MW-85	6/6/2014 8:25	474.41	9.97	464.44	19.73	1979	15.71	4.64	296.7	1400	nm *
MW-85	6/11/2014 7:10	474.41	10.11	464.3	18.85	1727	13.78	4.76	304.1	1260	nm
MW-85	7/8/2014 17:40	474.41	10.25	464.16	22.79	1378	4.38	4.71	-49	630	nm
MW-85	9/11/2014 18:50	474.41	10.58	463.83	21.64	1432	3.1	11.81	78	420	nm
MW-85	10/30/2014 16:52	474.41	9.39	465.02	20.95	1327	17.87	4.89	424	nm	0
MW-85	11/1/2014 8:46	474.41	9.89	464.52	19.28	1380	20.55	4.99	275.5	nm	0.2
MW-85	11/2/2014 7:59	474.41	9.67	464.74	17.8	1584	10.75	5.1	303.6	140	0.8
MW-85	11/3/2014 14:52	474.41	8.82	465.59	21.27	1391	14.7	5.37	320	210	3
MW-85	11/4/2014 13:32	474.41	9.58	464.83	20.01	1550	14.26	5.06	316.2	560	1
MW-85	12/5/2014 11:21	474.41	10.39	464.02	19.11	12651	10.21	5.84	300.4	14000	nm
MW-85	1/15/2015 14:00	474.41	10.76	463.65	17.9	6608	1.89	5.61	239.6	3500	nm
MW-85	4/16/2015 14:58	474.41	10.45	463.96	19.73	5056	3.4	5.23	137.8	4200	nm
MW-86	5/29/2014 17:33	473.19	9.17	464.02	21.81	1578	0.28	5.55	-182.7	nm	nm
MW-86	6/6/2014 8:12	473.19	4.93	468.26	20.18	43076	24.27	2.52	605.2	35000	nm
MW-86	6/11/2014 6:53	473.19	8.29	464.9	19.15	14758	22.36	2.41	524	4200	nm *
MW-86	7/8/2014 17:25	473.19	9.24	463.95	26.75	29373	0.52	2.42	654	28000	nm
MW-86	9/11/2014 20:15	473.19	11.5	461.69	22.19	12862	5.79	11.07	594.6	2800	nm *
MW-86	10/30/2014 16:45	473.19	8.24	464.95	22.04	4223	30.51	5.24	291.6	nm	0
MW-86	11/1/2014 8:56	473.19	8.44	464.75	20.06	5177	30.67	4.44	365	nm	2
MW-86	11/2/2014 8:11	473.19	8.49	464.7	17.56	5746	25.96	3.99	445.7	1900	3
MW-86	11/3/2014 14:48	473.19	7.26	465.93	21.75	6160	23.37	6.03	276.9	4200	1
MW-86	11/4/2014 13:37	473.19	8.47	464.72	20.9	7157	20.54	7.73	268.8	6300	9 *
MW-86	12/5/2014 11:56	473.19	9.22	463.97	18.93	13462	10.43	5.92	289.1	7000	nm
MW-86	1/15/2015 12:55	473.19	9.96	463.23	16.23	11603	13.72	6.13	139.7	2800	nm
MW-86	4/16/2015 13:40	473.19	9.75	463.44	20.15	10951	7.87	6.15	82.1	2800	nm
MW-92	10/30/2014 16:27	473.74	8.61	465.13	21.04	1455	22.53	6.33	212.5	nm	0
MW-92	11/1/2014 8:40	473.74	9.08	464.66	19.38	1358	15.21	5.41	273.7	nm	0
MW-92	11/3/2014 14:08	473.74	8.51	465.23	20.65	3375	12.53	11.2	175.4	2100	0
MW-92	11/4/2014 12:58	473.74	8.81	464.93	20.23	3347	8.99	11.08	239.6	4200	nm
MW-92	12/4/2014 8:57	473.74	9.71	464.03	14.68	1896	1.33	6.17	215.5	420	nm
MW-92	1/15/2015 16:08	473.74	9.95	463.79	14.73	2449	1.26	5.77	427	210	nm
MW-92	4/16/2015 0:00	473.74	9.75	463.99	17.74	3029	0.58	6.92	-73	nm	nm
MW-93	10/22/2014 2:53	477.81	13.78	464.03	21.3	1099	1.16	5.21	254.5	nm	nm
MW-93	11/3/2014 14:14	477.81	12.85	464.96	20.77	935	1.89	6.96	252.5	0	nm
MW-93	11/4/2014 13:07	477.81	13.02	464.79	20.11	933	1.62	6.17	291.6	2.1	nm
MW-93	12/4/2014 11:57	477.81	13.86	463.95	19.04	831	0.45	5.65	257.1	420	nm
MW-93	1/15/2015 14:30	477.81	14.21	463.6	17.32	1154	0.42	5.49	274.4	0	nm *
MW-93	4/16/2015 14:05	477.81	14.00	463.81	18.91	1094	0.69	5.29	219.9	0	nm
MW-94	10/22/2014 14:15	477.86	14.03	463.83	21.23	583	0.75	5.8	133.9	0	nm
MW-94	11/3/2014 14:14	477.86	13.19	464.67	21.14	495	0.88	7.29	212.7	0	nm
MW-94	11/4/2014 13:14	477.86	13.27	464.59	20.01	498	1.1	6.22	270.3	0	nm
MW-94	12/4/2014 11:31	477.86	14.14	463.72	18.85	578	6.65	5.83	83.5	0	nm
MW-94	1/15/2015 14:45	477.86	14.37	463.49	16.9	606	0.72	5.69	245	0	nm
MW-94	4/16/2015 13:10	477.86	14.55	463.31	19.02	631	0.84	5.64	20.5	70	nm
MW-95	10/22/2014 15:17	477.63	13.73	463.9	22.09	1081	1.84	5.78	156.5	0	nm
MW-95	11/3/2014 14:35	477.63	12.82	464.81	21.32	950	1.4	6.34	244.8	0	nm *
MW-95	11/4/2014 13:20	477.63	12.97	464.66	20.81	946	1.36	5.82	272.5	0	nm
MW-95	12/4/2014 13:45	477.63	13.77	463.86	20.53	1098	3.83	5.71	102.7	0	nm
MW-95	1/15/2015 14:40	477.63	14.1	463.53	18.53	1148	0.64	5.54	277.2	70	nm
MW-95	4/16/2015 15:01	477.63	14.45	463.18	19.57	1156	1.2	5.57	-11.3	0	nm
MW-172	10/22/2014 16:26	472.94	8.75	464.19	23.7	1189	0.21	5.28	274.7	0	nm *
MW-172	10/30/2014 15:03	472.94	7.82	465.12	22.46	963	15.7	5.6	341.6	nm	0
MW-172	11/1/2014 9:02	472.94	8.34	464.6	20.33	1012	16.61	5.31	366.8	nm	0.4
MW-172	11/1/2014 15:55	472.94	7.44	465.5	22.4	1018	12.07	7.28	239.4	7	nm
MW-172	11/3/2014 13:28	472.94	8.04	464.9	17.5	600	9.02	11.15	147	420	4
MW-172	11/4/2014 12:15	472.94	8.07	464.87	21.63	3237	6.27	5.95	423.3	6300	11
MW-172	12/5/2014 8:24	472.94	8.75	464.19	17.85	2968	1.76	5.39	337.5	6300	nm
MW-172	1/15/2015 0:00	472.94	9.16	463.78	16.99	2182	2.52	6.48	125.7	420	nm
MW-172	4/16/2015 9:52	472.94	8.93	464.01	18.4	1649	2.28	5.96	-55.7	1860	nm

TABLE 14
SUMMARY OF FIELD PARAMETERS (AREA 1)
MARCH 2014 - APRIL 2015
Whirlpool Facility - Fort Smith, Arkansas

Well	Time - Time Stamp	TOC Elevation (feet)	Level/Depth TOC (feet)	Groundwater Elevation (feet)	Temperature (°C)	Conductivity (µS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Sodium Persulfate (mg/L)	H2O2 (µg/L)
IW-127	3/26/2014 14:44	473.61	10.94	462.67	18	419	1.6	5.77	339.9	8400	nm
IW-127	3/26/2014 16:16	473.61	10.28	463.33	16.73	2129	2.57	11.26	209.8	1400	nm
IW-127	3/26/2014 17:49	473.61	10.19	463.42	17.87	79752	1.47	13.17	297.5	14700	nm
IW-127	3/27/2014 9:41	473.61	10.68	462.93	18.35	60259	1.13	12.99	306.8	>21000	nm
IW-127	3/27/2014 16:20	473.61	10.55	463.06	19.3	27441	1.24	12.79	311.6	11200	nm
IW-127	3/29/2014 8:04	473.61	11.13	462.48	15.72	21938	2.19	12.77	150.4	14000	nm
IW-127	3/31/2014 7:47	473.61	10.82	462.79	17.79	18291	1.81	12.62	73.9	14000	nm
IW-127	4/7/2014 20:30	473.61	10.82	462.79	18.47	9653	2.5	12	81.5	16800	nm
IW-127	4/14/2014 12:51	473.61	10.79	462.82	17.46	9123	1.85	11.81	95.6	11200	nm
IW-127	4/29/2014 10:57	473.61	10.32	463.29	18.04	6763	4.54	10.29	98.2	8400	nm
IW-127	5/29/2014 11:55	473.61	10.11	463.5	19.89	4882	0.16	6.77	294.8	2100	nm
IW-127	12/4/2014 14:29	473.61	9.62	463.99	18.58	8945	0.22	10.38	216.3	12600	nm
IW-132	10/23/2014 14:03	475.49	11.36	464.13	21.95	1261	0.57	5.41	261.7	0	nm
IW-132	11/1/2014 9:39	475.49	10.98	464.51	19.9	1142	3.57	5.35	298.9	nm	0.4
IW-135	10/23/2014 14:29	475.49	9.64	465.85	23.65	1107	0.17	5.32	265.8	0	nm
IW-140	10/31/2014 14:37	474.18	9.17	465.01	20.33	929	5.31	5.45	247	nm	1
IW-141	10/23/2014 16:57	473.36	9.21	464.15	22.73	1465	0.32	5.91	36.6	nm	nm
IW-141	10/30/2014 16:58	473.36	8.36	465	21.77	11.63	2.02	5.53	348.3	nm	0
IW-141	10/31/2014 16:07	473.36	7.56	465.8	21.35	1222	5.31	5.81	237	nm	0.8
IW-141	11/1/2014 9:25	473.36	8.86	464.5	20.45	1212	5.34	5.66	322.2	nm	0.6
IW-141	11/4/2014 13:40	473.36	8.67	464.69	21.52	25569	3.33	12.82	143.2	17500	INT
IW-141	12/5/2014 12:56	473.36	9.45	463.91	19.27	14082	1.63	12.55	164.2	22400	nm
IW-142	10/31/2014 16:21	472.95	6.82	466.13	22.57	1181	25.45	6.12	233	nm	0.2
IW-143	10/23/2014 1:22	472.95	8.86	464.09	23.44	1196	0.22	5.16	306.8	0	nm
IW-147	10/23/2014 15:15	473.13	8.96	464.17	22.52	1958	2.74	5.36	140.3	nm	nm
IW-147	11/4/2014 13:53	473.13	8.42	464.71	20.63	34955	13.38	12.92	172.3	21000	INT
IW-147	12/5/2014 11:02	473.13	9.06	464.07	19.2	12754	4.92	12	90.2	2800	nm
IW-148	11/1/2014 9:47	473.14	8.77	464.37	20.28	1270	28.45	5.5	312.4	nm	0
IW-150	10/31/2014 16:50	473.12	7.14	465.98	21.01	1007	12.7	5.35	275.9	nm	0.8
IW-150	11/1/2014 9:07	473.12	8.69	464.43	21.06	1012	17.08	5.37	340.4	nm	0.4
IW-152	10/22/2014 16:43	473.24	9.12	464.12	23.31	829	1	5.63	143.7	0	nm
IW-152	11/4/2014 13:59	473.24	8.8	464.44	21.39	61899	9.17	13.05	267.2	35000	INT
IW-152	12/4/2014 16:18	473.24	9.55	463.69	19.96	50174	90.95	13.12	264.3	21000	nm
IW-153	10/23/2014 11:51	473	8.78	464.22	20.9	1322	0.89	6.18	188.6	0	nm
IW-153	12/4/2014 9:09	473	9.09	463.91	17.21	22999	1.78	12.65	133.3	24500	nm *
IW-155	10/23/2014 13:02	473.28	9.39	463.89	22.42	1391	0.83	5.22	272.1	0	nm
IW-155	10/31/2014 15:18	473.28	8	465.28	21.28	1533	27.75	5.22	274.6	nm	2
IW-157	10/23/2014 11:49	473.38	9.37	464.01	21.31	1262	0.54	5.19	334.6	0	nm
IW-157	11/1/2014 9:20	473.38	8.95	464.43	19.93	1023	10.22	5.26	338.7	nm	0
IW-157	11/4/2014 14:05	473.38	8.73	464.65	20.68	15940	6.26	12.71	121.6	14000	INT
IW-157	12/5/2014 9:00	473.38	9.44	463.94	17.81	7729	65.43	12.28	311.3	4200	nm
IW-159	10/31/2014 16:40	473.09	7.38	465.71	20.65	938	11.36	5.4	257.2	nm	0.6
IW-163	11/1/2014 8:35	473.78	9.3	464.48	19.36	1504	11.47	5.11	266.7	nm	0
IW-165	10/30/2014 15:17	473.23	8.3	464.93	20.5	1094	11.59	5.38	347.9	nm	0
IW-165	11/1/2014 9:13	473.23	8.81	464.42	19.04	1101	10.57	5.17	333.8	nm	0
IW-168	10/31/2014 3:42	473.40	8.11	465.29	21.02	1066	14.17	5.47	272.7	nm	0
IW-169	10/22/2014 13:00	nm	9.91	nm	20.9	1575	0.25	5.39	54.1	0	nm

Notes:
*DTW measured earlier in the day prior to measurement of geochemical parameters.
INT = Matrix interference prevented accurate peroxide measurements
TOC = Top of casing
DO = Dissolved oxygen
ORP = Oxidation reduction potential
nm = Not measured
µS/cm = Microsiemens per centimeter
mg/L = Milligrams per liter
SU = Standard unit
mV = Millivolts
µg/L = Micrograms per liter

Injection Start	Injection Stop
10/28/2014	11/3/2014

TABLE 15
SUMMARY OF FIELD PARAMETERS (SUPPLEMENTAL NECK AREA)
MARCH 2014 - APRIL 2015
Whirlpool Facility - Fort Smith, Arkansas

Well	Time - Time Stamp	Level/Depth TOC (feet)	Temperature (°C)	Conductivity (µS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Sodium Persulfate (mg/L)
ITMW-	5/13/2014	14.61	18.47	146	7.43	6.42	208.3	nm
ITMW-16	6/6/2014 9:09	14.23	19.82	226	4.63	6.3	265.9	21
ITMW-16	6/11/2014 7:52	14.41	20.08	251	6.23	5.93	277.7	0
ITMW-16	7/8/2014 15:00	14.75	21.9	497	3.94	7.93	228	210
ITMW-16	7/30/2014 0:00	14.85	21.53	233	0.42	5.78	172.6	nm
ITMW-16	10/15/2014 0:00	14.45	19.76	216	6.6	7.03	92.7	nm
ITMW-16	1/14/2015 12:35	15.1	16.02	222	5.73	6.92	59	0
ITMW-16	4/14/2015 17:14	14.81	17.86	82	6.97	6.49	212.7	nm
IW-101	3/24/2014 16:16	12.98	20.05	1111	2.67	5.32	181.6	nm
IW-101	3/24/2014 17:15	12.66	19.87	1119	5.04	5.32	193.4	nm
IW-101	3/24/2014 18:18	12.93	19.56	1106	5.39	5.45	171.4	nm
IW-101	3/25/2014 7:59	13.3	16.42	1235	5.32	5.46	317.4	nm
IW-101	3/25/2014 10:30	13.28	17.48	1209	4.01	5.47	296.5	nm
IW-101	3/25/2014 12:34	13.21	18.59	1196	3.56	5.44	274.6	nm
IW-101	3/25/2014 14:54	13.13	19.07	1174	5.02	5.45	326.8	nm
IW-101	3/25/2014 17:03	13.11	19.04	1171	4.4	5.45	287.2	0
IW-101	3/26/2014 9:44	13.12	18.36	1190	2.04	5.23	94.2	0
IW-101	3/26/2014 15:04	12.94	19	1106	2.48	5.09	414.6	nm
IW-101	3/27/2014 10:06	12.55	19.47	1110	2.25	5.4	449.2	nm
IW-101	3/27/2014 16:48	12.45	20.55	1184	2.8	5.75	484.3	nm
IW-101	3/29/2014 8:42	13.09	18.23	1263	3.71	5.38	355.3	2.1
IW-101	3/31/2014 8:17	12.77	18.32	1256	21.74	5.32	84.9	1.4
IW-101	4/7/2014 19:13	12.59	19.66	1108	9.34	5.51	104.9	1.4
IW-101	4/14/2014 11:38	12.72	18.38	1165	13.23	5.59	49.4	0.7
IW-101	4/30/2014 10:36	12.65	19.15	1566	11.35	5.38	222.3	1.4
IW-101	5/23/2014 12:45	12.45	22.15	1532	3.83	4.93	456.3	nm
IW-101	5/28/2014 12:20	12.2	nm	1711	nm	6.79	nm	560
IW-101	5/28/2014 14:16	12.08	nm	1661	nm	6.09	nm	560
IW-101	5/28/2014 16:55	11.88	nm	1571	nm	6.9	nm	420
IW-101	5/29/2014 8:01	11.75	nm	1683	nm	5.7	nm	420
IW-101	5/29/2014 10:24	11.46	nm	1758	nm	5.79	nm	700
IW-101	5/29/2014 15:38	11.3	nm	1877	nm	4.84	nm	nm
IW-101	5/30/2014 8:47	11.25	20.01	2805	13.5	6.39	239	1400
IW-101	5/30/2014 12:32	11.17	nm	3238	13.33	5.62	285	2100
IW-101	5/30/2014 14:24	11.55	20.86	5555	18.2	5.62	309.7	3500
IW-101	5/30/2014 18:21	11.26	20.62	5848	14.22	5.57	2085	3500
IW-101	5/31/2014 14:52	12.05	nm	1599	nm	5.58	nm	420
IW-101	5/31/2014 15:55	11.87	nm	1905	nm	7.54	nm	700
IW-101	6/2/2014 15:06	11.11	21.06	7125	20.55	9.84	321.2	10500
IW-101	6/4/2014 7:56	11.18	20.88	5699	25.65	5.66	366	3500
IW-101	6/6/2014 8:56	11.24	20.78	5436	18.91	5.61	293.8	8400
IW-101	6/11/2014 8:08	11.44	20.86	5070	23.35	5.7	344.5	2800
IW-101	7/8/2014 15:20	11.59	24.43	2761	15.59	4.76	22.6	4200
IW-101	9/12/2014 10:40	12.2	22.92	2280	6.78	10.8	-25.4	2100
IW-130	4/29/2014 13:09	12.42	19.47	41946	21.62	12.9	115.8	14700
IW-130	5/23/2014 14:34	12.54	21.95	16091	11.75	12.3	180.7	nm
IW-130	5/28/2014 12:46	12.17	nm	16604	nm	12.5	nm	4900
IW-130	5/28/2014 14:11	11.99	nm	17845	nm	12.5	nm	4900
IW-130	5/28/2014 16:55	11.84	nm	19493	nm	12.5	nm	4900
IW-130	5/29/2014 8:00	11.71	nm	38604	nm	12.9	nm	14000
IW-130	5/29/2014 10:23	11.44	nm	25138	nm	12.6	nm	14000
IW-130	5/29/2014 15:38	11.02	nm	32677	nm	12.8	nm	nm
IW-130	5/30/2014 8:46	11.14	21.08	42145	21.2	12.9	134	16800
IW-130	5/30/2014 12:38	12.07	nm	17894	nm	12.5	nm	3500
IW-130	5/30/2014 14:24	11.92	nm	35648	nm	12.8	nm	14000
IW-130	6/6/2014 8:58	11.27	21.25	27089	18.44	12.8	133.9	10500
IW-130	6/11/2014 8:30	11.55	21.45	26962	20.72	12.9	153.7	10500
IW-130	7/8/2014 11:34	11.61	22.95	18296	28.33	11.8	-64	14700
IW-130	9/12/2014 10:58	11.85	22.85	13135	19.39	11.7	-199.7	8400

TABLE 15
SUMMARY OF FIELD PARAMETERS (SUPPLEMENTAL NECK AREA)
MARCH 2014 - APRIL 2015
Whirlpool Facility - Fort Smith, Arkansas

Well	Time - Time Stamp	Level/Depth TOC (feet)	Temperature (°C)	Conductivity (µS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Sodium Persulfate (mg/L)
MW-23	5/22/2014 17:19	12.3	21.11	1101	1.28	4.83	287.4	nm
MW-23	5/30/2014 14:24	11.2	20.61	1077	2.09	4.67	174	0
MW-23	5/30/2014 17:54	11.13	nm	1026	35.6	4.33	60	0
MW-23	5/31/2014 14:44	11.43	20.21	1024	3.72	4.56	20.6	nm
MW-23	5/31/2014 15:51	11.15	20.42	1108	2.01	4.37	3.2	1.4
MW-23	6/2/2014 14:59	11.02	20.21	1076	3.11	4.33	374.8	4.2
MW-23	6/4/2014 7:39	11.08	20.4	1148	3.05	4.46	419.3	21
MW-23	6/6/2014 8:48	11.14	20.01	1056	3.69	4.31	311.9	1.4
MW-23	6/11/2014 7:39	11.35	19.81	1060	3.47	4.86	289.3	2.1
MW-23	7/8/2014 12:40	11.53	22.4	1167	0.98	4.98	193.9	0.7
MW-23	9/12/2014 8:45	11.88	21.82	925	1.31	4.84	246.3	0
MW-23	10/23/2014 8:26	11.61	21.51	1236	0.54	4.87	298.4	70
MW-23	1/15/2015 14:34	12.03	17.6	2092	0.68	4.95	343.3	560
MW-23	4/14/2015 17:09	11.66	19.11	1892	0.73	4.92	-84.4	nm
MW-24	5/22/2014 16:01	12.92	22.12	1044	1.65	5.01	271.6	nm
MW-24	5/28/2014 13:56	12.63	nm	1008	nm	5.13	nm	nm
MW-24	5/28/2014 15:43	nm	nm	1024	nm	5.14	nm	0
MW-24	5/28/2014 17:30	nm	nm	1042	nm	5.13	nm	0
MW-24	5/29/2014 8:06	12.35	nm	1036	nm	4.78	nm	0
MW-24	5/29/2014 10:28	11.99	nm	1081	nm	5.01	nm	0
MW-24	5/29/2014 15:42	nm	nm	1118	nm	4.6	nm	nm
MW-24	5/30/2014 8:51	11.87	20.52	1125	1.97	4.61	189	0
MW-24	5/30/2014 12:23	11.75	nm	1110	2.12	4.48	22.1	0
MW-24	5/30/2014 14:24	12.17	20.37	1087	2.15	4.61	11.2	nm
MW-24	5/30/2014 18:01	11.92	21.17	1170	2.27	4.48	84.2	0.7
MW-24	5/31/2014 14:47	12.58	nm	1021	nm	4.81	nm	0
MW-24	5/31/2014 15:37	12.4	nm	1080	nm	4.76	nm	0
MW-24	6/2/2014 14:55	11.81	20.11	83	2.25	4.29	362.9	5.6
MW-24	6/4/2014 7:44	11.71	20.4	1205	2.03	4.15	416.1	70
MW-24	6/6/2014 8:46	11.74	20.49	1508	2.01	4.51	305	6300
MW-24	6/11/2014 7:44	11.97	19.98	1547	1.88	4.78	317.3	280
MW-24	7/8/2014 13:10	12.12	21.84	2665	0.16	3.99	26.3	2100
MW-24	9/12/2014 9:10	12.45	22.09	2060	1.01	11.5	-225.6	1260
MW-24	10/23/2014 10:25	12.19	22.27	2986	0.18	4.1	441.6	1400
MW-24	11/3/2014 13:59	11.4	22.03	1383	2.39	5.46	336.5	70
MW-24	11/4/2014 12:51	11.4	20.58	3147	2.27	3.7	485.6	2800
MW-24	1/15/2015 15:40	12.5	18.43	3516	0.26	3.76	375.9	420
MW-24	4/16/2015 11:30	12.28	19.68	2775	0.17	4.23	549.3	1,400
MW-83	5/23/2014 15:46	12.11	22.24	1857	0.31	5.98	268.6	nm
MW-83	5/28/2014 13:37	nm	nm	1409	nm	5.9	nm	140
MW-83	5/28/2014 14:36	11.79	nm	1466	nm	5.62	nm	140
MW-83	5/28/2014 16:57	11.62	nm	1580	nm	5.82	nm	280
MW-83	5/29/2014 8:04	11.5	nm	1669	nm	5.61	nm	420
MW-83	5/29/2014 10:26	11.19	nm	1972	nm	5.61	nm	420
MW-83	5/29/2014 15:40	11.03	nm	1708	nm	5.33	nm	nm
MW-83	5/30/2014 8:48	11.02	20.91	2330	1.17	5.71	216	700
MW-83	5/30/2014 12:28	10.88	nm	42272	1.47	12.9	48.1	21000
MW-83	5/30/2014 14:24	11.21	21.69	129101	4.85	13.1	245.9	>28000
MW-83	5/30/2014 18:13	10.92	22.41	129913	6.72	13.4	252.1	>35000
MW-83	5/31/2014 14:56	11.77	nm	1556	nm	5.43	nm	280
MW-83	5/31/2014 16:07	11.59	nm	1625	nm	5.54	nm	280
MW-83	6/2/2014 15:09	10.75	22.07	105304	9.42	13.1	385	>35000
MW-83	6/4/2014 8:00	11.87	21.36	60686	8.32	13.1	247.4	35000
MW-83	6/6/2014 9:10	10.94	21.09	51901	6.31	13.1	221.1	>35000
MW-83	6/11/2014 8:19	11.26	20.76	7067	2.2	11.7	2.7	4200
MW-83	7/8/2014 14:35	11.29	24.56	9974	0.54	11.7	141.9	16800
MW-83	9/12/2014 10:07	11.7	22.4	3619	0.55	7.39	179.9	2240
MW-83	10/23/2014 8:22	11.38	22.42	5273	1.74	9.88	205.3	2800
MW-83	1/15/2015 13:20	11.71	17.69	2790	0.9	6.14	322.1	1680
MW-83	4/16/2015 13:40	11.44	22.31	2231	0.45	6.32	389.7	280

TABLE 15
SUMMARY OF FIELD PARAMETERS (SUPPLEMENTAL NECK AREA)
MARCH 2014 - APRIL 2015
Whirlpool Facility - Fort Smith, Arkansas

Well	Time - Time Stamp	Level/Depth TOC (feet)	Temperature (°C)	Conductivity (µS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Sodium Persulfate (mg/L)
MW-84	5/28/2014 13:12	12.35	nm	1228	nm	5.33	nm	0
MW-84	5/28/2014 14:31	12.06	nm	1217	nm	5.63	nm	0
MW-84	5/28/2014 16:58	11.86	nm	1212	nm	5.36	nm	0
MW-84	5/29/2014 8:05	11.81	nm	1168	nm	5.05	nm	0
MW-84	5/29/2014 10:27	11.42	nm	1085	nm	5.07	nm	0
MW-84	5/29/2014 15:41	11.93	nm	1107	nm	5.46	nm	nm
MW-84	5/30/2014 8:49	11.17	20.59	939	1.48	5.02	173	0
MW-84	5/30/2014 12:00	11.15	nm	935	1.29	4.77	-49.4	0
MW-84	5/30/2014 14:24	11.55	20.79	921	1.85	4.78	5.3	nm
MW-84	5/30/2014 18:06	11.31	20.91	1874	1.35	5.72	-8.4	700
MW-84	5/31/2014 14:50	12.07	nm	1170	nm	5.05	nm	0
MW-84	5/31/2014 15:44	11.88	nm	1087	nm	5.11	nm	0
MW-84	6/2/2014 15:01	11.2	21.08	12298	1.73	12	198.2	700
MW-84	6/4/2014 7:50	11.2	20.65	3852	1.62	9.52	-88.2	3500
MW-84	6/6/2014 8:52	11.05	20.8	14450	2.19	12.3	-5.2	10500
MW-84	6/11/2014 8:03	11.27	20.51	3681	2.15	9.47	3	2100
MW-84	7/8/2014 13:40	11.44	25.14	21031	0.24	11.9	174.8	10500
MW-84	9/12/2014 11:20	12.03	22.55	14354	0.5	10.3	234.8	19600
MW-84	10/23/2014 9:26	11.56	22.74	14793	0.92	10.2	210.5	10500
MW-84	1/14/2015 15:30	11.97	18.92	11942	1.21	9.25	175.5	3500
MW-84	4/16/2015 8:45	11.64	18.88	8756	2.08	9.59	252.7	7000

Notes:
nm = Not measured
TOC = Top of casing
DO = Dissolved oxygen
ORP = Oxidation reduction potential
µS/cm = Microsiemens per centimeter
mg/L = Milligrams per liter
SU = Standard unit
mV = Millivolts

Injection Start	Injection Stop
5/28/2014 13:43	5/30/2014 14:05

TABLE 16
SUMMARY OF FIELD PARAMETERS (AREA 2 AND AREA 3)
MARCH 2014 - APRIL 2015
Whirlpool Facility - Fort Smith, Arkansas

Well	Time - Time Stamp	Level/Depth TOC (feet)	Temperature (°C)	Conductivity (µS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Sodium Persulfate (mg/L)
MW-32	3/8/2014 10:05	12.89	17.21	1323	0.42	4.76	300.1	nm
MW-32	3/28/2014 10:20	12.57	18.25	1209	0.34	4.54	76.3	nm
MW-32	5/13/2014 15:35	12.52	19.07	1198	0.61	4.65	226.2	nm
MW-32	7/29/2014 13:18	11.68	26.28	1133	0.41	4.66	593	nm
MW-32	10/14/2014 14:30	11.3	22.85	1097	0.24	4.86	456.1	nm
MW-32	1/15/2015 14:50	12.04	16.97	1570	0.15	4.56	336.5	140
MW-32	4/15/2015 9:20	11.54	18.22	1359	0.31	5.03	366.3	70
MW-33	3/8/2014 9:10	12.43	16.42	620	7.9	5.13	248.2	nm
MW-33	3/28/2014 12:05	11.79	18.63	685	0.47	4.76	84	nm
MW-33	5/14/2014 2:20	11.74	17.06	727	0.44	4.88	283.9	nm
MW-33	5/31/2014 15:06	10.48	22.07	523	2.68	4.53	215.6	nm
MW-33	6/5/2014 9:32	nm	20.69	754	2.39	4.54	357.7	14
MW-33	6/6/2014 9:45	nm	20.05	700	2.22	4.7	317.2	7
MW-33	6/11/2014 9:22	nm	20.72	601	1.67	4.64	628	28
MW-33	7/8/2014 15:30	nm	24.46	775	2.44	5.52	242.2	2.1
MW-33	7/29/2014 0:00	10.87	26.1	731	0.88	4.97	147.8	nm
MW-33	9/11/2014 15:27	10.81	22.01	510	1.55	5.75	272.3	0
MW-33	10/15/2014 0:00	10.66	22.48	799	0.85	5.13	313.2	nm
MW-33	1/14/2015 17:00	11.62	16.67	738	0.58	4.97	441.5	0
MW-33	4/15/2015 11:55	11.1	18.32	793	0.19	6.22	75.3	nm
MW-34	3/8/2014 13:30	11.46	17.07	1009	0.15	4.86	264.7	nm
MW-34	3/27/2014 11:15	10.91	16.27	838	0.29	4.73	80.3	nm
MW-34	5/13/2014 15:35	11.05	17.52	840	0.2	4.86	329.6	nm
MW-34	5/31/2014 12:02	10.1	20.92	788	3.72	4.96	182.9	nm
MW-34	6/2/2014 12:54	9.44	20.18	977	2.34	4.62	377	nm
MW-34	6/2/2014 16:47	nm	19.98	977	3.36	4.22	5.22	2.1
MW-34	6/3/2014 15:40	9.21	20.9	967	2.42	4.22	257.3	0
MW-34	6/5/2014 9:17	nm	18.31	988	1.57	4.47	357	70
MW-34	6/6/2014 9:37	nm	19.65	1004	2.62	4.78	312	35
MW-34	6/11/2014 9:51	nm	19.16	989	2.1	4.58	352.4	7
MW-34	7/9/2014 15:00	10.04	20.19	1366	2.53	5.16	391.3	560
MW-34	7/29/2014 0:00	10.21	26.66	1549	1.1	4.51	350.9	700
MW-34	9/11/2014 15:57	10.32	19.86	1093	2.11	5.14	276.6	280
MW-34	10/15/2014 0:00	9.95	18.65	2029	1.1	4.67	513.5	700
MW-34	1/13/2015 13:20	10.71	15.05	2435	0.49	4.55	429.7	2700
MW-34	4/14/2015 15:50	10.25	17.56	1745	5.14	4.62	333.1	nm
MW-35R	3/8/2014 10:55	10.4	17.62	1202	2.64	5.63	255.2	nm
MW-35R	3/26/2014 12:20	10.92	16.88	1093	0.44	5.34	90.6	nm
MW-35R	3/29/2014 11:23	11.15	16.82	4034	2.22	11.39	118.1	4200
MW-35R	3/31/2014 9:52	10.82	16.34	1468	3.06	6.31	90.2	4.2
MW-35R	4/7/2014 16:25	10.6	15.96	858	3	6.32	84.2	1.4
MW-35R	4/14/2014 10:41	10.71	15.1	1326	2.06	6.45	63.1	2.1
MW-35R	5/13/2014 17:05	10.78	16.88	1478	2.35	6.26	267.4	nm
MW-35R	5/31/2014 10:40	9.76	18.95	891	3.7	6.05	182	nm
MW-35R	6/2/2014 9:05	9.01	19.26	17793	1.81	12.46	204.7	21000
MW-35R	6/2/2014 13:01	8.93	18.92	31768	2.7	12.94	273	17500
MW-35R	6/2/2014 17:42	9.61	18.1	5464	2.71	10.43	190.6	3500
MW-35R	7/9/2014 13:28	9.77	19.84	23506	1.96	11.06	-7.2	4900
MW-35R	7/30/2014 0:00	9.38	20.4	20232	0.3	12.11	163	>20000
MW-35R	9/11/2014 15:27	9.89	21.42	1153	3.05	8.91	318.6	420
MW-35R	10/14/2014 0:00	9.51	20.95	16092	0.32	11.7	138.4	14700
MW-35R	1/13/2015 10:35	10.38	14.68	17960	0.82	8.31	297.2	8400
MW-35R	4/14/2015 17:15	9.88	17.82	15767	2.04	6.74	201.7	16,800
MW-36	3/6/2014 13:55	10.42	16.13	791	0.27	5.21	313	nm
MW-36	5/13/2014 12:15	10.01	16.91	916	1.36	5.06	197.5	nm
MW-36	5/31/2014 12:54	9.05	19.23	548	3.32	4.25	273.1	nm
MW-36	6/3/2014 15:24	7.8	20.05	834	2.79	4.27	262.5	2.8
MW-36	6/8/2014 18:06	nm	19	864	3.53	4.31	329.8	5.6
MW-36	6/9/2014 23:50	nm	18.59	923	1.79	4.53	319.7	210
MW-36	6/11/2014 10:04	nm	18.76	1204	0.93	4.72	342.7	420
MW-36	7/9/2014 14:30	8.99	21.75	1372	2.82	6.19	-31.8	700
MW-36	7/29/2014 0:00	9.24	22.4	1415	0.15	4.85	168.3	nm
MW-36	9/11/2014 15:27	9.11	20.49	1156	2.25	5.23	300.5	560
MW-36	10/14/2014 0:00	8.72	19.77	1461	0.52	5.08	460.8	1260
MW-36	1/12/2015 15:30	9.41	14.08	1375	0.35	5.14	399.9	0
MW-36	4/14/2015 13:45	9.27	17.72	1398	7.14	4.88	315.2	560

TABLE 16
SUMMARY OF FIELD PARAMETERS (AREA 2 AND AREA 3)
MARCH 2014 - APRIL 2015
Whirlpool Facility - Fort Smith, Arkansas

Well	Time - Time Stamp	Level/Depth TOC (feet)	Temperature (°C)	Conductivity (µS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Sodium Persulfate (mg/L)
MW-65	3/8/2014 11:35	11.12	16.89	1489	0.6	5.08	278.9	nm
MW-65	3/26/2014 12:20	11.04	15.98	1399	0.79	5.33	423.5	nm
MW-65	3/29/2014 13:28	11.15	17.35	1415	4.3	5.22	322.2	1.4
MW-65	3/31/2014 9:59	10.84	18.05	1628	3.37	5.05	85.9	7
MW-65	4/7/2014 17:01	10.63	16.32	1407	4.43	5.04	88.7	1.4
MW-65	4/14/2014 10:46	10.74	14.19	1793	3.34	4.95	67.7	5.6
MW-65	5/14/2014 9:15	10.77	15.36	1918	3.47	4.91	345.4	nm
MW-65	5/31/2014 9:47	9.8	18.21	1070	2.9	4.98	51.2	nm
MW-65	6/2/2014 12:42	9.11	18.97	240152	2.07	13.64	412.3	>35000
MW-65	6/2/2014 17:47	9.54	18.21	108917	5.2	13.36	381.9	>35000
MW-65	6/3/2014 16:21	9.43	19.09	112875	5.76	13.46	306.5	>35000
MW-65	6/5/2014 9:45	9.83	18.49	111937	11.56	13.51	324.4	>35000
MW-65	6/6/2014 10:09	9.99	18.41	100329	12.43	13.41	284.6	>35000
MW-65	6/11/2014 10:16	10.12	18.41	90942	12.38	13.54	246	>35000
MW-65	7/30/2014 0:00	10.09	20.42	28015	9.83	12.63	302.1	>28000
MW-65	9/11/2014 15:57	4.93	19.66	14196	12.82	12.5	147	12600
MW-65	10/14/2014 0:00	9.56	20.18	13176	6.02	11.98	121.9	nm
MW-65	1/13/2015 0:00	10.33	16.78	11520	6.97	11.74	211.6	2100
MW-65	4/15/2015 9:50	9.91	17.26	10973	2.8	10.65	109.8	3,500
IW-76	3/8/2014 9:15	8.64	15.72	970	1.39	5.46	683.1	nm
IW-76	3/27/2014 9:40	9.24	14.55	992	1.5	5.33	680.4	nm
IW-76	5/14/2014 0:00	9.3	15.68	1027	1.84	5.25	735.1	nm
IW-76	5/31/2014 10:21	8.31	nm	1051	18.1	4.83	660	nm
IW-76	6/2/2014 16:56	7.45	18.15	1368	1.63	4.65	746.1	280
IW-76	6/5/2014 9:41	nm	18.02	2075	1.36	7.19	575.5	700
IW-76	6/6/2014 9:59	7.85	17.35	2044	1.44	5.17	756.6	1400
IW-76	6/11/2014 9:19	7.98	18.24	2316	2.73	4.94	747.3	1400
IW-76	6/14/2014 19:19	7.98	18.24	2316	2.73	4.94	747.3	1400
IW-76	7/9/2014 10:55	8.3	18.42	804	5.19	5.98	341.1	70
IW-76	7/29/2014 10:10	8.42	18.95	2751	0.58	5.19	727.2	nm
IW-76	10/15/2014 9:49	8.19	18.75	3023	0.22	5.16	694.4	2100
IW-76	1/14/2015 12:25	8.69	15.07	2316	0.82	5.06	321.9	420
IW-76	4/15/2015 0:00	9.45	16.39	1776	1.37	5.47	124.5	nm
IW-77	3/8/2014 0:00	10.25	16.77	741	1.43	5.52	512.1	nm
IW-77	3/26/2014 0:00	10.09	16.12	827	1.3	4.91	91.2	nm
IW-77	3/29/2014 11:32	10.25	16.3	909	2.19	5.29	256.5	0
IW-77	3/31/2014 9:55	9.91	16.63	92.3	2.48	5.08	89.8	0
IW-77	4/7/2014 16:30	9.72	16.13	880	3.03	5.17	90.6	0
IW-77	4/14/2014 10:56	9.82	14.16	885	2.58	5.26	59.8	0.7
IW-77	5/31/2014 9:33	8.43	18.24	814	1.47	4.77	25.3	nm
IW-77	5/31/2014 13:45	8.12	17.14	901	1.96	4.39	96.1	nm
IW-77	5/31/2014 16:43	8.19	16.98	941	1.63	4.57	51.9	nm
IW-77	5/31/2014 18:10	8.8	18.81	13858	0.094	12.09	13.3	12600
IW-77	6/1/2014 11:03	8.26	17.62	1394	15.7	4.76	19.7	70
IW-77	6/1/2014 14:00	7.98	18.81	22790	1.09	12.74	82.9	16800
IW-77	6/1/2014 17:28	7.96	17.84	5709	2.23	10.32	292.2	10500
IW-77	6/2/2014 8:56	7.79	17.23	4451	1.68	8.06	319.5	4900
IW-77	6/2/2014 17:10	8.88	18.11	399	3.8	5.36	74.3	nm
IW-77	6/3/2014 9:40	8.72	18.32	62443	1.48	13.27	298	28000
IW-77	6/3/2014 16:10	8.48	17.28	5429	2.98	9.01	251.3	8400
IW-77	6/5/2014 9:29	8.6	17.5	3095	2	6.63	339.4	2800
IW-77	6/6/2014 10:05	8.29	17.34	4544	2.51	6.84	305.1	4200
IW-77	6/11/2014 9:45	8.56	18.6	7195	3.03	12.07	37.4	4200
IW-77	7/9/2014 12:35	8.89	19.28	5272	0.27	9.87	252.6	8400
IW-77	7/29/2015 17:40	8.94	21.88	3667	0.6	6.74	264.4	2100
IW-77	9/11/2014 15:27	8.98	19.51	1548	4.23	6.33	321.4	1680
IW-77	10/15/2014 10:05	8.81	18.8	3918	0.85	5.88	464.2	4200
IW-77	10/23/2014 16:14	9.7	19.76	4426	0.79	6.13	356.8	nm
IW-77	1/14/2015 15:05	9.18	16.9	6966	0.37	5.88	357.4	2800
IW-77	4/14/2015 9:20	9.01	16.47	5108	0.67	5.59	175.5	2,800
IW-78	5/28/2014 13:14	10.81	18.41	2271	0.49	5.44	263	nm
IW-78	5/31/2014 13:04	9.37	18.18	1415	3.72	5.04	158	nm
IW-78	7/9/2014 13:25	9.36	23.56	18058	4.81	12.73	231.8	14000
IW-78	9/11/2014 14:05	9.49	21.31	8436	1.86	6.96	388.9	8400

TABLE 16
SUMMARY OF FIELD PARAMETERS (AREA 2 AND AREA 3)
MARCH 2014 - APRIL 2015
Whirlpool Facility - Fort Smith, Arkansas

Well	Time - Time Stamp	Level/Depth TOC (feet)	Temperature (°C)	Conductivity (µS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Sodium Persulfate (mg/L)
IW-79	3/29/2014 11:16	11.17	16.84	1140	3.79	5.97	317.8	nm
IW-79	3/31/2014 9:50	10.74	16.58	1153	3.85	5.9	88.5	2.1
IW-79	4/7/2014 16:12	10.34	15.93	230	8.45	6.11	85.1	0.7
IW-79	4/14/2014 10:35	10.63	14.82	1143	4.87	6.07	59.6	2.8
IW-79	5/28/2014 12:10	10.15	19.38	829	1.67	5.97	203.7	nm
IW-79	5/31/2014 11:43	9.7	18.72	320	4.07	5.76	475.3	nm
IW-79	6/2/2014 10:42	9.14	18.38	1353	2.31	5.53	266	700
IW-79	6/2/2014 13:16	8.97	18.01	633	3.54	5.01	368.6	210
IW-79	6/2/2014 17:38	8.82	18.16	873	3.21	5.2	699.1	280
IW-79	6/3/2014 16:12	8.44	18.75	9057	8.78	12.39	56.2	3500
IW-79	7/9/2014 11:10	9.7	21.15	12000	5.31	11.18	49.4	14000
IW-79	9/11/2014 12:45	9.8	21.76	2726	3.04	10.31	142	1400
IW-80	3/8/2014 12:50	10.43	16.84	581	1.32	5.78	633.9	nm
IW-80	3/26/2014 15:40	10.54	14.82	639	2.42	5.99	551.3	nm
IW-80	5/31/2014 11:39	9.28	19.52	700	1.42	5.8	597.3	nm
IW-80	6/2/2014 17:34	8.35	18.69	875	1.57	5.4	757.9	280
IW-80	6/5/2014 9:39	8.86	18.42	74507	7.74	13.31	298.6	28000
IW-80	6/6/2014 10:01	8.67	19.08	101735	9.16	13.46	298.7	>35000
IW-80	6/11/2014 10:01	8.99	18.7	31522	8.69	12.99	143.7	21000
IW-80	7/9/2014 14:05	9.25	20.08	1464	3.59	7.11	483.2	1680
IW-80	7/30/2014 10:10	9.34	19.84	4624	2.19	6.45	727.2	2800
IW-80	9/11/2014 15:27	9.37	19.73	7435	3.87	6.41	408.8	11200
IW-80	10/14/2014 11:00	9.00	20.97	6832	1.5	6.55	379.2	6300
IW-80	1/13/2015 12:15	10.79	17.26	2587	2.13	6.31	446.2	1400
IW-80	4/14/2015 13:30	9.43	17.23	1295	4.36	5.72	127.7	420
MW-81	5/29/2014 9:04	9.73	17.87	1098	0.23	4.98	-159.2	nm
MW-81	5/31/2014 10:05	9.43	18.43	1030	1	4.85	-30.5	nm
MW-81	5/31/2014 16:40	8.8	17.78	1082	1.74	4.45	32	nm
MW-81	5/31/2014 18:06	8.79	17.77	1075	1.12	4.41	-28.1	nm
MW-81	6/1/2014 11:00	9.35	18.15	1141	1.49	4.22	2.9	nm
MW-81	6/1/2014 13:52	8.81	18.01	1136	1.64	4.7	-67.8	21
MW-81	6/1/2014 17:21	8.6	18.12	1166	1.22	4.59	13.4	21
MW-81	6/2/2014 8:45	9.26	17.43	1169	1.34	11.68	36.1	2.8
MW-81	6/3/2014 16:05	8.39	18.08	2497	1.32	4.68	12.6	2100
MW-81	6/3/2014 9:31	9.15	18.4	2048	2.55	4.44	-3.5	1400
MW-81	6/5/2014 9:15	8.8	17.83	1880	1.99	4.71	39.6	700
MW-81	6/6/2014 9:54	8.89	17.49	2500	1.71	4.78	-82.7	2100
MW-81	6/11/2014 9:30	9.11	18.65	2313	1.61	4.74	9.8	1400
MW-81	7/9/2014 10:10	9.42	18.94	2687	0.31	5.01	5	3500
MW-81	9/11/2014 15:00	9.55	20.12	2461	0.6	4.88	246.9	4200
MW-81	1/13/2015 16:00	9.93	16.79	4506	0.3	5.86	370.9	1400
MW-81	4/15/2015 16:25	9.46	17.99	141	4.18	6.68	142.4	nm
MW-82	5/28/2014 16:44	9.85	18.85	1102	0.28	4.97	0.9	nm
MW-82	5/31/2014 10:02	9.5	18.79	1033	1.24	4.83	13.8	nm
MW-82	5/31/2014 13:52	9.03	18.39	1025	0.94	4.49	22.1	nm
MW-82	5/31/2014 16:32	8.82	18.04	1089	1.54	4.9	87.5	nm
MW-82	5/31/2014 18:01	8.92	18.02	1064	1.47	4.74	6	nm
MW-82	6/1/2014 10:56	9.42	18.46	1124	1.88	4.03	106.3	nm
MW-82	6/1/2014 13:49	8.92	18.61	1139	1.77	4.8	33.6	nm
MW-82	6/1/2014 17:16	8.64	18.98	1484	1.94	5.14	255.9	840
MW-82	6/2/2014 8:40	9.33	17.85	1560	1.43	4.44	105.2	420
MW-82	6/3/2014 9:35	9.21	17.96	3321	1.9	4.42	170	2800
MW-82	6/3/2014 16:08	8.58	17.82	2213	1.68	4.55	170	1400
MW-82	6/5/2014 9:12	8.88	17.71	4493	2.05	4.62	225	4200
MW-82	6/6/2014 9:43	9.06	17.73	4105	1.78	4.67	176.1	4200
MW-82	6/11/2014 9:36	9.18	18.77	4712	3.28	6.33	194.2	2800
MW-82	7/9/2014 10:10	9.5	19.84	6630	0.1	4.63	226.6	14000
MW-82	9/11/2014 14:28	9.65	21.09	4071	0.9	5.88	348.1	4200
MW-82	1/13/2015 16:15	9.84	15.26	2152	0.42	5.08	279	700
MW-82	4/15/2015 17:12	9.29	17.53	1388	5.01	5.82	121.7	700

TABLE 16
SUMMARY OF FIELD PARAMETERS (AREA 2 AND AREA 3)
MARCH 2014 - APRIL 2015
Whirlpool Facility - Fort Smith, Arkansas

Well	Time - Time Stamp	Level/Depth TOC (feet)	Temperature (°C)	Conductivity (µS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Sodium Persulfate (mg/L)
IW-113	3/26/2014 8:25	11.1	14.83	834	2.3	5.38	255.5	2.8
IW-113	3/26/2014 10:53	nm	15.93	1420	1.51	6.03	212.4	nm
IW-113	3/26/2014 12:51	10.91	16.97	100106	1.28	13.32	244.4	21000
IW-113	3/26/2014 16:45	10.87	15.47	5942	1.85	11.95	177.9	1400
IW-113	3/27/2014 8:29	10.59	17.12	15772	1.83	12.54	200.7	4900
IW-113	3/27/2014 13:30	10.48	19.02	118915	1.43	12.94	367.1	28000
IW-113	3/27/2014 17:53	10.43	18.53	6293	1.95	11.91	218.6	5600
IW-113	3/29/2014 10:20	11.08	15.53	3009	2.82	10.52	280.2	700
IW-113	3/31/2014 9:07	10.74	16.96	2659	2.4	9.92	98.6	1400
IW-113	4/7/2014 15:33	10.54	16.66	1406	4.23	6.49	80.4	700
IW-113	4/14/2014 9:21	10.64	15.28	1228	2.74	6.45	21.7	2.8
IW-113	6/2/2014 10:21	9.37	17.64	1014	1.48	4.99	265.1	14
IW-114	3/26/2014 9:16	10.81	15.05	1010	3.23	5.25	271.3	2.1
IW-114	3/26/2014 10:58	10.44	15.63	131400	1.3	13.19	225.5	14000
IW-114	3/26/2014 12:57	10.42	16.34	167706	1.05	13.4	285.6	28000
IW-114	3/26/2014 16:51	10.37	15.53	77250	2.08	12.89	291.3	1400
IW-114	3/27/2014 8:32	10.1	15.67	16778	1.61	12.59	196.6	2800
IW-114	3/27/2014 13:36	9.98	17.9	64495	1.83	13.03	335.9	14000
IW-114	3/27/2014 17:56	9.93	18.5	39026	2.55	12.83	299.1	14000
IW-114	3/29/2014 10:23	10.59	15.6	11081	3.19	12.41	157.1	4200
IW-114	3/31/2014 9:11	10.25	16.13	6738	4.25	12.05	88.6	2100
IW-114	4/7/2014 16:55	10.06	17.18	1475	5.75	9.29	91	2.1
IW-114	4/14/2014 9:36	10.15	14.55	2122	2.95	11.12	49.6	2.1
IW-114	5/1/2014 11:02	10.17	17.66	1566	5.21	7.34	100.8	2.1
IW-114	5/31/2014 12:16	nm	18.9	1412	0.65	5.9	116.1	nm
IW-115	3/26/2014 8:50	10.82	15.2	906	1.64	4.97	266	1.4
IW-115	3/26/2014 11:01	10.64	16.7	1146	2.09	6.56	277.6	nm
IW-115	3/26/2014 13:01	10.63	16.65	2527	1.93	10.17	202.3	700
IW-115	3/26/2014 16:47	10.59	15.15	5868	1.24	11.19	178.9	700
IW-115	3/27/2014 8:35	10.31	15.73	2341	1.74	8.99	229.4	700
IW-115	3/27/2014 13:43	10.2	17.35	8364	1.88	12.41	247	5600
IW-115	3/27/2014 17:59	10.15	17.97	14576	1.24	12.66	309.9	11200
IW-115	3/29/2014 10:27	10.81	15.97	3844	2.32	10.95	169.3	1400
IW-115	3/31/2014 9:18	10.47	16.93	3012	2.76	9.97	97.9	1400
IW-115	4/7/2014 15:40	10.28	16.38	1427	3.78	6.09	81.6	5.6
IW-115	4/14/2014 9:48	10.36	14.66	1284	2.68	6.47	48.1	1.4
IW-115	5/28/2014 14:14	9.87	18.44	1130	0.34	5.42	126	nm
IW-115	6/2/2014 10:53	8.65	17.77	1215	1.55	5.33	248.1	35
IW-115	6/2/2014 13:08	8.58	18.08	1292	1.37	5.24	376.5	70
IW-115	6/2/2014 17:51	8.6	18.91	15905	2	12.61	280.3	10500
IW-115	6/3/2014 16:17	8.25	18.72	19580	2.12	12.78	139.2	10500
IW-115	6/3/2014 23:52	9.43	18.51	1102	1.52	5.27	21.8	70
IW-115	6/6/2014 10:07	9	18.19	16879	1.85	12.71	114.7	7000
IW-115	6/8/2014 20:22	8.83	18.35	14934	1.7	12.62	71	12600
IW-115	7/9/2014 12:55	9.43	20.64	2850	0.53	10.88	-28	1400
IW-115	9/11/2014 12:50	9.61	21.71	1.755	0.43	10.28	114.9	2800
IW-117	3/26/2014 8:47	10.97	14.8	1064	1.42	5.02	78.2	2.1
IW-117	3/26/2014 11:11	10.81	16.45	1050	1.92	6.01	288.5	nm
IW-117	3/26/2014 13:12	10.78	16.6	3368	1.61	11.59	144.2	700
IW-117	3/26/2014 16:54	10.76	15.88	20713	2	12.74	228.9	2100
IW-117	3/27/2014 8:41	10.47	16.03	3951	2.15	11.49	156.3	700
IW-117	3/27/2014 13:52	10.36	17.51	29193	1.74	12.82	279.9	14000
IW-117	3/27/2014 18:07	10.31	17.68	8372	1.4	12.4	143.7	5600
IW-117	3/29/2014 10:35	10.96	15.98	49704	2.08	12.94	225.4	19600
IW-117	3/31/2014 9:25	10.63	16.84	8089	2.49	12.14	84.9	5600
IW-117	4/7/2014 15:42	10.43	16.13	1849	3.9	7.46	80.1	700
IW-117	4/14/2014 9:58	10.52	14.39	2234	2.82	9.78	45.2	5.6
IW-117	5/1/2014 10:19	10.58	17.27	1630	4.52	6.98	60.9	2.1
IW-117	5/31/2014 12:12	nm	17.76	1186	0.93	6.02	90.9	nm

TABLE 16
SUMMARY OF FIELD PARAMETERS (AREA 2 AND AREA 3)
MARCH 2014 - APRIL 2015
Whirlpool Facility - Fort Smith, Arkansas

Well	Time - Time Stamp	Level/Depth TOC (feet)	Temperature (°C)	Conductivity (µS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Sodium Persulfate (mg/L)
IW-118	3/26/2014 9:11	11.14	14.13	951	3.25	5.21	267.5	0
IW-118	3/26/2014 11:17	10.95	15.7	26907	2.55	12.75	133.4	10400
IW-118	3/26/2014 13:17	10.93	15.86	11085	3.07	12.7	147.8	4200
IW-118	3/26/2014 17:01	10.99	13.89	3951	2	11.6	124.8	700
IW-118	3/27/2014 8:44	10.61	16.01	2057	2	9.02	203.2	5.6
IW-118	3/27/2014 13:58	10.49	17.58	4265	1.45	11.52	274.4	4200
IW-118	3/27/2014 18:10	10.35	18.28	3143	2.28	10.73	225.4	2800
IW-118	3/29/2014 10:39	11.09	15.95	2486	3.58	8.33	293.7	1400
IW-118	3/31/2014 9:27	10.76	16.57	1756	4.07	6.81	96.1	1400
IW-118	4/7/2014 17:12	10.56	16.88	989	3.96	6.15	86.6	1.4
IW-118	4/14/2014 10:02	10.65	14	1004	4.04	6.76	52.6	0
IW-118	5/28/2014 15:32	10.1	18.53	2293	0.42	8.87	80.5	nm
IW-118	5/31/2014 11:10	9.73	20.6	5543	1.61	11.49	-25.5	2100
IW-120	3/26/2014 8:43	10.79	15.62	1059	2.09	5.14	266.3	2.1
IW-120	3/26/2014 11:27	10.63	16.9	1152	2.27	6.14	326.7	nm
IW-120	3/26/2014 13:23	10.59	16.09	1168	2.65	6.25	315.1	nm
IW-120	3/26/2014 17:07	10.55	16.64	32601	2	12.77	233.4	5600
IW-120	3/27/2014 8:50	10.28	17.1	17191	1.79	12.49	199	5600
IW-120	3/27/2014 14:08	10.17	17.28	5554	2.23	11.98	293.6	2100
IW-120	3/27/2014 18:17	10.14	18.04	31665	1.71	12.87	328.6	21000
IW-120	3/29/2014 10:46	10.78	16.22	11344	2.43	12.28	150.5	8400
IW-120	3/31/2014 9:33	10.43	16.35	3964	2.93	10.91	90.7	2800
IW-120	4/7/2014 15:52	10.23	16.1	1993	3.83	6.9	77.3	700
IW-120	4/14/2014 10:13	10.32	13.64	2512	2.48	9.93	51.8	4.2
IW-120	5/1/2014 10:38	10.35	17.11	1870	6.51	7.06	90.4	2.1
IW-120	5/31/2014 11:57	nm	17.63	1373	1.82	6.07	106	nm
IW-120	6/1/2014 11:52	9.06	17.96	1384	1.8	5.3	-51.3	nm
IW-120	6/1/2014 14:33	8.91	18.14	2181	1.74	8.58	-76.9	700
IW-120	6/1/2014 17:50	8.35	17.97	23201	1.65	13.02	39.3	14700
IW-120	6/2/2014 9:10	9.31	18.09	36872	1.49	12.97	279.3	16000
IW-121	3/26/2014 8:38	10.9	15.59	1078	1.94	4.88	270.9	7
IW-121	3/26/2014 11:30	10.74	17.24	1072	1.6	5.26	350.3	nm
IW-121	3/26/2014 13:26	10.7	16.57	1109	2.1	5.17	303.5	nm
IW-121	3/26/2014 17:10	10.66	15.57	1164	2.23	5.54	519.4	nm
IW-121	3/27/2014 8:52	10.38	16.09	1089	2.39	5.97	424.7	nm
IW-121	3/27/2014 14:11	10.27	18	1467	1.61	6.15	482.4	nm
IW-121	3/27/2014 18:21	10.2	18.01	2802	1.68	6.3	552.8	nm
IW-121	3/29/2014 10:50	10.87	15.78	2790	2.65	5.19	377.7	1400
IW-121	3/31/2014 9:38	10.53	16.18	2138	2.84	5.08	102.3	700
IW-121	4/7/2014 15:55	10.34	16.06	1376	3.91	5.08	78.5	4.2
IW-121	4/14/2014 10:17	10.43	14.45	2206	3.2	5.61	52.5	7
IW-121	5/31/2014 11:53	nm	18.11	1663	2.04	5.82	195.8	nm
IW-121	6/1/2014 11:56	9.15	17.62	1166	2.05	4.68	-8.1	nm
IW-121	6/1/2014 14:28	9	17.95	1082	1.62	4.77	-40.8	21
IW-122	3/26/2014 8:36	10.71	14.28	1036	2.07	4.98	74.9	1.4
IW-122	3/26/2014 11:32	10.54	16.43	991	1.24	4.89	383.1	nm
IW-122	3/26/2014 13:28	10.51	16.3	1160	1.54	5.38	295.3	nm
IW-122	3/26/2014 17:13	10.48	15.23	2236	1.35	7.3	379.8	700
IW-122	3/27/2014 8:55	10.19	16.27	3648	1.69	10.67	211.5	1400
IW-122	3/27/2014 14:13	10.08	17.28	3011	1.71	10.08	245.2	1400
IW-122	3/27/2014 18:24	10.04	17.88	2260	1.93	7.61	387.8	1400
IW-122	3/29/2014 10:55	10.68	16.04	2362	2.49	7.02	259.2	700
IW-122	3/31/2014 9:42	10.34	16.37	1945	2.96	6.21	97.6	700
IW-122	4/7/2014 16:00	10.14	16.05	1294	3.58	5.74	76.6	2.8
IW-122	4/14/2014 10:21	10.24	12.95	1312	2.47	5.56	62.2	1.4
IW-122	5/31/2014 11:49	nm	17.83	1166	1.68	5.74	232.6	nm
IW-122	5/31/2014 16:45	9.15	17.47	1129	2.09	4.61	123.8	nm
IW-122	5/31/2014 18:13	9.25	17.11	1110	2.52	4.79	71.1	nm
IW-122	6/1/2014 11:07	9.79	18.63	1183	1.88	5.72	-3.8	nm
IW-122	6/1/2014 11:58	9.44	18.05	1188	2.13	4.39	-19.8	nm
IW-122	6/1/2014 14:20	9.23	18.21	1185	1.63	4.91	-32	42
IW-122	6/1/2014 17:46	8.85	18.09	1158	2.12	5.47	124	49
IW-122	6/2/2014 9:17	9.71	17.31	1423	1.79	5.15	352.6	420

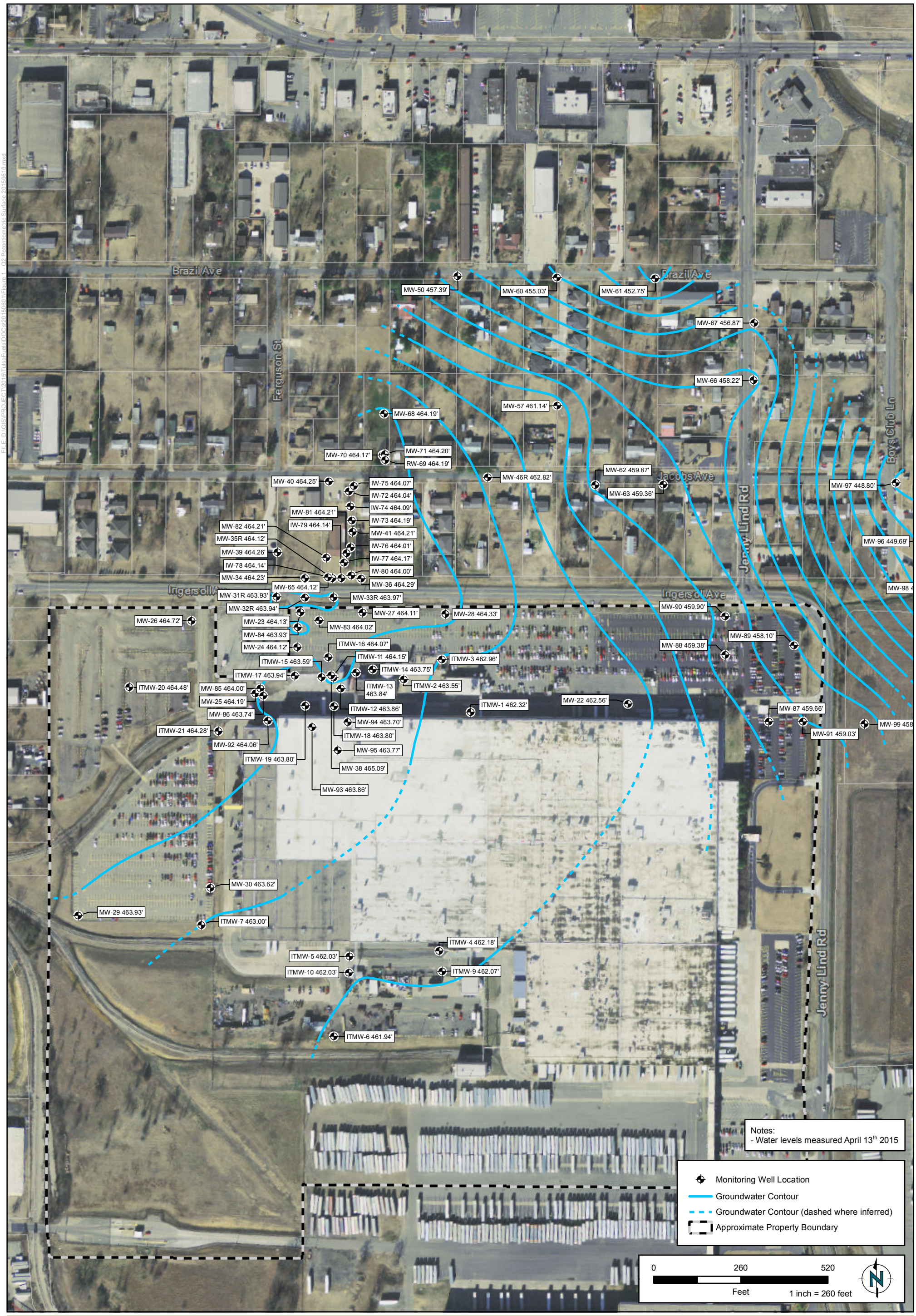
TABLE 16
SUMMARY OF FIELD PARAMETERS (AREA 2 AND AREA 3)
MARCH 2014 - APRIL 2015
Whirlpool Facility - Fort Smith, Arkansas

Well	Time - Time Stamp	Level/Depth TOC (feet)	Temperature (°C)	Conductivity (µS/cm)	DO (mg/L)	pH (SU)	ORP (mV)	Sodium Persulfate (mg/L)
IW-123	3/26/2014 8:33	11.1	15.57	750	1.99	5	260.7	4.2
IW-123	3/26/2014 11:35	10.93	16.6	786	1.92	4.94	390.7	nm
IW-123	3/26/2014 13:32	10.91	16.53	787	1.55	4.97	302.1	nm
IW-123	3/26/2014 17:15	10.88	15.74	809	2.8	5.17	489.1	nm
IW-123	3/27/2014 8:58	10.58	15.94	1610	1.8	6.18	367.4	4.2
IW-123	3/27/2014 14:18	10.47	17.33	2434	2.27	6.85	394	nm
IW-123	3/27/2014 18:28	10.43	18.24	56880	1.39	12.91	381.6	28000
IW-123	3/29/2014 10:58	11.08	15.89	3170	2.47	9.84	191.1	2100
IW-123	3/31/2014 9:47	10.74	16.51	1900	2.7	6.66	93.7	1400
IW-123	4/7/2014 16:02	10.53	15.86	1102	3.61	5.86	79.3	2.8
IW-123	4/14/2014 10:26	10.64	14.34	1332	3.05	5.99	57.6	4.2
IW-123	5/31/2014 10:14	nm	18.37	1866	1.58	5.9	61.2	700
IW-123	6/1/2014 17:41	8.83	18.91	914	1.91	5.28	173.6	21
IW-124	3/26/2014 8:29	11.15	15.13	769	1.39	6.24	250.3	0.7
IW-124	3/26/2014 11:37	10.93	16.48	685	1.47	5.74	377.2	nm
IW-124	3/26/2014 13:35	10.9	16.81	665	1.72	5.69	290.1	nm
IW-124	3/26/2014 17:18	10.87	15.03	643	1.27	5.63	466.7	nm
IW-124	3/27/2014 9:02	10.57	16.64	622	1.44	6.02	377.6	nm
IW-124	3/27/2014 14:20	10.47	17.47	611	1.46	6.22	413.1	nm
IW-124	3/27/2014 18:35	10.45	17.87	677	1.7	6.55	516.9	nm
IW-124	3/29/2014 11:03	11.07	16.32	725	1.47	6.03	284.8	0.07
IW-124	3/31/2014 9:48	10.73	16	766	1.81	6.07	96.1	0.07
IW-124	4/7/2014 16:06	10.53	16.19	816	2.35	7.36	83.3	0.7
IW-124	4/12/2014 10:30	10.64	13.86	760	2.21	6.68	64.9	0.7
IW-124	5/31/2014 10:11	nm	18.37	700	1.62	5.75	9.2	nm
IW-131	4/30/2014 15:30	10.35	17.74	5571	3.67	12.48	-170.3	2.8
IW-131	5/28/2014 10:53	9.88	18.89	4842	0.74	11.97	89.6	nm
IW-131	5/31/2014 10:52	9.45	19.74	5147	2.57	11.98	-35.9	630

Notes:
nm = Not measured
TOC = Top of casing
DO = Dissolved oxygen
ORP = Oxidation reduction potential
µS/cm = Microsiemens per centimeter
mg/L = Milligrams per liter
SU = Standard unit
mV = Millivolts

Injection Start	Injection Stop
5/31/2014 11:00	6/3/2014 17:18

Figures



FILE: D:\GIS\PROJECT\2015\TulsaFuels\DOCs\20150601\Figure 1 - Q2 Potentiometric Surface 20150610.mxd

RAMBOLL ENVIRON

SECOND QUARTER 2015 POTENTIOMETRIC SURFACE

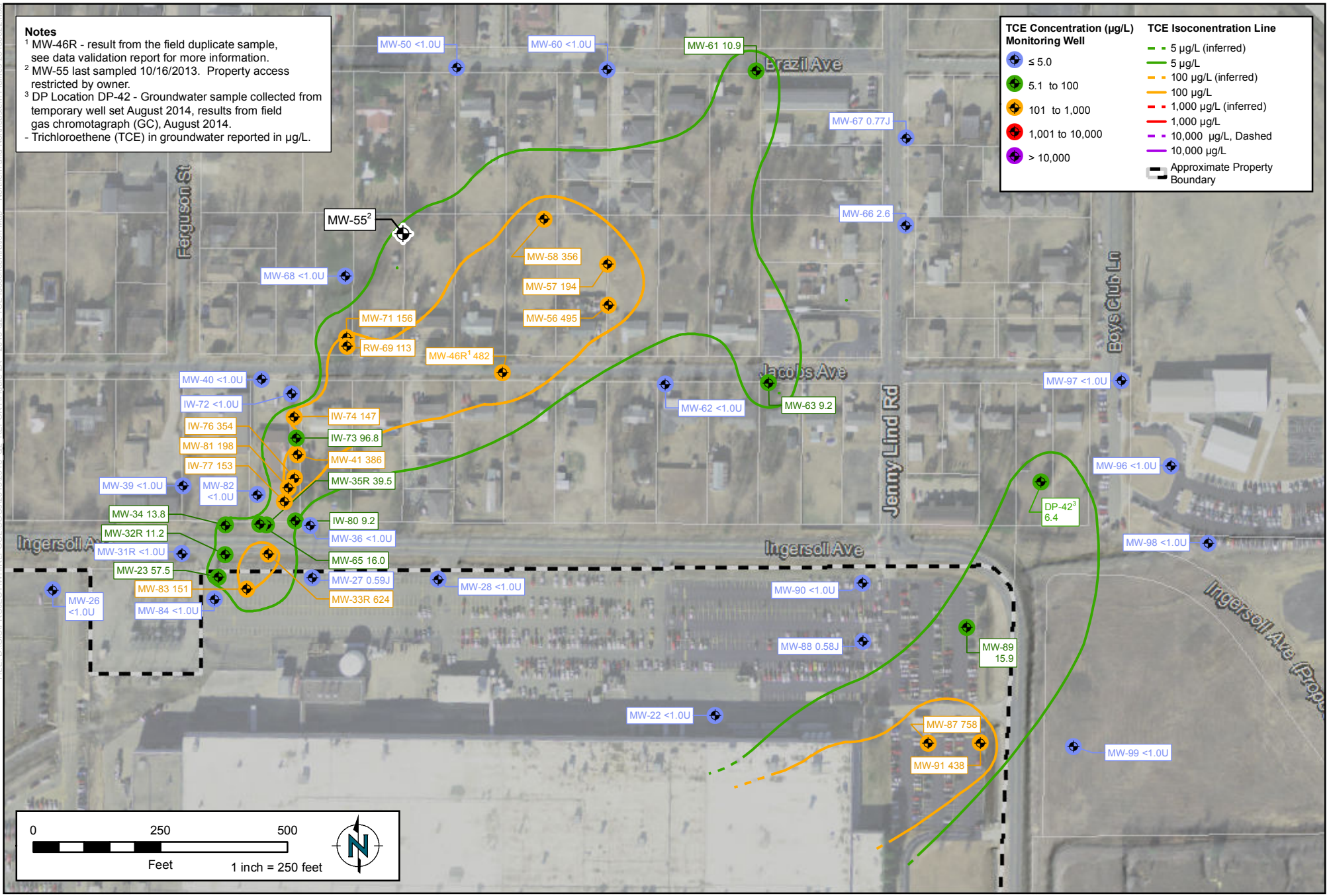
Whirlpool Facility - Fort Smith, Arkansas

Figure 1

DRAFTED BY: KTS

DATE: 06/11/2015

PROJECT: 3434446A



FILE: D:\GIS\PROJECTS\WHIRLPOOL\DOCs\20150915_Q2_REPORT\Figure 2A – 2015 Q2 TCE Isoconcentration Map – Northern and Northeastern Plumes 20150622.mxd

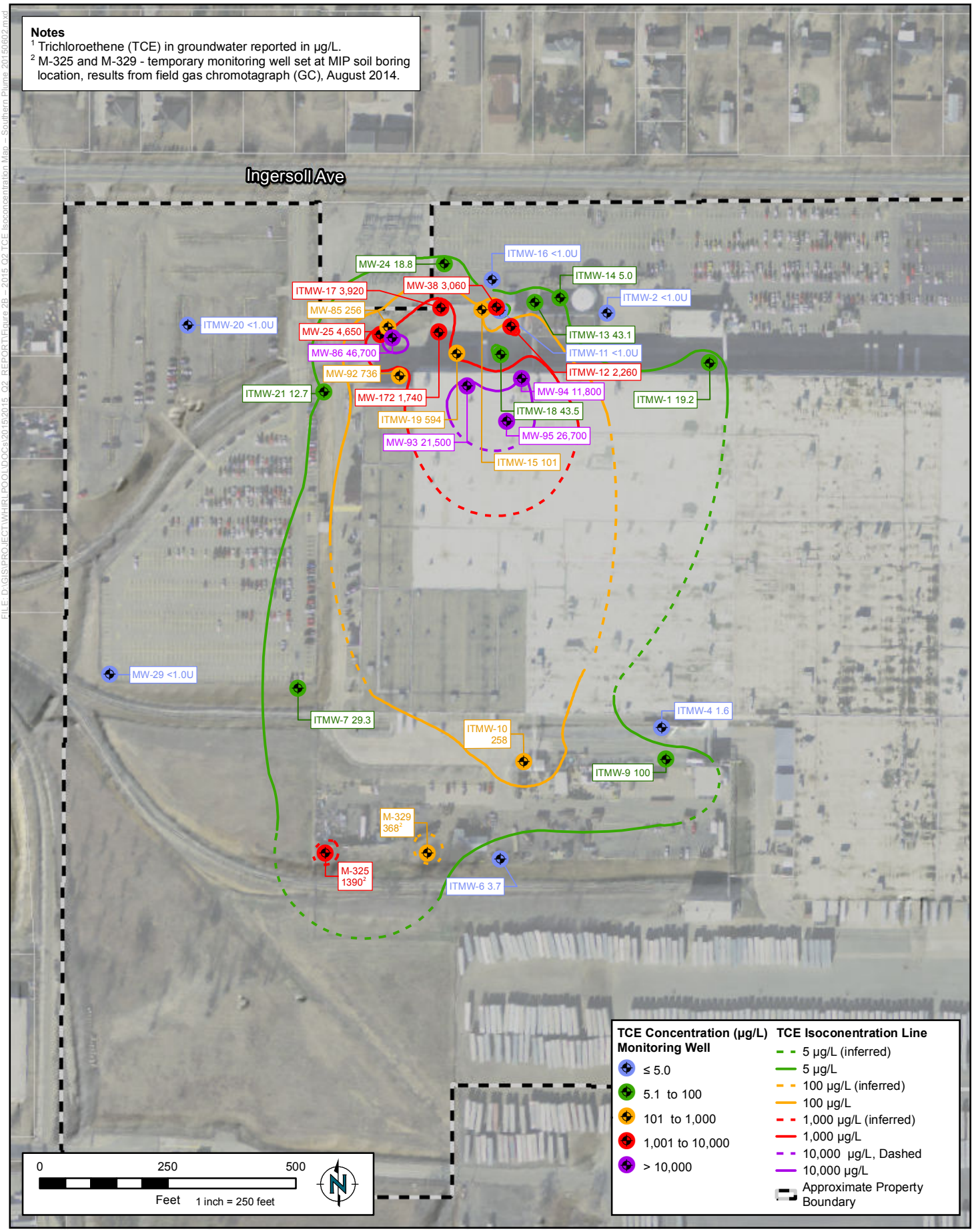
RAMBOLL ENVIRON

2015 SECOND QUARTER TCE ISOCONCENTRATION MAP NORTHERN AND NORTHEASTERN PLUMES

Whirlpool Facility - Fort Smith, Arkansas

Figure 2A

DRAFTED BY: KTS	DATE: 07/13/2015	PROJECT: 3437470A



RAMBOLL ENVIRON

SECOND QUARTER 2015 TCE ISOCONCENTRATION MAP SOUTHERN PLUME

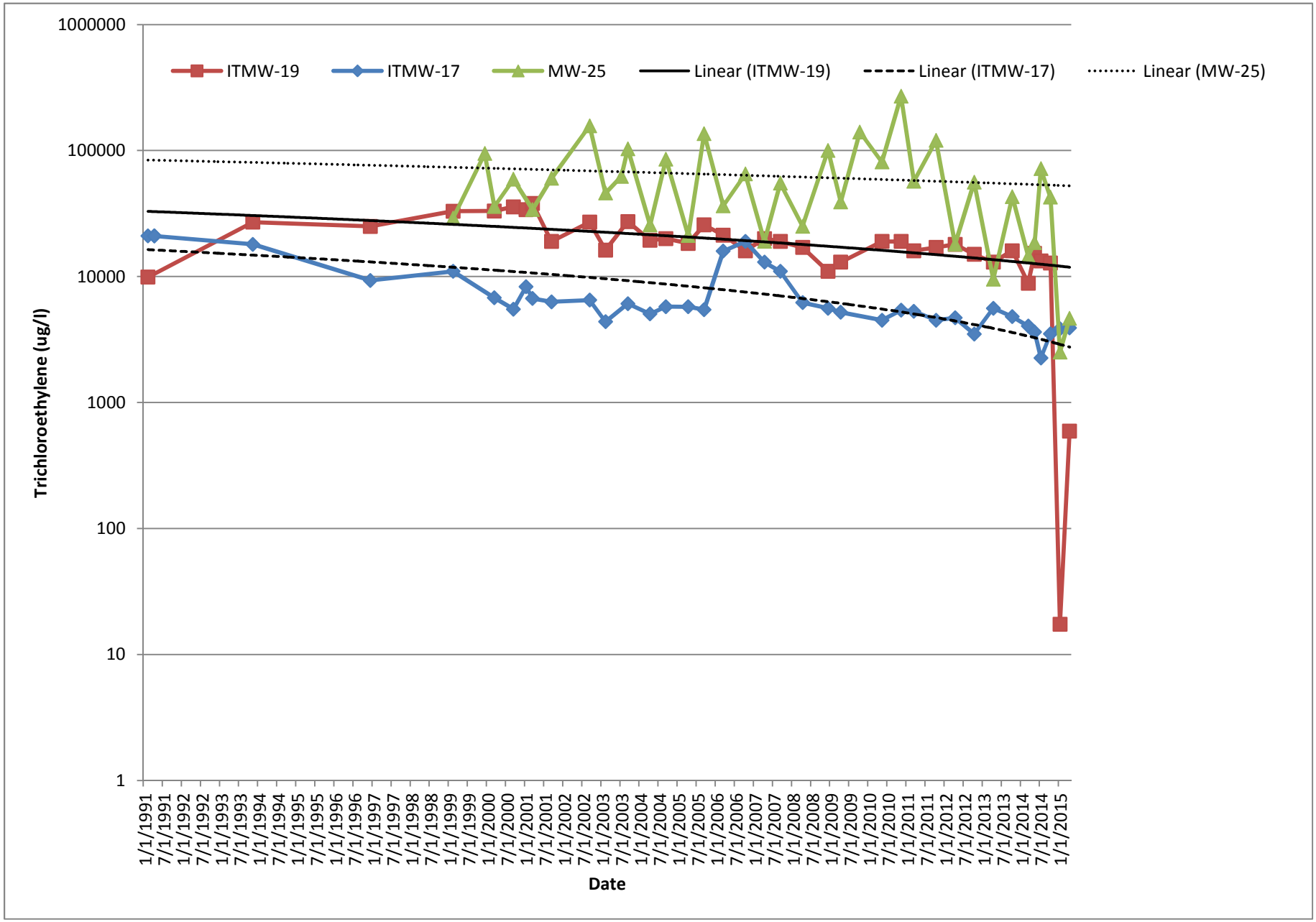
Whirlpool Facility - Fort Smith, Arkansas

Figure 2B

DRAFTED BY: KTS | DATE: 06/02/2015 | PROJECT: 3437470A

FILE: D:\GIS\PROJECT\WHIRLPOOL\DOCS\20150216_02_REPORT\Figure 2B - 2015 02 TCE Isoconcentration Map - Southern Plume 20150602.mxd

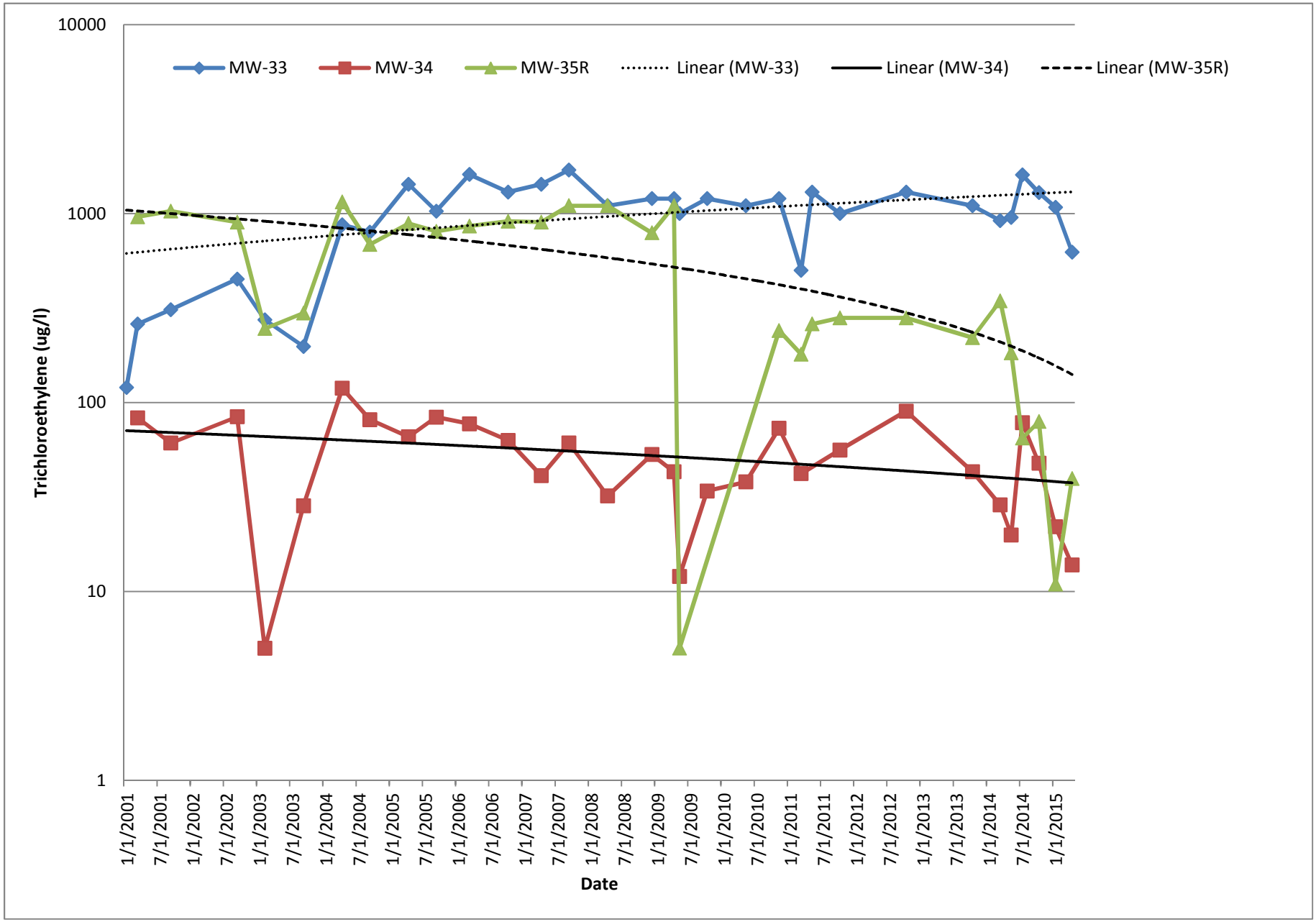
TCE Concentration with Time at Source Area Onsite Wells



RAMBOLL ENVIRON

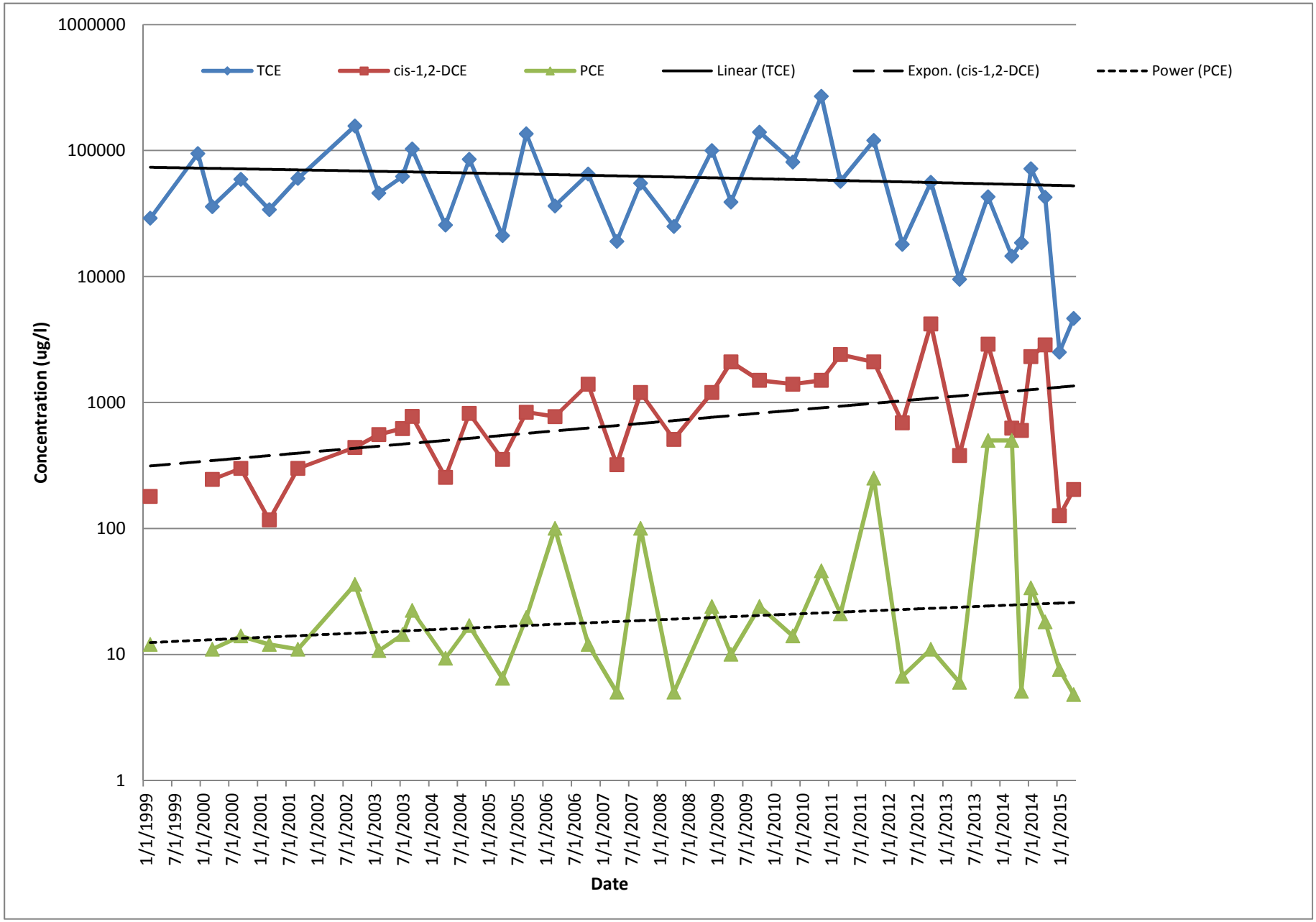
Figure 3
Whirlpool Facility
Fort Smith, Arkansas

TCE Concentration with Time at Northern Onsite Wells



RAMBOLL ENVIRON

Figure 4
Whirlpool Facility
Fort Smith, Arkansas



RAMBOLL ENVIRON

Figure 5
Whirlpool Facility
Fort Smith, Arkansas

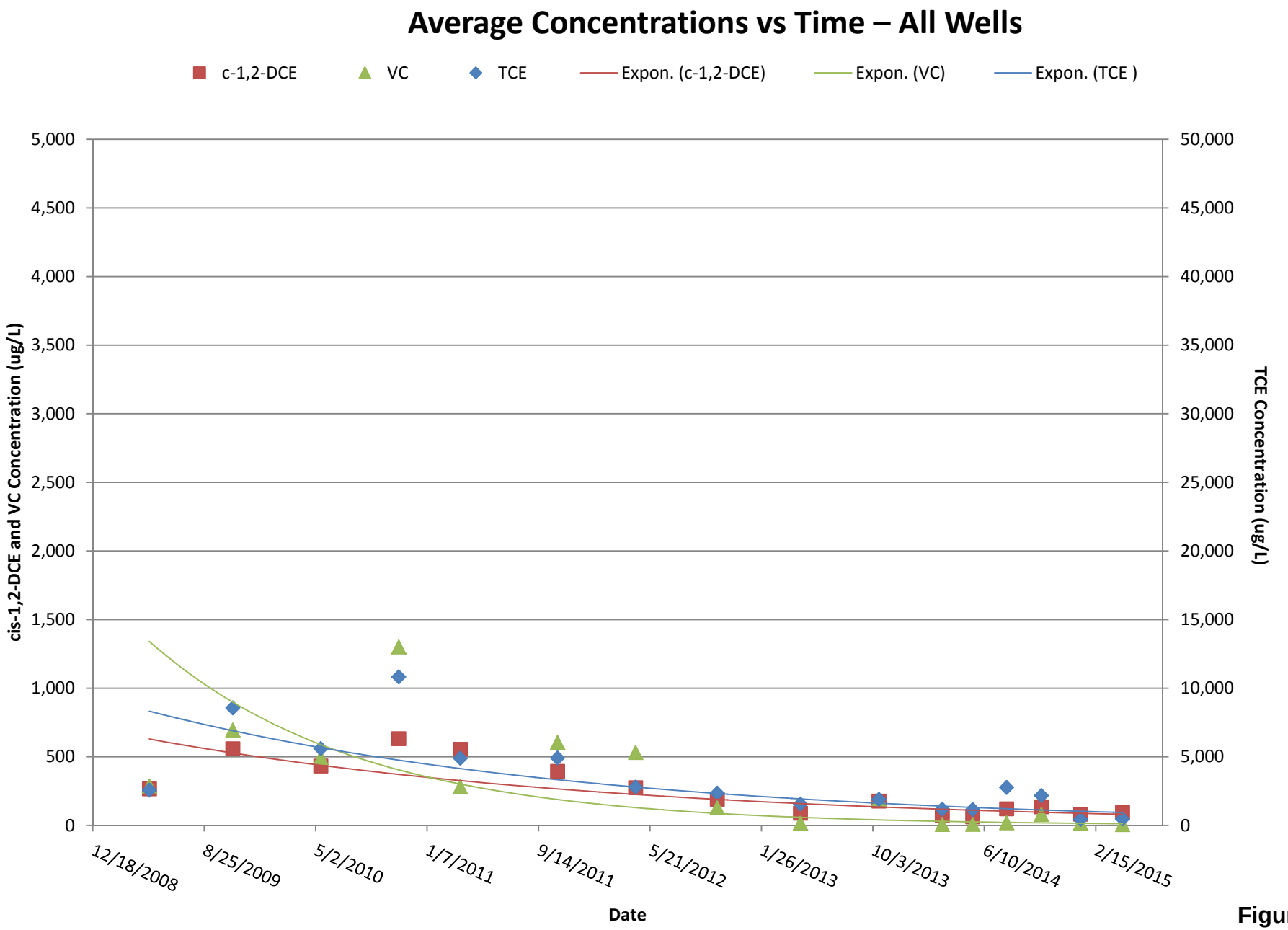


Figure 6
Whirlpool Facility
Fort Smith, Arkansas

RAMBOLL ENVIRON

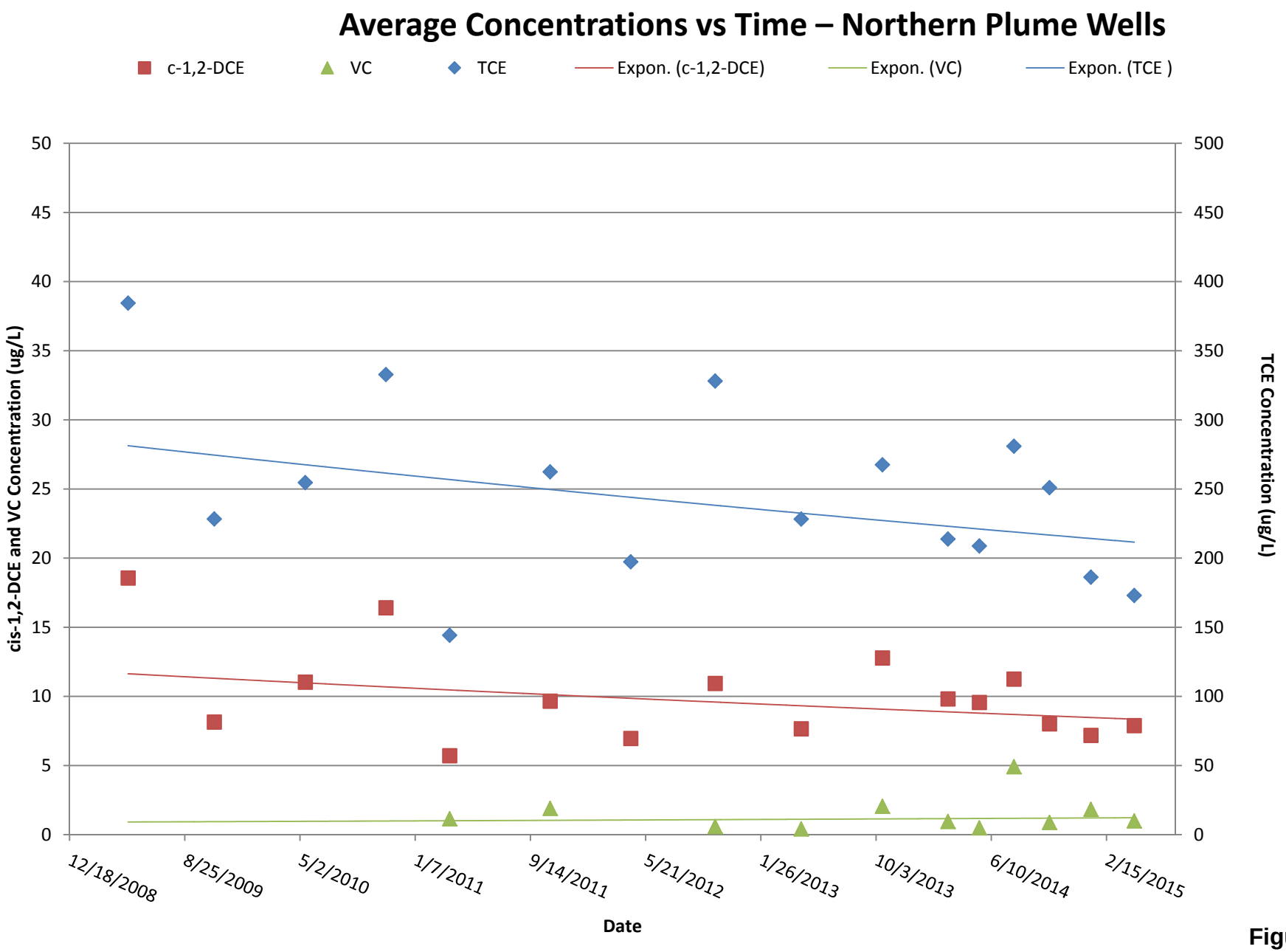


Figure 7
Whirlpool Facility
Fort Smith, Arkansas

RAMBOLL ENVIRON

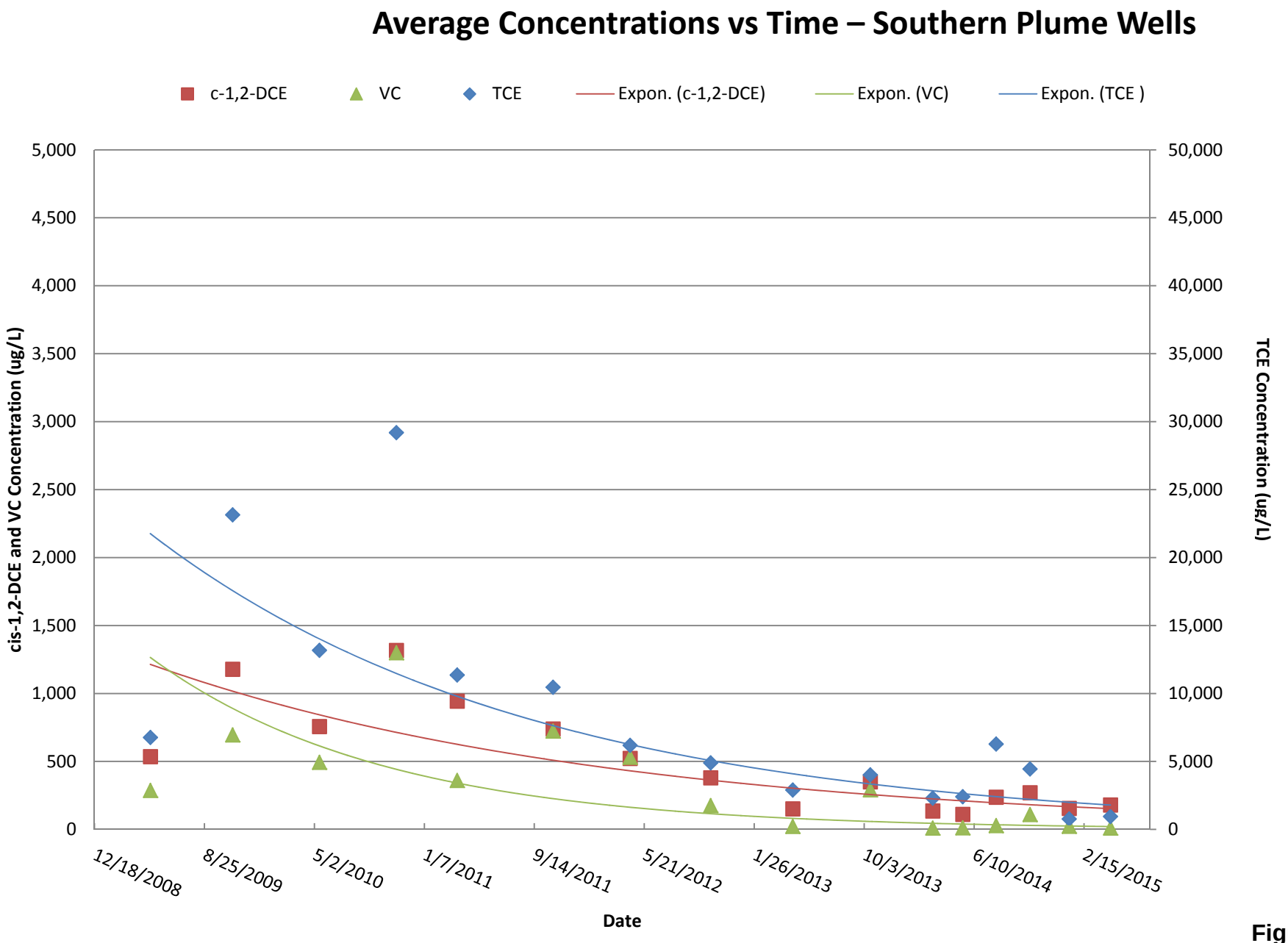


Figure 8
Whirlpool Facility
Fort Smith, Arkansas

RAMBOLL ENVIRON

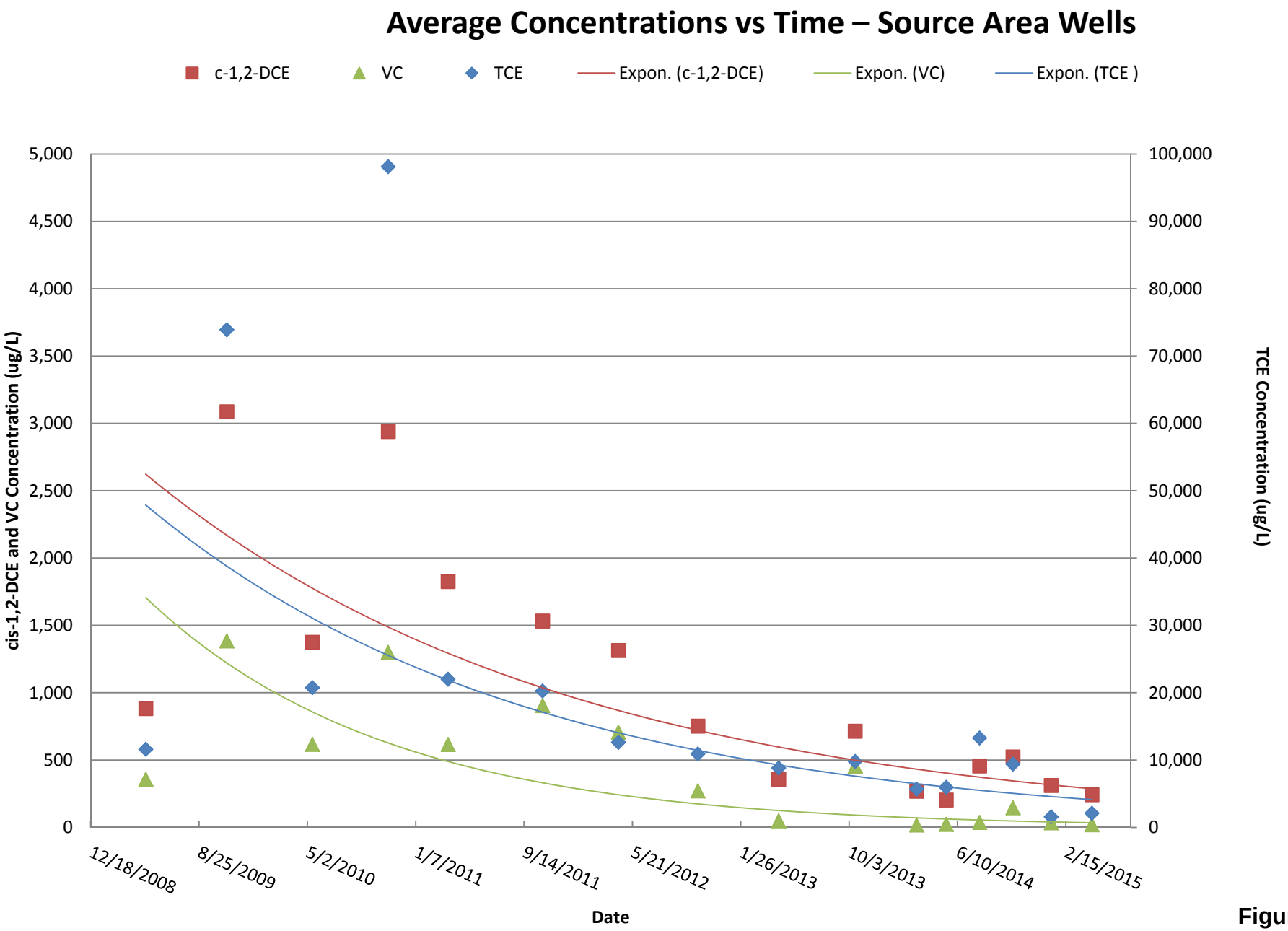


Figure 9
Whirlpool Facility
Fort Smith, Arkansas

RAMBOLL ENVIRON

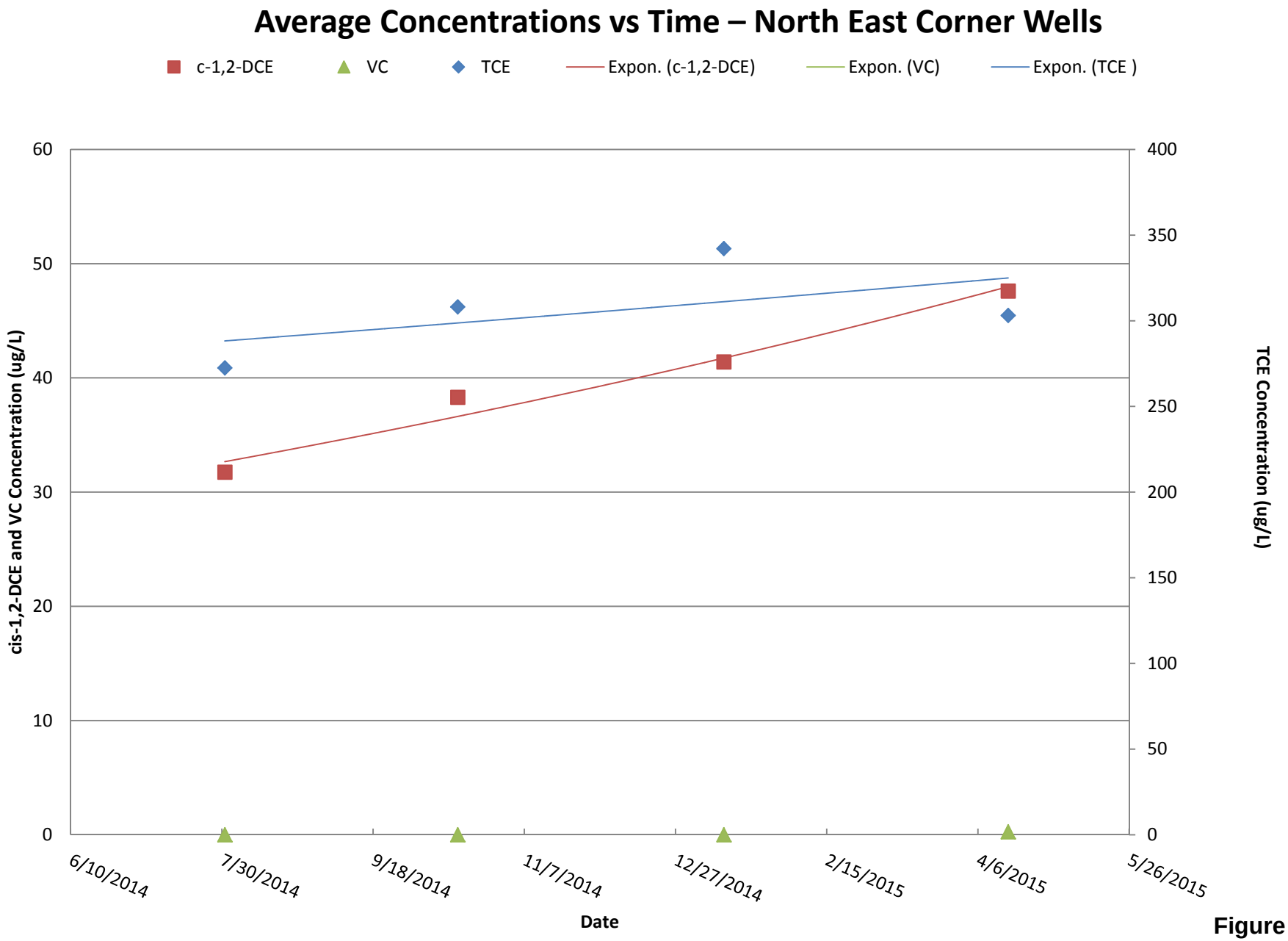
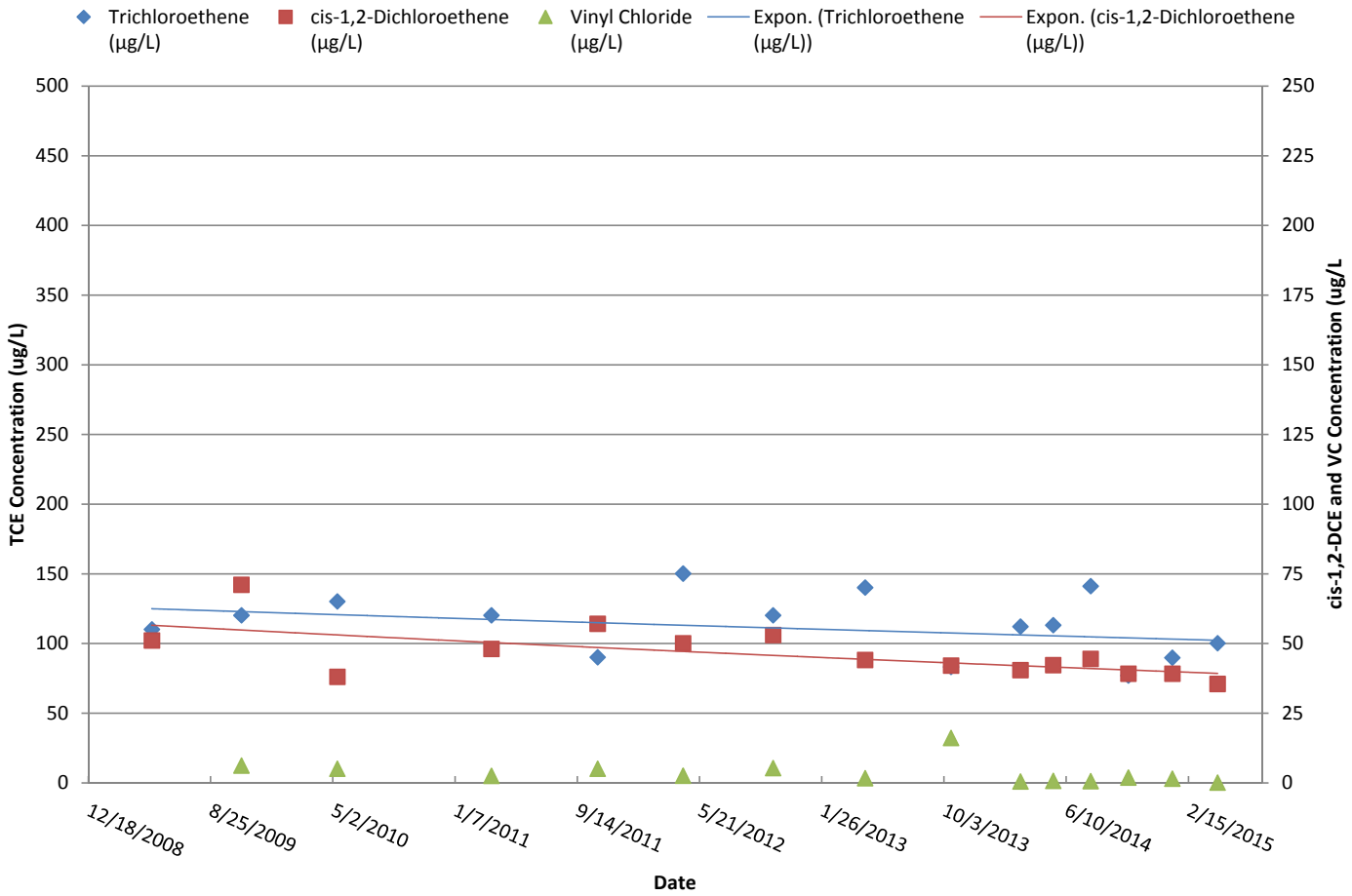


Figure 10
Whirlpool Facility
Fort Smith, Arkansas

RAMBOLL ENVIRON

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



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

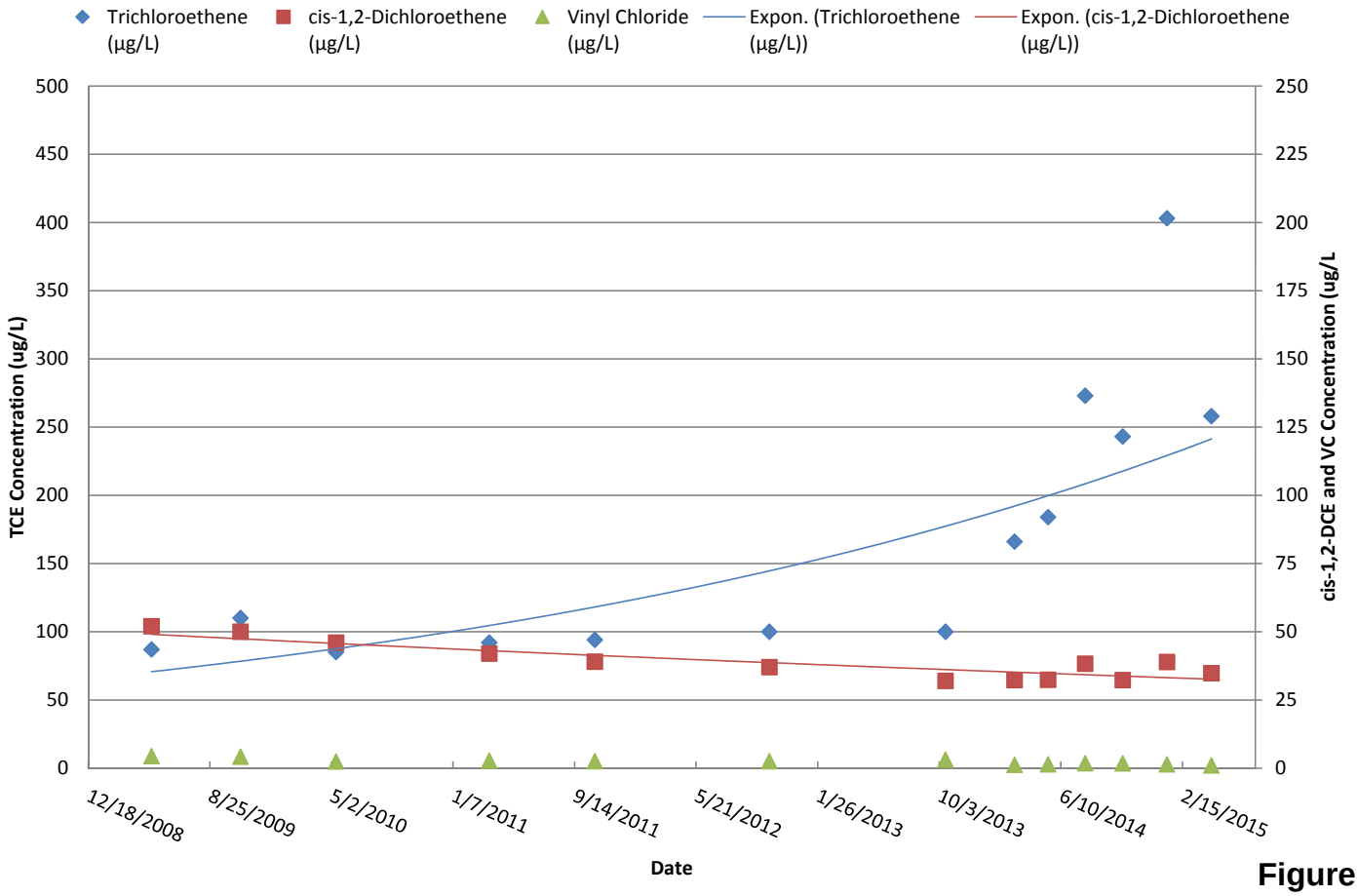
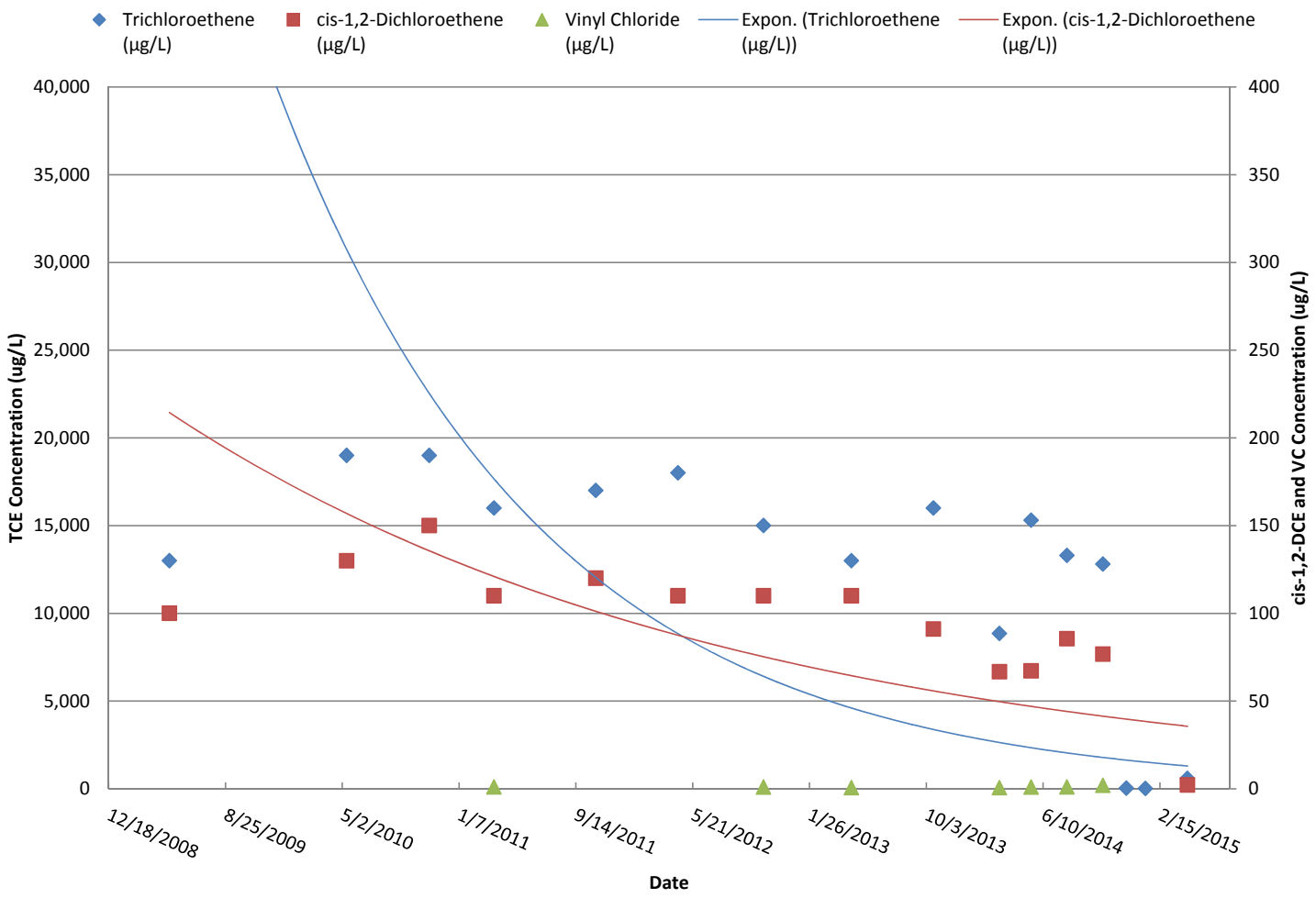


Figure 11
Whirlpool Facility
Fort Smith, Arkansas



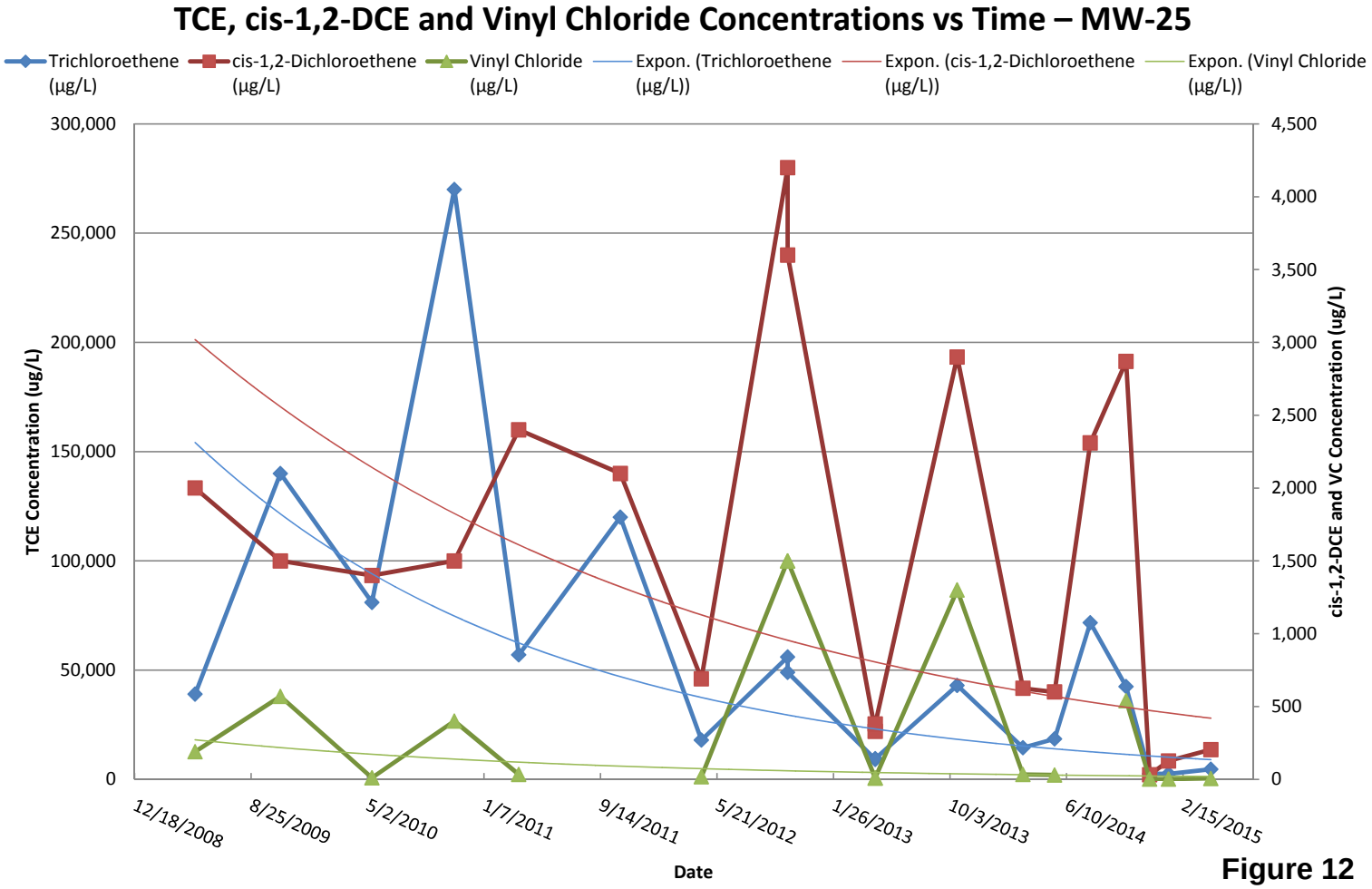
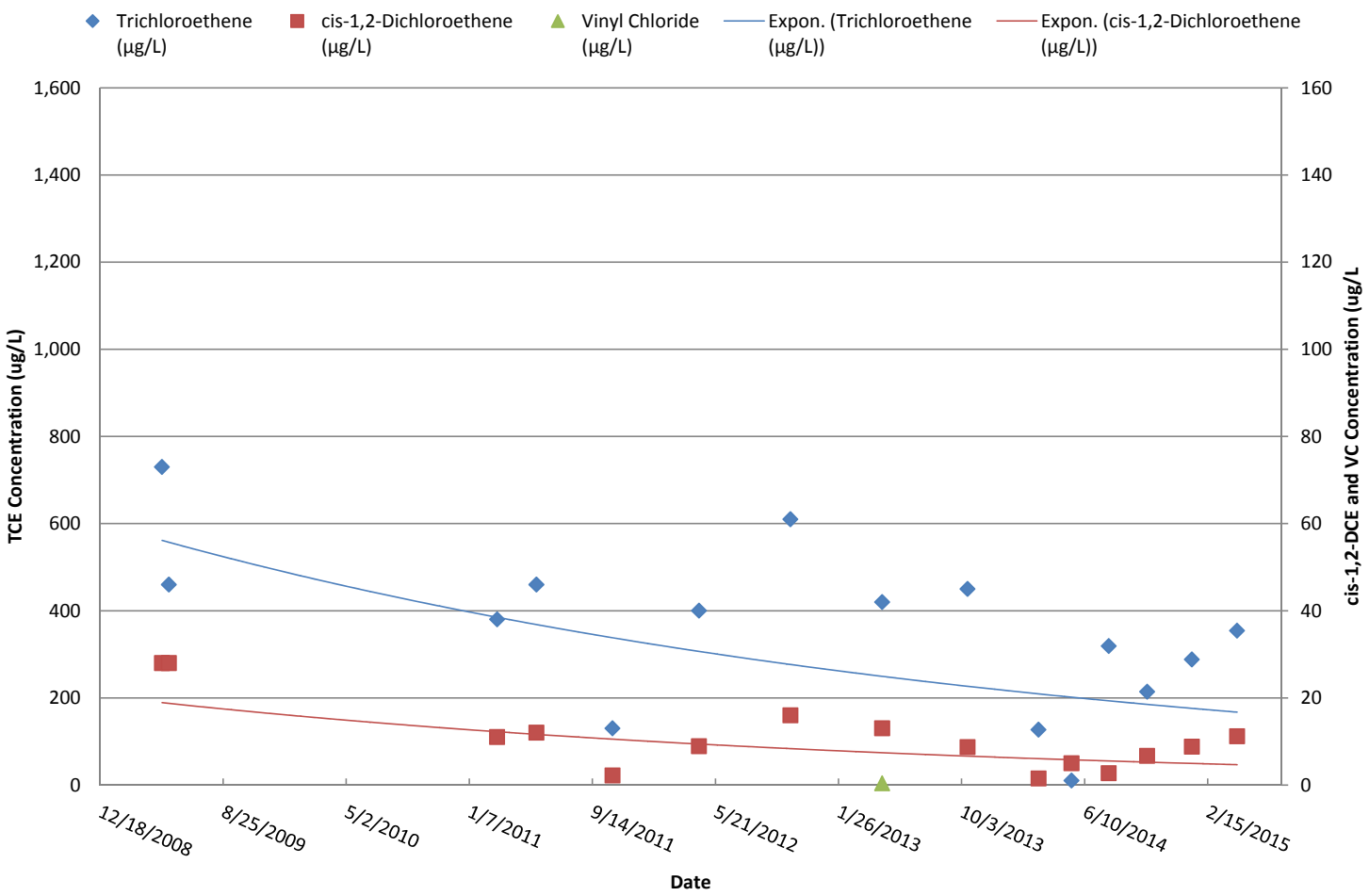


Figure 12
Whirlpool Facility
Fort Smith, Arkansas

RAMBOLL ENVIRON



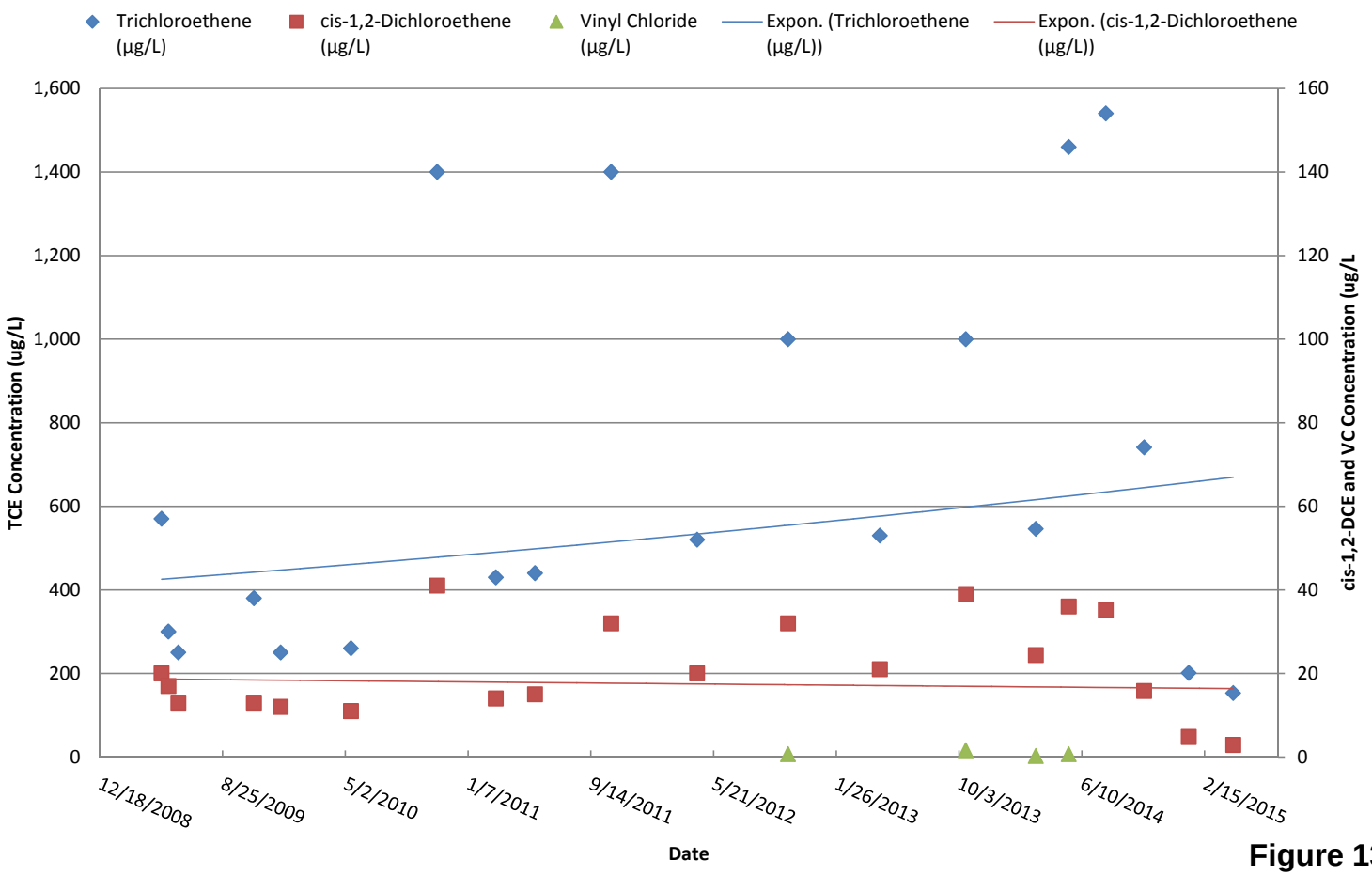


Figure 13
Whirlpool Facility
Fort Smith, Arkansas

RAMBOLL ENVIRON

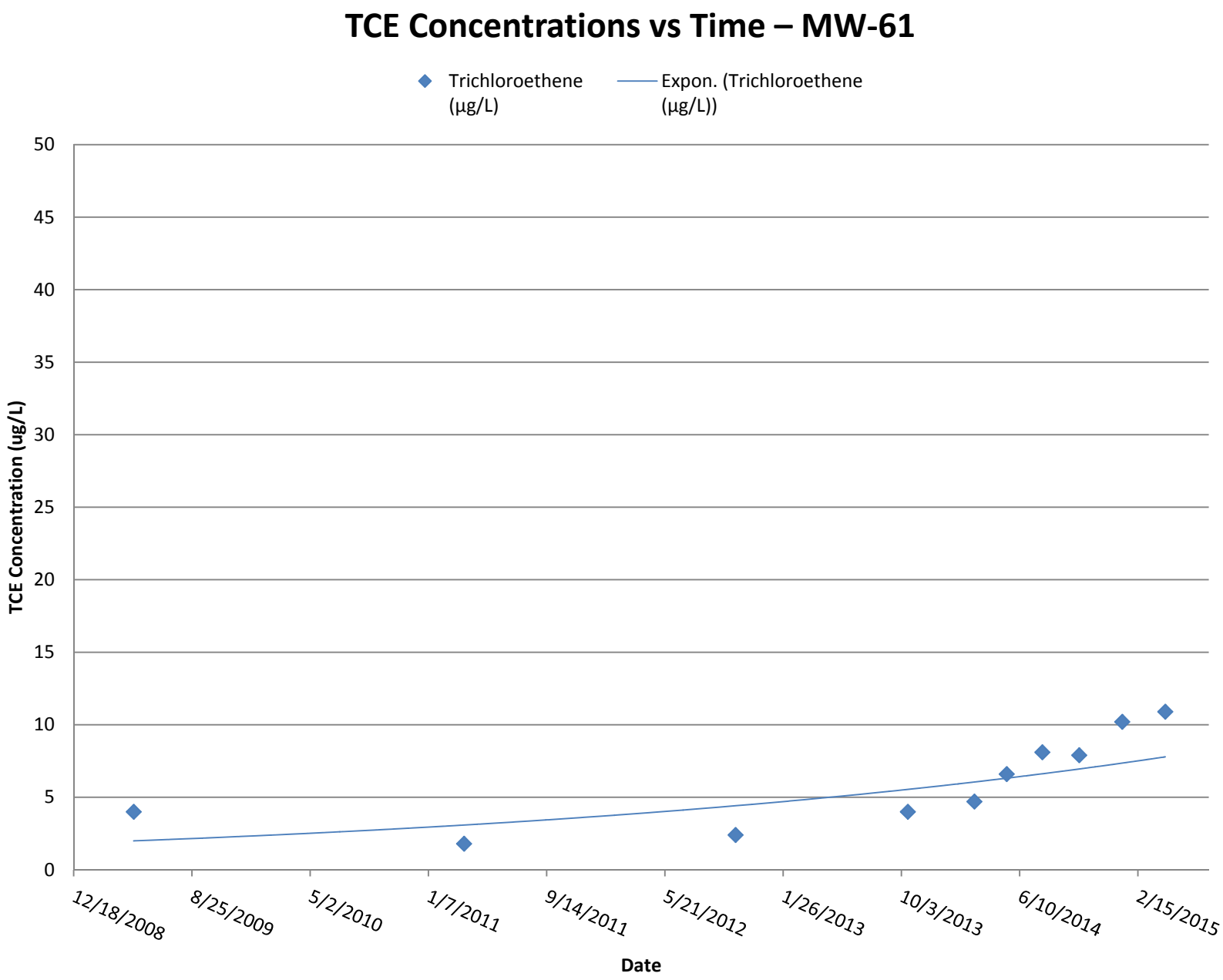


Figure 14
Whirlpool Facility
Fort Smith, Arkansas

RAMBOLL ENVIRON

Appendix A

Second quarter 2015 Calibration Logs

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/13/15

Calibrated by: VS/RL

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes): Lot # 4AH648 Exp 8/2015

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

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

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor. Lot #7960 Exp 6/2019
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. Lot # 4AF624 Exp: 9/2016
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. Lot# 4A5507 Exp: 10/2016
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor. Lot # 4A5289 Exp: 6/2016
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1228 + 10min = 1238
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.01 in. x 25.4 = 762.25 mmHg - 15.169 = 747.09 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 17506

1. Specific Conductance: 1.389
2. ORP: 246.2
3. pH:
   - Point 1: 6.56
   - Point 2: 9.80
   - Point 3: ~~4.19~~ 4.19
4. DO: 11.56

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/13/15

Calibrated by: J. Stumpf

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1328 + 10min = 1400
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.01 in. x 25.4 = 762.3 mmHg - 15.169 = 747.1 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 011871

1. Specific Conductance: 1.413
2. ORP: 240
3. pH:
   - Point 1: 7.00
   - Point 2: 10.00
   - Point 3: 4.00
4. DO: 98.3

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/13/2015

Calibrated by: J. Myers

Turn on YSI. Note time on line 38!

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

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

1.341 mS/cm 1.342 mS/cm

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

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

ORP 240.1

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below. 6.94
4. Discard used calibration standard, and rinse calibration cup and probes with DI water. ~~6.88 pH Jm~~

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water. 9.94

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below. 4.02
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1345 + 10min = ~~1354~~ 1355
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.01 in. x 25.4 = 762.3 mmHg - 15.169 = 747.1 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water. ✓

94.3%

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 14C101342

1. Specific Conductance: 1.342 mS/cm
2. ORP: 240.1
3. pH:
   - Point 1: 6.94
   - Point 2: 9.99
   - Point 3: 4.02
4. DO: 94.3

Colorimeter Model/Serial Number: 14824

Turbidity Meter Model/Serial Number: 0180884

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/13/2015

Calibrated by: WES

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1230 + 10min = 1240
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.01 in. x 25.4 = 762.25 mmHg - 15.169 = 747.09 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 10 K101389

1. Specific Conductance: 1.413 ms/cm
2. ORP: 240.0
3. pH:
   - Point 1: 10.00
   - Point 2: 4.00
   - Point 3: 7.00
4. DO: 100%

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4.13.2015

Calibrated by: Lucy Cross

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 2:02 + 10min = 2:12
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.01 in. x 25.4 = 762.3 mmHg - 15.169 = 747.1 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number:

1. Specific Conductance: 1.413
2. ORP: 240.0
3. pH:
   - Point 1: 7.00
   - Point 2: 10.00
   - Point 3: 4.00
4. DO: 9.26

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/13/15

Calibrated by: LUKE MARTON

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes): cur 1345 1410 + 10min = ~~1355~~ 1420 cm

1. Ensure unit has been on for at least 10 minutes: Initial time: ~~1345~~ 1410 + 10min = ~~1355~~ 1420
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.01 in. x 25.4 = 762.3 mmHg - 15.169 = 747.1 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 11K100356

1. Specific Conductance: 1.413
2. ORP: 240
3. pH:
   - Point 1: 7.00
   - Point 2: 10.01
   - Point 3: 4.03
4. DO: 98.3 – "OUT OF RANGE, LET SIT FOR ~20 MIN COULD NOT GET IN RANGE

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/14/15

Calibrated by: Rachel Lafore

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes): Exp 10/31/2015 Lot # 4AJ853

1. Pour conductivity standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in specific conductance. Note below. 1.298ms/cm
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

ORP calibration (should take *at least* 1.5 minutes): Exp 10/31/15 Lot 4AJ853

1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in ORP. Note below. 239.8
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

3-Point pH calibration (should take *at least* 4.5 minutes): Exp 8/30/16 Lot # 4AH570

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.
5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: ~~0650~~ 0653 + 10min = 0703
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.11 in. x 25.4 = 764.794 mmHg - 15.169 = 749.625 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 14L101344

1. Specific Conductance: 1,298ms/cm
2. ORP: 239.8
3. pH:
   - Point 1: 6.98
   - Point 2: ~~6.98~~ 10.12
   - Point 3: 4.04
4. DO: 114.6

Colorimeter Model/Serial Number: 05329

Turbidity Meter Model/Serial Number: 025108

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 9/14/15

Calibrated by: J. Shumpf

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0650 + 10min = 0700
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.11 in. x 25.4 = 764.8 mmHg - 15.169 = 749.6 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 011871

1. Specific Conductance: 1.413
2. ORP: 240.0
3. pH:
   - Point 1: 7.00
   - Point 2: 10.00
   - Point 3: 4.00
4. DO: 98.7

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/14/2015

Calibrated by: Lucy Cross

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 7:09 + 10min = 7:19
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.11 in. x 25.4 = 764.8 mmHg - 15.169 = 749.6 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number:

1. Specific Conductance: 1.413
2. ORP: 240.0
3. pH:
   - Point 1: 7.00
   - Point 2: 10.00
   - Point 3: 4.00
4. DO: 98.5%

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/14/15

Calibrated by: Victoria Siegler

Turn on YSI. Note time on line 38!

Specific Conductance calibration (should take *at least* 1.5 minutes): Lot # 4H 4AH648 Exp 8/2015

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

ORP calibration (should take *at least* 1.5 minutes): Lot # 7760 Exp 4/2019

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

3-Point pH calibration (should take *at least* 4.5 minutes): Lot # 4AI624 Exp 9/2016

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

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. Lot # 4AJ507 Exp 10/2016
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor. Lot # 4AJ289 Exp 6/2016
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0760 + 10min = 0710
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   _____ in. x 25.4 = _____ mmHg - 15.169 = 749.6 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 15071413

1. Specific Conductance: 1413
2. ORP: 240258
3. pH:
   - Point 1: 7.08
   - Point 2: 9.93
   - Point 3: 3.94
4. DO: ~~258~~ 9.14

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/14/2015

Calibrated by: MES

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 720 . + 10min = 820
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   _____ in. x 25.4 = _____ mmHg - 15.169 = 749. mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 10K101389

1. Specific Conductance: 1.413 ms/cm3
2. ORP: 240.1
3. pH:
   - Point 1: 4.00 mes
   - Point 2: ~~10.00~~ 9.99
   - Point 3: 6.73
4. DO: 9.08

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/14/15

Calibrated by: LUM MARTON

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0717 + 10min = 0727
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   _____ in. x 25.4 = _____ mmHg - 15.169 = 749.6 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 06H100389

1. Specific Conductance: 1.413
2. ORP: 240.0
3. pH:
   - Point 1: 7.00
   - Point 2: 10.00
   - Point 3: 4.03
4. DO: 98.0

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/14/2015

Calibrated by: J. Myers

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0655 + 10min = 0705
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.11 in. x 25.4 = 764.8 mmHg - 15.169 = 749.6 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

✓Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: ~~14F~~ 14610342

1. Specific Conductance: 1413
2. ORP: 240
3. pH:
   - Point 1: 6.92 → 7.0
   - Point 2: 10.15 → 10.0
   - Point 3: 4.24 → 4.04
4. DO: 98.6%

Colorimeter Model/Serial Number: 14824

Turbidity Meter Model/Serial Number: 016064

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/15/2015

Calibrated by: JM

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0651 + 10min = 0701
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.97 in. x 25.4 = 761.24 mmHg - 15.169 = 746.07 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 14616134?

1. Specific Conductance: 1491 → 1413
2. ORP: 238.1 → 240.0
3. pH:
   - Point 1: 4.03 → 4.00
   - Point 2: 6.96 → 7.00
   - Point 3: 10.02 → 10.00
4. DO: 97.1 → 99.1

Colorimeter Model/Serial Number: 14824

Turbidity Meter Model/Serial Number: 01480H

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/15/2015

Calibrated by: Lizy Cross

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 7:11 + 10min = 7:21
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.97 in. x 25.4 = 761.238 mmHg - 15.169 = 746.069 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number:

1. Specific Conductance: 1.413
2. ORP: 240.0
3. pH:
   - Point 1: 7.00
   - Point 2: 10.00
   - Point 3: 4.00
4. DO: 94.5

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/15/15

Calibrated by: LUCY MARTON

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 703 + 10min = 713
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   _____ in. x 25.4 = _____ mmHg - 15.169 = 747.593 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 11K100350 10F102253 APPEARED OFF. RECALIBRATED AT 0917

1. Specific Conductance: 1.413 1.413
2. ORP: 240
3. pH:
   - Point 1: 7.0 7.0
   - Point 2: 10.0 4.0
   - Point 3: 4.02 9.98
4. DO: 93.4 98.4

DO WOULD NOT CALIBRATE, SWITCHED YSI's & CALIBRATED 10F102253

NOTE: WHILE AT IMW-18, DO CALIBRATION

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/15/2015

Calibrated by: UKS

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 600 + 10min = 610
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.97 in. x 25.4 = 761.238 mmHg - 15.169 = 746.069 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 10K101390

1. Specific Conductance: 1413 us/cm
2. ORP: 240.0
3. pH:
   - Point 1: 10.00
   - Point 2: 4.05
   - Point 3: 6.86
4. DO: 9.41 mg/L

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/15/15

Calibrated by: LUKE MARTIN

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: ~~600~~ 640 + 10min = ~~610~~ 650
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.97 in. x 25.4 = 761.238 mmHg - 15.169 = 746.069 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 11K100390

1. Specific Conductance: 1413
2. ORP: 240
3. pH:
   - Point 1: 10.0
   - Point 2: 4.0
   - Point 3: 6.96
4. DO: 98.6

NOTE - DO TOOK 3 CALIBRATIONS BEFORE IT WAS "IN RANGE"

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/15/2015

Calibrated by: Rachel LaFave

Turn on YSI. Note time on line 38!

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

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

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

Exp 10/31/15
Lot # 4AJ853

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

Lot # 7760
Exp 6/2019

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0650 + 10min = 0706
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.95 in. x 25.4 = 760.73 mmHg - 15.169 = 745.561 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 14J01344 RL

1. Specific Conductance: 1,283 - ~~could not cap~~
2. ORP: 243.0
3. pH:
   - Point 1: 6.94
   - Point 2: 10.03
   - Point 3: 4.01
4. DO: 99.8

Colorimeter Model/Serial Number: 05329

Turbidity Meter Model/Serial Number: 025108

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/15/15

Calibrated by: Victoria Siegler

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0644 + 10min = 0654
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.01 in. x 25.4 = 762.25mmHg - 15.169 = 747.09 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 17507

1. Specific Conductance: 1492
2. ORP: 235.4
3. pH:
   - Point 1: 4.58
   - Point 2: 9.87
   - Point 3: 4.36
4. DO: 9.16

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/15/15

Calibrated by: J. Stumpf

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0653 + 10min = 0703
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.97 in. x 25.4 = 761.24 mmHg - 15.169 = 746.07 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 011871

1. Specific Conductance: 1412
2. ORP: ~~237.6~~ JS 240
3. pH:
   - Point 1: 7.00
   - Point 2: 4.00
   - Point 3: 10.01
4. DO: 98.2

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/15/15

Calibrated by: VS

Turn on YSI. Note time on line 38!

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

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

ORP calibration (should take *at least* 1.5 minutes): Lot #7760 Exp 6/2019

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. Lot# 4AI6024 Exp 9/2016
2. Allow *1 minute* for temperature stabilization.
3. Press "calibrate" after *30 seconds* of no significant change in pH. Note below.
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. Lot #4AJ507
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note below Exp 10/2016
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor. Lot # 4AJ289 Exp 6/2016
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0944 + 10min = 0954
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.97 in. x 25.4 = 761.24 mmHg - 15.169 = 746.07 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number:

1. Specific Conductance: 1153
2. ORP: 239.5
3. pH:
   - Point 1: 6.95
   - Point 2: 9.85
   - Point 3: ~~6.85~~ 4.18
4. DO: ~~#63~~ 10.01

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/16/15

Calibrated by: J. Myers

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1655 + 10min = 0705
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.01 in. x 25.4 = 762.25 mmHg - 15.169 = 747.085 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 14610342

1. Specific Conductance: 1283 → 1413
2. ORP: 238.4 → 240
3. pH:
   - Point 1: 7.06 → 7.0
   - Point 2: 10.03 → 10.0
   - Point 3: 4.07 → 4.01
4. DO: 107.3 → 98.3%

Colorimeter Model/Serial Number: 14824

Turbidity Meter Model/Serial Number: 0140484

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4-16-2015

Calibrated by: Lucy Cross

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 7:35 + 10min = 7:45
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.01 in. x 25.4 = 762.25 mmHg - 15.169 = 747.085 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 12441

1. Specific Conductance: 1.413
2. ORP: 240.1
3. pH:
   - Point 1: 7.00
   - Point 2: 10.00
   - Point 3: 4.00
4. DO: 95.5%

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/16/15

Calibrated by: J. Stumpf

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0647 + 10min = 0657
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.01 in. x 25.4 = 762.25 mmHg - 15.169 = 747.593 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 011871

1. Specific Conductance: 1413
2. ORP: 240
3. pH:
   - Point 1: 4.00
   - Point 2: 7.00
   - Point 3: 10.01
4. DO: 98.4

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/16/15

Calibrated by: Rachel LaFiore

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0648 + 10min = 0658
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.02 in. x 25.4 = 762.508 mmHg - 15.169 = 747.339 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 14L101344

1. Specific Conductance: 1.685
2. ORP: 240.1
3. pH:
   - Point 1: 3.98
   - Point 2: 10.07
   - Point 3: 6.98
4. DO: 98.8

Colorimeter Model/Serial Number: 05329

Turbidity Meter Model/Serial Number: 025108

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 4/16/2015

Calibrated by: WES

Turn on YSI. Note time on line 38!

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

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 620 + 10min =_____
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.03 in. x 25.4 = _____ mmHg - 15.169 = 747.593 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 10K101389

1. Specific Conductance: 1413 uS/cm
2. ORP: 240.0
3. pH:
   - Point 1: 10.00
   - Point 2: 4.01
   - Point 3: 6.87
4. DO: 9.58

Colorimeter Model/Serial Number:

Turbidity Meter Model/Serial Number:

Appendix B

Laboratory Analytical Data

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

April 29, 2015

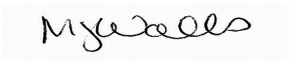
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 14, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

Pace Analytical Services, Inc.
9608 Loiret Blvd.
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CERTIFICATIONS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

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

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

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SAMPLE SUMMARY

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60191794001	**MW-68-201504**	Water	04/13/15 14:45	04/14/15 01:30
60191794002	**ITMW-20-201504**	Water	04/13/15 15:35	04/14/15 01:30
60191794003	**MW-28-201504**	Water	04/13/15 15:00	04/14/15 01:30
60191794004	**EB-07-201504**	Water	04/13/15 16:45	04/14/15 01:30
60191794005	**TB-01-201504**	Water	04/13/15 14:45	04/14/15 01:30
60191794006	**MW-22-201504**	Water	04/13/15 16:45	04/14/15 01:30
60191794007	**MW-26-201504**	Water	04/13/15 15:40	04/14/15 01:30
60191794008	**TB-02-201504**	Water	04/13/15 14:45	04/14/15 01:30
60191794009	**MW-27-201504**	Water	04/13/15 16:15	04/14/15 01:30

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SAMPLE ANALYTE COUNT

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60191794001	**MW-68-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191794002	**ITMW-20-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191794003	**MW-28-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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

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SAMPLE ANALYTE COUNT

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191794004	**EB-07-201504**	EPA 5030B/8260	PGH	38	PASI-K
60191794005	**TB-01-201504**	EPA 5030B/8260	PGH	38	PASI-K
60191794006	**MW-22-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191794007	**MW-26-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191794008	**TB-02-201504**	EPA 5030B/8260	PGH	38	PASI-K
60191794009	**MW-27-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D

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PROJECT NARRATIVE

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Method: **EPA 8015 - Alcohol**
Description: Alcohol by Direct Inject GCFID
Client: Environ_AR
Date: April 29, 2015

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: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Environ_AR
Date: April 29, 2015

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: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 29, 2015

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

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

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

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

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

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

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

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

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

QC Batch: MSV/68904

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191794002,60191794003

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

- MS (Lab ID: 1551635)
  - Vinyl chloride

Additional Comments:

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PROJECT NARRATIVE

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: Environ_AR
Date: April 29, 2015

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.

Additional Comments:

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PROJECT NARRATIVE

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Method: **SM 3500-Fe B#4**
Description: Iron, Ferric (Calculation)
Client: Environ_AR
Date: April 29, 2015

General Information:
6 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:

Pace Analytical Services, Inc.
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PROJECT NARRATIVE

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: April 29, 2015

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

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

H6: Analysis initiated outside of the 15 minute EPA recommended holding time.
- ITMW-20-201504 (Lab ID: 60191794002)
- MW-22-201504 (Lab ID: 60191794006)
- MW-26-201504 (Lab ID: 60191794007)
- MW-27-201504 (Lab ID: 60191794009)
- MW-28-201504 (Lab ID: 60191794003)
- MW-68-201504 (Lab ID: 60191794001)

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

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

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

Additional Comments:

Analyte Comments:

QC Batch: WET/54388

1e: Field pH
- ITMW-20-201504 (Lab ID: 60191794002)
  - pH at 25 Degrees C
- MW-22-201504 (Lab ID: 60191794006)
  - pH at 25 Degrees C
- MW-26-201504 (Lab ID: 60191794007)
  - pH at 25 Degrees C
- MW-27-201504 (Lab ID: 60191794009)
  - pH at 25 Degrees C
- MW-28-201504 (Lab ID: 60191794003)
  - pH at 25 Degrees C
- MW-68-201504 (Lab ID: 60191794001)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Environ_AR
Date: April 29, 2015

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/54112

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191794002

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

- MS (Lab ID: 1549880)
  - 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: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Environ_AR
Date: April 29, 2015

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.

Additional Comments:

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PROJECT NARRATIVE

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Method: **EPA 350.1**
Description: 350.1 Ammonia
Client: Environ_AR
Date: April 29, 2015

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/33661

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191753002,60191754001

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

- MS (Lab ID: 1551368)
  - Nitrogen, Ammonia
- MS (Lab ID: 1551369)
  - 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: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Environ_AR
Date: April 29, 2015

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/33629

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191794002,60191794003

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

- MS (Lab ID: 1549746)
  - Nitrogen, NO2 plus NO3

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: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Method: **SM 4500-CO2 D**
Description: Total Carbon Dioxide Calc
Client: Environ_AR
Date: April 29, 2015

General Information:
6 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: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Method: **SM 5310C**
Description: 5310C TOC
Client: Environ_AR
Date: April 29, 2015

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.

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: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Method: **SM 4500-P E**
Description: SM4500P-E, Total Phosphorus
Client: Environ_AR
Date: April 29, 2015

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/7911

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s):
60191794002,60191794003,7525099001

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

- MS (Lab ID: 134630)
  - 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: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Sample: MW-68-201504 **Lab ID: 60191794001** Collected: 04/13/15 14:45 Received: 04/14/15 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1980	1		04/20/15 16:57	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**24.9J**	ug/L	50.0	9.0	1	04/14/15 14:45	04/15/15 12:46	7439-89-6	
Manganese	**851**	ug/L	5.0	2.4	1	04/14/15 14:45	04/15/15 12:46	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/17/15 22:58	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/17/15 22:58	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/17/15 22:58	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/17/15 22:58	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/17/15 22:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/17/15 22:58	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/17/15 22:58	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/17/15 22:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/17/15 22:58	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:58	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/17/15 22:58	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/17/15 22:58	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/17/15 22:58	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/17/15 22:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/17/15 22:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/17/15 22:58	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/17/15 22:58	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/17/15 22:58	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/17/15 22:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/17/15 22:58	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/17/15 22:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:58	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:58	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/17/15 22:58	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:58	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:58	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/17/15 22:58	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/17/15 22:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/17/15 22:58	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/17/15 22:58	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/17/15 22:58	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/17/15 22:58		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Sample: MW-68-201504 **Lab ID: 60191794001** Collected: 04/13/15 14:45 Received: 04/14/15 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**11.3J**	mg/L	20.0	2.0	1		04/17/15 09:19		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 09:19		
Alkalinity, Total as CaCO3	**11.3J**	mg/L	20.0	2.0	1		04/17/15 09:19		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.6**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/15/15 12:56	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**329**	mg/L	50.0	25.0	50		04/23/15 15:04	16887-00-6	
Sulfate	**0.94J**	mg/L	1.0	0.24	1		04/23/15 14:50	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/17/15 14:50	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.014	1		04/15/15 11:08		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 11:08		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.014	1		04/15/15 11:08		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/23/15 14:59	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.10**	mg/L	0.030	0.010	1	04/20/15 09:31	04/20/15 13:27		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Sample: ITMW-20-201504 **Lab ID: 60191794002** Collected: 04/13/15 15:35 Received: 04/14/15 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1980	1		04/20/15 17:09	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**34.8J**	ug/L	50.0	9.0	1	04/14/15 14:45	04/15/15 12:48	7439-89-6	
Manganese	**6.6**	ug/L	5.0	2.4	1	04/14/15 14:45	04/15/15 12:48	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/17/15 23:13	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/17/15 23:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/17/15 23:13	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/17/15 23:13	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/17/15 23:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/17/15 23:13	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/17/15 23:13	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/17/15 23:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/17/15 23:13	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:13	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/17/15 23:13	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/17/15 23:13	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/17/15 23:13	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/17/15 23:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/17/15 23:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/17/15 23:13	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/17/15 23:13	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/17/15 23:13	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/17/15 23:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/17/15 23:13	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/17/15 23:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:13	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:13	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/17/15 23:13	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:13	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:13	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/17/15 23:13	75-01-4	M1
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/17/15 23:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/17/15 23:13	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		04/17/15 23:13	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		04/17/15 23:13	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/17/15 23:13		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Sample: ITMW-20-201504 **Lab ID: 60191794002** Collected: 04/13/15 15:35 Received: 04/14/15 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**81.6**	mg/L	20.0	2.0	1		04/17/15 09:23		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 09:23		
Alkalinity, Total as CaCO3	**81.6**	mg/L	20.0	2.0	1		04/17/15 09:23		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.5**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/15/15 12:56	18496-25-8	M1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**107**	mg/L	10.0	5.0	10		04/23/15 20:43	16887-00-6	
Sulfate	**15.9**	mg/L	1.0	0.24	1		04/23/15 15:18	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/17/15 14:53	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.1**	mg/L	0.10	0.014	1		04/15/15 11:11		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 11:11		
Nitrogen, NO2 plus NO3	**1.1**	mg/L	0.10	0.014	1		04/15/15 11:11		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**120**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/23/15 15:12	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.025J**	mg/L	0.030	0.010	1	04/20/15 09:31	04/20/15 13:28		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Sample: MW-28-201504 **Lab ID: 60191794003** Collected: 04/13/15 15:00 Received: 04/14/15 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1980	1		04/20/15 18:16	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**242**	ug/L	50.0	9.0	1	04/14/15 14:45	04/15/15 12:55	7439-89-6	
Manganese	**37.3**	ug/L	5.0	2.4	1	04/14/15 14:45	04/15/15 12:55	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/17/15 23:28	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/17/15 23:28	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/17/15 23:28	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/17/15 23:28	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/17/15 23:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/17/15 23:28	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/17/15 23:28	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/17/15 23:28	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/17/15 23:28	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:28	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/17/15 23:28	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/17/15 23:28	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/17/15 23:28	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/17/15 23:28	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/17/15 23:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/17/15 23:28	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/17/15 23:28	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/17/15 23:28	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/17/15 23:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/17/15 23:28	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/17/15 23:28	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:28	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:28	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/17/15 23:28	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:28	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:28	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/17/15 23:28	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/17/15 23:28	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		1		04/17/15 23:28	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/17/15 23:28	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		04/17/15 23:28	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/17/15 23:28		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Sample: MW-28-201504 **Lab ID: 60191794003** Collected: 04/13/15 15:00 Received: 04/14/15 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**99.9**	mg/L	20.0	2.0	1		04/17/15 09:30		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 09:30		
Alkalinity, Total as CaCO3	**99.9**	mg/L	20.0	2.0	1		04/17/15 09:30		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**2.4**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.4**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/15/15 12:57	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**20.3**	mg/L	2.0	1.0	2		04/23/15 21:25	16887-00-6	
Sulfate	**39.9**	mg/L	2.0	0.47	2		04/23/15 21:25	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/17/15 14:54	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.014	1		04/15/15 11:09		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 11:09		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.014	1		04/15/15 11:09		M1
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**173**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.54J**	mg/L	1.0	0.50	1		04/23/15 15:38	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.17**	mg/L	0.030	0.010	1	04/20/15 09:31	04/20/15 13:28		M1

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Sample: EB-07-201504 **Lab ID: 60191794004** Collected: 04/13/15 16:45 Received: 04/14/15 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/17/15 22:43	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/17/15 22:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/17/15 22:43	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/17/15 22:43	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/17/15 22:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/17/15 22:43	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/17/15 22:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/17/15 22:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/17/15 22:43	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:43	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/17/15 22:43	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/17/15 22:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/17/15 22:43	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/17/15 22:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/17/15 22:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/17/15 22:43	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/17/15 22:43	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/17/15 22:43	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/17/15 22:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/17/15 22:43	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/17/15 22:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:43	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/17/15 22:43	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:43	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/17/15 22:43	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/17/15 22:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/17/15 22:43	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		04/17/15 22:43	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		04/17/15 22:43	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/17/15 22:43		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Sample: TB-01-201504 **Lab ID: 60191794005** Collected: 04/13/15 14:45 Received: 04/14/15 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**7.9J**	ug/L	10.0	5.0	1		04/17/15 22:28	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/17/15 22:28	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/17/15 22:28	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/17/15 22:28	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/17/15 22:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/17/15 22:28	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/17/15 22:28	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/17/15 22:28	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/17/15 22:28	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:28	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/17/15 22:28	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/17/15 22:28	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/17/15 22:28	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/17/15 22:28	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/17/15 22:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/17/15 22:28	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/17/15 22:28	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/17/15 22:28	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/17/15 22:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/17/15 22:28	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/17/15 22:28	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:28	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:28	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/17/15 22:28	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:28	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:28	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/17/15 22:28	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/17/15 22:28	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		04/17/15 22:28	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/17/15 22:28	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		04/17/15 22:28	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/17/15 22:28		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Sample: MW-22-201504 **Lab ID: 60191794006** Collected: 04/13/15 16:45 Received: 04/14/15 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1980	1		04/20/15 17:20	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**44.6J**	ug/L	50.0	9.0	1	04/14/15 14:45	04/15/15 13:06	7439-89-6	
Manganese	**103**	ug/L	5.0	2.4	1	04/14/15 14:45	04/15/15 13:06	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/17/15 23:42	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/17/15 23:42	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/17/15 23:42	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/17/15 23:42	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/17/15 23:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/17/15 23:42	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/17/15 23:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/17/15 23:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/17/15 23:42	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:42	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/17/15 23:42	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/17/15 23:42	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/17/15 23:42	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/17/15 23:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/17/15 23:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/17/15 23:42	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/17/15 23:42	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/17/15 23:42	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/17/15 23:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/17/15 23:42	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/17/15 23:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:42	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:42	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/17/15 23:42	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:42	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/17/15 23:42	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/17/15 23:42	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/17/15 23:42	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		04/17/15 23:42	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		04/17/15 23:42	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/17/15 23:42		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Sample: MW-22-201504 **Lab ID: 60191794006** Collected: 04/13/15 16:45 Received: 04/14/15 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**51.6**	mg/L	20.0	2.0	1		04/17/15 09:47		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 09:47		
Alkalinity, Total as CaCO3	**51.6**	mg/L	20.0	2.0	1		04/17/15 09:47		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.4**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/15/15 12:58	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**13.3**	mg/L	1.0	0.50	1		04/23/15 22:22	16887-00-6	
Sulfate	**14.3**	mg/L	1.0	0.24	1		04/23/15 22:22	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/17/15 14:55	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.014	1		04/15/15 11:14		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 11:14		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.014	1		04/15/15 11:14		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**456**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.60J**	mg/L	1.0	0.50	1		04/23/15 16:30	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	ND	mg/L	0.030	0.010	1	04/20/15 09:31	04/20/15 13:29		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Sample: MW-26-201504 **Lab ID: 60191794007** Collected: 04/13/15 15:40 Received: 04/14/15 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1980	1		04/20/15 17:31	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**18.6J**	ug/L	50.0	9.0	1	04/14/15 14:45	04/15/15 13:08	7439-89-6	
Manganese	**150**	ug/L	5.0	2.4	1	04/14/15 14:45	04/15/15 13:08	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**7.5J**	ug/L	10.0	5.0	1		04/17/15 23:57	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/17/15 23:57	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/17/15 23:57	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/17/15 23:57	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/17/15 23:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/17/15 23:57	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/17/15 23:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/17/15 23:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/17/15 23:57	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:57	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/17/15 23:57	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/17/15 23:57	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/17/15 23:57	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/17/15 23:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/17/15 23:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/17/15 23:57	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/17/15 23:57	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/17/15 23:57	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/17/15 23:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/17/15 23:57	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/17/15 23:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:57	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/17/15 23:57	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 23:57	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 23:57	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/17/15 23:57	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/17/15 23:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		04/17/15 23:57	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-120		1		04/17/15 23:57	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		04/17/15 23:57	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/17/15 23:57		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Sample: MW-26-201504 **Lab ID: 60191794007** Collected: 04/13/15 15:40 Received: 04/14/15 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**25.9**	mg/L	20.0	2.0	1		04/17/15 09:50		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 09:50		
Alkalinity, Total as CaCO3	**25.9**	mg/L	20.0	2.0	1		04/17/15 09:50		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.2**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/15/15 12:58	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**312**	mg/L	20.0	10.0	20		04/23/15 22:50	16887-00-6	
Sulfate	**9.7**	mg/L	1.0	0.24	1		04/23/15 22:36	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/17/15 14:56	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**2.9**	mg/L	0.10	0.014	1		04/15/15 11:12		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 11:12		
Nitrogen, NO2 plus NO3	**2.9**	mg/L	0.10	0.014	1		04/15/15 11:12		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**365**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/23/15 16:43	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	ND	mg/L	0.030	0.010	1	04/20/15 09:31	04/20/15 13:29		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Sample: TB-02-201504 **Lab ID: 60191794008** Collected: 04/13/15 14:45 Received: 04/14/15 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/17/15 22:13	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/17/15 22:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/17/15 22:13	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/17/15 22:13	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/17/15 22:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/17/15 22:13	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/17/15 22:13	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/17/15 22:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/17/15 22:13	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:13	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/17/15 22:13	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/17/15 22:13	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/17/15 22:13	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/17/15 22:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/17/15 22:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/17/15 22:13	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/17/15 22:13	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/17/15 22:13	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/17/15 22:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/17/15 22:13	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/17/15 22:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:13	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:13	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/17/15 22:13	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/17/15 22:13	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/17/15 22:13	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/17/15 22:13	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/17/15 22:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/17/15 22:13	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		04/17/15 22:13	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		04/17/15 22:13	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/17/15 22:13		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Sample: MW-27-201504 **Lab ID: 60191794009** Collected: 04/13/15 16:15 Received: 04/14/15 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
Alcohol by Direct Inject GCFID	Analytical Method: EPA 8015 - Alcohol								
2-Chloroethanol	ND	ug/L	10000	1980	1		04/21/15 08:44	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**1600**	ug/L	50.0	9.0	1	04/14/15 14:45	04/15/15 13:10	7439-89-6	
Manganese	**32.4**	ug/L	5.0	2.4	1	04/14/15 14:45	04/15/15 13:10	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/18/15 00:12	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/18/15 00:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/18/15 00:12	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/18/15 00:12	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/18/15 00:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/18/15 00:12	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/18/15 00:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/18/15 00:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/18/15 00:12	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/18/15 00:12	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/18/15 00:12	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/18/15 00:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/18/15 00:12	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/18/15 00:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/18/15 00:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/18/15 00:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/18/15 00:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/18/15 00:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/18/15 00:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/18/15 00:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/18/15 00:12	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/18/15 00:12	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/18/15 00:12	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/18/15 00:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/18/15 00:12	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/18/15 00:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/18/15 00:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/18/15 00:12	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/18/15 00:12	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/18/15 00:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/18/15 00:12	79-00-5	
Trichloroethene	**0.59J**	ug/L	1.0	0.50	1		04/18/15 00:12	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/18/15 00:12	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/18/15 00:12	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		04/18/15 00:12	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		04/18/15 00:12	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		04/18/15 00:12	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/18/15 00:12		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Sample: MW-27-201504 **Lab ID: 60191794009** Collected: 04/13/15 16:15 Received: 04/14/15 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**40.2**	mg/L	20.0	2.0	1		04/17/15 09:54		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 09:54		
Alkalinity, Total as CaCO3	**40.2**	mg/L	20.0	2.0	1		04/17/15 09:54		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**1.6**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.8**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/15/15 12:58	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**46.7**	mg/L	5.0	2.5	5		04/23/15 23:47	16887-00-6	
Sulfate	**14.1**	mg/L	1.0	0.24	1		04/23/15 23:33	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/17/15 14:57	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.33**	mg/L	0.10	0.014	1		04/15/15 11:13		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 11:13		
Nitrogen, NO2 plus NO3	**0.33**	mg/L	0.10	0.014	1		04/15/15 11:13		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**172**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.72J**	mg/L	1.0	0.50	1		04/23/15 16:57	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**1.4**	mg/L	0.030	0.010	1	04/20/15 09:31	04/20/15 13:29		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

QC Batch: GCSV/3742 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60191794001, 60191794002, 60191794006, 60191794007, 60191794009

METHOD BLANK: 134598 Matrix: Water
Associated Lab Samples: 60191794001, 60191794002, 60191794006, 60191794007, 60191794009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	04/20/15 16:13	

LABORATORY CONTROL SAMPLE: 134599

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	86400	86	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 134600 134601

Parameter	Units	60191794002 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	89200	92500	89	92	40-140	4	40	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

QC Batch: GCSV/3745
QC Batch Method: EPA 8015 - Alcohol
Analysis Method: EPA 8015 - Alcohol
Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60191794003

METHOD BLANK: 134703 Matrix: Water
Associated Lab Samples: 60191794003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	3410J	10000	04/21/15 11:53	

LABORATORY CONTROL SAMPLE: 134704

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	89200	89	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 134705 134706

Parameter	Units	60191794003 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	89200	91200	89	91	40-140	2	40	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

QC Batch: MPRP/31418 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60191794001, 60191794002, 60191794003, 60191794006, 60191794007, 60191794009

METHOD BLANK: 1549521 Matrix: Water
Associated Lab Samples: 60191794001, 60191794002, 60191794003, 60191794006, 60191794007, 60191794009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	04/15/15 12:12	
Manganese	ug/L	ND	5.0	04/15/15 12:12	

LABORATORY CONTROL SAMPLE: 1549522

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	10600	106	80-120	
Manganese	ug/L	1000	1040	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1549523 1549524

Parameter	Units	60191794002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	34.8J	10000	10000	10500	10800	105	108	75-125	3	20	
Manganese	ug/L	6.6	1000	1000	1010	1040	100	103	75-125	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1549525 1549526

Parameter	Units	60191794003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	242	10000	10000	11200	11100	110	108	75-125	1	20	
Manganese	ug/L	37.3	1000	1000	1080	1070	105	103	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

QC Batch: MSV/68904 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60191794001, 60191794002, 60191794003, 60191794004, 60191794005, 60191794006, 60191794007, 60191794008, 60191794009

METHOD BLANK: 1551596 Matrix: Water
Associated Lab Samples: 60191794001, 60191794002, 60191794003, 60191794004, 60191794005, 60191794006, 60191794007, 60191794008, 60191794009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/17/15 21:59	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/17/15 21:59	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/17/15 21:59	
1,1-Dichloroethane	ug/L	ND	1.0	04/17/15 21:59	
1,1-Dichloroethene	ug/L	ND	1.0	04/17/15 21:59	
1,2-Dichloroethane	ug/L	ND	1.0	04/17/15 21:59	
1,2-Dichloropropane	ug/L	ND	1.0	04/17/15 21:59	
2-Butanone (MEK)	ug/L	ND	10.0	04/17/15 21:59	
2-Hexanone	ug/L	ND	10.0	04/17/15 21:59	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/17/15 21:59	
Acetone	ug/L	ND	10.0	04/17/15 21:59	
Benzene	ug/L	ND	1.0	04/17/15 21:59	
Bromodichloromethane	ug/L	ND	1.0	04/17/15 21:59	
Bromoform	ug/L	ND	1.0	04/17/15 21:59	
Bromomethane	ug/L	ND	5.0	04/17/15 21:59	
Carbon disulfide	ug/L	ND	5.0	04/17/15 21:59	
Carbon tetrachloride	ug/L	ND	1.0	04/17/15 21:59	
Chlorobenzene	ug/L	ND	1.0	04/17/15 21:59	
Chloroethane	ug/L	ND	1.0	04/17/15 21:59	
Chloroform	ug/L	ND	1.0	04/17/15 21:59	
Chloromethane	ug/L	0.13J	1.0	04/17/15 21:59	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/17/15 21:59	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/17/15 21:59	
Dibromochloromethane	ug/L	ND	1.0	04/17/15 21:59	
Ethylbenzene	ug/L	ND	1.0	04/17/15 21:59	
Methylene chloride	ug/L	ND	1.0	04/17/15 21:59	
Styrene	ug/L	ND	1.0	04/17/15 21:59	
Tetrachloroethene	ug/L	ND	1.0	04/17/15 21:59	
Toluene	ug/L	ND	1.0	04/17/15 21:59	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/17/15 21:59	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/17/15 21:59	
Trichloroethene	ug/L	ND	1.0	04/17/15 21:59	
Vinyl chloride	ug/L	ND	1.0	04/17/15 21:59	
Xylene (Total)	ug/L	ND	3.0	04/17/15 21:59	
1,2-Dichloroethane-d4 (S)	%	100	80-120	04/17/15 21:59	
4-Bromofluorobenzene (S)	%	100	80-120	04/17/15 21:59	
Toluene-d8 (S)	%	98	80-120	04/17/15 21:59	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

LABORATORY CONTROL SAMPLE: 1551597

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.3	102	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.3	97	73-121	
1,1,2-Trichloroethane	ug/L	20	20.6	103	80-120	
1,1-Dichloroethane	ug/L	20	20.7	103	80-120	
1,1-Dichloroethene	ug/L	20	19.8	99	80-120	
1,2-Dichloroethane	ug/L	20	21.0	105	81-120	
1,2-Dichloropropane	ug/L	20	20.8	104	80-120	
2-Butanone (MEK)	ug/L	100	103	103	67-122	
2-Hexanone	ug/L	100	104	104	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	106	106	76-120	
Acetone	ug/L	100	102	102	72-120	
Benzene	ug/L	20	20.6	103	80-120	
Bromodichloromethane	ug/L	20	20.7	103	80-120	
Bromoform	ug/L	20	20.7	103	73-138	
Bromomethane	ug/L	20	18.0	90	38-137	
Carbon disulfide	ug/L	20	18.3	92	71-129	
Carbon tetrachloride	ug/L	20	20.3	102	67-146	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	18.9	94	76-120	
Chloroform	ug/L	20	19.4	97	80-120	
Chloromethane	ug/L	20	18.0	90	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.3	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.4	102	80-120	
Dibromochloromethane	ug/L	20	20.7	104	80-126	
Ethylbenzene	ug/L	20	19.8	99	80-120	
Methylene chloride	ug/L	20	21.1	105	80-120	
Styrene	ug/L	20	20.4	102	80-123	
Tetrachloroethene	ug/L	20	19.8	99	80-123	
Toluene	ug/L	20	20.2	101	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.3	97	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.1	100	80-129	
Trichloroethene	ug/L	20	20.2	101	80-120	
Vinyl chloride	ug/L	20	22.7	114	62-125	
Xylene (Total)	ug/L	60	60.9	101	80-120	
1,2-Dichloroethane-d4 (S)	%			104	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1551635 1551636

Parameter	Units	60191794002 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	23.2	22.0	116	110	88-124	5	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	20.2	19.9	101	100	78-116	1	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	20.6	21.7	103	108	84-112	5	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1551635 1551636

Parameter	Units	60191794002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	ND	20	20	22.5	21.7	112	109	82-121	4	9	
1,1-Dichloroethene	ug/L	ND	20	20	22.4	22.7	112	114	78-124	2	12	
1,2-Dichloroethane	ug/L	ND	20	20	22.1	20.5	110	102	79-121	8	12	
1,2-Dichloropropane	ug/L	ND	20	20	22.2	20.3	111	102	82-119	9	10	
2-Butanone (MEK)	ug/L	ND	100	100	101	96.3	101	96	66-114	5	13	
2-Hexanone	ug/L	ND	100	100	102	101	102	101	71-116	1	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	106	102	106	102	72-122	4	12	
Acetone	ug/L	ND	100	100	105	110	101	107	65-113	5	27	
Benzene	ug/L	ND	20	20	22.6	21.8	113	109	46-155	4	13	
Bromodichloromethane	ug/L	ND	20	20	22.1	20.9	111	104	77-127	6	10	
Bromoform	ug/L	ND	20	20	20.4	20.5	102	102	70-125	0	11	
Bromomethane	ug/L	ND	20	20	19.5	20.9	98	105	41-140	7	30	
Carbon disulfide	ug/L	ND	20	20	21.3	20.9	106	104	68-140	2	10	
Carbon tetrachloride	ug/L	ND	20	20	23.4	22.8	117	114	68-147	3	11	
Chlorobenzene	ug/L	ND	20	20	21.7	22.1	108	111	83-121	2	9	
Chloroethane	ug/L	ND	20	20	21.8	21.0	109	105	69-126	4	19	
Chloroform	ug/L	ND	20	20	20.7	20.0	104	100	86-119	4	9	
Chloromethane	ug/L	ND	20	20	20.4	20.7	102	103	23-168	1	49	
cis-1,2-Dichloroethene	ug/L	ND	20	20	22.0	21.4	110	107	85-117	3	10	
cis-1,3-Dichloropropene	ug/L	ND	20	20	20.9	19.4	105	97	74-115	8	12	
Dibromochloromethane	ug/L	ND	20	20	21.2	20.1	106	101	65-134	5	11	
Ethylbenzene	ug/L	ND	20	20	21.2	21.1	106	106	51-148	1	14	
Methylene chloride	ug/L	ND	20	20	21.5	20.7	107	104	75-118	4	11	
Styrene	ug/L	ND	20	20	18.6	19.2	93	96	17-174	3	10	
Tetrachloroethene	ug/L	ND	20	20	21.4	21.7	107	108	78-127	1	9	
Toluene	ug/L	ND	20	20	20.9	21.5	105	107	47-149	3	16	
trans-1,2-Dichloroethene	ug/L	ND	20	20	21.2	20.6	106	103	84-119	3	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	19.0	19.8	95	99	71-120	4	10	
Trichloroethene	ug/L	ND	20	20	21.0	21.0	105	105	70-135	0	10	
Vinyl chloride	ug/L	ND	20	20	27.0	25.9	135	129	58-130	4	11	M1
Xylene (Total)	ug/L	ND	60	60	63.8	65.5	106	109	39-158	3	15	
1,2-Dichloroethane-d4 (S)	%						103	97	80-120			
4-Bromofluorobenzene (S)	%						99	102	80-120			
Toluene-d8 (S)	%						97	100	80-120			
Preservation pH		1.0			1.0	1.0				0		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1551637 1551638

Parameter	Units	60191794003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	21.6	21.4	108	107	88-124	1	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.7	18.8	98	94	78-116	5	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	19.9	20.0	99	100	84-112	1	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1551637 1551638

Parameter	Units	60191794003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	ND	20	20	21.2	21.5	106	108	82-121	2	9	
1,1-Dichloroethene	ug/L	ND	20	20	21.5	21.7	108	109	78-124	1	12	
1,2-Dichloroethane	ug/L	ND	20	20	20.7	20.5	103	103	79-121	1	12	
1,2-Dichloropropane	ug/L	ND	20	20	20.3	20.6	101	103	82-119	1	10	
2-Butanone (MEK)	ug/L	ND	100	100	93.1	96.3	93	96	66-114	3	13	
2-Hexanone	ug/L	ND	100	100	93.9	98.3	94	98	71-116	5	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	97.4	101	97	101	72-122	3	12	
Acetone	ug/L	ND	100	100	91.7	106	92	106	65-113	15	27	
Benzene	ug/L	ND	20	20	21.2	21.3	106	106	46-155	0	13	
Bromodichloromethane	ug/L	ND	20	20	20.7	21.0	103	105	77-127	1	10	
Bromoform	ug/L	ND	20	20	18.9	20.5	94	102	70-125	8	11	
Bromomethane	ug/L	ND	20	20	20.2	22.4	101	112	41-140	11	30	
Carbon disulfide	ug/L	ND	20	20	20.2	20.6	101	103	68-140	2	10	
Carbon tetrachloride	ug/L	ND	20	20	22.1	21.9	110	109	68-147	1	11	
Chlorobenzene	ug/L	ND	20	20	20.9	21.1	104	105	83-121	1	9	
Chloroethane	ug/L	ND	20	20	20.3	20.2	101	101	69-126	0	19	
Chloroform	ug/L	ND	20	20	19.7	19.9	98	99	86-119	1	9	
Chloromethane	ug/L	ND	20	20	19.6	22.7	98	114	23-168	15	49	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.9	21.1	104	106	85-117	1	10	
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.2	19.9	96	100	74-115	4	12	
Dibromochloromethane	ug/L	ND	20	20	19.9	20.1	100	100	65-134	1	11	
Ethylbenzene	ug/L	ND	20	20	20.2	20.8	101	104	51-148	3	14	
Methylene chloride	ug/L	ND	20	20	19.8	20.5	99	102	75-118	3	11	
Styrene	ug/L	ND	20	20	19.9	20.5	100	102	17-174	3	10	
Tetrachloroethene	ug/L	ND	20	20	20.1	20.4	101	102	78-127	1	9	
Toluene	ug/L	ND	20	20	19.9	20.9	100	105	47-149	5	16	
trans-1,2-Dichloroethene	ug/L	ND	20	20	20.6	20.5	103	102	84-119	1	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.4	19.4	92	97	71-120	6	10	
Trichloroethene	ug/L	ND	20	20	20.6	20.5	103	103	70-135	1	10	
Vinyl chloride	ug/L	ND	20	20	25.6	25.7	128	128	58-130	0	11	
Xylene (Total)	ug/L	ND	60	60	60.7	62.1	101	103	39-158	2	15	
1,2-Dichloroethane-d4 (S)	%						100	103	80-120			
4-Bromofluorobenzene (S)	%						100	96	80-120			
Toluene-d8 (S)	%						96	102	80-120			
Preservation pH		1.0			1.0	1.0				0		

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REPORT OF LABORATORY ANALYSIS

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(913)599-5665

QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

QC Batch: WET/54146 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60191794001, 60191794002, 60191794003, 60191794006, 60191794007, 60191794009

METHOD BLANK: 1550751 Matrix: Water
Associated Lab Samples: 60191794001, 60191794002, 60191794003, 60191794006, 60191794007, 60191794009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	04/17/15 08:09	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	04/17/15 08:09	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	04/17/15 08:09	

LABORATORY CONTROL SAMPLE: 1550752

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

SAMPLE DUPLICATE: 1550753

Parameter	Units	60191794002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	81.6	82.2	1	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	81.6	82.2	1	10	

SAMPLE DUPLICATE: 1550754

Parameter	Units	60191794003 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	99.9	102	2	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	99.9	102	2	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

QC Batch: WET/54112 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60191794001, 60191794002, 60191794003, 60191794006, 60191794007, 60191794009

METHOD BLANK: 1549878 Matrix: Water
Associated Lab Samples: 60191794001, 60191794002, 60191794003, 60191794006, 60191794007, 60191794009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	04/15/15 12:53	

LABORATORY CONTROL SAMPLE: 1549879

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.50	101	80-120	

MATRIX SPIKE SAMPLE: 1549880

Parameter	Units	60191794002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.24	49	75-125	M1

SAMPLE DUPLICATE: 1549881

Parameter	Units	60191794003 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

QC Batch: WETA/33727 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60191794001, 60191794002, 60191794003, 60191794006, 60191794007, 60191794009

METHOD BLANK: 1555678 Matrix: Water
Associated Lab Samples: 60191794001, 60191794002, 60191794003, 60191794006, 60191794007, 60191794009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	04/23/15 13:39	
Sulfate	mg/L	ND	1.0	04/23/15 13:39	

LABORATORY CONTROL SAMPLE: 1555679

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	96	90-110	
Sulfate	mg/L	5	5.1	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1553664 1553665

Parameter	Units	60191794002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	107	50	50	157	157	101	100	80-120	0	15	
Sulfate	mg/L	15.9	5	5	20.5	20.6	93	96	80-120	1	15	

MATRIX SPIKE SAMPLE: 1553666

Parameter	Units	60191794003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	20.3	10	30.9	106	80-120	
Sulfate	mg/L	39.9	10	50.7	108	80-120	

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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

QC Batch: WETA/33661 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60191794001, 60191794002, 60191794003, 60191794006, 60191794007, 60191794009

METHOD BLANK: 1551366 Matrix: Water
Associated Lab Samples: 60191794001, 60191794002, 60191794003, 60191794006, 60191794007, 60191794009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	04/17/15 14:30	

LABORATORY CONTROL SAMPLE: 1551367

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

MATRIX SPIKE SAMPLE: 1551368

Parameter	Units	60191753002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.21	2	1.8	79	90-110	M1

MATRIX SPIKE SAMPLE: 1551369

Parameter	Units	60191754001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.25	2	1.8	75	90-110	M1

SAMPLE DUPLICATE: 1551370

Parameter	Units	60191794001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	ND	ND		18	

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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

QC Batch: WETA/33629 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60191794001, 60191794002, 60191794003, 60191794006, 60191794007, 60191794009

METHOD BLANK: 1549744 Matrix: Water
Associated Lab Samples: 60191794001, 60191794002, 60191794003, 60191794006, 60191794007, 60191794009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	04/15/15 11:06	
Nitrogen, Nitrite	mg/L	ND	0.10	04/15/15 11:06	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	04/15/15 11:06	

LABORATORY CONTROL SAMPLE: 1549745

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.8	111	85-115	
Nitrogen, Nitrite	mg/L	.4	0.38	95	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.2	108	90-110	

MATRIX SPIKE SAMPLE: 1549746

Parameter	Units	60191794003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	ND	1.6	1.8	114	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.40	100	90-110	
Nitrogen, NO2 plus NO3	mg/L	ND	2	2.2	111	90-110	M1

MATRIX SPIKE SAMPLE: 1549747

Parameter	Units	60191794002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.1	1.6	2.8	107	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.40	100	90-110	
Nitrogen, NO2 plus NO3	mg/L	1.1	2	3.2	106	90-110	

SAMPLE DUPLICATE: 1549748

Parameter	Units	60191833001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	ND	ND		20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	ND	ND		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

QC Batch: WETA/33752 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60191794001, 60191794002, 60191794003, 60191794006, 60191794007, 60191794009

METHOD BLANK: 1554748 Matrix: Water
Associated Lab Samples: 60191794001, 60191794002, 60191794003, 60191794006, 60191794007, 60191794009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	04/23/15 13:54	

LABORATORY CONTROL SAMPLE: 1554749

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.5	109	80-120	

MATRIX SPIKE SAMPLE: 1554750

Parameter	Units	60191794002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	ND	5	4.6	85	80-120	

SAMPLE DUPLICATE: 1554751

Parameter	Units	60191794003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	0.54J	0.53J		25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

QC Batch: WETA/7911 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60191794001, 60191794002, 60191794003, 60191794006, 60191794007, 60191794009

METHOD BLANK: 134536 Matrix: Water
Associated Lab Samples: 60191794001, 60191794002, 60191794003, 60191794006, 60191794007, 60191794009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	04/20/15 13:26	

LABORATORY CONTROL SAMPLE: 134537

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.4	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 134538 134539

Parameter	Units	7525099001 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	0.51	1.5	1.5	2.0	2.0	99	99	80-120	0	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 134628 134629

Parameter	Units	60191794002 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	0.025J	1.5	1.5	1.7	1.6	106	103	80-120	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 134630 134631

Parameter	Units	60191794003 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	0.17	1.5	1.5	1.4	1.5	77	85	80-120	8	20	M1

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

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

ANALYTE QUALIFIERS

1e	Field pH
H6	Analysis initiated outside of the 15 minute EPA recommended holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191794001	**MW-68-201504**	EPA 8015 - Alcohol	GCSV/3742		
60191794002	**ITMW-20-201504**	EPA 8015 - Alcohol	GCSV/3742		
60191794003	**MW-28-201504**	EPA 8015 - Alcohol	GCSV/3745		
60191794006	**MW-22-201504**	EPA 8015 - Alcohol	GCSV/3742		
60191794007	**MW-26-201504**	EPA 8015 - Alcohol	GCSV/3742		
60191794009	**MW-27-201504**	EPA 8015 - Alcohol	GCSV/3742		
60191794001	**MW-68-201504**	EPA 3010	MPRP/31418	EPA 6010	ICP/23361
60191794002	**ITMW-20-201504**	EPA 3010	MPRP/31418	EPA 6010	ICP/23361
60191794003	**MW-28-201504**	EPA 3010	MPRP/31418	EPA 6010	ICP/23361
60191794006	**MW-22-201504**	EPA 3010	MPRP/31418	EPA 6010	ICP/23361
60191794007	**MW-26-201504**	EPA 3010	MPRP/31418	EPA 6010	ICP/23361
60191794009	**MW-27-201504**	EPA 3010	MPRP/31418	EPA 6010	ICP/23361
60191794001	**MW-68-201504**	EPA 5030B/8260	MSV/68904		
60191794002	**ITMW-20-201504**	EPA 5030B/8260	MSV/68904		
60191794003	**MW-28-201504**	EPA 5030B/8260	MSV/68904		
60191794004	**EB-07-201504**	EPA 5030B/8260	MSV/68904		
60191794005	**TB-01-201504**	EPA 5030B/8260	MSV/68904		
60191794006	**MW-22-201504**	EPA 5030B/8260	MSV/68904		
60191794007	**MW-26-201504**	EPA 5030B/8260	MSV/68904		
60191794008	**TB-02-201504**	EPA 5030B/8260	MSV/68904		
60191794009	**MW-27-201504**	EPA 5030B/8260	MSV/68904		
60191794001	**MW-68-201504**	SM 2320B	WET/54146		
60191794002	**ITMW-20-201504**	SM 2320B	WET/54146		
60191794003	**MW-28-201504**	SM 2320B	WET/54146		
60191794006	**MW-22-201504**	SM 2320B	WET/54146		
60191794007	**MW-26-201504**	SM 2320B	WET/54146		
60191794009	**MW-27-201504**	SM 2320B	WET/54146		
60191794001	**MW-68-201504**	SM 3500-Fe B#4	WET/54281		
60191794002	**ITMW-20-201504**	SM 3500-Fe B#4	WET/54281		
60191794003	**MW-28-201504**	SM 3500-Fe B#4	WET/54281		
60191794006	**MW-22-201504**	SM 3500-Fe B#4	WET/54281		
60191794007	**MW-26-201504**	SM 3500-Fe B#4	WET/54281		
60191794009	**MW-27-201504**	SM 3500-Fe B#4	WET/54281		
60191794001	**MW-68-201504**	SM 4500-H+B	WET/54388		
60191794002	**ITMW-20-201504**	SM 4500-H+B	WET/54388		
60191794003	**MW-28-201504**	SM 4500-H+B	WET/54388		
60191794006	**MW-22-201504**	SM 4500-H+B	WET/54388		
60191794007	**MW-26-201504**	SM 4500-H+B	WET/54388		
60191794009	**MW-27-201504**	SM 4500-H+B	WET/54388		
60191794001	**MW-68-201504**	SM 4500-S-2 D	WET/54112		
60191794002	**ITMW-20-201504**	SM 4500-S-2 D	WET/54112		
60191794003	**MW-28-201504**	SM 4500-S-2 D	WET/54112		
60191794006	**MW-22-201504**	SM 4500-S-2 D	WET/54112		
60191794007	**MW-26-201504**	SM 4500-S-2 D	WET/54112		
60191794009	**MW-27-201504**	SM 4500-S-2 D	WET/54112		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60191794

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191794001	**MW-68-201504**	EPA 300.0	WETA/33727		
60191794002	**ITMW-20-201504**	EPA 300.0	WETA/33727		
60191794003	**MW-28-201504**	EPA 300.0	WETA/33727		
60191794006	**MW-22-201504**	EPA 300.0	WETA/33727		
60191794007	**MW-26-201504**	EPA 300.0	WETA/33727		
60191794009	**MW-27-201504**	EPA 300.0	WETA/33727		
60191794001	**MW-68-201504**	EPA 350.1	WETA/33661		
60191794002	**ITMW-20-201504**	EPA 350.1	WETA/33661		
60191794003	**MW-28-201504**	EPA 350.1	WETA/33661		
60191794006	**MW-22-201504**	EPA 350.1	WETA/33661		
60191794007	**MW-26-201504**	EPA 350.1	WETA/33661		
60191794009	**MW-27-201504**	EPA 350.1	WETA/33661		
60191794001	**MW-68-201504**	EPA 353.2	WETA/33629		
60191794002	**ITMW-20-201504**	EPA 353.2	WETA/33629		
60191794003	**MW-28-201504**	EPA 353.2	WETA/33629		
60191794006	**MW-22-201504**	EPA 353.2	WETA/33629		
60191794007	**MW-26-201504**	EPA 353.2	WETA/33629		
60191794009	**MW-27-201504**	EPA 353.2	WETA/33629		
60191794001	**MW-68-201504**	SM 4500-CO2 D	WETA/33864		
60191794002	**ITMW-20-201504**	SM 4500-CO2 D	WETA/33864		
60191794003	**MW-28-201504**	SM 4500-CO2 D	WETA/33864		
60191794006	**MW-22-201504**	SM 4500-CO2 D	WETA/33864		
60191794007	**MW-26-201504**	SM 4500-CO2 D	WETA/33864		
60191794009	**MW-27-201504**	SM 4500-CO2 D	WETA/33864		
60191794001	**MW-68-201504**	SM 5310C	WETA/33752		
60191794002	**ITMW-20-201504**	SM 5310C	WETA/33752		
60191794003	**MW-28-201504**	SM 5310C	WETA/33752		
60191794006	**MW-22-201504**	SM 5310C	WETA/33752		
60191794007	**MW-26-201504**	SM 5310C	WETA/33752		
60191794009	**MW-27-201504**	SM 5310C	WETA/33752		
60191794001	**MW-68-201504**	SM4500-P B	WETA/7911	SM 4500-P E	WETA/7915
60191794002	**ITMW-20-201504**	SM4500-P B	WETA/7911	SM 4500-P E	WETA/7915
60191794003	**MW-28-201504**	SM4500-P B	WETA/7911	SM 4500-P E	WETA/7915
60191794006	**MW-22-201504**	SM4500-P B	WETA/7911	SM 4500-P E	WETA/7915
60191794007	**MW-26-201504**	SM4500-P B	WETA/7911	SM 4500-P E	WETA/7915
60191794009	**MW-27-201504**	SM4500-P B	WETA/7911	SM 4500-P E	WETA/7915

REPORT OF LABORATORY ANALYSIS

Pace Analytical
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Sample Condition Upon Receipt

WO# : 60191794

60191794

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☐ UPS ☐ VIA ☑ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☑ None ☐ Other ☑ 2 PLC

Thermometer Used: ~~CF -0.1~~ T-239 / CF -1.8 T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 3-3 / 2-5

Temperature should be above freezing to 6°C

Date and initials of person examining contents: pw 4/14/15

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☑Yes ☐No ☐N/A	6. NO2 NO3 Ecoli
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: NT		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, O&G, WI-DRO (water)	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☑Yes ☐No ☐N/A	
Pace Trip Blank lot # (if purchased): 030915-3		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MW Date: 4/14/15

CHAIN-OF-CUSTODY / Analytical Request Document

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

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Page: 1 of 1

Section A — **Required** Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B — **Required** Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C — Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D — **Required** Client Information

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

Valid Matrix Codes

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		2	2	2	2	2	2	2	2	2	2	2	2	2	2	
1	MW-68-201504 3DGnH 3DGnu	WT	G	4/13/15	1445	WE3		IBP2U	11	X	X	X	X	X	X	1A	G35		X	X	X	X	X	X	X	X	X	X	X	N	IBP3S1-5 IBP3V1-5 IBP32 11-0	001
2	MW-20-201504 3DGnH MS/MSD	WT	G	4/13/15	~~1500~~ 1535				14	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	N	MS/MSD	002
3	MW-28-201504 ↓ ↓MS/MSD	WT	G	4/13/15	1500				14	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	N	MS/MSD ↓ ↓	003
4	FB-07-201504 3DGnH	WT	G	4/13/15	1645				3				X						X											N		004
5	TB-01-201504	WT	G	4/13/15	—				3				X						X											N		005
6	MW-22-201504	WT	G	4/13/15	1645				11	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	N	↓ ↓ ↓	006
7	MW-26-201504	WT	G	4/13/15	1540				11	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	N	↓ ↓ ↓	007
8	TB-02-201504	WT	G	4/13/15	—				3				X						X											N		008
9	MW-27-201504 ↓ ↓	WT	G	4/13/15	1615				11	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	N	↓ ↓ ↓	009
10																																
11																																
12																																

60191794

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Level IV data package required	Wendy Stonestreet / ENVIRON	4/13/15	1800		4/14/15	~~0245~~ 0130	3-7	Y	Y	Y
							2-5	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Wendy Stonestreet

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): ~~4/13/15~~ 4/13/15

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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

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

April 30, 2015

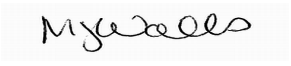
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 15, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

Pace Analytical Services, Inc.
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CERTIFICATIONS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

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

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

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SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60191868001	IW-77-201504	Water	04/14/15 09:20	04/15/15 08:35
60191868002	MW-39-201504	Water	04/14/15 10:55	04/15/15 08:35
60191868003	MW-40-201504	Water	04/14/15 09:05	04/15/15 08:35
60191868004	MW-71-201504	Water	04/14/15 09:50	04/15/15 08:35
60191868005	RW-69-201504	Water	04/14/15 10:00	04/15/15 08:35
60191868006	MW-60-201504	Water	04/14/15 15:00	04/15/15 08:35
60191868007	ITMW-7-201504	Water	04/14/15 14:55	04/15/15 08:35
60191868008	MW-50-201504	Water	04/14/15 12:10	04/15/15 08:35
60191868009	MW-29-201504	Water	04/14/15 12:25	04/15/15 08:35
60191868010	ITMW-21-201504	Water	04/14/15 12:15	04/15/15 08:35
60191868011	MW-63-201504	Water	04/14/15 15:40	04/15/15 08:35
60191868012	ITMW-4-201504	Water	04/14/15 16:40	04/15/15 08:35
60191868013	ITMW-6-201504	Water	04/14/15 14:35	04/15/15 08:35
60191868014	MW-62-201504	Water	04/14/15 11:25	04/15/15 08:35
60191868015	MW-34-201504	Water	04/14/15 15:50	04/15/15 08:35
60191868016	IW-80-201504	Water	04/14/15 13:30	04/15/15 08:35
60191868017	MW-36-201504	Water	04/14/15 13:45	04/15/15 08:35
60191868018	MW-35R-201504	Water	04/14/15 17:15	04/15/15 08:35
60191868019	MW-61-201504	Water	04/14/15 17:15	04/15/15 08:35
60191868020	MW-46R-201504	Water	04/14/15 13:55	04/15/15 08:35
60191868021	MW-31R-201504	Water	04/14/15 17:45	04/15/15 08:35
60191868022	ITMW-16-201504	Water	04/14/15 17:14	04/15/15 08:35
60191868023	DUP-07-201504	Water	04/14/15 13:55	04/15/15 08:35
60191868024	TB-03-201504	Water	04/14/15 08:00	04/15/15 08:35
60191868025	TB-04-201504	Water	04/14/15 08:00	04/15/15 08:35
60191868026	TB-05-201504	Water	04/14/15 08:00	04/15/15 08:35
60191868027	TB-06-201504	Water	04/14/15 08:00	04/15/15 08:35
60191868028	TB-07-201504	Water	04/14/15 08:00	04/15/15 08:35

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60191868001	**IW-77-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868002	**MW-39-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868003	**MW-40-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868004	**MW-71-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868005	**RW-69-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868006	**MW-60-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868007	**ITMW-7-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868008	**MW-50-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868009	**MW-29-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K

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

SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868010	**ITMW-21-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868011	**MW-63-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868012	**ITMW-4-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-H+B	TJG	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868013	**ITMW-6-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868014	**MW-62-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868015	**MW-34-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868016	**IW-80-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868017	**MW-36-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868018	**MW-35R-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868019	**MW-61-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868020	**MW-46R-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-P E	BAF	1	PASI-D
60191868021	**MW-31R-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868022	**ITMW-16-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191868023	**DUP-07-201504**	EPA 5030B/8260	PGH	38	PASI-K
60191868024	**TB-03-201504**	EPA 5030B/8260	PGH	38	PASI-K
60191868025	**TB-04-201504**	EPA 5030B/8260	PGH	38	PASI-K
60191868026	**TB-05-201504**	EPA 5030B/8260	PGH	38	PASI-K
60191868027	**TB-06-201504**	EPA 5030B/8260	PGH	38	PASI-K
60191868028	**TB-07-201504**	EPA 5030B/8260	PGH	38	PASI-K

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Method: **EPA 8015 - Alcohol**
Description: Alcohol by Direct Inject GCFID
Client: Environ_AR
Date: April 30, 2015

General Information:
22 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: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Environ_AR
Date: April 30, 2015

General Information:
22 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: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 30, 2015

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

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

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

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

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

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

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

QC Batch: MSV/69103

B: Analyte was detected in the associated method blank.
- BLANK for HBN 382792 [MSV/6910 (Lab ID: 1557447)
  - Bromomethane
  - Chloromethane

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

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

QC Batch: MSV/68871

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

QC Batch: MSV/68904

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191794002,60191794003

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
- MS (Lab ID: 1551635)
  - Vinyl chloride

QC Batch: MSV/68932

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

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 30, 2015

QC Batch: MSV/68973

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191868013

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

- MS (Lab ID: 1553609)
  - Styrene
- MSD (Lab ID: 1553610)
  - Styrene
  - cis-1,2-Dichloroethene

R1: RPD value was outside control limits.

- MSD (Lab ID: 1553610)
  - Bromodichloromethane
  - Tetrachloroethene

QC Batch: MSV/68990

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

QC Batch: MSV/69103

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

Additional Comments:

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: Environ_AR
Date: April 30, 2015

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

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

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

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

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

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

Additional Comments:

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Method: **SM 3500-Fe B#4**
Description: Iron, Ferric (Calculation)
Client: Environ_AR
Date: April 30, 2015

General Information:
22 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: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: April 30, 2015

General Information:
22 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-16-201504 (Lab ID: 60191868022)
- ITMW-21-201504 (Lab ID: 60191868010)
- ITMW-4-201504 (Lab ID: 60191868012)
- ITMW-6-201504 (Lab ID: 60191868013)
- ITMW-7-201504 (Lab ID: 60191868007)
- IW-77-201504 (Lab ID: 60191868001)
- IW-80-201504 (Lab ID: 60191868016)
- MW-29-201504 (Lab ID: 60191868009)
- MW-31R-201504 (Lab ID: 60191868021)
- MW-34-201504 (Lab ID: 60191868015)
- MW-35R-201504 (Lab ID: 60191868018)
- MW-36-201504 (Lab ID: 60191868017)
- MW-39-201504 (Lab ID: 60191868002)
- MW-40-201504 (Lab ID: 60191868003)
- MW-46R-201504 (Lab ID: 60191868020)
- MW-50-201504 (Lab ID: 60191868008)
- MW-60-201504 (Lab ID: 60191868006)
- MW-61-201504 (Lab ID: 60191868019)
- MW-62-201504 (Lab ID: 60191868014)
- MW-63-201504 (Lab ID: 60191868011)
- MW-71-201504 (Lab ID: 60191868004)
- RW-69-201504 (Lab ID: 60191868005)

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: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: April 30, 2015

Analyte Comments:

QC Batch: WET/54389

1e: Field pH

- ITMW-21-201504 (Lab ID: 60191868010)
  - pH at 25 Degrees C
- ITMW-4-201504 (Lab ID: 60191868012)
  - pH at 25 Degrees C
- ITMW-6-201504 (Lab ID: 60191868013)
  - pH at 25 Degrees C
- ITMW-7-201504 (Lab ID: 60191868007)
  - pH at 25 Degrees C
- IW-77-201504 (Lab ID: 60191868001)
  - pH at 25 Degrees C
- MW-29-201504 (Lab ID: 60191868009)
  - pH at 25 Degrees C
- MW-34-201504 (Lab ID: 60191868015)
  - pH at 25 Degrees C
- MW-35R-201504 (Lab ID: 60191868018)
  - pH at 25 Degrees C
- MW-36-201504 (Lab ID: 60191868017)
  - pH at 25 Degrees C
- MW-39-201504 (Lab ID: 60191868002)
  - pH at 25 Degrees C
- MW-40-201504 (Lab ID: 60191868003)
  - pH at 25 Degrees C
- MW-46R-201504 (Lab ID: 60191868020)
  - pH at 25 Degrees C
- MW-50-201504 (Lab ID: 60191868008)
  - pH at 25 Degrees C
- MW-60-201504 (Lab ID: 60191868006)
  - pH at 25 Degrees C
- MW-61-201504 (Lab ID: 60191868019)
  - pH at 25 Degrees C
- MW-62-201504 (Lab ID: 60191868014)
  - pH at 25 Degrees C
- MW-63-201504 (Lab ID: 60191868011)
  - pH at 25 Degrees C
- MW-71-201504 (Lab ID: 60191868004)
  - pH at 25 Degrees C
- RW-69-201504 (Lab ID: 60191868005)
  - pH at 25 Degrees C

QC Batch: WET/54390

1e: Field pH

- ITMW-16-201504 (Lab ID: 60191868022)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: April 30, 2015

Analyte Comments:

QC Batch: WET/54393

1e: Field pH

- IW-80-201504 (Lab ID: 60191868016)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Environ_AR
Date: April 30, 2015

General Information:
22 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/54194

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191868012

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

- MS (Lab ID: 1552654)
  - Sulfide, Total

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

Additional Comments:

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

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Environ_AR
Date: April 30, 2015

General Information:
22 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: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Method: **EPA 350.1**
Description: 350.1 Ammonia
Client: Environ_AR
Date: April 30, 2015

General Information:
22 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/33690

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191831001,60191832001

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

- MS (Lab ID: 1552768)
  - Nitrogen, Ammonia

QC Batch: WETA/33691

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191868013,60191881001

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

- MS (Lab ID: 1552773)
  - Nitrogen, Ammonia
- MS (Lab ID: 1552774)
  - 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: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Environ_AR
Date: April 30, 2015

General Information:
22 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/33640

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191856002,60191862001

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

- MS (Lab ID: 1550145)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrate

QC Batch: WETA/33641

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191868005,60191868013

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

- MS (Lab ID: 1550152)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrate
- MS (Lab ID: 1550153)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrate

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

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Method: **SM 4500-CO2 D**
Description: Total Carbon Dioxide Calc
Client: Environ_AR
Date: April 30, 2015

General Information:
22 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:

Pace Analytical Services, Inc.
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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Method: **SM 5310C**
Description: 5310C TOC
Client: Environ_AR
Date: April 30, 2015

General Information:
22 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/33760

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191868013

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

- MS (Lab ID: 1555571)
  - 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: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Method: **SM 4500-P E**
Description: SM4500P-E, Total Phosphorus
Client: Environ_AR
Date: April 30, 2015

General Information:
22 samples were analyzed for SM 4500-P E. All samples were received in acceptable condition with any exceptions noted below.

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

Sample Preparation:
The samples were prepared in accordance with SM4500-P B with any exceptions noted below.

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

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

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

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

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

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: IW-77-201504 **Lab ID: 60191868001** Collected: 04/14/15 09:20 Received: 04/15/15 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	1980	1		04/21/15 08:55	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**103**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 18:22	7439-89-6	
Manganese	**20.4**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 18:22	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**45.1**	ug/L	10.0	5.0	1		04/19/15 15:11	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 15:11	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 15:11	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 15:11	75-25-2	
Bromomethane	**11.1**	ug/L	5.0	2.5	1		04/19/15 15:11	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 15:11	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 15:11	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 15:11	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 15:11	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:11	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 15:11	67-66-3	
Chloromethane	**17.0**	ug/L	1.0	0.50	1		04/19/15 15:11	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 15:11	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:11	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 15:11	75-35-4	
cis-1,2-Dichloroethene	**2.9**	ug/L	1.0	0.50	1		04/19/15 15:11	156-59-2	
trans-1,2-Dichloroethene	**0.51J**	ug/L	1.0	0.50	1		04/19/15 15:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 15:11	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 15:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 15:11	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 15:11	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 15:11	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 15:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 15:11	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 15:11	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:11	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 15:11	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 15:11	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:11	79-00-5	
Trichloroethene	**153**	ug/L	1.0	0.50	1		04/19/15 15:11	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 15:11	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 15:11	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/19/15 15:11	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		04/19/15 15:11	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		04/19/15 15:11	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		04/19/15 15:11		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: IW-77-201504 **Lab ID: 60191868001** Collected: 04/14/15 09:20 Received: 04/15/15 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)	**107**	mg/L	20.0	2.0	1		04/17/15 13:08		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 13:08		
Alkalinity, Total as CaCO3	**107**	mg/L	20.0	2.0	1		04/17/15 13:08		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.6**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:26	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**276**	mg/L	20.0	10.0	20		04/26/15 09:29	16887-00-6	
Sulfate	**1240**	mg/L	100	23.7	100		04/26/15 10:14	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.10**	mg/L	0.10	0.027	1		04/20/15 14:18	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**2.3**	mg/L	0.10	0.014	1		04/15/15 15:37		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 15:37		
Nitrogen, NO2 plus NO3	**2.3**	mg/L	0.10	0.014	1		04/15/15 15:37		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**643**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/23/15 17:10	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.60**	mg/L	0.030	0.010	1	04/20/15 15:00	04/20/15 16:07		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-39-201504 **Lab ID: 60191868002** Collected: 04/14/15 10:55 Received: 04/15/15 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	1980	1		04/21/15 09:06	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**56.5**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 18:24	7439-89-6	
Manganese	**395**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 18:24	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/18/15 00:27	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/18/15 00:27	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/18/15 00:27	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/18/15 00:27	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/18/15 00:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/18/15 00:27	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/18/15 00:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/18/15 00:27	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/18/15 00:27	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/18/15 00:27	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/18/15 00:27	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/18/15 00:27	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/18/15 00:27	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/18/15 00:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/18/15 00:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/18/15 00:27	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/18/15 00:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/18/15 00:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/18/15 00:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/18/15 00:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/18/15 00:27	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/18/15 00:27	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/18/15 00:27	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/18/15 00:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/18/15 00:27	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/18/15 00:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/18/15 00:27	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/18/15 00:27	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/18/15 00:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/18/15 00:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/18/15 00:27	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/18/15 00:27	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/18/15 00:27	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/18/15 00:27	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/18/15 00:27	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		04/18/15 00:27	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		04/18/15 00:27	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/18/15 00:27		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-39-201504 **Lab ID: 60191868002** Collected: 04/14/15 10:55 Received: 04/15/15 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)	**11.6J**	mg/L	20.0	2.0	1		04/17/15 13:10		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 13:10		
Alkalinity, Total as CaCO3	**11.6J**	mg/L	20.0	2.0	1		04/17/15 13:10		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**4.9**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:26	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**308**	mg/L	20.0	10.0	20		04/26/15 11:43	16887-00-6	
Sulfate	**13.3**	mg/L	1.0	0.24	1		04/26/15 11:28	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 14:19	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.014	1		04/15/15 15:38		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 15:38		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.014	1		04/15/15 15:38		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/23/15 17:23	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	04/20/15 15:00	04/20/15 16:07		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-40-201504 **Lab ID: 60191868003** Collected: 04/14/15 09:05 Received: 04/15/15 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	1980	1		04/21/15 09:17	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**11.5J**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 18:26	7439-89-6	
Manganese	**225**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 18:26	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/18/15 00:42	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/18/15 00:42	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/18/15 00:42	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/18/15 00:42	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/18/15 00:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/18/15 00:42	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/18/15 00:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/18/15 00:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/18/15 00:42	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/18/15 00:42	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/18/15 00:42	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/18/15 00:42	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/18/15 00:42	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/18/15 00:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/18/15 00:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/18/15 00:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/18/15 00:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/18/15 00:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/18/15 00:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/18/15 00:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/18/15 00:42	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/18/15 00:42	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/18/15 00:42	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/18/15 00:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/18/15 00:42	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/18/15 00:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/18/15 00:42	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/18/15 00:42	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/18/15 00:42	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/18/15 00:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/18/15 00:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/18/15 00:42	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/18/15 00:42	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/18/15 00:42	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/18/15 00:42	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		04/18/15 00:42	17060-07-0	
Toluene-d8 (S)	94	%	80-120		1		04/18/15 00:42	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/18/15 00:42		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-40-201504 **Lab ID: 60191868003** Collected: 04/14/15 09:05 Received: 04/15/15 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)	**14.7J**	mg/L	20.0	2.0	1		04/17/15 13:16		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 13:16		
Alkalinity, Total as CaCO3	**14.7J**	mg/L	20.0	2.0	1		04/17/15 13:16		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.1**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:27	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**222**	mg/L	20.0	10.0	20		04/26/15 12:13	16887-00-6	
Sulfate	**2.6**	mg/L	1.0	0.24	1		04/26/15 11:58	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 14:21	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.014	1		04/15/15 15:39		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 15:39		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.014	1		04/15/15 15:39		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/23/15 17:36	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	04/20/15 15:00	04/20/15 16:07		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-71-201504 **Lab ID: 60191868004** Collected: 04/14/15 09:50 Received: 04/15/15 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	1980	1		04/21/15 09:28	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**984**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 18:29	7439-89-6	
Manganese	**1070**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 18:29	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/21/15 18:33	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 18:33	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 18:33	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 18:33	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 18:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 18:33	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 18:33	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 18:33	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 18:33	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:33	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 18:33	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 18:33	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 18:33	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:33	107-06-2	
1,1-Dichloroethene	**1.7**	ug/L	1.0	0.50	1		04/21/15 18:33	75-35-4	
cis-1,2-Dichloroethene	**5.7**	ug/L	1.0	0.50	1		04/21/15 18:33	156-59-2	
trans-1,2-Dichloroethene	**0.53J**	ug/L	1.0	0.50	1		04/21/15 18:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 18:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 18:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 18:33	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 18:33	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 18:33	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 18:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 18:33	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 18:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:33	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 18:33	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 18:33	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:33	79-00-5	
Trichloroethene	**156**	ug/L	1.0	0.50	1		04/21/15 18:33	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 18:33	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 18:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/21/15 18:33	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		04/21/15 18:33	17060-07-0	
Toluene-d8 (S)	91	%	80-120		1		04/21/15 18:33	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 18:33		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-71-201504 **Lab ID: 60191868004** Collected: 04/14/15 09:50 Received: 04/15/15 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)	**21.8**	mg/L	20.0	2.0	1		04/17/15 13:18		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 13:18		
Alkalinity, Total as CaCO3	**21.8**	mg/L	20.0	2.0	1		04/17/15 13:18		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.47**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.1**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:27	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**251**	mg/L	20.0	10.0	20		04/26/15 12:43	16887-00-6	
Sulfate	**3.9**	mg/L	1.0	0.24	1		04/26/15 12:28	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 14:24	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.014	1		04/15/15 15:39		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 15:39		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.014	1		04/15/15 15:39		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**343**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/23/15 17:50	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.17**	mg/L	0.030	0.010	1	04/20/15 15:00	04/20/15 16:07		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: RW-69-201504 **Lab ID: 60191868005** Collected: 04/14/15 10:00 Received: 04/15/15 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	1980	1		04/21/15 09:39	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**243**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 18:35	7439-89-6	
Manganese	**1040**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 18:35	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/21/15 18:47	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 18:47	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 18:47	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 18:47	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 18:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 18:47	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 18:47	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 18:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 18:47	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:47	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 18:47	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 18:47	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 18:47	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:47	107-06-2	
1,1-Dichloroethene	**0.76J**	ug/L	1.0	0.50	1		04/21/15 18:47	75-35-4	
cis-1,2-Dichloroethene	**4.5**	ug/L	1.0	0.50	1		04/21/15 18:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 18:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 18:47	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 18:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 18:47	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 18:47	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 18:47	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 18:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 18:47	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 18:47	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:47	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 18:47	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 18:47	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:47	79-00-5	
Trichloroethene	**113**	ug/L	1.0	0.50	1		04/21/15 18:47	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 18:47	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 18:47	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		04/21/15 18:47	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-120		1		04/21/15 18:47	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		04/21/15 18:47	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 18:47		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: RW-69-201504 **Lab ID: 60191868005** Collected: 04/14/15 10:00 Received: 04/15/15 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)	**16.3J**	mg/L	20.0	2.0	1		04/17/15 13:21		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 13:21		
Alkalinity, Total as CaCO3	**16.3J**	mg/L	20.0	2.0	1		04/17/15 13:21		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.23**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.4**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:27	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**287**	mg/L	20.0	10.0	20		04/26/15 13:13	16887-00-6	
Sulfate	**2.8**	mg/L	1.0	0.24	1		04/26/15 12:58	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 14:25	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.014	1		04/15/15 15:42		M1
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 15:42		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.014	1		04/15/15 15:42		M1
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/23/15 18:03	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	04/20/15 15:00	04/20/15 16:08		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-60-201504 **Lab ID: 60191868006** Collected: 04/14/15 15:00 Received: 04/15/15 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	1980	1		04/21/15 09:50	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**2400**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 18:38	7439-89-6	
Manganese	**800**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 18:38	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/21/15 15:49	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 15:49	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 15:49	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 15:49	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 15:49	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 15:49	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 15:49	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 15:49	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 15:49	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 15:49	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 15:49	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 15:49	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 15:49	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 15:49	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 15:49	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 15:49	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 15:49	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 15:49	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 15:49	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 15:49	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 15:49	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 15:49	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 15:49	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 15:49	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 15:49	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 15:49	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 15:49	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 15:49	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 15:49	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 15:49	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 15:49	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 15:49	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 15:49	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 15:49	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	92	%	80-120		1		04/21/15 15:49	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-120		1		04/21/15 15:49	17060-07-0	
Toluene-d8 (S)	93	%	80-120		1		04/21/15 15:49	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 15:49		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-60-201504 **Lab ID: 60191868006** Collected: 04/14/15 15:00 Received: 04/15/15 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)	**409**	mg/L	20.0	2.0	1		04/17/15 13:26		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 13:26		
Alkalinity, Total as CaCO3	**409**	mg/L	20.0	2.0	1		04/17/15 13:26		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**1.3**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**7.3**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**135**	mg/L	10.0	5.0	10		04/26/15 14:12	16887-00-6	
Sulfate	**27.0**	mg/L	2.0	0.47	2		04/26/15 13:57	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 14:26	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.014	1		04/15/15 15:44		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 15:44		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.014	1		04/15/15 15:44		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**403**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.55J**	mg/L	1.0	0.50	1		04/24/15 10:11	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.17**	mg/L	0.030	0.010	1	04/20/15 15:00	04/20/15 16:08		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: ITMW-7-201504 **Lab ID: 60191868007** Collected: 04/14/15 14:55 Received: 04/15/15 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	1980	1		04/21/15 10:02	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**28.4J**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 18:40	7439-89-6	
Manganese	**66.2**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 18:40	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**8.9J**	ug/L	10.0	5.0	1		04/21/15 16:04	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 16:04	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 16:04	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 16:04	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 16:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 16:04	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 16:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 16:04	56-23-5	
Chlorobenzene	**1.1**	ug/L	1.0	0.50	1		04/21/15 16:04	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:04	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 16:04	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 16:04	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 16:04	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 16:04	75-35-4	
cis-1,2-Dichloroethene	**9.2**	ug/L	1.0	0.50	1		04/21/15 16:04	156-59-2	
trans-1,2-Dichloroethene	**0.64J**	ug/L	1.0	0.50	1		04/21/15 16:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 16:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 16:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 16:04	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 16:04	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 16:04	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 16:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 16:04	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 16:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:04	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 16:04	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 16:04	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:04	79-00-5	
Trichloroethene	**29.3**	ug/L	1.0	0.50	1		04/21/15 16:04	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 16:04	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 16:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		04/21/15 16:04	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120		1		04/21/15 16:04	17060-07-0	
Toluene-d8 (S)	94	%	80-120		1		04/21/15 16:04	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 16:04		

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: ITMW-7-201504 **Lab ID: 60191868007** Collected: 04/14/15 14:55 Received: 04/15/15 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)	**11.2J**	mg/L	20.0	2.0	1		04/17/15 13:29		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 13:29		
Alkalinity, Total as CaCO3	**11.2J**	mg/L	20.0	2.0	1		04/17/15 13:29		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.0**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:28	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**261**	mg/L	20.0	10.0	20		04/26/15 14:42	16887-00-6	
Sulfate	**9.4**	mg/L	1.0	0.24	1		04/26/15 14:27	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.089J**	mg/L	0.10	0.027	1		04/20/15 14:27	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**3.0**	mg/L	0.10	0.014	1		04/15/15 15:46		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 15:46		
Nitrogen, NO2 plus NO3	**3.0**	mg/L	0.10	0.014	1		04/15/15 15:46		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/24/15 10:37	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	04/20/15 15:00	04/20/15 16:08		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-50-201504 **Lab ID: 60191868008** Collected: 04/14/15 12:10 Received: 04/15/15 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	1980	1		04/21/15 10:13	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**11900**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 18:42	7439-89-6	
Manganese	**281**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 18:42	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/21/15 16:19	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 16:19	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 16:19	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 16:19	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 16:19	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 16:19	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 16:19	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 16:19	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 16:19	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:19	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 16:19	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 16:19	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 16:19	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 16:19	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 16:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 16:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 16:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 16:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 16:19	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 16:19	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 16:19	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 16:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 16:19	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 16:19	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:19	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 16:19	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 16:19	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:19	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 16:19	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 16:19	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 16:19	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	92	%	80-120		1		04/21/15 16:19	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/21/15 16:19	17060-07-0	
Toluene-d8 (S)	94	%	80-120		1		04/21/15 16:19	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 16:19		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-50-201504 **Lab ID: 60191868008** Collected: 04/14/15 12:10 Received: 04/15/15 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)	**225**	mg/L	20.0	2.0	1		04/17/15 13:43		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 13:43		
Alkalinity, Total as CaCO3	**225**	mg/L	20.0	2.0	1		04/17/15 13:43		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**11.1**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.7**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:29	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**239**	mg/L	20.0	10.0	20		04/26/15 15:12	16887-00-6	
Sulfate	**1.4**	mg/L	1.0	0.24	1		04/26/15 14:57	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 14:29	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.014	1		04/15/15 15:47		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 15:47		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.014	1		04/15/15 15:47		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**288**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/24/15 11:03	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.35**	mg/L	0.030	0.010	1	04/20/15 15:00	04/20/15 16:08		

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-29-201504 **Lab ID: 60191868009** Collected: 04/14/15 12:25 Received: 04/15/15 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	1980	1		04/21/15 10:24	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**307**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 18:45	7439-89-6	
Manganese	**124**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 18:45	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/21/15 16:33	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 16:33	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 16:33	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 16:33	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 16:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 16:33	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 16:33	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 16:33	56-23-5	
Chlorobenzene	**2.4**	ug/L	1.0	0.50	1		04/21/15 16:33	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:33	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 16:33	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 16:33	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 16:33	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 16:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 16:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 16:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 16:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 16:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 16:33	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 16:33	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 16:33	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 16:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 16:33	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 16:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:33	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 16:33	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 16:33	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:33	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 16:33	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 16:33	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 16:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		04/21/15 16:33	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/21/15 16:33	17060-07-0	
Toluene-d8 (S)	93	%	80-120		1		04/21/15 16:33	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 16:33		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-29-201504 **Lab ID: 60191868009** Collected: 04/14/15 12:25 Received: 04/15/15 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)	**7.0J**	mg/L	20.0	2.0	1		04/17/15 13:45		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 13:45		
Alkalinity, Total as CaCO3	**7.0J**	mg/L	20.0	2.0	1		04/17/15 13:45		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.31**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.2**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:29	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**42.9**	mg/L	5.0	2.5	5		04/26/15 15:42	16887-00-6	
Sulfate	**29.7**	mg/L	2.0	0.47	2		04/26/15 15:27	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 14:30	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.92**	mg/L	0.10	0.014	1		04/15/15 15:48		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 15:48		
Nitrogen, NO2 plus NO3	**0.92**	mg/L	0.10	0.014	1		04/15/15 15:48		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.1**	mg/L	1.0	0.50	1		04/24/15 11:16	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.10**	mg/L	0.030	0.010	1	04/20/15 15:00	04/20/15 16:08		

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: ITMW-21-201504 **Lab ID: 60191868010** Collected: 04/14/15 12:15 Received: 04/15/15 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	1980	1		04/21/15 10:35	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**31.8J**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 18:47	7439-89-6	
Manganese	**284**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 18:47	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**10.6**	ug/L	10.0	5.0	1		04/21/15 16:48	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 16:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 16:48	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 16:48	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 16:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 16:48	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 16:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 16:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 16:48	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:48	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 16:48	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 16:48	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 16:48	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 16:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 16:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 16:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 16:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 16:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 16:48	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 16:48	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 16:48	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 16:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 16:48	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 16:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:48	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 16:48	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 16:48	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 16:48	79-00-5	
Trichloroethene	**12.7**	ug/L	1.0	0.50	1		04/21/15 16:48	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 16:48	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 16:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/21/15 16:48	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/21/15 16:48	17060-07-0	
Toluene-d8 (S)	92	%	80-120		1		04/21/15 16:48	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 16:48		

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: ITMW-21-201504 **Lab ID: 60191868010** Collected: 04/14/15 12:15 Received: 04/15/15 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)	**13.3J**	mg/L	20.0	2.0	1		04/17/15 13:48		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 13:48		
Alkalinity, Total as CaCO3	**13.3J**	mg/L	20.0	2.0	1		04/17/15 13:48		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.2**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:29	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**623**	mg/L	50.0	25.0	50		04/26/15 16:11	16887-00-6	
Sulfate	**3.6**	mg/L	1.0	0.24	1		04/26/15 15:56	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 14:31	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.25**	mg/L	0.10	0.014	1		04/15/15 15:49		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 15:49		
Nitrogen, NO2 plus NO3	**0.25**	mg/L	0.10	0.014	1		04/15/15 15:49		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/24/15 11:29	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	04/20/15 15:00	04/20/15 16:08		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-63-201504 **Lab ID: 60191868011** Collected: 04/14/15 15:40 Received: 04/15/15 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	1980	1		04/21/15 10:46	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**50900**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 18:49	7439-89-6	
Manganese	**422**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 18:49	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/21/15 17:03	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 17:03	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 17:03	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 17:03	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 17:03	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 17:03	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 17:03	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 17:03	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 17:03	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:03	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 17:03	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 17:03	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 17:03	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:03	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:03	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 17:03	75-35-4	
cis-1,2-Dichloroethene	**0.99J**	ug/L	1.0	0.50	1		04/21/15 17:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 17:03	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 17:03	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 17:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 17:03	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 17:03	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 17:03	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 17:03	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 17:03	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 17:03	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:03	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 17:03	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 17:03	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:03	79-00-5	
Trichloroethene	**9.2**	ug/L	1.0	0.50	1		04/21/15 17:03	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 17:03	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 17:03	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		04/21/15 17:03	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		04/21/15 17:03	17060-07-0	
Toluene-d8 (S)	92	%	80-120		1		04/21/15 17:03	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 17:03		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-63-201504 **Lab ID: 60191868011** Collected: 04/14/15 15:40 Received: 04/15/15 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)	**43.6**	mg/L	20.0	2.0	1		04/17/15 13:51		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 13:51		
Alkalinity, Total as CaCO3	**43.6**	mg/L	20.0	2.0	1		04/17/15 13:51		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**50.9**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.6**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:29	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**141**	mg/L	10.0	5.0	10		04/26/15 17:11	16887-00-6	
Sulfate	**9.5**	mg/L	1.0	0.24	1		04/26/15 16:56	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 14:34	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.25**	mg/L	0.10	0.014	1		04/15/15 15:50		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 15:50		
Nitrogen, NO2 plus NO3	**0.25**	mg/L	0.10	0.014	1		04/15/15 15:50		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**63.0**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.57J**	mg/L	1.0	0.50	1		04/24/15 16:04	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**1.6**	mg/L	0.030	0.010	1	04/20/15 15:00	04/20/15 16:09		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: ITMW-4-201504 **Lab ID: 60191868012** Collected: 04/14/15 16:40 Received: 04/15/15 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	1980	1		04/21/15 10:57	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**3040**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 18:51	7439-89-6	
Manganese	**3450**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 18:51	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		04/27/15 11:31	67-64-1	
Benzene	ND	ug/L	1.0	0.060	1		04/27/15 11:31	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 11:31	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 11:31	75-25-2	
Bromomethane	ND	ug/L	5.0	0.16	1		04/27/15 11:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 11:31	78-93-3	
Carbon disulfide	**0.30J**	ug/L	5.0	0.12	1		04/27/15 11:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 11:31	56-23-5	
Chlorobenzene	**0.61J**	ug/L	1.0	0.21	1		04/27/15 11:31	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 11:31	75-00-3	
Chloroform	**0.28J**	ug/L	1.0	0.14	1		04/27/15 11:31	67-66-3	
Chloromethane	**0.30J**	ug/L	1.0	0.080	1		04/27/15 11:31	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 11:31	124-48-1	
1,1-Dichloroethane	**0.68J**	ug/L	1.0	0.050	1		04/27/15 11:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 11:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.20	1		04/27/15 11:31	75-35-4	
cis-1,2-Dichloroethene	**2.6**	ug/L	1.0	0.080	1		04/27/15 11:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.20	1		04/27/15 11:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 11:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 11:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 11:31	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 11:31	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 11:31	591-78-6	
Methylene chloride	**2.9**	ug/L	1.0	0.15	1		04/27/15 11:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 11:31	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 11:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 11:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.10	1		04/27/15 11:31	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/27/15 11:31	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 11:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/27/15 11:31	79-00-5	
Trichloroethene	**1.6**	ug/L	1.0	0.17	1		04/27/15 11:31	79-01-6	
Vinyl chloride	**0.84J**	ug/L	1.0	0.13	1		04/27/15 11:31	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 11:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/27/15 11:31	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/27/15 11:31	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		04/27/15 11:31	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 11:31		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: ITMW-4-201504 **Lab ID: 60191868012** Collected: 04/14/15 16:40 Received: 04/15/15 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)	**91.0**	mg/L	20.0	2.0	1		04/17/15 13:55		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 13:55		
Alkalinity, Total as CaCO3	**91.0**	mg/L	20.0	2.0	1		04/17/15 13:55		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**1.1**	mg/L	0.20		1		04/28/15 00:00	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		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:30	18496-25-8	M1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**6.6**	mg/L	1.0	0.50	1		04/26/15 17:26	16887-00-6	
Sulfate	**16.4**	mg/L	1.0	0.24	1		04/26/15 17:26	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.18**	mg/L	0.10	0.027	1		04/20/15 14:38	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.014	1		04/15/15 15:51		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 15:51		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.014	1		04/15/15 15:51		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**209**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**8.8**	mg/L	1.0	0.50	1		04/24/15 12:22	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	04/20/15 15:00	04/20/15 16:09		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: ITMW-6-201504 **Lab ID: 60191868013** Collected: 04/14/15 14:35 Received: 04/15/15 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	1980	1		04/21/15 18:56	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**183**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 18:54	7439-89-6	
Manganese	**142**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 18:54	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/21/15 17:18	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 17:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 17:18	75-27-4	R1
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 17:18	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 17:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 17:18	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 17:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 17:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 17:18	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:18	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 17:18	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 17:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 17:18	124-48-1	
1,1-Dichloroethane	**4.0**	ug/L	1.0	0.50	1		04/21/15 17:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 17:18	75-35-4	
cis-1,2-Dichloroethene	**5.3**	ug/L	1.0	0.50	1		04/21/15 17:18	156-59-2	M1
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 17:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 17:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 17:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 17:18	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 17:18	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 17:18	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 17:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 17:18	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 17:18	100-42-5	M1
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:18	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 17:18	127-18-4	R1
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 17:18	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:18	79-00-5	
Trichloroethene	**3.7**	ug/L	1.0	0.50	1		04/21/15 17:18	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 17:18	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 17:18	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/21/15 17:18	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		04/21/15 17:18	17060-07-0	
Toluene-d8 (S)	94	%	80-120		1		04/21/15 17:18	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 17:18		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: ITMW-6-201504 **Lab ID: 60191868013** Collected: 04/14/15 14:35 Received: 04/15/15 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)	**145**	mg/L	20.0	2.0	1		04/17/15 13:59		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 13:59		
Alkalinity, Total as CaCO3	**145**	mg/L	20.0	2.0	1		04/17/15 13:59		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.1**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:31	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**150**	mg/L	10.0	5.0	10		04/26/15 17:41	16887-00-6	
Sulfate	**86.7**	mg/L	10.0	2.4	10		04/26/15 17:41	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 14:39	7664-41-7	M1
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**22.7**	mg/L	0.50	0.070	5		04/15/15 16:13		M1
Nitrogen, Nitrite	ND	mg/L	0.50	0.12	5		04/15/15 16:13		
Nitrogen, NO2 plus NO3	**22.7**	mg/L	0.50	0.070	5		04/15/15 16:13		M1
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**352**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.54J**	mg/L	1.0	0.50	1		04/24/15 12:34	7440-44-0	M1
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.10**	mg/L	0.030	0.010	1	04/20/15 15:00	04/20/15 16:09		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-62-201504 **Lab ID: 60191868014** Collected: 04/14/15 11:25 Received: 04/15/15 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	1980	1		04/21/15 11:09	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**2490**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 19:05	7439-89-6	
Manganese	**68.5**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 19:05	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/21/15 17:33	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 17:33	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 17:33	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 17:33	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 17:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 17:33	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 17:33	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 17:33	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 17:33	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:33	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 17:33	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 17:33	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 17:33	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 17:33	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 17:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 17:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 17:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 17:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 17:33	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 17:33	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 17:33	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 17:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 17:33	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 17:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:33	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 17:33	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 17:33	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:33	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 17:33	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 17:33	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 17:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		04/21/15 17:33	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/21/15 17:33	17060-07-0	
Toluene-d8 (S)	94	%	80-120		1		04/21/15 17:33	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 17:33		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-62-201504 **Lab ID: 60191868014** Collected: 04/14/15 11:25 Received: 04/15/15 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)	**40.0**	mg/L	20.0	2.0	1		04/17/15 14:07		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 14:07		
Alkalinity, Total as CaCO3	**40.0**	mg/L	20.0	2.0	1		04/17/15 14:07		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**2.5**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.4**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:31	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**154**	mg/L	10.0	5.0	10		04/26/15 19:55	16887-00-6	
Sulfate	**4.0**	mg/L	1.0	0.24	1		04/26/15 18:41	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 14:41	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.82**	mg/L	0.10	0.014	1		04/15/15 15:53		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 15:53		
Nitrogen, NO2 plus NO3	**0.82**	mg/L	0.10	0.014	1		04/15/15 15:53		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**67.7**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/24/15 13:01	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.17**	mg/L	0.030	0.010	1	04/20/15 15:00	04/20/15 16:10		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-34-201504 **Lab ID: 60191868015** Collected: 04/14/15 15:50 Received: 04/15/15 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	1980	1		04/21/15 12:16	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**62.6**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 19:07	7439-89-6	
Manganese	**43.2**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 19:07	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**38.1**	ug/L	10.0	5.0	1		04/16/15 22:17	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/16/15 22:17	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/16/15 22:17	75-27-4	
Bromoform	**2.1**	ug/L	1.0	0.50	1		04/16/15 22:17	75-25-2	
Bromomethane	**6.9**	ug/L	5.0	2.5	1		04/16/15 22:17	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/16/15 22:17	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/16/15 22:17	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/16/15 22:17	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/16/15 22:17	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/16/15 22:17	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/16/15 22:17	67-66-3	
Chloromethane	**4.8**	ug/L	1.0	0.50	1		04/16/15 22:17	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/16/15 22:17	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/16/15 22:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/16/15 22:17	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/16/15 22:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/16/15 22:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/16/15 22:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/16/15 22:17	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/16/15 22:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/16/15 22:17	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/16/15 22:17	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/16/15 22:17	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/16/15 22:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/16/15 22:17	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/16/15 22:17	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/16/15 22:17	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/16/15 22:17	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/16/15 22:17	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/16/15 22:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/16/15 22:17	79-00-5	
Trichloroethene	**13.8**	ug/L	1.0	0.50	1		04/16/15 22:17	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/16/15 22:17	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/16/15 22:17	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/16/15 22:17	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		04/16/15 22:17	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/16/15 22:17	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		04/16/15 22:17		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-34-201504 **Lab ID: 60191868015** Collected: 04/14/15 15:50 Received: 04/15/15 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)	**4.0J**	mg/L	20.0	2.0	1		04/17/15 14:10		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 14:10		
Alkalinity, Total as CaCO3	**4.0J**	mg/L	20.0	2.0	1		04/17/15 14:10		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**4.6**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:31	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**224**	mg/L	20.0	10.0	20		04/26/15 20:40	16887-00-6	
Sulfate	**326**	mg/L	20.0	4.7	20		04/26/15 20:40	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 14:42	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.35**	mg/L	0.10	0.014	1		04/15/15 15:54		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 15:54		
Nitrogen, NO2 plus NO3	**0.35**	mg/L	0.10	0.014	1		04/15/15 15:54		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/24/15 13:14	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	ND	mg/L	0.030	0.010	1	04/20/15 15:00	04/20/15 16:10		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: IW-80-201504 **Lab ID: 60191868016** Collected: 04/14/15 13:30 Received: 04/15/15 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	1980	1		04/21/15 13:39	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**122**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 19:09	7439-89-6	
Manganese	**44.0**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 19:09	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**7.3J**	ug/L	10.0	5.0	1		04/16/15 22:47	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/16/15 22:47	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/16/15 22:47	75-27-4	
Bromoform	**1.1**	ug/L	1.0	0.50	1		04/16/15 22:47	75-25-2	
Bromomethane	**3.0J**	ug/L	5.0	2.5	1		04/16/15 22:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/16/15 22:47	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/16/15 22:47	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/16/15 22:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/16/15 22:47	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/16/15 22:47	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/16/15 22:47	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/16/15 22:47	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/16/15 22:47	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/16/15 22:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/16/15 22:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/16/15 22:47	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/16/15 22:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/16/15 22:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/16/15 22:47	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/16/15 22:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/16/15 22:47	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/16/15 22:47	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/16/15 22:47	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/16/15 22:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/16/15 22:47	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/16/15 22:47	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/16/15 22:47	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/16/15 22:47	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/16/15 22:47	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/16/15 22:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/16/15 22:47	79-00-5	
Trichloroethene	**9.2**	ug/L	1.0	0.50	1		04/16/15 22:47	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/16/15 22:47	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/16/15 22:47	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/16/15 22:47	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		04/16/15 22:47	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/16/15 22:47	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		04/16/15 22:47		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: IW-80-201504 **Lab ID: 60191868016** Collected: 04/14/15 13:30 Received: 04/15/15 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)	**90.9**	mg/L	20.0	2.0	1		04/17/15 14:13		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 14:13		
Alkalinity, Total as CaCO3	**90.9**	mg/L	20.0	2.0	1		04/17/15 14:13		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/30/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.2**	Std. Units	0.10	0.10	1		04/14/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:31	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**250**	mg/L	20.0	10.0	20		04/26/15 20:55	16887-00-6	
Sulfate	**292**	mg/L	20.0	4.7	20		04/26/15 20:55	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 14:43	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.42**	mg/L	0.10	0.014	1		04/15/15 15:57		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 15:57		
Nitrogen, NO2 plus NO3	**0.42**	mg/L	0.10	0.014	1		04/15/15 15:57		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**1230**	mg/L	20.0	20.0	1		04/30/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/24/15 13:27	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.56**	mg/L	0.030	0.010	1	04/22/15 09:12	04/22/15 11:42		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-36-201504 **Lab ID: 60191868017** Collected: 04/14/15 13:45 Received: 04/15/15 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	1980	1		04/21/15 13:50	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**209**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 19:12	7439-89-6	
Manganese	**625**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 19:12	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**10.6**	ug/L	10.0	5.0	1		04/16/15 22:32	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/16/15 22:32	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/16/15 22:32	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/16/15 22:32	75-25-2	
Bromomethane	**14.4**	ug/L	5.0	2.5	1		04/16/15 22:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/16/15 22:32	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/16/15 22:32	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/16/15 22:32	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/16/15 22:32	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/16/15 22:32	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/16/15 22:32	67-66-3	
Chloromethane	**5.7**	ug/L	1.0	0.50	1		04/16/15 22:32	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/16/15 22:32	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/16/15 22:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/16/15 22:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/16/15 22:32	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/16/15 22:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/16/15 22:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/16/15 22:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/16/15 22:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/16/15 22:32	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/16/15 22:32	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/16/15 22:32	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/16/15 22:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/16/15 22:32	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/16/15 22:32	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/16/15 22:32	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/16/15 22:32	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/16/15 22:32	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/16/15 22:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/16/15 22:32	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/16/15 22:32	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/16/15 22:32	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/16/15 22:32	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		04/16/15 22:32	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		04/16/15 22:32	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		04/16/15 22:32	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		04/16/15 22:32		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-36-201504 **Lab ID: 60191868017** Collected: 04/14/15 13:45 Received: 04/15/15 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)	**12.6J**	mg/L	20.0	2.0	1		04/17/15 14:24		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 14:24		
Alkalinity, Total as CaCO3	**12.6J**	mg/L	20.0	2.0	1		04/17/15 14:24		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.21**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**4.9**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:32	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**243**	mg/L	20.0	10.0	20		04/26/15 21:25	16887-00-6	
Sulfate	**86.9**	mg/L	10.0	2.4	10		04/26/15 21:10	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 14:44	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.023J**	mg/L	0.10	0.014	1		04/15/15 15:58		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 15:58		
Nitrogen, NO2 plus NO3	**0.023J**	mg/L	0.10	0.014	1		04/15/15 15:58		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/24/15 13:40	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.73**	mg/L	0.030	0.010	1	04/22/15 09:12	04/22/15 11:42		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-35R-201504 **Lab ID: 60191868018** Collected: 04/14/15 17:15 Received: 04/15/15 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	1980	1		04/21/15 14:02	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**67.8**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 19:14	7439-89-6	
Manganese	**47.4**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 19:14	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**57.2**	ug/L	10.0	5.0	1		04/16/15 23:02	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/16/15 23:02	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/16/15 23:02	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/16/15 23:02	75-25-2	
Bromomethane	**22.9**	ug/L	5.0	2.5	1		04/16/15 23:02	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/16/15 23:02	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/16/15 23:02	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/16/15 23:02	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/16/15 23:02	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/16/15 23:02	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/16/15 23:02	67-66-3	
Chloromethane	**29.2**	ug/L	1.0	0.50	1		04/16/15 23:02	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/16/15 23:02	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/16/15 23:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/16/15 23:02	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/16/15 23:02	75-35-4	
cis-1,2-Dichloroethene	**1.3**	ug/L	1.0	0.50	1		04/16/15 23:02	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/16/15 23:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/16/15 23:02	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/16/15 23:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/16/15 23:02	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/16/15 23:02	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/16/15 23:02	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/16/15 23:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/16/15 23:02	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/16/15 23:02	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/16/15 23:02	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/16/15 23:02	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/16/15 23:02	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/16/15 23:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/16/15 23:02	79-00-5	
Trichloroethene	**39.5**	ug/L	1.0	0.50	1		04/16/15 23:02	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/16/15 23:02	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/16/15 23:02	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/16/15 23:02	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-120		1		04/16/15 23:02	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		04/16/15 23:02	2037-26-5	
Preservation pH	**7.0**		0.10	0.10	1		04/16/15 23:02		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-35R-201504 **Lab ID: 60191868018** Collected: 04/14/15 17:15 Received: 04/15/15 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)	**620**	mg/L	20.0	2.0	1		04/17/15 14:31		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 14:31		
Alkalinity, Total as CaCO3	**620**	mg/L	20.0	2.0	1		04/17/15 14:31		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.7**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:32	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**268**	mg/L	20.0	10.0	20		04/26/15 21:39	16887-00-6	
Sulfate	**5740**	mg/L	500	118	500		04/26/15 21:54	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.65**	mg/L	0.10	0.027	1		04/20/15 14:46	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**2.3**	mg/L	0.10	0.014	1		04/15/15 15:59		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 15:59		
Nitrogen, NO2 plus NO3	**2.3**	mg/L	0.10	0.014	1		04/15/15 15:59		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**771**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.4**	mg/L	1.0	0.50	1		04/24/15 13:53	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	04/22/15 09:12	04/22/15 11:43		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-61-201504 **Lab ID: 60191868019** Collected: 04/14/15 17:15 Received: 04/15/15 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	1980	1		04/21/15 14:13	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**6480**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 19:17	7439-89-6	
Manganese	**61.4**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 19:17	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/21/15 17:48	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 17:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 17:48	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 17:48	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 17:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 17:48	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 17:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 17:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 17:48	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:48	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 17:48	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 17:48	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 17:48	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 17:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 17:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 17:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 17:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 17:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 17:48	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 17:48	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 17:48	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 17:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 17:48	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 17:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:48	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 17:48	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 17:48	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 17:48	79-00-5	
Trichloroethene	**10.9**	ug/L	1.0	0.50	1		04/21/15 17:48	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 17:48	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 17:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		04/21/15 17:48	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		04/21/15 17:48	17060-07-0	
Toluene-d8 (S)	92	%	80-120		1		04/21/15 17:48	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 17:48		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-61-201504 **Lab ID: 60191868019** Collected: 04/14/15 17:15 Received: 04/15/15 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)	**129**	mg/L	20.0	2.0	1		04/17/15 14:35		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 14:35		
Alkalinity, Total as CaCO3	**129**	mg/L	20.0	2.0	1		04/17/15 14:35		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**4.8**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.6**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:32	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**105**	mg/L	10.0	5.0	10		04/26/15 22:54	16887-00-6	
Sulfate	**13.3**	mg/L	1.0	0.24	1		04/26/15 22:09	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 14:47	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.8**	mg/L	0.10	0.014	1		04/15/15 15:59		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 15:59		
Nitrogen, NO2 plus NO3	**1.8**	mg/L	0.10	0.014	1		04/15/15 15:59		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**183**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/24/15 14:06	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.35**	mg/L	0.030	0.010	1	04/22/15 09:12	04/22/15 11:43		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-46R-201504 **Lab ID: 60191868020** Collected: 04/14/15 13:55 Received: 04/15/15 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	1980	1		04/21/15 14:24	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**231**	ug/L	50.0	9.0	1	04/15/15 16:45	04/16/15 19:19	7439-89-6	
Manganese	**120**	ug/L	5.0	2.4	1	04/15/15 16:45	04/16/15 19:19	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		04/27/15 11:46	67-64-1	
Benzene	ND	ug/L	1.0	0.060	1		04/27/15 11:46	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 11:46	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 11:46	75-25-2	
Bromomethane	**0.59J**	ug/L	5.0	0.16	1		04/27/15 11:46	74-83-9	B
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 11:46	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/27/15 11:46	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 11:46	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 11:46	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 11:46	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/27/15 11:46	67-66-3	
Chloromethane	**0.34J**	ug/L	1.0	0.080	1		04/27/15 11:46	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 11:46	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.050	1		04/27/15 11:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 11:46	107-06-2	
1,1-Dichloroethene	**1.4**	ug/L	1.0	0.20	1		04/27/15 11:46	75-35-4	
cis-1,2-Dichloroethene	**13.8**	ug/L	1.0	0.080	1		04/27/15 11:46	156-59-2	
trans-1,2-Dichloroethene	**0.47J**	ug/L	1.0	0.20	1		04/27/15 11:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 11:46	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 11:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 11:46	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 11:46	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 11:46	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.15	1		04/27/15 11:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 11:46	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 11:46	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 11:46	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.10	1		04/27/15 11:46	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/27/15 11:46	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 11:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/27/15 11:46	79-00-5	
Trichloroethene	**220**	ug/L	5.0	2.5	5		04/21/15 19:17	79-01-6	
Vinyl chloride	**0.47J**	ug/L	1.0	0.13	1		04/27/15 11:46	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 11:46	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/27/15 11:46	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/27/15 11:46	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/27/15 11:46	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 11:46		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-46R-201504 **Lab ID: 60191868020** Collected: 04/14/15 13:55 Received: 04/15/15 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)	**13.2J**	mg/L	20.0	2.0	1		04/17/15 14:39		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/17/15 14:39		
Alkalinity, Total as CaCO3	**13.2J**	mg/L	20.0	2.0	1		04/17/15 14:39		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.23**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.9**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:32	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**224**	mg/L	20.0	10.0	20		04/26/15 23:24	16887-00-6	
Sulfate	**0.69J**	mg/L	1.0	0.24	1		04/26/15 23:09	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 14:48	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.014	1		04/15/15 16:01		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 16:01		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.014	1		04/15/15 16:01		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/24/15 14:19	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	ND	mg/L	0.030	0.010	1	04/22/15 09:12	04/22/15 11:43		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-31R-201504 **Lab ID: 60191868021** Collected: 04/14/15 17:45 Received: 04/15/15 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	1980	1		04/21/15 14:35	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**1490**	ug/L	50.0	9.0	1	04/17/15 13:00	04/21/15 17:57	7439-89-6	
Manganese	**1280**	ug/L	5.0	2.4	1	04/17/15 13:00	04/21/15 17:57	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/21/15 18:03	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 18:03	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 18:03	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 18:03	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 18:03	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 18:03	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 18:03	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 18:03	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 18:03	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:03	75-00-3	
Chloroform	**0.52J**	ug/L	1.0	0.50	1		04/21/15 18:03	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 18:03	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 18:03	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:03	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:03	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 18:03	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 18:03	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 18:03	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 18:03	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 18:03	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 18:03	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 18:03	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 18:03	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 18:03	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 18:03	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 18:03	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:03	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 18:03	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 18:03	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:03	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:03	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 18:03	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 18:03	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 18:03	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		04/21/15 18:03	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		04/21/15 18:03	17060-07-0	
Toluene-d8 (S)	93	%	80-120		1		04/21/15 18:03	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 18:03		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: MW-31R-201504 **Lab ID: 60191868021** Collected: 04/14/15 17:45 Received: 04/15/15 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)	**37.3**	mg/L	20.0	2.0	1		04/20/15 10:24		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 10:24		
Alkalinity, Total as CaCO3	**37.3**	mg/L	20.0	2.0	1		04/20/15 10:24		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.5**	Std. Units	0.10	0.10	1		04/27/15 00:00		H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:33	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**116**	mg/L	10.0	5.0	10		04/26/15 23:54	16887-00-6	
Sulfate	**26.8**	mg/L	2.0	0.47	2		04/26/15 23:39	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 14:51	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.040J**	mg/L	0.10	0.014	1		04/15/15 16:02		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 16:02		
Nitrogen, NO2 plus NO3	**0.040J**	mg/L	0.10	0.014	1		04/15/15 16:02		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**269**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.53J**	mg/L	1.0	0.50	1		04/24/15 14:59	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	ND	mg/L	0.030	0.010	1	04/22/15 09:12	04/22/15 11:43		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: ITMW-16-201504 **Lab ID: 60191868022** Collected: 04/14/15 17:14 Received: 04/15/15 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	1980	1		04/21/15 14:46	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**7120**	ug/L	50.0	9.0	1	04/17/15 13:00	04/21/15 17:59	7439-89-6	
Manganese	**98.7**	ug/L	5.0	2.4	1	04/17/15 13:00	04/21/15 17:59	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/21/15 18:18	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 18:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 18:18	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 18:18	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 18:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 18:18	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 18:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 18:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 18:18	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:18	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 18:18	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 18:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 18:18	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 18:18	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 18:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 18:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 18:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 18:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 18:18	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 18:18	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 18:18	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 18:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 18:18	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 18:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:18	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 18:18	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 18:18	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 18:18	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 18:18	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 18:18	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 18:18	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		04/21/15 18:18	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		04/21/15 18:18	17060-07-0	
Toluene-d8 (S)	91	%	80-120		1		04/21/15 18:18	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 18:18		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: ITMW-16-201504 **Lab ID: 60191868022** Collected: 04/14/15 17:14 Received: 04/15/15 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)	**30.0**	mg/L	20.0	2.0	1		04/20/15 10:28		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 10:28		
Alkalinity, Total as CaCO3	**30.0**	mg/L	20.0	2.0	1		04/20/15 10:28		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**7.1**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.5**	Std. Units	0.10	0.10	1		04/27/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:33	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**1.0**	mg/L	1.0	0.50	1		04/27/15 00:09	16887-00-6	
Sulfate	**10.8**	mg/L	1.0	0.24	1		04/27/15 00:09	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 14:52	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.61**	mg/L	0.10	0.014	1		04/15/15 16:03		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/15/15 16:03		
Nitrogen, NO2 plus NO3	**0.61**	mg/L	0.10	0.014	1		04/15/15 16:03		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**45.9**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**2.8**	mg/L	1.0	0.50	1		04/24/15 15:12	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.52**	mg/L	0.030	0.010	1	04/22/15 09:12	04/22/15 11:43		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: DUP-07-201504 **Lab ID: 60191868023** Collected: 04/14/15 13:55 Received: 04/15/15 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		04/27/15 13:50	67-64-1	
Benzene	ND	ug/L	1.0	0.060	1		04/27/15 13:50	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 13:50	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 13:50	75-25-2	
Bromomethane	ND	ug/L	5.0	0.16	1		04/27/15 13:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 13:50	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/27/15 13:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 13:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 13:50	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 13:50	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/27/15 13:50	67-66-3	
Chloromethane	**0.17J**	ug/L	1.0	0.080	1		04/27/15 13:50	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 13:50	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.050	1		04/27/15 13:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 13:50	107-06-2	
1,1-Dichloroethene	**1.4**	ug/L	1.0	0.20	1		04/27/15 13:50	75-35-4	
cis-1,2-Dichloroethene	**13.9**	ug/L	1.0	0.080	1		04/27/15 13:50	156-59-2	
trans-1,2-Dichloroethene	**0.57J**	ug/L	1.0	0.20	1		04/27/15 13:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 13:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 13:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 13:50	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 13:50	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 13:50	591-78-6	
Methylene chloride	**0.18J**	ug/L	1.0	0.15	1		04/27/15 13:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 13:50	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 13:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 13:50	79-34-5	
Tetrachloroethene	**0.11J**	ug/L	1.0	0.10	1		04/27/15 13:50	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/27/15 13:50	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 13:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/27/15 13:50	79-00-5	
Trichloroethene	**482**	ug/L	10.0	1.7	10		04/21/15 19:32	79-01-6	
Vinyl chloride	**0.51J**	ug/L	1.0	0.13	1		04/27/15 13:50	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 13:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%	80-120		1		04/27/15 13:50	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/27/15 13:50	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		04/27/15 13:50	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 13:50		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: TB-03-201504 **Lab ID: 60191868024** Collected: 04/14/15 08:00 Received: 04/15/15 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	5.0	1		04/21/15 15:34	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 15:34	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 15:34	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 15:34	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 15:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 15:34	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 15:34	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 15:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 15:34	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 15:34	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 15:34	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 15:34	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 15:34	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 15:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 15:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 15:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 15:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 15:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 15:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 15:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 15:34	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 15:34	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 15:34	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 15:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 15:34	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 15:34	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 15:34	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 15:34	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 15:34	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 15:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 15:34	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 15:34	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 15:34	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 15:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		04/21/15 15:34	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/21/15 15:34	17060-07-0	
Toluene-d8 (S)	93	%	80-120		1		04/21/15 15:34	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 15:34		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: TB-04-201504 **Lab ID: 60191868025** Collected: 04/14/15 08:00 Received: 04/15/15 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**7.7J**	ug/L	10.0	5.0	1		04/22/15 13:00	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 13:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 13:00	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 13:00	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 13:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 13:00	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 13:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 13:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 13:00	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:00	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 13:00	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 13:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 13:00	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:00	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 13:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 13:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 13:00	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 13:00	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 13:00	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 13:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 13:00	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 13:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:00	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 13:00	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:00	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:00	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 13:00	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 13:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/22/15 13:00	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		04/22/15 13:00	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		04/22/15 13:00	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 13:00		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: TB-05-201504 **Lab ID: 60191868026** Collected: 04/14/15 08:00 Received: 04/15/15 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**7.1J**	ug/L	10.0	5.0	1		04/22/15 13:15	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 13:15	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 13:15	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 13:15	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 13:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 13:15	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 13:15	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 13:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 13:15	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:15	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 13:15	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 13:15	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 13:15	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:15	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 13:15	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 13:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 13:15	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 13:15	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 13:15	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 13:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 13:15	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 13:15	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:15	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:15	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 13:15	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:15	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:15	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 13:15	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 13:15	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		04/22/15 13:15	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-120		1		04/22/15 13:15	17060-07-0	
Toluene-d8 (S)	104	%	80-120		1		04/22/15 13:15	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 13:15		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: TB-06-201504 **Lab ID: 60191868027** Collected: 04/14/15 08:00 Received: 04/15/15 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	5.0	1		04/22/15 13:30	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 13:30	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 13:30	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 13:30	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 13:30	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 13:30	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 13:30	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 13:30	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 13:30	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:30	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 13:30	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 13:30	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 13:30	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:30	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:30	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:30	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 13:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 13:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 13:30	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 13:30	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 13:30	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 13:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 13:30	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 13:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:30	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:30	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 13:30	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:30	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:30	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 13:30	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 13:30	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/22/15 13:30	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/22/15 13:30	17060-07-0	
Toluene-d8 (S)	105	%	80-120		1		04/22/15 13:30	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 13:30		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Sample: TB-07-201504 **Lab ID: 60191868028** Collected: 04/14/15 08:00 Received: 04/15/15 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	5.0	1		04/22/15 13:45	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 13:45	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 13:45	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 13:45	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 13:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 13:45	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 13:45	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 13:45	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 13:45	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:45	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 13:45	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 13:45	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 13:45	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:45	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:45	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 13:45	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 13:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 13:45	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 13:45	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 13:45	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 13:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 13:45	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 13:45	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:45	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:45	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 13:45	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 13:45	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 13:45	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 13:45	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 13:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		1		04/22/15 13:45	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/22/15 13:45	17060-07-0	
Toluene-d8 (S)	106	%	80-120		1		04/22/15 13:45	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 13:45		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: GCSV/3742 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60191868001, 60191868002, 60191868003, 60191868004, 60191868005, 60191868006, 60191868007, 60191868008, 60191868009, 60191868010, 60191868011, 60191868012, 60191868014

METHOD BLANK: 134598 Matrix: Water
Associated Lab Samples: 60191868001, 60191868002, 60191868003, 60191868004, 60191868005, 60191868006, 60191868007, 60191868008, 60191868009, 60191868010, 60191868011, 60191868012, 60191868014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	04/20/15 16:13	

LABORATORY CONTROL SAMPLE: 134599

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	86400	86	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 134600 134601

Parameter	Units	60191794002 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	89200	92500	89	92	40-140	4	40	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: GCSV/3745 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60191868015, 60191868016, 60191868017, 60191868018, 60191868019, 60191868020, 60191868021, 60191868022

METHOD BLANK: 134703 Matrix: Water
Associated Lab Samples: 60191868015, 60191868016, 60191868017, 60191868018, 60191868019, 60191868020, 60191868021, 60191868022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	3410J	10000	04/21/15 11:53	

LABORATORY CONTROL SAMPLE: 134704

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	89200	89	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 134705 134706

Parameter	Units	60191794003 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	89200	91200	89	91	40-140	2	40	

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REPORT OF LABORATORY ANALYSIS

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(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: GCSV/3750
QC Batch Method: EPA 8015 - Alcohol
Analysis Method: EPA 8015 - Alcohol
Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60191868013

METHOD BLANK: 134858 Matrix: Water
Associated Lab Samples: 60191868013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	04/21/15 19:18	

LABORATORY CONTROL SAMPLE: 134859

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	89800	90	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 134860 134861

Parameter	Units	60191868013 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	96300	96400	96	96	40-140	0	40	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: MPRP/31432 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60191868001, 60191868002, 60191868003, 60191868004, 60191868005, 60191868006, 60191868007, 60191868008, 60191868009, 60191868010, 60191868011, 60191868012, 60191868013, 60191868014, 60191868015, 60191868016, 60191868017, 60191868018, 60191868019, 60191868020

METHOD BLANK: 1550288 Matrix: Water
Associated Lab Samples: 60191868001, 60191868002, 60191868003, 60191868004, 60191868005, 60191868006, 60191868007, 60191868008, 60191868009, 60191868010, 60191868011, 60191868012, 60191868013, 60191868014, 60191868015, 60191868016, 60191868017, 60191868018, 60191868019, 60191868020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	04/16/15 18:19	
Manganese	ug/L	ND	5.0	04/16/15 18:19	

LABORATORY CONTROL SAMPLE: 1550289

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	10200	102	80-120	
Manganese	ug/L	1000	984	98	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1550290 1550291

Parameter	Units	60191868013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	183	10000	10000	10400	10400	102	102	75-125	0	20	
Manganese	ug/L	142	1000	1000	1140	1150	99	100	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

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(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: MPRP/31444
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Associated Lab Samples: 60191868021, 60191868022

METHOD BLANK: 1550747 Matrix: Water
Associated Lab Samples: 60191868021, 60191868022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	04/21/15 17:34	
Manganese	ug/L	ND	5.0	04/21/15 17:34	

LABORATORY CONTROL SAMPLE: 1550748

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9870	99	80-120	
Manganese	ug/L	1000	962	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1550749 1550750

Parameter	Units	60191842001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	3940	10000	10000	13800	13600	98	96	75-125	2	20	
Manganese	ug/L	880	1000	1000	1840	1810	96	93	75-125	1	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: MSV/68904
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60191868002, 60191868003

METHOD BLANK: 1551596
Matrix: Water
Associated Lab Samples: 60191868002, 60191868003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/17/15 21:59	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/17/15 21:59	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/17/15 21:59	
1,1-Dichloroethane	ug/L	ND	1.0	04/17/15 21:59	
1,1-Dichloroethene	ug/L	ND	1.0	04/17/15 21:59	
1,2-Dichloroethane	ug/L	ND	1.0	04/17/15 21:59	
1,2-Dichloropropane	ug/L	ND	1.0	04/17/15 21:59	
2-Butanone (MEK)	ug/L	ND	10.0	04/17/15 21:59	
2-Hexanone	ug/L	ND	10.0	04/17/15 21:59	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/17/15 21:59	
Acetone	ug/L	ND	10.0	04/17/15 21:59	
Benzene	ug/L	ND	1.0	04/17/15 21:59	
Bromodichloromethane	ug/L	ND	1.0	04/17/15 21:59	
Bromoform	ug/L	ND	1.0	04/17/15 21:59	
Bromomethane	ug/L	ND	5.0	04/17/15 21:59	
Carbon disulfide	ug/L	ND	5.0	04/17/15 21:59	
Carbon tetrachloride	ug/L	ND	1.0	04/17/15 21:59	
Chlorobenzene	ug/L	ND	1.0	04/17/15 21:59	
Chloroethane	ug/L	ND	1.0	04/17/15 21:59	
Chloroform	ug/L	ND	1.0	04/17/15 21:59	
Chloromethane	ug/L	0.13J	1.0	04/17/15 21:59	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/17/15 21:59	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/17/15 21:59	
Dibromochloromethane	ug/L	ND	1.0	04/17/15 21:59	
Ethylbenzene	ug/L	ND	1.0	04/17/15 21:59	
Methylene chloride	ug/L	ND	1.0	04/17/15 21:59	
Styrene	ug/L	ND	1.0	04/17/15 21:59	
Tetrachloroethene	ug/L	ND	1.0	04/17/15 21:59	
Toluene	ug/L	ND	1.0	04/17/15 21:59	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/17/15 21:59	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/17/15 21:59	
Trichloroethene	ug/L	ND	1.0	04/17/15 21:59	
Vinyl chloride	ug/L	ND	1.0	04/17/15 21:59	
Xylene (Total)	ug/L	ND	3.0	04/17/15 21:59	
1,2-Dichloroethane-d4 (S)	%	100	80-120	04/17/15 21:59	
4-Bromofluorobenzene (S)	%	100	80-120	04/17/15 21:59	
Toluene-d8 (S)	%	98	80-120	04/17/15 21:59	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

LABORATORY CONTROL SAMPLE: 1551597

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.3	102	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.3	97	73-121	
1,1,2-Trichloroethane	ug/L	20	20.6	103	80-120	
1,1-Dichloroethane	ug/L	20	20.7	103	80-120	
1,1-Dichloroethene	ug/L	20	19.8	99	80-120	
1,2-Dichloroethane	ug/L	20	21.0	105	81-120	
1,2-Dichloropropane	ug/L	20	20.8	104	80-120	
2-Butanone (MEK)	ug/L	100	103	103	67-122	
2-Hexanone	ug/L	100	104	104	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	106	106	76-120	
Acetone	ug/L	100	102	102	72-120	
Benzene	ug/L	20	20.6	103	80-120	
Bromodichloromethane	ug/L	20	20.7	103	80-120	
Bromoform	ug/L	20	20.7	103	73-138	
Bromomethane	ug/L	20	18.0	90	38-137	
Carbon disulfide	ug/L	20	18.3	92	71-129	
Carbon tetrachloride	ug/L	20	20.3	102	67-146	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	18.9	94	76-120	
Chloroform	ug/L	20	19.4	97	80-120	
Chloromethane	ug/L	20	18.0	90	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.3	102	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.4	102	80-120	
Dibromochloromethane	ug/L	20	20.7	104	80-126	
Ethylbenzene	ug/L	20	19.8	99	80-120	
Methylene chloride	ug/L	20	21.1	105	80-120	
Styrene	ug/L	20	20.4	102	80-123	
Tetrachloroethene	ug/L	20	19.8	99	80-123	
Toluene	ug/L	20	20.2	101	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.3	97	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.1	100	80-129	
Trichloroethene	ug/L	20	20.2	101	80-120	
Vinyl chloride	ug/L	20	22.7	114	62-125	
Xylene (Total)	ug/L	60	60.9	101	80-120	
1,2-Dichloroethane-d4 (S)	%			104	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1551635 1551636

Parameter	Units	60191794002 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	23.2	22.0	116	110	88-124	5	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	20.2	19.9	101	100	78-116	1	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	20.6	21.7	103	108	84-112	5	10	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1551635 1551636

Parameter	Units	60191794002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	ND	20	20	22.5	21.7	112	109	82-121	4	9	
1,1-Dichloroethene	ug/L	ND	20	20	22.4	22.7	112	114	78-124	2	12	
1,2-Dichloroethane	ug/L	ND	20	20	22.1	20.5	110	102	79-121	8	12	
1,2-Dichloropropane	ug/L	ND	20	20	22.2	20.3	111	102	82-119	9	10	
2-Butanone (MEK)	ug/L	ND	100	100	101	96.3	101	96	66-114	5	13	
2-Hexanone	ug/L	ND	100	100	102	101	102	101	71-116	1	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	106	102	106	102	72-122	4	12	
Acetone	ug/L	ND	100	100	105	110	101	107	65-113	5	27	
Benzene	ug/L	ND	20	20	22.6	21.8	113	109	46-155	4	13	
Bromodichloromethane	ug/L	ND	20	20	22.1	20.9	111	104	77-127	6	10	
Bromoform	ug/L	ND	20	20	20.4	20.5	102	102	70-125	0	11	
Bromomethane	ug/L	ND	20	20	19.5	20.9	98	105	41-140	7	30	
Carbon disulfide	ug/L	ND	20	20	21.3	20.9	106	104	68-140	2	10	
Carbon tetrachloride	ug/L	ND	20	20	23.4	22.8	117	114	68-147	3	11	
Chlorobenzene	ug/L	ND	20	20	21.7	22.1	108	111	83-121	2	9	
Chloroethane	ug/L	ND	20	20	21.8	21.0	109	105	69-126	4	19	
Chloroform	ug/L	ND	20	20	20.7	20.0	104	100	86-119	4	9	
Chloromethane	ug/L	ND	20	20	20.4	20.7	102	103	23-168	1	49	
cis-1,2-Dichloroethene	ug/L	ND	20	20	22.0	21.4	110	107	85-117	3	10	
cis-1,3-Dichloropropene	ug/L	ND	20	20	20.9	19.4	105	97	74-115	8	12	
Dibromochloromethane	ug/L	ND	20	20	21.2	20.1	106	101	65-134	5	11	
Ethylbenzene	ug/L	ND	20	20	21.2	21.1	106	106	51-148	1	14	
Methylene chloride	ug/L	ND	20	20	21.5	20.7	107	104	75-118	4	11	
Styrene	ug/L	ND	20	20	18.6	19.2	93	96	17-174	3	10	
Tetrachloroethene	ug/L	ND	20	20	21.4	21.7	107	108	78-127	1	9	
Toluene	ug/L	ND	20	20	20.9	21.5	105	107	47-149	3	16	
trans-1,2-Dichloroethene	ug/L	ND	20	20	21.2	20.6	106	103	84-119	3	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	19.0	19.8	95	99	71-120	4	10	
Trichloroethene	ug/L	ND	20	20	21.0	21.0	105	105	70-135	0	10	
Vinyl chloride	ug/L	ND	20	20	27.0	25.9	135	129	58-130	4	11	M1
Xylene (Total)	ug/L	ND	60	60	63.8	65.5	106	109	39-158	3	15	
1,2-Dichloroethane-d4 (S)	%						103	97	80-120			
4-Bromofluorobenzene (S)	%						99	102	80-120			
Toluene-d8 (S)	%						97	100	80-120			
Preservation pH		1.0			1.0	1.0				0		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1551637 1551638

Parameter	Units	60191794003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	21.6	21.4	108	107	88-124	1	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	19.7	18.8	98	94	78-116	5	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	19.9	20.0	99	100	84-112	1	10	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1551637 1551638

Parameter	Units	60191794003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	ND	20	20	21.2	21.5	106	108	82-121	2	9	
1,1-Dichloroethene	ug/L	ND	20	20	21.5	21.7	108	109	78-124	1	12	
1,2-Dichloroethane	ug/L	ND	20	20	20.7	20.5	103	103	79-121	1	12	
1,2-Dichloropropane	ug/L	ND	20	20	20.3	20.6	101	103	82-119	1	10	
2-Butanone (MEK)	ug/L	ND	100	100	93.1	96.3	93	96	66-114	3	13	
2-Hexanone	ug/L	ND	100	100	93.9	98.3	94	98	71-116	5	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	97.4	101	97	101	72-122	3	12	
Acetone	ug/L	ND	100	100	91.7	106	92	106	65-113	15	27	
Benzene	ug/L	ND	20	20	21.2	21.3	106	106	46-155	0	13	
Bromodichloromethane	ug/L	ND	20	20	20.7	21.0	103	105	77-127	1	10	
Bromoform	ug/L	ND	20	20	18.9	20.5	94	102	70-125	8	11	
Bromomethane	ug/L	ND	20	20	20.2	22.4	101	112	41-140	11	30	
Carbon disulfide	ug/L	ND	20	20	20.2	20.6	101	103	68-140	2	10	
Carbon tetrachloride	ug/L	ND	20	20	22.1	21.9	110	109	68-147	1	11	
Chlorobenzene	ug/L	ND	20	20	20.9	21.1	104	105	83-121	1	9	
Chloroethane	ug/L	ND	20	20	20.3	20.2	101	101	69-126	0	19	
Chloroform	ug/L	ND	20	20	19.7	19.9	98	99	86-119	1	9	
Chloromethane	ug/L	ND	20	20	19.6	22.7	98	114	23-168	15	49	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.9	21.1	104	106	85-117	1	10	
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.2	19.9	96	100	74-115	4	12	
Dibromochloromethane	ug/L	ND	20	20	19.9	20.1	100	100	65-134	1	11	
Ethylbenzene	ug/L	ND	20	20	20.2	20.8	101	104	51-148	3	14	
Methylene chloride	ug/L	ND	20	20	19.8	20.5	99	102	75-118	3	11	
Styrene	ug/L	ND	20	20	19.9	20.5	100	102	17-174	3	10	
Tetrachloroethene	ug/L	ND	20	20	20.1	20.4	101	102	78-127	1	9	
Toluene	ug/L	ND	20	20	19.9	20.9	100	105	47-149	5	16	
trans-1,2-Dichloroethene	ug/L	ND	20	20	20.6	20.5	103	102	84-119	1	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.4	19.4	92	97	71-120	6	10	
Trichloroethene	ug/L	ND	20	20	20.6	20.5	103	103	70-135	1	10	
Vinyl chloride	ug/L	ND	20	20	25.6	25.7	128	128	58-130	0	11	
Xylene (Total)	ug/L	ND	60	60	60.7	62.1	101	103	39-158	2	15	
1,2-Dichloroethane-d4 (S)	%						100	103	80-120			
4-Bromofluorobenzene (S)	%						100	96	80-120			
Toluene-d8 (S)	%						96	102	80-120			
Preservation pH		1.0			1.0	1.0				0		

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: MSV/68973 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60191868004, 60191868005, 60191868006, 60191868007, 60191868008, 60191868009, 60191868010, 60191868011, 60191868013, 60191868014, 60191868019, 60191868020, 60191868021, 60191868022, 60191868023, 60191868024

METHOD BLANK: 1553607 Matrix: Water
Associated Lab Samples: 60191868004, 60191868005, 60191868006, 60191868007, 60191868008, 60191868009, 60191868010, 60191868011, 60191868013, 60191868014, 60191868019, 60191868020, 60191868021, 60191868022, 60191868023, 60191868024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/21/15 15:19	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/21/15 15:19	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/21/15 15:19	
1,1-Dichloroethane	ug/L	ND	1.0	04/21/15 15:19	
1,1-Dichloroethene	ug/L	ND	1.0	04/21/15 15:19	
1,2-Dichloroethane	ug/L	ND	1.0	04/21/15 15:19	
1,2-Dichloropropane	ug/L	ND	1.0	04/21/15 15:19	
2-Butanone (MEK)	ug/L	ND	10.0	04/21/15 15:19	
2-Hexanone	ug/L	ND	10.0	04/21/15 15:19	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/21/15 15:19	
Acetone	ug/L	ND	10.0	04/21/15 15:19	
Benzene	ug/L	ND	1.0	04/21/15 15:19	
Bromodichloromethane	ug/L	ND	1.0	04/21/15 15:19	
Bromoform	ug/L	ND	1.0	04/21/15 15:19	
Bromomethane	ug/L	ND	5.0	04/21/15 15:19	
Carbon disulfide	ug/L	ND	5.0	04/21/15 15:19	
Carbon tetrachloride	ug/L	ND	1.0	04/21/15 15:19	
Chlorobenzene	ug/L	ND	1.0	04/21/15 15:19	
Chloroethane	ug/L	ND	1.0	04/21/15 15:19	
Chloroform	ug/L	ND	1.0	04/21/15 15:19	
Chloromethane	ug/L	0.15J	1.0	04/21/15 15:19	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/21/15 15:19	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/21/15 15:19	
Dibromochloromethane	ug/L	ND	1.0	04/21/15 15:19	
Ethylbenzene	ug/L	ND	1.0	04/21/15 15:19	
Methylene chloride	ug/L	ND	1.0	04/21/15 15:19	
Styrene	ug/L	ND	1.0	04/21/15 15:19	
Tetrachloroethene	ug/L	ND	1.0	04/21/15 15:19	
Toluene	ug/L	ND	1.0	04/21/15 15:19	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/21/15 15:19	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/21/15 15:19	
Trichloroethene	ug/L	ND	1.0	04/21/15 15:19	
Vinyl chloride	ug/L	ND	1.0	04/21/15 15:19	
Xylene (Total)	ug/L	ND	3.0	04/21/15 15:19	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/21/15 15:19	
4-Bromofluorobenzene (S)	%	97	80-120	04/21/15 15:19	
Toluene-d8 (S)	%	94	80-120	04/21/15 15:19	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

LABORATORY CONTROL SAMPLE: 1553608

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	22.8	114	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.8	99	73-121	
1,1,2-Trichloroethane	ug/L	20	21.5	107	80-120	
1,1-Dichloroethane	ug/L	20	22.4	112	80-120	
1,1-Dichloroethene	ug/L	20	22.2	111	80-120	
1,2-Dichloroethane	ug/L	20	23.0	115	81-120	
1,2-Dichloropropane	ug/L	20	22.1	111	80-120	
2-Butanone (MEK)	ug/L	100	108	108	67-122	
2-Hexanone	ug/L	100	102	102	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	114	114	76-120	
Acetone	ug/L	100	109	109	72-120	
Benzene	ug/L	20	22.6	113	80-120	
Bromodichloromethane	ug/L	20	22.7	114	80-120	
Bromoform	ug/L	20	22.3	111	73-138	
Bromomethane	ug/L	20	18.6	93	38-137	
Carbon disulfide	ug/L	20	20.4	102	71-129	
Carbon tetrachloride	ug/L	20	23.2	116	67-146	
Chlorobenzene	ug/L	20	22.2	111	80-120	
Chloroethane	ug/L	20	21.2	106	76-120	
Chloroform	ug/L	20	22.3	112	80-120	
Chloromethane	ug/L	20	21.4	107	34-165	
cis-1,2-Dichloroethene	ug/L	20	22.9	114	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.7	109	80-120	
Dibromochloromethane	ug/L	20	21.3	106	80-126	
Ethylbenzene	ug/L	20	21.1	105	80-120	
Methylene chloride	ug/L	20	22.3	111	80-120	
Styrene	ug/L	20	21.2	106	80-123	
Tetrachloroethene	ug/L	20	20.3	101	80-123	
Toluene	ug/L	20	20.6	103	80-120	
trans-1,2-Dichloroethene	ug/L	20	21.3	106	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.8	99	80-129	
Trichloroethene	ug/L	20	22.5	112	80-120	
Vinyl chloride	ug/L	20	24.1	121	62-125	
Xylene (Total)	ug/L	60	63.6	106	80-120	
1,2-Dichloroethane-d4 (S)	%			95	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1553609 1553610

Parameter	Units	60191868013 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	22.9	24.4	114	122	88-124	6	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	17.0	18.2	85	91	78-116	7	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	19.1	21.3	96	106	84-112	10	10	

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REPORT OF LABORATORY ANALYSIS

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(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1553609 1553610

Parameter	Units	60191868013 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	4.0	20	20	25.6	28.1	108	120	82-121	9	9	
1,1-Dichloroethene	ug/L	ND	20	20	20.7	22.1	102	109	78-124	6	12	
1,2-Dichloroethane	ug/L	ND	20	20	22.0	23.3	110	116	79-121	5	12	
1,2-Dichloropropane	ug/L	ND	20	20	21.5	23.1	107	115	82-119	7	10	
2-Butanone (MEK)	ug/L	ND	100	100	92.3	101	92	101	66-114	9	13	
2-Hexanone	ug/L	ND	100	100	86.9	92.6	87	93	71-116	6	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	105	108	105	108	72-122	3	12	
Acetone	ug/L	ND	100	100	107	112	107	112	65-113	4	27	
Benzene	ug/L	ND	20	20	21.8	23.1	109	116	46-155	6	13	
Bromodichloromethane	ug/L	ND	20	20	21.8	24.3	109	122	77-127	11	10	R1
Bromoform	ug/L	ND	20	20	19.4	20.2	97	101	70-125	4	11	
Bromomethane	ug/L	ND	20	20	15.4	19.0	77	95	41-140	21	30	
Carbon disulfide	ug/L	ND	20	20	18.5	19.0	93	95	68-140	2	10	
Carbon tetrachloride	ug/L	ND	20	20	23.3	24.2	116	121	68-147	4	11	
Chlorobenzene	ug/L	ND	20	20	20.3	21.7	102	109	83-121	7	9	
Chloroethane	ug/L	ND	20	20	17.2	19.1	86	96	69-126	10	19	
Chloroform	ug/L	ND	20	20	21.4	22.8	107	114	86-119	6	9	
Chloromethane	ug/L	ND	20	20	16.6	19.9	83	99	23-168	18	49	
cis-1,2-Dichloroethene	ug/L	5.3	20	20	28.1	29.9	114	123	85-117	6	10	M1
cis-1,3-Dichloropropene	ug/L	ND	20	20	19.4	20.7	97	104	74-115	7	12	
Dibromochloromethane	ug/L	ND	20	20	19.7	20.2	99	101	65-134	2	11	
Ethylbenzene	ug/L	ND	20	20	19.2	20.1	96	100	51-148	4	14	
Methylene chloride	ug/L	ND	20	20	21.1	22.5	105	113	75-118	7	11	
Styrene	ug/L	ND	20	20	1.6	1.7	8	9	17-174	10	10	M1
Tetrachloroethene	ug/L	ND	20	20	18.4	20.4	92	102	78-127	10	9	R1
Toluene	ug/L	ND	20	20	19.2	20.1	96	101	47-149	5	16	
trans-1,2-Dichloroethene	ug/L	ND	20	20	20.7	22.7	102	112	84-119	9	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	16.5	17.8	82	89	71-120	8	10	
Trichloroethene	ug/L	3.7	20	20	25.6	25.9	110	111	70-135	1	10	
Vinyl chloride	ug/L	ND	20	20	19.7	21.3	97	105	58-130	8	11	
Xylene (Total)	ug/L	ND	60	60	58.9	62.2	98	104	39-158	6	15	
1,2-Dichloroethane-d4 (S)	%						102	101	80-120			
4-Bromofluorobenzene (S)	%						94	97	80-120			
Toluene-d8 (S)	%						92	93	80-120			
Preservation pH		1.0			1.0	1.0				0		

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: MSV/68990 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60191868025, 60191868026, 60191868027, 60191868028

METHOD BLANK: 1554233 Matrix: Water
Associated Lab Samples: 60191868025, 60191868026, 60191868027, 60191868028

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/22/15 12:30	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/22/15 12:30	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/22/15 12:30	
1,1-Dichloroethane	ug/L	ND	1.0	04/22/15 12:30	
1,1-Dichloroethene	ug/L	ND	1.0	04/22/15 12:30	
1,2-Dichloroethane	ug/L	ND	1.0	04/22/15 12:30	
1,2-Dichloropropane	ug/L	ND	1.0	04/22/15 12:30	
2-Butanone (MEK)	ug/L	ND	10.0	04/22/15 12:30	
2-Hexanone	ug/L	ND	10.0	04/22/15 12:30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/22/15 12:30	
Acetone	ug/L	2.5J	10.0	04/22/15 12:30	
Benzene	ug/L	ND	1.0	04/22/15 12:30	
Bromodichloromethane	ug/L	ND	1.0	04/22/15 12:30	
Bromoform	ug/L	ND	1.0	04/22/15 12:30	
Bromomethane	ug/L	ND	5.0	04/22/15 12:30	
Carbon disulfide	ug/L	0.15J	5.0	04/22/15 12:30	
Carbon tetrachloride	ug/L	ND	1.0	04/22/15 12:30	
Chlorobenzene	ug/L	ND	1.0	04/22/15 12:30	
Chloroethane	ug/L	ND	1.0	04/22/15 12:30	
Chloroform	ug/L	ND	1.0	04/22/15 12:30	
Chloromethane	ug/L	0.21J	1.0	04/22/15 12:30	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 12:30	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 12:30	
Dibromochloromethane	ug/L	ND	1.0	04/22/15 12:30	
Ethylbenzene	ug/L	ND	1.0	04/22/15 12:30	
Methylene chloride	ug/L	ND	1.0	04/22/15 12:30	
Styrene	ug/L	ND	1.0	04/22/15 12:30	
Tetrachloroethene	ug/L	ND	1.0	04/22/15 12:30	
Toluene	ug/L	ND	1.0	04/22/15 12:30	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 12:30	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 12:30	
Trichloroethene	ug/L	ND	1.0	04/22/15 12:30	
Vinyl chloride	ug/L	ND	1.0	04/22/15 12:30	
Xylene (Total)	ug/L	ND	3.0	04/22/15 12:30	
1,2-Dichloroethane-d4 (S)	%	106	80-120	04/22/15 12:30	
4-Bromofluorobenzene (S)	%	99	80-120	04/22/15 12:30	
Toluene-d8 (S)	%	102	80-120	04/22/15 12:30	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

LABORATORY CONTROL SAMPLE: 1554234

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.7	103	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.2	96	73-121	
1,1,2-Trichloroethane	ug/L	20	20.7	104	80-120	
1,1-Dichloroethane	ug/L	20	20.3	101	80-120	
1,1-Dichloroethene	ug/L	20	20.7	104	80-120	
1,2-Dichloroethane	ug/L	20	20.4	102	81-120	
1,2-Dichloropropane	ug/L	20	20.8	104	80-120	
2-Butanone (MEK)	ug/L	100	99.2	99	67-122	
2-Hexanone	ug/L	100	102	102	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	108	108	76-120	
Acetone	ug/L	100	98.8	99	72-120	
Benzene	ug/L	20	21.5	108	80-120	
Bromodichloromethane	ug/L	20	20.5	102	80-120	
Bromoform	ug/L	20	20.3	101	73-138	
Bromomethane	ug/L	20	21.0	105	38-137	
Carbon disulfide	ug/L	20	20.3	101	71-129	
Carbon tetrachloride	ug/L	20	19.9	100	67-146	
Chlorobenzene	ug/L	20	21.4	107	80-120	
Chloroethane	ug/L	20	20.5	103	76-120	
Chloroform	ug/L	20	20.2	101	80-120	
Chloromethane	ug/L	20	16.4	82	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.1	101	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.2	106	80-120	
Dibromochloromethane	ug/L	20	20.2	101	80-126	
Ethylbenzene	ug/L	20	20.6	103	80-120	
Methylene chloride	ug/L	20	21.1	105	80-120	
Styrene	ug/L	20	20.7	103	80-123	
Tetrachloroethene	ug/L	20	20.1	101	80-123	
Toluene	ug/L	20	20.7	104	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.2	101	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.1	106	80-129	
Trichloroethene	ug/L	20	21.0	105	80-120	
Vinyl chloride	ug/L	20	22.5	112	62-125	
Xylene (Total)	ug/L	60	64.0	107	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			100	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: MSV/69103 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60191868012, 60191868020, 60191868023

METHOD BLANK: 1557447 Matrix: Water
Associated Lab Samples: 60191868012, 60191868020, 60191868023

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1-Dichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
1,2-Dichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,2-Dichloropropane	ug/L	ND	1.0	04/27/15 10:45	
2-Butanone (MEK)	ug/L	ND	10.0	04/27/15 10:45	
2-Hexanone	ug/L	ND	10.0	04/27/15 10:45	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/27/15 10:45	
Acetone	ug/L	ND	10.0	04/27/15 10:45	
Benzene	ug/L	ND	1.0	04/27/15 10:45	
Bromodichloromethane	ug/L	ND	1.0	04/27/15 10:45	
Bromoform	ug/L	ND	1.0	04/27/15 10:45	
Bromomethane	ug/L	0.52J	5.0	04/27/15 10:45	
Carbon disulfide	ug/L	ND	5.0	04/27/15 10:45	
Carbon tetrachloride	ug/L	ND	1.0	04/27/15 10:45	
Chlorobenzene	ug/L	ND	1.0	04/27/15 10:45	
Chloroethane	ug/L	ND	1.0	04/27/15 10:45	
Chloroform	ug/L	ND	1.0	04/27/15 10:45	
Chloromethane	ug/L	0.14J	1.0	04/27/15 10:45	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/27/15 10:45	
Dibromochloromethane	ug/L	ND	1.0	04/27/15 10:45	
Ethylbenzene	ug/L	ND	1.0	04/27/15 10:45	
Methylene chloride	ug/L	ND	1.0	04/27/15 10:45	
Styrene	ug/L	ND	1.0	04/27/15 10:45	
Tetrachloroethene	ug/L	ND	1.0	04/27/15 10:45	
Toluene	ug/L	ND	1.0	04/27/15 10:45	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/27/15 10:45	
Trichloroethene	ug/L	ND	1.0	04/27/15 10:45	
Vinyl chloride	ug/L	ND	1.0	04/27/15 10:45	
Xylene (Total)	ug/L	ND	3.0	04/27/15 10:45	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/27/15 10:45	
4-Bromofluorobenzene (S)	%	100	80-120	04/27/15 10:45	
Toluene-d8 (S)	%	103	80-120	04/27/15 10:45	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

LABORATORY CONTROL SAMPLE: 1557448

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	22.7	113	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	21.8	109	73-121	
1,1,2-Trichloroethane	ug/L	20	22.3	111	80-120	
1,1-Dichloroethane	ug/L	20	23.1	116	80-120	
1,1-Dichloroethene	ug/L	20	21.3	107	80-120	
1,2-Dichloroethane	ug/L	20	21.5	107	81-120	
1,2-Dichloropropane	ug/L	20	21.6	108	80-120	
2-Butanone (MEK)	ug/L	100	99.4	99	67-122	
2-Hexanone	ug/L	100	104	104	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	76-120	
Acetone	ug/L	100	105	105	72-120	
Benzene	ug/L	20	22.2	111	80-120	
Bromodichloromethane	ug/L	20	21.9	109	80-120	
Bromoform	ug/L	20	21.1	105	73-138	
Bromomethane	ug/L	20	24.5	122	38-137	
Carbon disulfide	ug/L	20	21.9	109	71-129	
Carbon tetrachloride	ug/L	20	22.4	112	67-146	
Chlorobenzene	ug/L	20	22.7	113	80-120	
Chloroethane	ug/L	20	22.0	110	76-120	
Chloroform	ug/L	20	22.3	111	80-120	
Chloromethane	ug/L	20	19.2	96	34-165	
cis-1,2-Dichloroethene	ug/L	20	22.5	113	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.6	108	80-120	
Dibromochloromethane	ug/L	20	21.9	110	80-126	
Ethylbenzene	ug/L	20	22.4	112	80-120	
Methylene chloride	ug/L	20	21.3	106	80-120	
Styrene	ug/L	20	22.4	112	80-123	
Tetrachloroethene	ug/L	20	23.7	119	80-123	
Toluene	ug/L	20	22.0	110	80-120	
trans-1,2-Dichloroethene	ug/L	20	22.1	111	80-120	
trans-1,3-Dichloropropene	ug/L	20	22.3	111	80-129	
Trichloroethene	ug/L	20	21.8	109	80-120	
Vinyl chloride	ug/L	20	24.6	123	62-125	
Xylene (Total)	ug/L	60	68.3	114	80-120	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			99	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: MSV/68871 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60191868015, 60191868016, 60191868017, 60191868018

METHOD BLANK: 1550535 Matrix: Water
Associated Lab Samples: 60191868015, 60191868016, 60191868017, 60191868018

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/16/15 21:18	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/16/15 21:18	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/16/15 21:18	
1,1-Dichloroethane	ug/L	ND	1.0	04/16/15 21:18	
1,1-Dichloroethene	ug/L	ND	1.0	04/16/15 21:18	
1,2-Dichloroethane	ug/L	ND	1.0	04/16/15 21:18	
1,2-Dichloropropane	ug/L	ND	1.0	04/16/15 21:18	
2-Butanone (MEK)	ug/L	ND	10.0	04/16/15 21:18	
2-Hexanone	ug/L	ND	10.0	04/16/15 21:18	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/16/15 21:18	
Acetone	ug/L	ND	10.0	04/16/15 21:18	
Benzene	ug/L	ND	1.0	04/16/15 21:18	
Bromodichloromethane	ug/L	ND	1.0	04/16/15 21:18	
Bromoform	ug/L	ND	1.0	04/16/15 21:18	
Bromomethane	ug/L	ND	5.0	04/16/15 21:18	
Carbon disulfide	ug/L	ND	5.0	04/16/15 21:18	
Carbon tetrachloride	ug/L	ND	1.0	04/16/15 21:18	
Chlorobenzene	ug/L	ND	1.0	04/16/15 21:18	
Chloroethane	ug/L	ND	1.0	04/16/15 21:18	
Chloroform	ug/L	ND	1.0	04/16/15 21:18	
Chloromethane	ug/L	0.17J	1.0	04/16/15 21:18	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/16/15 21:18	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/16/15 21:18	
Dibromochloromethane	ug/L	ND	1.0	04/16/15 21:18	
Ethylbenzene	ug/L	ND	1.0	04/16/15 21:18	
Methylene chloride	ug/L	ND	1.0	04/16/15 21:18	
Styrene	ug/L	ND	1.0	04/16/15 21:18	
Tetrachloroethene	ug/L	ND	1.0	04/16/15 21:18	
Toluene	ug/L	ND	1.0	04/16/15 21:18	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/16/15 21:18	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/16/15 21:18	
Trichloroethene	ug/L	ND	1.0	04/16/15 21:18	
Vinyl chloride	ug/L	ND	1.0	04/16/15 21:18	
Xylene (Total)	ug/L	ND	3.0	04/16/15 21:18	
1,2-Dichloroethane-d4 (S)	%	96	80-120	04/16/15 21:18	
4-Bromofluorobenzene (S)	%	98	80-120	04/16/15 21:18	
Toluene-d8 (S)	%	99	80-120	04/16/15 21:18	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

LABORATORY CONTROL SAMPLE: 1550536

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.8	104	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.1	100	73-121	
1,1,2-Trichloroethane	ug/L	20	20.3	102	80-120	
1,1-Dichloroethane	ug/L	20	21.1	105	80-120	
1,1-Dichloroethene	ug/L	20	20.6	103	80-120	
1,2-Dichloroethane	ug/L	20	21.3	106	81-120	
1,2-Dichloropropane	ug/L	20	21.1	105	80-120	
2-Butanone (MEK)	ug/L	100	102	102	67-122	
2-Hexanone	ug/L	100	104	104	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	106	106	76-120	
Acetone	ug/L	100	102	102	72-120	
Benzene	ug/L	20	21.3	107	80-120	
Bromodichloromethane	ug/L	20	21.3	106	80-120	
Bromoform	ug/L	20	20.3	102	73-138	
Bromomethane	ug/L	20	21.1	106	38-137	
Carbon disulfide	ug/L	20	18.9	95	71-129	
Carbon tetrachloride	ug/L	20	20.4	102	67-146	
Chlorobenzene	ug/L	20	21.6	108	80-120	
Chloroethane	ug/L	20	19.4	97	76-120	
Chloroform	ug/L	20	19.8	99	80-120	
Chloromethane	ug/L	20	19.1	96	34-165	
cis-1,2-Dichloroethene	ug/L	20	21.4	107	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.8	104	80-120	
Dibromochloromethane	ug/L	20	21.1	105	80-126	
Ethylbenzene	ug/L	20	20.8	104	80-120	
Methylene chloride	ug/L	20	20.0	100	80-120	
Styrene	ug/L	20	21.2	106	80-123	
Tetrachloroethene	ug/L	20	20.1	101	80-123	
Toluene	ug/L	20	20.3	102	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.6	98	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.6	103	80-129	
Trichloroethene	ug/L	20	20.8	104	80-120	
Vinyl chloride	ug/L	20	22.3	112	62-125	
Xylene (Total)	ug/L	60	62.7	105	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			101	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: MSV/68932
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60191868001

METHOD BLANK: 1552695
Matrix: Water
Associated Lab Samples: 60191868001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1-Dichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1-Dichloroethene	ug/L	ND	1.0	04/19/15 14:26	
1,2-Dichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,2-Dichloropropane	ug/L	ND	1.0	04/19/15 14:26	
2-Butanone (MEK)	ug/L	ND	10.0	04/19/15 14:26	
2-Hexanone	ug/L	ND	10.0	04/19/15 14:26	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/19/15 14:26	
Acetone	ug/L	ND	10.0	04/19/15 14:26	
Benzene	ug/L	ND	1.0	04/19/15 14:26	
Bromodichloromethane	ug/L	ND	1.0	04/19/15 14:26	
Bromoform	ug/L	ND	1.0	04/19/15 14:26	
Bromomethane	ug/L	ND	5.0	04/19/15 14:26	
Carbon disulfide	ug/L	ND	5.0	04/19/15 14:26	
Carbon tetrachloride	ug/L	ND	1.0	04/19/15 14:26	
Chlorobenzene	ug/L	ND	1.0	04/19/15 14:26	
Chloroethane	ug/L	ND	1.0	04/19/15 14:26	
Chloroform	ug/L	ND	1.0	04/19/15 14:26	
Chloromethane	ug/L	0.16J	1.0	04/19/15 14:26	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/19/15 14:26	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/19/15 14:26	
Dibromochloromethane	ug/L	ND	1.0	04/19/15 14:26	
Ethylbenzene	ug/L	ND	1.0	04/19/15 14:26	
Methylene chloride	ug/L	ND	1.0	04/19/15 14:26	
Styrene	ug/L	ND	1.0	04/19/15 14:26	
Tetrachloroethene	ug/L	ND	1.0	04/19/15 14:26	
Toluene	ug/L	ND	1.0	04/19/15 14:26	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/19/15 14:26	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/19/15 14:26	
Trichloroethene	ug/L	ND	1.0	04/19/15 14:26	
Vinyl chloride	ug/L	ND	1.0	04/19/15 14:26	
Xylene (Total)	ug/L	ND	3.0	04/19/15 14:26	
1,2-Dichloroethane-d4 (S)	%	98	80-120	04/19/15 14:26	
4-Bromofluorobenzene (S)	%	101	80-120	04/19/15 14:26	
Toluene-d8 (S)	%	97	80-120	04/19/15 14:26	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

LABORATORY CONTROL SAMPLE: 1552696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.5	103	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	17.6	88	73-121	
1,1,2-Trichloroethane	ug/L	20	20.0	100	80-120	
1,1-Dichloroethane	ug/L	20	21.0	105	80-120	
1,1-Dichloroethene	ug/L	20	20.7	104	80-120	
1,2-Dichloroethane	ug/L	20	21.1	106	81-120	
1,2-Dichloropropane	ug/L	20	20.2	101	80-120	
2-Butanone (MEK)	ug/L	100	98.7	99	67-122	
2-Hexanone	ug/L	100	96.2	96	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	76-120	
Acetone	ug/L	100	99.8	100	72-120	
Benzene	ug/L	20	20.9	104	80-120	
Bromodichloromethane	ug/L	20	20.6	103	80-120	
Bromoform	ug/L	20	19.5	97	73-138	
Bromomethane	ug/L	20	17.8	89	38-137	
Carbon disulfide	ug/L	20	19.1	95	71-129	
Carbon tetrachloride	ug/L	20	21.1	106	67-146	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	20.2	101	76-120	
Chloroform	ug/L	20	20.3	101	80-120	
Chloromethane	ug/L	20	21.1	106	34-165	
cis-1,2-Dichloroethene	ug/L	20	21.0	105	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.0	100	80-120	
Dibromochloromethane	ug/L	20	19.4	97	80-126	
Ethylbenzene	ug/L	20	19.5	97	80-120	
Methylene chloride	ug/L	20	20.7	103	80-120	
Styrene	ug/L	20	19.9	99	80-123	
Tetrachloroethene	ug/L	20	19.4	97	80-123	
Toluene	ug/L	20	19.7	98	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.9	99	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.9	94	80-129	
Trichloroethene	ug/L	20	21.1	105	80-120	
Vinyl chloride	ug/L	20	22.3	112	62-125	
Xylene (Total)	ug/L	60	60.0	100	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			97	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: WET/54175 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60191868001, 60191868002, 60191868003, 60191868004, 60191868005, 60191868006, 60191868007, 60191868008, 60191868009, 60191868010, 60191868011, 60191868012, 60191868013, 60191868014, 60191868015, 60191868016, 60191868017, 60191868018, 60191868019, 60191868020

METHOD BLANK: 1551659 Matrix: Water
Associated Lab Samples: 60191868001, 60191868002, 60191868003, 60191868004, 60191868005, 60191868006, 60191868007, 60191868008, 60191868009, 60191868010, 60191868011, 60191868012, 60191868013, 60191868014, 60191868015, 60191868016, 60191868017, 60191868018, 60191868019, 60191868020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	04/17/15 13:03	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	04/17/15 13:03	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	04/17/15 13:03	

LABORATORY CONTROL SAMPLE: 1551660

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	521	104	90-110	

SAMPLE DUPLICATE: 1551661

Parameter	Units	60191868002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	11.6J	11.6J		10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	11.6J	11.6J		10	

SAMPLE DUPLICATE: 1551662

Parameter	Units	60191868013 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	145	149	3	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	145	149	3	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: WET/54198 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60191868021, 60191868022

METHOD BLANK: 1552781 Matrix: Water
Associated Lab Samples: 60191868021, 60191868022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	04/20/15 08:48	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	04/20/15 08:48	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	04/20/15 08:48	

LABORATORY CONTROL SAMPLE: 1552782

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	519	104	90-110	

SAMPLE DUPLICATE: 1552783

Parameter	Units	60191890002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	162	163	1	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	162	163	1	10	

SAMPLE DUPLICATE: 1552784

Parameter	Units	60191890009 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	280	284	2	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	280	284	2	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: WET/54193 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60191868001, 60191868002, 60191868003, 60191868004, 60191868005, 60191868006, 60191868007, 60191868008, 60191868009, 60191868010, 60191868011

METHOD BLANK: 1552647 Matrix: Water
Associated Lab Samples: 60191868001, 60191868002, 60191868003, 60191868004, 60191868005, 60191868006, 60191868007, 60191868008, 60191868009, 60191868010, 60191868011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	04/19/15 12:23	

LABORATORY CONTROL SAMPLE: 1552648

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.50	99	80-120	

MATRIX SPIKE SAMPLE: 1552649

Parameter	Units	60191963001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.037J	.5	0.46	84	75-125	

SAMPLE DUPLICATE: 1552651

Parameter	Units	60191975001 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: WET/54194 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60191868012, 60191868013, 60191868014, 60191868015, 60191868016, 60191868017, 60191868018, 60191868019, 60191868020, 60191868021, 60191868022

METHOD BLANK: 1552652 Matrix: Water
Associated Lab Samples: 60191868012, 60191868013, 60191868014, 60191868015, 60191868016, 60191868017, 60191868018, 60191868019, 60191868020, 60191868021, 60191868022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	04/19/15 12:29	

LABORATORY CONTROL SAMPLE: 1552653

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.49	98	80-120	

MATRIX SPIKE SAMPLE: 1552654

Parameter	Units	60191868012 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.26	53	75-125	M1

SAMPLE DUPLICATE: 1552656

Parameter	Units	60191868013 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: WETA/33770 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60191868001, 60191868002, 60191868003, 60191868004, 60191868005, 60191868006, 60191868007, 60191868008, 60191868009, 60191868010, 60191868011, 60191868012, 60191868013

METHOD BLANK: 1555786 Matrix: Water
Associated Lab Samples: 60191868001, 60191868002, 60191868003, 60191868004, 60191868005, 60191868006, 60191868007, 60191868008, 60191868009, 60191868010, 60191868011, 60191868012, 60191868013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	04/26/15 08:59	
Sulfate	mg/L	ND	1.0	04/26/15 08:59	

LABORATORY CONTROL SAMPLE: 1555787

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.6	91	90-110	
Sulfate	mg/L	5	4.8	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1555788 1555789

Parameter	Units	60191868001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	276	100	100	374	371	98	95	80-120	1	15	
Sulfate	mg/L	1240	500	500	1760	1740	106	101	80-120	1	15	

MATRIX SPIKE SAMPLE: 1555790

Parameter	Units	60191868013 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	150	50	203	105	80-120	
Sulfate	mg/L	86.7	50	135	97	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: WETA/33771 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60191868014, 60191868015, 60191868016, 60191868017, 60191868018, 60191868019, 60191868020, 60191868021, 60191868022

METHOD BLANK: 1555792 Matrix: Water
Associated Lab Samples: 60191868014, 60191868015, 60191868016, 60191868017, 60191868018, 60191868019, 60191868020, 60191868021, 60191868022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	04/26/15 18:11	
Sulfate	mg/L	ND	1.0	04/26/15 18:11	

LABORATORY CONTROL SAMPLE: 1555793

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.6	92	90-110	
Sulfate	mg/L	5	4.8	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1555794 1555795

Parameter	Units	60191868014 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	154	50	50	207	205	106	102	80-120	1	15	
Sulfate	mg/L	4.0	5	5	8.7	8.7	94	96	80-120	1	15	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: WETA/33690 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60191868001, 60191868002, 60191868003, 60191868004, 60191868005, 60191868006, 60191868007, 60191868008, 60191868009, 60191868010

METHOD BLANK: 1552766 Matrix: Water
Associated Lab Samples: 60191868001, 60191868002, 60191868003, 60191868004, 60191868005, 60191868006, 60191868007, 60191868008, 60191868009, 60191868010

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	04/20/15 13:59	

LABORATORY CONTROL SAMPLE: 1552767

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.2	108	90-110	

MATRIX SPIKE SAMPLE: 1552768

Parameter	Units	60191831001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	21.4	20	39.2	89	90-110	M1

MATRIX SPIKE SAMPLE: 1552769

Parameter	Units	60191832001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.8	92	90-110	

SAMPLE DUPLICATE: 1552770

Parameter	Units	60191845002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	3.7	3.6	1	18	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: WETA/33691 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60191868011, 60191868012, 60191868013, 60191868014, 60191868015, 60191868016, 60191868017, 60191868018, 60191868019, 60191868020, 60191868021, 60191868022

METHOD BLANK: 1552771 Matrix: Water
Associated Lab Samples: 60191868011, 60191868012, 60191868013, 60191868014, 60191868015, 60191868016, 60191868017, 60191868018, 60191868019, 60191868020, 60191868021, 60191868022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	04/20/15 14:32	

LABORATORY CONTROL SAMPLE: 1552772

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.1	104	90-110	

MATRIX SPIKE SAMPLE: 1552773

Parameter	Units	60191868013 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.3	63	90-110	M1

MATRIX SPIKE SAMPLE: 1552774

Parameter	Units	60191881001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.8	89	90-110	M1

SAMPLE DUPLICATE: 1552775

Parameter	Units	60191910001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	ND	ND		18	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: WETA/33640 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60191868001, 60191868002, 60191868003, 60191868004

METHOD BLANK: 1550143 Matrix: Water
Associated Lab Samples: 60191868001, 60191868002, 60191868003, 60191868004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	04/15/15 15:26	
Nitrogen, Nitrite	mg/L	ND	0.10	04/15/15 15:26	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	04/15/15 15:26	

LABORATORY CONTROL SAMPLE: 1550144

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.8	111	85-115	
Nitrogen, Nitrite	mg/L	.4	0.39	97	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.2	108	90-110	

MATRIX SPIKE SAMPLE: 1550145

Parameter	Units	60191862001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	64.5	32	88.1	74	85-115	M1
Nitrogen, Nitrite	mg/L	ND	8	8.8	110	90-110	
Nitrogen, NO2 plus NO3	mg/L	64.5	40	97.0	81	90-110	M1

MATRIX SPIKE SAMPLE: 1550277

Parameter	Units	60191856002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	ND	1.6	1.8	113	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.40	100	90-110	
Nitrogen, NO2 plus NO3	mg/L	ND	2	2.2	110	90-110	

SAMPLE DUPLICATE: 1550146

Parameter	Units	60191863001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	55.8	55.4	1	20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	55.8	55.4	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: WETA/33641 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60191868005, 60191868006, 60191868007, 60191868008, 60191868009, 60191868010, 60191868011, 60191868012, 60191868013, 60191868014, 60191868015, 60191868016, 60191868017, 60191868018, 60191868019, 60191868020, 60191868021, 60191868022

METHOD BLANK: 1550150 Matrix: Water
Associated Lab Samples: 60191868005, 60191868006, 60191868007, 60191868008, 60191868009, 60191868010, 60191868011, 60191868012, 60191868013, 60191868014, 60191868015, 60191868016, 60191868017, 60191868018, 60191868019, 60191868020, 60191868021, 60191868022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	04/15/15 15:40	
Nitrogen, Nitrite	mg/L	ND	0.10	04/15/15 15:40	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	04/15/15 15:40	

LABORATORY CONTROL SAMPLE: 1550151

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.8	112	85-115	
Nitrogen, Nitrite	mg/L	.4	0.39	97	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.2	109	90-110	

MATRIX SPIKE SAMPLE: 1550152

Parameter	Units	60191868005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	ND	1.6	1.9	119	85-115	M1
Nitrogen, Nitrite	mg/L	ND	.4	0.41	102	90-110	
Nitrogen, NO2 plus NO3	mg/L	ND	2	2.3	115	90-110	M1

MATRIX SPIKE SAMPLE: 1550153

Parameter	Units	60191868013 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	22.7	8	27.2	56	85-115	M1
Nitrogen, Nitrite	mg/L	ND	2	1.9	96	90-110	
Nitrogen, NO2 plus NO3	mg/L	22.7	10	29.1	64	90-110	M1

SAMPLE DUPLICATE: 1550154

Parameter	Units	60191868019 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	1.8	1.8	1	20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	1.8	1.8	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: WETA/33752 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60191868001, 60191868002, 60191868003, 60191868004, 60191868005

METHOD BLANK: 1554748 Matrix: Water
Associated Lab Samples: 60191868001, 60191868002, 60191868003, 60191868004, 60191868005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	04/23/15 13:54	

LABORATORY CONTROL SAMPLE: 1554749

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.5	109	80-120	

MATRIX SPIKE SAMPLE: 1554750

Parameter	Units	60191794002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	ND	5	4.6	85	80-120	

SAMPLE DUPLICATE: 1554751

Parameter	Units	60191794003 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	0.54J	0.53J		25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: WETA/33760 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60191868006, 60191868007, 60191868008, 60191868009, 60191868010, 60191868011, 60191868012, 60191868013, 60191868014, 60191868015, 60191868016, 60191868017, 60191868018, 60191868019, 60191868020, 60191868021, 60191868022

METHOD BLANK: 1555568 Matrix: Water
Associated Lab Samples: 60191868006, 60191868007, 60191868008, 60191868009, 60191868010, 60191868011, 60191868012, 60191868013, 60191868014, 60191868015, 60191868016, 60191868017, 60191868018, 60191868019, 60191868020, 60191868021, 60191868022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	04/24/15 09:45	

LABORATORY CONTROL SAMPLE: 1555569

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.4	109	80-120	

MATRIX SPIKE SAMPLE: 1555571

Parameter	Units	60191868013 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	0.54J	5	4.4	77	80-120	M1

SAMPLE DUPLICATE: 1555570

Parameter	Units	60191868007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	ND		25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: WETA/7918 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60191868001, 60191868002, 60191868003, 60191868004, 60191868005, 60191868006, 60191868007, 60191868008, 60191868009, 60191868010, 60191868011, 60191868012, 60191868013, 60191868014, 60191868015

METHOD BLANK: 134644 Matrix: Water
Associated Lab Samples: 60191868001, 60191868002, 60191868003, 60191868004, 60191868005, 60191868006, 60191868007, 60191868008, 60191868009, 60191868010, 60191868011, 60191868012, 60191868013, 60191868014, 60191868015

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	04/20/15 16:06	

LABORATORY CONTROL SAMPLE: 134645

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.5	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 134646 134647

Parameter	Units	60191868001 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	0.60	1.5	1.5	2.0	2.1	92	95	80-120	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 134651 134652

Parameter	Units	60191868013 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	0.10	1.5	1.5	1.6	1.5	96	91	80-120	5	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

QC Batch: WETA/7937 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60191868016, 60191868017, 60191868018, 60191868019, 60191868020, 60191868021, 60191868022

METHOD BLANK: 135085 Matrix: Water
Associated Lab Samples: 60191868016, 60191868017, 60191868018, 60191868019, 60191868020, 60191868021, 60191868022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	04/22/15 11:41	

LABORATORY CONTROL SAMPLE: 135086

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.4	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 135087 135088

Parameter	Units	7525148001 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	0.73	1.5	1.5	2.1	2.1	91	89	80-120	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 135091 135092

Parameter	Units	60191960001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphate as P04	mg/L	0.032	1.5	1.5	1.5	1.5	97	98	80-120	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

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

BATCH QUALIFIERS

Batch: MSV/68871

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

Batch: MSV/68932

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

Batch: MSV/68990

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

Batch: MSV/69103

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

ANALYTE QUALIFIERS

1e	Field pH
B	Analyte was detected in the associated method blank.
H6	Analysis initiated outside of the 15 minute EPA recommended holding time.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191868001	IW-77-201504	EPA 8015 - Alcohol	GCSV/3742		
60191868002	MW-39-201504	EPA 8015 - Alcohol	GCSV/3742		
60191868003	MW-40-201504	EPA 8015 - Alcohol	GCSV/3742		
60191868004	MW-71-201504	EPA 8015 - Alcohol	GCSV/3742		
60191868005	RW-69-201504	EPA 8015 - Alcohol	GCSV/3742		
60191868006	MW-60-201504	EPA 8015 - Alcohol	GCSV/3742		
60191868007	ITMW-7-201504	EPA 8015 - Alcohol	GCSV/3742		
60191868008	MW-50-201504	EPA 8015 - Alcohol	GCSV/3742		
60191868009	MW-29-201504	EPA 8015 - Alcohol	GCSV/3742		
60191868010	ITMW-21-201504	EPA 8015 - Alcohol	GCSV/3742		
60191868011	MW-63-201504	EPA 8015 - Alcohol	GCSV/3742		
60191868012	ITMW-4-201504	EPA 8015 - Alcohol	GCSV/3742		
60191868013	ITMW-6-201504	EPA 8015 - Alcohol	GCSV/3750		
60191868014	MW-62-201504	EPA 8015 - Alcohol	GCSV/3742		
60191868015	MW-34-201504	EPA 8015 - Alcohol	GCSV/3745		
60191868016	IW-80-201504	EPA 8015 - Alcohol	GCSV/3745		
60191868017	MW-36-201504	EPA 8015 - Alcohol	GCSV/3745		
60191868018	MW-35R-201504	EPA 8015 - Alcohol	GCSV/3745		
60191868019	MW-61-201504	EPA 8015 - Alcohol	GCSV/3745		
60191868020	MW-46R-201504	EPA 8015 - Alcohol	GCSV/3745		
60191868021	MW-31R-201504	EPA 8015 - Alcohol	GCSV/3745		
60191868022	ITMW-16-201504	EPA 8015 - Alcohol	GCSV/3745		
60191868001	IW-77-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868002	MW-39-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868003	MW-40-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868004	MW-71-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868005	RW-69-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868006	MW-60-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868007	ITMW-7-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868008	MW-50-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868009	MW-29-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868010	ITMW-21-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868011	MW-63-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868012	ITMW-4-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868013	ITMW-6-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868014	MW-62-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868015	MW-34-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868016	IW-80-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868017	MW-36-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868018	MW-35R-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868019	MW-61-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868020	MW-46R-201504	EPA 3010	MPRP/31432	EPA 6010	ICP/23374
60191868021	MW-31R-201504	EPA 3010	MPRP/31444	EPA 6010	ICP/23390
60191868022	ITMW-16-201504	EPA 3010	MPRP/31444	EPA 6010	ICP/23390
60191868002	MW-39-201504	EPA 5030B/8260	MSV/68904		
60191868003	MW-40-201504	EPA 5030B/8260	MSV/68904		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191868004	MW-71-201504	EPA 5030B/8260	MSV/68973		
60191868005	RW-69-201504	EPA 5030B/8260	MSV/68973		
60191868006	MW-60-201504	EPA 5030B/8260	MSV/68973		
60191868007	ITMW-7-201504	EPA 5030B/8260	MSV/68973		
60191868008	MW-50-201504	EPA 5030B/8260	MSV/68973		
60191868009	MW-29-201504	EPA 5030B/8260	MSV/68973		
60191868010	ITMW-21-201504	EPA 5030B/8260	MSV/68973		
60191868011	MW-63-201504	EPA 5030B/8260	MSV/68973		
60191868012	ITMW-4-201504	EPA 5030B/8260	MSV/69103		
60191868013	ITMW-6-201504	EPA 5030B/8260	MSV/68973		
60191868014	MW-62-201504	EPA 5030B/8260	MSV/68973		
60191868019	MW-61-201504	EPA 5030B/8260	MSV/68973		
60191868020	MW-46R-201504	EPA 5030B/8260	MSV/68973		
60191868020	MW-46R-201504	EPA 5030B/8260	MSV/69103		
60191868021	MW-31R-201504	EPA 5030B/8260	MSV/68973		
60191868022	ITMW-16-201504	EPA 5030B/8260	MSV/68973		
60191868023	DUP-07-201504	EPA 5030B/8260	MSV/68973		
60191868023	DUP-07-201504	EPA 5030B/8260	MSV/69103		
60191868024	TB-03-201504	EPA 5030B/8260	MSV/68973		
60191868025	TB-04-201504	EPA 5030B/8260	MSV/68990		
60191868026	TB-05-201504	EPA 5030B/8260	MSV/68990		
60191868027	TB-06-201504	EPA 5030B/8260	MSV/68990		
60191868028	TB-07-201504	EPA 5030B/8260	MSV/68990		
60191868001	IW-77-201504	EPA 5030B/8260	MSV/68932		
60191868015	MW-34-201504	EPA 5030B/8260	MSV/68871		
60191868016	IW-80-201504	EPA 5030B/8260	MSV/68871		
60191868017	MW-36-201504	EPA 5030B/8260	MSV/68871		
60191868018	MW-35R-201504	EPA 5030B/8260	MSV/68871		
60191868001	IW-77-201504	SM 2320B	WET/54175		
60191868002	MW-39-201504	SM 2320B	WET/54175		
60191868003	MW-40-201504	SM 2320B	WET/54175		
60191868004	MW-71-201504	SM 2320B	WET/54175		
60191868005	RW-69-201504	SM 2320B	WET/54175		
60191868006	MW-60-201504	SM 2320B	WET/54175		
60191868007	ITMW-7-201504	SM 2320B	WET/54175		
60191868008	MW-50-201504	SM 2320B	WET/54175		
60191868009	MW-29-201504	SM 2320B	WET/54175		
60191868010	ITMW-21-201504	SM 2320B	WET/54175		
60191868011	MW-63-201504	SM 2320B	WET/54175		
60191868012	ITMW-4-201504	SM 2320B	WET/54175		
60191868013	ITMW-6-201504	SM 2320B	WET/54175		
60191868014	MW-62-201504	SM 2320B	WET/54175		
60191868015	MW-34-201504	SM 2320B	WET/54175		

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191868016	**IW-80-201504**	SM 2320B	WET/54175		
60191868017	**MW-36-201504**	SM 2320B	WET/54175		
60191868018	**MW-35R-201504**	SM 2320B	WET/54175		
60191868019	**MW-61-201504**	SM 2320B	WET/54175		
60191868020	**MW-46R-201504**	SM 2320B	WET/54175		
60191868021	**MW-31R-201504**	SM 2320B	WET/54198		
60191868022	**ITMW-16-201504**	SM 2320B	WET/54198		
60191868001	**IW-77-201504**	SM 3500-Fe B#4	WET/54373		
60191868002	**MW-39-201504**	SM 3500-Fe B#4	WET/54373		
60191868003	**MW-40-201504**	SM 3500-Fe B#4	WET/54373		
60191868004	**MW-71-201504**	SM 3500-Fe B#4	WET/54373		
60191868005	**RW-69-201504**	SM 3500-Fe B#4	WET/54373		
60191868006	**MW-60-201504**	SM 3500-Fe B#4	WET/54373		
60191868007	**ITMW-7-201504**	SM 3500-Fe B#4	WET/54373		
60191868008	**MW-50-201504**	SM 3500-Fe B#4	WET/54373		
60191868009	**MW-29-201504**	SM 3500-Fe B#4	WET/54373		
60191868010	**ITMW-21-201504**	SM 3500-Fe B#4	WET/54373		
60191868011	**MW-63-201504**	SM 3500-Fe B#4	WET/54373		
60191868012	**ITMW-4-201504**	SM 3500-Fe B#4	WET/54373		
60191868013	**ITMW-6-201504**	SM 3500-Fe B#4	WET/54373		
60191868014	**MW-62-201504**	SM 3500-Fe B#4	WET/54373		
60191868015	**MW-34-201504**	SM 3500-Fe B#4	WET/54373		
60191868016	**IW-80-201504**	SM 3500-Fe B#4	WET/54429		
60191868017	**MW-36-201504**	SM 3500-Fe B#4	WET/54373		
60191868018	**MW-35R-201504**	SM 3500-Fe B#4	WET/54373		
60191868019	**MW-61-201504**	SM 3500-Fe B#4	WET/54373		
60191868020	**MW-46R-201504**	SM 3500-Fe B#4	WET/54373		
60191868021	**MW-31R-201504**	SM 3500-Fe B#4	WET/54374		
60191868022	**ITMW-16-201504**	SM 3500-Fe B#4	WET/54374		
60191868001	**IW-77-201504**	SM 4500-H+B	WET/54389		
60191868002	**MW-39-201504**	SM 4500-H+B	WET/54389		
60191868003	**MW-40-201504**	SM 4500-H+B	WET/54389		
60191868004	**MW-71-201504**	SM 4500-H+B	WET/54389		
60191868005	**RW-69-201504**	SM 4500-H+B	WET/54389		
60191868006	**MW-60-201504**	SM 4500-H+B	WET/54389		
60191868007	**ITMW-7-201504**	SM 4500-H+B	WET/54389		
60191868008	**MW-50-201504**	SM 4500-H+B	WET/54389		
60191868009	**MW-29-201504**	SM 4500-H+B	WET/54389		
60191868010	**ITMW-21-201504**	SM 4500-H+B	WET/54389		
60191868011	**MW-63-201504**	SM 4500-H+B	WET/54389		
60191868012	**ITMW-4-201504**	SM 4500-H+B	WET/54389		
60191868013	**ITMW-6-201504**	SM 4500-H+B	WET/54389		
60191868014	**MW-62-201504**	SM 4500-H+B	WET/54389		
60191868015	**MW-34-201504**	SM 4500-H+B	WET/54389		
60191868016	**IW-80-201504**	SM 4500-H+B	WET/54393		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191868017	MW-36-201504	SM 4500-H+B	WET/54389		
60191868018	MW-35R-201504	SM 4500-H+B	WET/54389		
60191868019	MW-61-201504	SM 4500-H+B	WET/54389		
60191868020	MW-46R-201504	SM 4500-H+B	WET/54389		
60191868021	MW-31R-201504	SM 4500-H+B	WET/54390		
60191868022	ITMW-16-201504	SM 4500-H+B	WET/54390		
60191868001	IW-77-201504	SM 4500-S-2 D	WET/54193		
60191868002	MW-39-201504	SM 4500-S-2 D	WET/54193		
60191868003	MW-40-201504	SM 4500-S-2 D	WET/54193		
60191868004	MW-71-201504	SM 4500-S-2 D	WET/54193		
60191868005	RW-69-201504	SM 4500-S-2 D	WET/54193		
60191868006	MW-60-201504	SM 4500-S-2 D	WET/54193		
60191868007	ITMW-7-201504	SM 4500-S-2 D	WET/54193		
60191868008	MW-50-201504	SM 4500-S-2 D	WET/54193		
60191868009	MW-29-201504	SM 4500-S-2 D	WET/54193		
60191868010	ITMW-21-201504	SM 4500-S-2 D	WET/54193		
60191868011	MW-63-201504	SM 4500-S-2 D	WET/54193		
60191868012	ITMW-4-201504	SM 4500-S-2 D	WET/54194		
60191868013	ITMW-6-201504	SM 4500-S-2 D	WET/54194		
60191868014	MW-62-201504	SM 4500-S-2 D	WET/54194		
60191868015	MW-34-201504	SM 4500-S-2 D	WET/54194		
60191868016	IW-80-201504	SM 4500-S-2 D	WET/54194		
60191868017	MW-36-201504	SM 4500-S-2 D	WET/54194		
60191868018	MW-35R-201504	SM 4500-S-2 D	WET/54194		
60191868019	MW-61-201504	SM 4500-S-2 D	WET/54194		
60191868020	MW-46R-201504	SM 4500-S-2 D	WET/54194		
60191868021	MW-31R-201504	SM 4500-S-2 D	WET/54194		
60191868022	ITMW-16-201504	SM 4500-S-2 D	WET/54194		
60191868001	IW-77-201504	EPA 300.0	WETA/33770		
60191868002	MW-39-201504	EPA 300.0	WETA/33770		
60191868003	MW-40-201504	EPA 300.0	WETA/33770		
60191868004	MW-71-201504	EPA 300.0	WETA/33770		
60191868005	RW-69-201504	EPA 300.0	WETA/33770		
60191868006	MW-60-201504	EPA 300.0	WETA/33770		
60191868007	ITMW-7-201504	EPA 300.0	WETA/33770		
60191868008	MW-50-201504	EPA 300.0	WETA/33770		
60191868009	MW-29-201504	EPA 300.0	WETA/33770		
60191868010	ITMW-21-201504	EPA 300.0	WETA/33770		
60191868011	MW-63-201504	EPA 300.0	WETA/33770		
60191868012	ITMW-4-201504	EPA 300.0	WETA/33770		
60191868013	ITMW-6-201504	EPA 300.0	WETA/33770		
60191868014	MW-62-201504	EPA 300.0	WETA/33771		
60191868015	MW-34-201504	EPA 300.0	WETA/33771		
60191868016	IW-80-201504	EPA 300.0	WETA/33771		
60191868017	MW-36-201504	EPA 300.0	WETA/33771		
60191868018	MW-35R-201504	EPA 300.0	WETA/33771		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191868019	MW-61-201504	EPA 300.0	WETA/33771		
60191868020	MW-46R-201504	EPA 300.0	WETA/33771		
60191868021	MW-31R-201504	EPA 300.0	WETA/33771		
60191868022	ITMW-16-201504	EPA 300.0	WETA/33771		
60191868001	IW-77-201504	EPA 350.1	WETA/33690		
60191868002	MW-39-201504	EPA 350.1	WETA/33690		
60191868003	MW-40-201504	EPA 350.1	WETA/33690		
60191868004	MW-71-201504	EPA 350.1	WETA/33690		
60191868005	RW-69-201504	EPA 350.1	WETA/33690		
60191868006	MW-60-201504	EPA 350.1	WETA/33690		
60191868007	ITMW-7-201504	EPA 350.1	WETA/33690		
60191868008	MW-50-201504	EPA 350.1	WETA/33690		
60191868009	MW-29-201504	EPA 350.1	WETA/33690		
60191868010	ITMW-21-201504	EPA 350.1	WETA/33690		
60191868011	MW-63-201504	EPA 350.1	WETA/33691		
60191868012	ITMW-4-201504	EPA 350.1	WETA/33691		
60191868013	ITMW-6-201504	EPA 350.1	WETA/33691		
60191868014	MW-62-201504	EPA 350.1	WETA/33691		
60191868015	MW-34-201504	EPA 350.1	WETA/33691		
60191868016	IW-80-201504	EPA 350.1	WETA/33691		
60191868017	MW-36-201504	EPA 350.1	WETA/33691		
60191868018	MW-35R-201504	EPA 350.1	WETA/33691		
60191868019	MW-61-201504	EPA 350.1	WETA/33691		
60191868020	MW-46R-201504	EPA 350.1	WETA/33691		
60191868021	MW-31R-201504	EPA 350.1	WETA/33691		
60191868022	ITMW-16-201504	EPA 350.1	WETA/33691		
60191868001	IW-77-201504	EPA 353.2	WETA/33640		
60191868002	MW-39-201504	EPA 353.2	WETA/33640		
60191868003	MW-40-201504	EPA 353.2	WETA/33640		
60191868004	MW-71-201504	EPA 353.2	WETA/33640		
60191868005	RW-69-201504	EPA 353.2	WETA/33641		
60191868006	MW-60-201504	EPA 353.2	WETA/33641		
60191868007	ITMW-7-201504	EPA 353.2	WETA/33641		
60191868008	MW-50-201504	EPA 353.2	WETA/33641		
60191868009	MW-29-201504	EPA 353.2	WETA/33641		
60191868010	ITMW-21-201504	EPA 353.2	WETA/33641		
60191868011	MW-63-201504	EPA 353.2	WETA/33641		
60191868012	ITMW-4-201504	EPA 353.2	WETA/33641		
60191868013	ITMW-6-201504	EPA 353.2	WETA/33641		
60191868014	MW-62-201504	EPA 353.2	WETA/33641		
60191868015	MW-34-201504	EPA 353.2	WETA/33641		
60191868016	IW-80-201504	EPA 353.2	WETA/33641		
60191868017	MW-36-201504	EPA 353.2	WETA/33641		
60191868018	MW-35R-201504	EPA 353.2	WETA/33641		
60191868019	MW-61-201504	EPA 353.2	WETA/33641		
60191868020	MW-46R-201504	EPA 353.2	WETA/33641		
60191868021	MW-31R-201504	EPA 353.2	WETA/33641		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191868022	ITMW-16-201504	EPA 353.2	WETA/33641		
60191868001	IW-77-201504	SM 4500-CO2 D	WETA/33865		
60191868002	MW-39-201504	SM 4500-CO2 D	WETA/33865		
60191868003	MW-40-201504	SM 4500-CO2 D	WETA/33865		
60191868004	MW-71-201504	SM 4500-CO2 D	WETA/33865		
60191868005	RW-69-201504	SM 4500-CO2 D	WETA/33865		
60191868006	MW-60-201504	SM 4500-CO2 D	WETA/33865		
60191868007	ITMW-7-201504	SM 4500-CO2 D	WETA/33865		
60191868008	MW-50-201504	SM 4500-CO2 D	WETA/33865		
60191868009	MW-29-201504	SM 4500-CO2 D	WETA/33865		
60191868010	ITMW-21-201504	SM 4500-CO2 D	WETA/33865		
60191868011	MW-63-201504	SM 4500-CO2 D	WETA/33865		
60191868012	ITMW-4-201504	SM 4500-CO2 D	WETA/33865		
60191868013	ITMW-6-201504	SM 4500-CO2 D	WETA/33865		
60191868014	MW-62-201504	SM 4500-CO2 D	WETA/33865		
60191868015	MW-34-201504	SM 4500-CO2 D	WETA/33865		
60191868016	IW-80-201504	SM 4500-CO2 D	WETA/33880		
60191868017	MW-36-201504	SM 4500-CO2 D	WETA/33865		
60191868018	MW-35R-201504	SM 4500-CO2 D	WETA/33865		
60191868019	MW-61-201504	SM 4500-CO2 D	WETA/33865		
60191868020	MW-46R-201504	SM 4500-CO2 D	WETA/33865		
60191868021	MW-31R-201504	SM 4500-CO2 D	WETA/33865		
60191868022	ITMW-16-201504	SM 4500-CO2 D	WETA/33867		
60191868001	IW-77-201504	SM 5310C	WETA/33752		
60191868002	MW-39-201504	SM 5310C	WETA/33752		
60191868003	MW-40-201504	SM 5310C	WETA/33752		
60191868004	MW-71-201504	SM 5310C	WETA/33752		
60191868005	RW-69-201504	SM 5310C	WETA/33752		
60191868006	MW-60-201504	SM 5310C	WETA/33760		
60191868007	ITMW-7-201504	SM 5310C	WETA/33760		
60191868008	MW-50-201504	SM 5310C	WETA/33760		
60191868009	MW-29-201504	SM 5310C	WETA/33760		
60191868010	ITMW-21-201504	SM 5310C	WETA/33760		
60191868011	MW-63-201504	SM 5310C	WETA/33760		
60191868012	ITMW-4-201504	SM 5310C	WETA/33760		
60191868013	ITMW-6-201504	SM 5310C	WETA/33760		
60191868014	MW-62-201504	SM 5310C	WETA/33760		
60191868015	MW-34-201504	SM 5310C	WETA/33760		
60191868016	IW-80-201504	SM 5310C	WETA/33760		
60191868017	MW-36-201504	SM 5310C	WETA/33760		
60191868018	MW-35R-201504	SM 5310C	WETA/33760		
60191868019	MW-61-201504	SM 5310C	WETA/33760		
60191868020	MW-46R-201504	SM 5310C	WETA/33760		
60191868021	MW-31R-201504	SM 5310C	WETA/33760		
60191868022	ITMW-16-201504	SM 5310C	WETA/33760		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191868001	**IW-77-201504**	SM4500-P B	WETA/7918	SM 4500-P E	WETA/7921
60191868002	**MW-39-201504**	SM4500-P B	WETA/7918	SM 4500-P E	WETA/7921
60191868003	**MW-40-201504**	SM4500-P B	WETA/7918	SM 4500-P E	WETA/7921
60191868004	**MW-71-201504**	SM4500-P B	WETA/7918	SM 4500-P E	WETA/7921
60191868005	**RW-69-201504**	SM4500-P B	WETA/7918	SM 4500-P E	WETA/7921
60191868006	**MW-60-201504**	SM4500-P B	WETA/7918	SM 4500-P E	WETA/7921
60191868007	**ITMW-7-201504**	SM4500-P B	WETA/7918	SM 4500-P E	WETA/7921
60191868008	**MW-50-201504**	SM4500-P B	WETA/7918	SM 4500-P E	WETA/7921
60191868009	**MW-29-201504**	SM4500-P B	WETA/7918	SM 4500-P E	WETA/7921
60191868010	**ITMW-21-201504**	SM4500-P B	WETA/7918	SM 4500-P E	WETA/7921
60191868011	**MW-63-201504**	SM4500-P B	WETA/7918	SM 4500-P E	WETA/7921
60191868012	**ITMW-4-201504**	SM4500-P B	WETA/7918	SM 4500-P E	WETA/7921
60191868013	**ITMW-6-201504**	SM4500-P B	WETA/7918	SM 4500-P E	WETA/7921
60191868014	**MW-62-201504**	SM4500-P B	WETA/7918	SM 4500-P E	WETA/7921
60191868015	**MW-34-201504**	SM4500-P B	WETA/7918	SM 4500-P E	WETA/7921
60191868016	**IW-80-201504**	SM4500-P B	WETA/7937	SM 4500-P E	WETA/7940
60191868017	**MW-36-201504**	SM4500-P B	WETA/7937	SM 4500-P E	WETA/7940
60191868018	**MW-35R-201504**	SM4500-P B	WETA/7937	SM 4500-P E	WETA/7940
60191868019	**MW-61-201504**	SM4500-P B	WETA/7937	SM 4500-P E	WETA/7940
60191868020	**MW-46R-201504**	SM4500-P B	WETA/7937	SM 4500-P E	WETA/7940
60191868021	**MW-31R-201504**	SM4500-P B	WETA/7937	SM 4500-P E	WETA/7940
60191868022	**ITMW-16-201504**	SM4500-P B	WETA/7937	SM 4500-P E	WETA/7940

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Sample Condition Upon Receipt

WO# : 60191868

60191868

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☒ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☐

Tracking #: see attachment 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: CF -0.1 T-239 / CF -1.8 T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 5.1 5.5 1.1 3.7 4.1 2.3

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JB 4/15

Chain of Custody present:	☒Yes ☐No ☐N/A	1. ITMW-16-20504 collected 4/14/15 at 1714 022
Chain of Custody filled out:	☒Yes ☐No ☐N/A	2. not on COC containers: (1) BP3U (1) BP3S
Chain of Custody relinquished:	☒Yes ☐No ☐N/A	3. (1) AG3S (1) BP3Z
Sampler name & signature on COC:	☒Yes ☐No ☐N/A	4. (3) DG4H (1) DP1N
Samples arrived within holding time:	☒Yes ☐No ☐N/A	5. (5) DG4H (3) DG4A
Short Hold Time analyses (<72hr):	☒Yes ☐No ☐N/A	6. NO_2/NO_3 Fe^{2+} pH (1) OTHR
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, O&G, WI-DRO (water)	☒Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☒Yes ☐No ☐N/A	
Pace Trip Blank lot # (if purchased): 4/8/15		15.
Headspace in VOA vials (>6mm):	☐Yes ☒No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☒N/A	17. List State:

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution:

IRWO-164114

Project Manager Review: MW Date: 4/16/15

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 3

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Environ	Report To:	Wendy Stonestreet	Attention:	Tammy Gleason
Address:	7500 College Blvd., Ste. 925	Copy To:	Tammy Gleason	Company Name:	Environ
	Overland Park, KS 66210			Address:	250 Monroe Ave. NW Grand Rapids
Email To:	wstonestreet@environcorp.com	Purchase Order No.:	NA	Pace Quote Reference:	Michigan, 49503
Phone:	913-553-5926 Fax:	Project Name:	Fort Smith, AR	Pace Project Manager:	MJ Walls
Requested Due Date/TAT:		Project Number:		Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 60191868
1	IW-77-201504	WT	G	4/14/15	0920	—	—		11	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	N	VOC short hold BP3N (3)DG4H (3)AG4H 001
2	MW-39-201504	WT	G	4/14/15	1055	—	—		11	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	N	BP3N (3)DG4H (3)AG4H 002
3	MW-40-201504	WT	G	4/14/15	0905	—	—		11	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	N	003
4	MW-71-201504	WT	G	4/14/15	0950	—	—		11	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	N	004
5	RW-69-201504	WT	G	4/14/15	1000	—	—		11	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	N	005
6	MW-60-201504	WT	G	4/14/15	1500	—	—		11	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	N	006
7	ITMW-7-201504	WT	G	4/14/15	1455	—	—		11	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	N	007
8	MW-50-201504	WT	G	4/14/15	1210	—	—		11	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	N	008
9	MW-29-201504	WT	G	4/14/15	1225	—	—		11	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	N	009
10	ITMW-21-201504	WT	G	4/14/15	1215	—	—		11	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	N	010
11	MW-63-201504	WT	G	4/14/15	1540	—	—		11	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	N	011
12	ITMW-4-201504	WT	G	4/14/15	1640	—	—		11	X	X	X	X	X	X		X		X	X	X	X	X	X	X	X	X	N	012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Level IV data package required	Victoria Siegler/Environ	4/14/15	1500		4/15	0935

SAMPLE CONDITIONS	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	5.1	Y	Y	Y
	5.5	Y	Y	Y
	1.1	Y	Y	Y
	3.7	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Siegler

SIGNATURE of SAMPLER: Victoria Siegler

DATE Signed (MM/DD/YY): 4/14/15

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	ITMW-16-201504 BP3N AG3S MS/MSD	WT	G	4/14/15	1435	—	—		14	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	N	MS/MSD BP3S BP3Z 013
2	MW-16Z-201504 BP3N AG3S BP3S BP3Z	WT	G	4/14/15	1125	—	—		11	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	N	BP3N (5)DG4H (3)DG4H (3)OTHR 014
3	MW-34-201504	WT	G	4/14/15	1550	—	—		11	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	N	(3)OTHR 015
4	MW-30-201504	WT	G	4/14/15	1330	—	—		11	X	X	X	X	X	X		X	X	X	X	X	X	X	X	X	X	X	X	N	016
5	MW-36-201504	WT	G	4/14/15	1345	—	—		11	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	N	017
6	TB-03-201504 (6)DG4H	WT	G	4/14/15	—	—	—		3				X					X											N	024
7	TB-04-201504	WT	G	4/14/15	—	—	—		3				X					X											N	025
8	TB-05-201504 (6)DG4H	WT	G	4/14/15	—	—	—		3				X					X											N	026
9	TB-06-201504 (3)DG4H	WT	G	4/14/15	—	—	—		3				X					X											N	027
10	MW-35R-201504 BP3N AG3S BP3S BP3Z	WT	G	4/14/15	1715	—	—		11	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	N	BP3N (3)DG4H (3)OTHR 018
11	MW-61-201504	WT	G	4/14/15	1715	—	—		11	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	N	(3)DG4H 019
12	MW-46R-201504	WT	G	4/14/15	1355	—	—		11	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	N	020

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
~~Level IV data package required~~	Victoria Sieglen / Environ	4/14/15	1800		4/15	0835	4.1	Y	Y	Y
							2.3	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:	Victoria Sieglen					
SIGNATURE of SAMPLER:	Victoria Sieglen	DATE Signed (MM/DD/YY): 4/14/15				

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

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

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	DUP-07-201504 (3)DG4H	WT	G	4/14/15	1355	—	—		3				X						X										N	023
2	MW-31R-201504 BP3U BP3S BP3Z AG3S	WT	G	4/14/15	1745	—	—		11	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X		BP3U (3)DG4H (3)DG4H 021
3	TB-07-201504 (3)DG4H	WT	G	4/14/15	—	—	—		3				X						X											028
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
~~Level IV data packages required~~	Victoria Sieglen / Environ	4/14/15	1800		4/15	0835		Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Sieglen

SIGNATURE of SAMPLER: Victoria Sieglen DATE Signed (MM/DD/YY): 4/14/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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

6113 5281 6743 → 5.1

62 62 7065 4461 → 5.5

6262 7065 4483 → 1.1

6262 7065 4450 → 3.7

6262 7065 4472 → 4.1

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

April 24, 2015

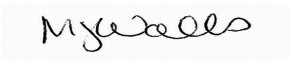
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH, AR
Pace Project No.: 60191895

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 15, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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

CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60191895

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

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

SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60191895

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60191895001	**MW-177-201504**	Water	04/14/15 10:15	04/15/15 08:35
60191895002	**MW-181-201504**	Water	04/14/15 15:40	04/15/15 08:35
60191895003	**MW-23-201504**	Water	04/14/15 17:09	04/15/15 08:35

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60191895

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60191895001	**MW-177-201504**	EPA 5030B/8260	PGH	38
60191895002	**MW-181-201504**	EPA 5030B/8260	PGH	38
60191895003	**MW-23-201504**	EPA 5030B/8260	PGH	38

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60191895

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 24, 2015

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

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

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

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

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

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

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

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

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

QC Batch: MSV/68990

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

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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

ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60191895

Sample: MW-177-201504 **Lab ID: 60191895001** Collected: 04/14/15 10:15 Received: 04/15/15 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	5.0	1		04/22/15 16:43	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 16:43	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 16:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 16:43	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 16:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 16:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	75-00-3	
Chloroform	**0.61J**	ug/L	1.0	0.50	1		04/22/15 16:43	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 16:43	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 16:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 16:43	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 16:43	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 16:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		04/22/15 16:43	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		04/22/15 16:43	17060-07-0	
Toluene-d8 (S)	115	%	80-120		1		04/22/15 16:43	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 16:43		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60191895

Sample: MW-181-201504 **Lab ID: 60191895002** Collected: 04/14/15 15:40 Received: 04/15/15 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	5.0	1		04/22/15 16:58	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 16:58	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 16:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 16:58	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 16:58	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 16:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 16:58	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 16:58	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 16:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 16:58	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 16:58	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 16:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		04/22/15 16:58	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		04/22/15 16:58	17060-07-0	
Toluene-d8 (S)	113	%	80-120		1		04/22/15 16:58	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 16:58		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60191895

Sample: MW-23-201504 **Lab ID: 60191895003** Collected: 04/14/15 17:09 Received: 04/15/15 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**35.9**	ug/L	10.0	5.0	1		04/22/15 17:13	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 17:13	75-27-4	
Bromoform	**2.3**	ug/L	1.0	0.50	1		04/22/15 17:13	75-25-2	
Bromomethane	**6.6**	ug/L	5.0	2.5	1		04/22/15 17:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 17:13	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 17:13	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 17:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 17:13	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 17:13	67-66-3	
Chloromethane	**7.2**	ug/L	1.0	0.50	1		04/22/15 17:13	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 17:13	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 17:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 17:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	75-35-4	
cis-1,2-Dichloroethene	**1.1**	ug/L	1.0	0.50	1		04/22/15 17:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 17:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 17:13	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 17:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 17:13	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 17:13	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 17:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 17:13	79-00-5	
Trichloroethene	**57.5**	ug/L	1.0	0.50	1		04/22/15 17:13	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 17:13	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 17:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%	80-120		1		04/22/15 17:13	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		04/22/15 17:13	17060-07-0	
Toluene-d8 (S)	114	%	80-120		1		04/22/15 17:13	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 17:13		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60191895

QC Batch: MSV/68990 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60191895001, 60191895002, 60191895003

METHOD BLANK: 1554233 Matrix: Water
Associated Lab Samples: 60191895001, 60191895002, 60191895003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/22/15 12:30	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/22/15 12:30	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/22/15 12:30	
1,1-Dichloroethane	ug/L	ND	1.0	04/22/15 12:30	
1,1-Dichloroethene	ug/L	ND	1.0	04/22/15 12:30	
1,2-Dichloroethane	ug/L	ND	1.0	04/22/15 12:30	
1,2-Dichloropropane	ug/L	ND	1.0	04/22/15 12:30	
2-Butanone (MEK)	ug/L	ND	10.0	04/22/15 12:30	
2-Hexanone	ug/L	ND	10.0	04/22/15 12:30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/22/15 12:30	
Acetone	ug/L	ND	10.0	04/22/15 12:30	
Benzene	ug/L	ND	1.0	04/22/15 12:30	
Bromodichloromethane	ug/L	ND	1.0	04/22/15 12:30	
Bromoform	ug/L	ND	1.0	04/22/15 12:30	
Bromomethane	ug/L	ND	5.0	04/22/15 12:30	
Carbon disulfide	ug/L	ND	5.0	04/22/15 12:30	
Carbon tetrachloride	ug/L	ND	1.0	04/22/15 12:30	
Chlorobenzene	ug/L	ND	1.0	04/22/15 12:30	
Chloroethane	ug/L	ND	1.0	04/22/15 12:30	
Chloroform	ug/L	ND	1.0	04/22/15 12:30	
Chloromethane	ug/L	ND	1.0	04/22/15 12:30	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 12:30	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 12:30	
Dibromochloromethane	ug/L	ND	1.0	04/22/15 12:30	
Ethylbenzene	ug/L	ND	1.0	04/22/15 12:30	
Methylene chloride	ug/L	ND	1.0	04/22/15 12:30	
Styrene	ug/L	ND	1.0	04/22/15 12:30	
Tetrachloroethene	ug/L	ND	1.0	04/22/15 12:30	
Toluene	ug/L	ND	1.0	04/22/15 12:30	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 12:30	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 12:30	
Trichloroethene	ug/L	ND	1.0	04/22/15 12:30	
Vinyl chloride	ug/L	ND	1.0	04/22/15 12:30	
Xylene (Total)	ug/L	ND	3.0	04/22/15 12:30	
1,2-Dichloroethane-d4 (S)	%	106	80-120	04/22/15 12:30	
4-Bromofluorobenzene (S)	%	99	80-120	04/22/15 12:30	
Toluene-d8 (S)	%	102	80-120	04/22/15 12:30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60191895

LABORATORY CONTROL SAMPLE: 1554234

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.7	103	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.2	96	73-121	
1,1,2-Trichloroethane	ug/L	20	20.7	104	80-120	
1,1-Dichloroethane	ug/L	20	20.3	101	80-120	
1,1-Dichloroethene	ug/L	20	20.7	104	80-120	
1,2-Dichloroethane	ug/L	20	20.4	102	81-120	
1,2-Dichloropropane	ug/L	20	20.8	104	80-120	
2-Butanone (MEK)	ug/L	100	99.2	99	67-122	
2-Hexanone	ug/L	100	102	102	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	108	108	76-120	
Acetone	ug/L	100	98.8	99	72-120	
Benzene	ug/L	20	21.5	108	80-120	
Bromodichloromethane	ug/L	20	20.5	102	80-120	
Bromoform	ug/L	20	20.3	101	73-138	
Bromomethane	ug/L	20	21.0	105	38-137	
Carbon disulfide	ug/L	20	20.3	101	71-129	
Carbon tetrachloride	ug/L	20	19.9	100	67-146	
Chlorobenzene	ug/L	20	21.4	107	80-120	
Chloroethane	ug/L	20	20.5	103	76-120	
Chloroform	ug/L	20	20.2	101	80-120	
Chloromethane	ug/L	20	16.4	82	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.1	101	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.2	106	80-120	
Dibromochloromethane	ug/L	20	20.2	101	80-126	
Ethylbenzene	ug/L	20	20.6	103	80-120	
Methylene chloride	ug/L	20	21.1	105	80-120	
Styrene	ug/L	20	20.7	103	80-123	
Tetrachloroethene	ug/L	20	20.1	101	80-123	
Toluene	ug/L	20	20.7	104	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.2	101	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.1	106	80-129	
Trichloroethene	ug/L	20	21.0	105	80-120	
Vinyl chloride	ug/L	20	22.5	112	62-125	
Xylene (Total)	ug/L	60	64.0	107	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			100	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60191895

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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/68990

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

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60191895

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191895001	**MW-177-201504**	EPA 5030B/8260	MSV/68990		
60191895002	**MW-181-201504**	EPA 5030B/8260	MSV/68990		
60191895003	**MW-23-201504**	EPA 5030B/8260	MSV/68990		

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Sample Condition Upon Receipt

WO#: 60191895

60191895

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☒ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☐

Tracking #: 6262 7065 4472 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: CF -0.1 T-239 / CF -1.8 T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 4.1

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JB 4/15

Chain of Custody present:	☒Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	7.
Sufficient volume:	☑Yes ☐No ☐N/A	8.
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	9.
Containers intact:	☑Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	12.
Sample labels match COC:	☑Yes ☐No ☐N/A	
Includes date/time/ID/analyses Matrix: WT		13.
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	14.
Exceptions: VOA, Coliform, O&G, WI-DRO (water)	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes ☑No ☐N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☒N/A	17. List State:

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MJ Walls Date: 4/16/15

CHAIN-OF-CUSTODY / Analytical Request Document

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

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Microseeps

Page: 1 of 1

003200

Section A Required Client Information:

Company: Environ
Address: 7500 College Blvd, Ste 925
Oakland Park, KS 66210
Email To: wstonestreet@environcorp.com
Phone: 913-553-5926 Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Wendy Stonestreet
Copy To: Tammy Gleason
Purchase Order No.: NA
Project Name: Fort Smith, AR
Project Number:

Section C Invoice Information:

Attention: Tammy Gleason
Company Name: Environ
Address: 250 Monroe Ave. NW Grand Rapids Michigan, 49503
Pace Quote Reference:
Pace Project Manager: MJ Walls
Pace Profile #: 7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

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

Matrix Codes (MATRIX / CODE)

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zink Acetate & NaOH	Other	Analysis Test Y/N	Requested Analysis Filtered (Y/N): 8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 60191895
1	MW-177-201504	WT	G	4/14/15	1015				3				X						X	N	(3)DCAH a01
2	MW-181-201504	WT	G	4/14/15	1540				3				X						X	N	(2)DCAH a02
3	MW-23-201504	WT	G	4/14/15	1709				3				X						X	N	(3)DCAH a03
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Lucy Cross/Environ	4/14/15	1900		4/15	0835	4.1	Y	X	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lucy Cross
SIGNATURE of SAMPLER: Lucy Cross
DATE Signed (MM/DD/YY): 4/14/2015

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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

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

April 28, 2015

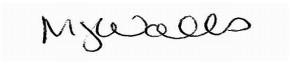
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH, AR
Pace Project No.: 60191896

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 15, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60191896

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

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SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60191896

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60191896001	**MW-176-201504**	Water	04/14/15 14:45	04/15/15 08:35

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60191896

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60191896001	**MW-176-201504**	EPA 5030B/8260	PGH	38

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60191896

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 28, 2015

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

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

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

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

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

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

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

QC Batch: MSV/69103

B: Analyte was detected in the associated method blank.
- BLANK for HBN 382792 [MSV/6910 (Lab ID: 1557447)
  - Bromomethane
  - Chloromethane

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

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

QC Batch: MSV/68990

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

QC Batch: MSV/69103

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

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60191896

Sample: MW-176-201504 **Lab ID: 60191896001** Collected: 04/14/15 14:45 Received: 04/15/15 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**7.5J**	ug/L	10.0	1.9	1		04/27/15 13:34	67-64-1	
Benzene	ND	ug/L	1.0	0.060	1		04/27/15 13:34	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 13:34	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 13:34	75-25-2	
Bromomethane	**0.44J**	ug/L	5.0	0.16	1		04/27/15 13:34	74-83-9	B
2-Butanone (MEK)	**10.0**	ug/L	10.0	0.59	1		04/27/15 13:34	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/27/15 13:34	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 13:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 13:34	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 13:34	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/27/15 13:34	67-66-3	
Chloromethane	**0.13J**	ug/L	1.0	0.080	1		04/27/15 13:34	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 13:34	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.050	1		04/27/15 13:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 13:34	107-06-2	
1,1-Dichloroethene	**2.7**	ug/L	1.0	0.20	1		04/27/15 13:34	75-35-4	
cis-1,2-Dichloroethene	**16.7**	ug/L	1.0	0.080	1		04/27/15 13:34	156-59-2	
trans-1,2-Dichloroethene	**0.87J**	ug/L	1.0	0.20	1		04/27/15 13:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 13:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 13:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 13:34	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 13:34	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 13:34	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.15	1		04/27/15 13:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 13:34	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 13:34	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 13:34	79-34-5	
Tetrachloroethene	**0.14J**	ug/L	1.0	0.10	1		04/27/15 13:34	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/27/15 13:34	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 13:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/27/15 13:34	79-00-5	
Trichloroethene	**528**	ug/L	10.0	1.7	10		04/22/15 17:28	79-01-6	
Vinyl chloride	**0.69J**	ug/L	1.0	0.13	1		04/27/15 13:34	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 13:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/27/15 13:34	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		04/27/15 13:34	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/27/15 13:34	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 13:34		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60191896

QC Batch: MSV/68990
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60191896001

METHOD BLANK: 1554233
Matrix: Water
Associated Lab Samples: 60191896001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	ug/L	ND	1.0	04/22/15 12:30	
1,2-Dichloroethane-d4 (S)	%	106	80-120	04/22/15 12:30	
4-Bromofluorobenzene (S)	%	99	80-120	04/22/15 12:30	
Toluene-d8 (S)	%	102	80-120	04/22/15 12:30	

LABORATORY CONTROL SAMPLE: 1554234

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	20	21.0	105	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			100	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60191896

QC Batch: MSV/69103
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60191896001

METHOD BLANK: 1557447
Matrix: Water
Associated Lab Samples: 60191896001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1-Dichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
1,2-Dichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,2-Dichloropropane	ug/L	ND	1.0	04/27/15 10:45	
2-Butanone (MEK)	ug/L	ND	10.0	04/27/15 10:45	
2-Hexanone	ug/L	ND	10.0	04/27/15 10:45	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/27/15 10:45	
Acetone	ug/L	ND	10.0	04/27/15 10:45	
Benzene	ug/L	ND	1.0	04/27/15 10:45	
Bromodichloromethane	ug/L	ND	1.0	04/27/15 10:45	
Bromoform	ug/L	ND	1.0	04/27/15 10:45	
Bromomethane	ug/L	0.52J	5.0	04/27/15 10:45	
Carbon disulfide	ug/L	ND	5.0	04/27/15 10:45	
Carbon tetrachloride	ug/L	ND	1.0	04/27/15 10:45	
Chlorobenzene	ug/L	ND	1.0	04/27/15 10:45	
Chloroethane	ug/L	ND	1.0	04/27/15 10:45	
Chloroform	ug/L	ND	1.0	04/27/15 10:45	
Chloromethane	ug/L	0.14J	1.0	04/27/15 10:45	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/27/15 10:45	
Dibromochloromethane	ug/L	ND	1.0	04/27/15 10:45	
Ethylbenzene	ug/L	ND	1.0	04/27/15 10:45	
Methylene chloride	ug/L	ND	1.0	04/27/15 10:45	
Styrene	ug/L	ND	1.0	04/27/15 10:45	
Tetrachloroethene	ug/L	ND	1.0	04/27/15 10:45	
Toluene	ug/L	ND	1.0	04/27/15 10:45	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/27/15 10:45	
Vinyl chloride	ug/L	ND	1.0	04/27/15 10:45	
Xylene (Total)	ug/L	ND	3.0	04/27/15 10:45	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/27/15 10:45	
4-Bromofluorobenzene (S)	%	100	80-120	04/27/15 10:45	
Toluene-d8 (S)	%	103	80-120	04/27/15 10:45	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60191896

LABORATORY CONTROL SAMPLE: 1557448

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	22.7	113	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	21.8	109	73-121	
1,1,2-Trichloroethane	ug/L	20	22.3	111	80-120	
1,1-Dichloroethane	ug/L	20	23.1	116	80-120	
1,1-Dichloroethene	ug/L	20	21.3	107	80-120	
1,2-Dichloroethane	ug/L	20	21.5	107	81-120	
1,2-Dichloropropane	ug/L	20	21.6	108	80-120	
2-Butanone (MEK)	ug/L	100	99.4	99	67-122	
2-Hexanone	ug/L	100	104	104	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	76-120	
Acetone	ug/L	100	105	105	72-120	
Benzene	ug/L	20	22.2	111	80-120	
Bromodichloromethane	ug/L	20	21.9	109	80-120	
Bromoform	ug/L	20	21.1	105	73-138	
Bromomethane	ug/L	20	24.5	122	38-137	
Carbon disulfide	ug/L	20	21.9	109	71-129	
Carbon tetrachloride	ug/L	20	22.4	112	67-146	
Chlorobenzene	ug/L	20	22.7	113	80-120	
Chloroethane	ug/L	20	22.0	110	76-120	
Chloroform	ug/L	20	22.3	111	80-120	
Chloromethane	ug/L	20	19.2	96	34-165	
cis-1,2-Dichloroethene	ug/L	20	22.5	113	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.6	108	80-120	
Dibromochloromethane	ug/L	20	21.9	110	80-126	
Ethylbenzene	ug/L	20	22.4	112	80-120	
Methylene chloride	ug/L	20	21.3	106	80-120	
Styrene	ug/L	20	22.4	112	80-123	
Tetrachloroethene	ug/L	20	23.7	119	80-123	
Toluene	ug/L	20	22.0	110	80-120	
trans-1,2-Dichloroethene	ug/L	20	22.1	111	80-120	
trans-1,3-Dichloropropene	ug/L	20	22.3	111	80-129	
Vinyl chloride	ug/L	20	24.6	123	62-125	
Xylene (Total)	ug/L	60	68.3	114	80-120	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			99	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60191896

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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/68990

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

Batch: MSV/69103

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

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60191896

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191896001	**MW-176-201504**	EPA 5030B/8260	MSV/68990		
60191896001	**MW-176-201504**	EPA 5030B/8260	MSV/69103		

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www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60191896

60191896

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☒ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☐

Tracking #: 6262 7065 4472 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: CF -0.1 T-239 / CF -1.8 T-194

Type of Ice: (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 4.1

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JB 4/15

Chain of Custody present:	☒Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☒Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☒Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☒Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☒Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☒No ☐N/A	6.
Rush Turn Around Time requested:	☐Yes ☒No ☐N/A	7.
Sufficient volume:	☒Yes ☐No ☐N/A	8.
Correct containers used:	☒Yes ☐No ☐N/A	
Pace containers used:	☒Yes ☐No ☐N/A	9.
Containers intact:	☒Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☒N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☐No ☒N/A	12.
Sample labels match COC:	☒Yes ☐No ☐N/A	
Includes date/time/ID/analyses Matrix: WT		13.
All containers needing preservation have been checked.	☐Yes ☐No ☒N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☒N/A	14.
Exceptions: VOA, Coliform, O&G, WI-DRO (water)	☒Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes ☒No ☐N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	☐Yes ☒No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☒N/A	17. List State:

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MJ Walls Date: 4/16/15

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Microseeps

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

003199

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Environ	Report To:	Wendy Stone Street	Attention:	Tammy Gleason
Address:	7500 College Blvd. Ste 925 Oakland Park, KS 66210	Copy To:	Tammy Gleason	Company Name:	ENVIRON
				Address:	250 Monroe Ave. NW Grand Rapids Michigan, 49503
Email To:	wstonestreet@environcorp.com	Purchase Order No.:	NA	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 ADEQ

Site Location STATE: AR

Section D Required Client Information

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

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

Requested Analysis Filtered (Y/N): 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	Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zink Acetate & NaOH	Other	Analysis Test: 8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 60191896
1	MW-176-201504	WT	G	4/14/15	1445				3				X					X	N	(3) DG4H 001
2																				
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Lucy Cross / Environ	4/14/15	1900	[signature] Pace	4/15	0835	4.1	Y	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE
PRINT Name of SAMPLER: Lucy Cross
SIGNATURE of SAMPLER: Lucy Cross
DATE Signed (MM/DD/YY): 4/14/2015

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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

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

April 30, 2015

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

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 16, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

Amended report, REV-1 on 4/30/15, to change sample ID -031 from FB to EB per the clients request.

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

Sincerely,

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

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

Pace Analytical Services, Inc.
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CERTIFICATIONS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

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

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

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SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60191960001	ITMW-15-201504	Water	04/15/15 16:00	04/16/15 01:47
60191960002	ITMW-10-201504	Water	04/15/15 14:35	04/16/15 01:47
60191960003	ITMW-12-201504	Water	04/15/15 14:20	04/16/15 01:47
60191960004	IW-76-201504	Water	04/15/15 12:45	04/16/15 01:47
60191960005	MW-32R-201504	Water	04/15/15 09:20	04/16/15 01:47
60191960006	MW-33R-201504	Water	04/15/15 11:55	04/16/15 01:47
60191960007	ITMW-9-201504	Water	04/15/15 11:20	04/16/15 01:47
60191960008	MW-66-201504	Water	04/15/15 10:55	04/16/15 01:47
60191960009	ITMW-1-201504	Water	04/15/15 11:45	04/16/15 01:47
60191960010	ITMW-13-201504	Water	04/15/15 14:30	04/16/15 01:47
60191960011	IW-72-201504	Water	04/15/15 09:25	04/16/15 01:47
60191960012	IW-74-201504	Water	04/15/15 11:20	04/16/15 01:47
60191960013	MW-67-201504	Water	04/15/15 08:50	04/16/15 01:47
60191960014	MW-65-201504	Water	04/15/15 09:50	04/16/15 01:47
60191960015	ITMW-19-201504	Water	04/15/15 16:22	04/16/15 01:47
60191960016	ITMW-11-201504	Water	04/15/15 16:40	04/16/15 01:47
60191960017	ITMW-17-201504	Water	04/15/15 16:30	04/16/15 01:47
60191960018	ITMW-2-201504	Water	04/15/15 08:45	04/16/15 01:47
60191960019	ITMW-14-201504	Water	04/15/15 09:05	04/16/15 01:47
60191960020	MW-41-201504	Water	04/15/15 15:20	04/16/15 01:47
60191960021	IW-73-201504	Water	04/15/15 14:30	04/16/15 01:47
60191960022	DUP-01-201504	Water	04/15/15 11:55	04/16/15 01:47
60191960023	DUP-03-201504	Water	04/15/15 16:30	04/16/15 01:47
60191960024	DUP-05-201504	Water	04/15/15 11:20	04/16/15 01:47
60191960025	TB-08-201504	Water	04/15/15 08:45	04/16/15 01:47
60191960026	TB-09-201504	Water	04/15/15 08:45	04/16/15 01:47
60191960027	TB-10-201504	Water	04/15/15 08:45	04/16/15 01:47
60191960028	TB-11-201504	Water	04/15/15 08:45	04/16/15 01:47
60191960029	TB-12-201504	Water	04/15/15 08:45	04/16/15 01:47
60191960030	TB-13-201504	Water	04/15/15 08:45	04/16/15 01:47
60191960031	EB-02-201504	Water	04/15/15 17:35	04/16/15 01:47
60191960032	DUP-02-201504	Water	04/15/15 15:20	04/16/15 01:47

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60191960001	**ITMW-15-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960002	**ITMW-10-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960003	**ITMW-12-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960004	**IW-76-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960005	**MW-32R-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960006	**MW-33R-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960007	**ITMW-9-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960008	**MW-66-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960009	**ITMW-1-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	OL	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 300.0	OL	2	PASI-K
		EPA 350.1	AJM	1	PASI-K
		EPA 353.2	AJM	3	PASI-K
		SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960010	**ITMW-13-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960011	**IW-72-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960012	**IW-74-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-H+B	TJG	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960013	**MW-67-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960014	**MW-65-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960015	**ITMW-19-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960016	**ITMW-11-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960017	**ITMW-17-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960018	**ITMW-2-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960019	**ITMW-14-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960020	**MW-41-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 4500-P E	BAF	1	PASI-D
60191960021	**IW-73-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60191960022	**DUP-01-201504**	EPA 5030B/8260	PGH	38	PASI-K
60191960023	**DUP-03-201504**	EPA 5030B/8260	PGH	38	PASI-K
60191960024	**DUP-05-201504**	EPA 5030B/8260	PGH	38	PASI-K
60191960025	**TB-08-201504**	EPA 5030B/8260	PGH	38	PASI-K
60191960026	**TB-09-201504**	EPA 5030B/8260	PGH	38	PASI-K
60191960027	**TB-10-201504**	EPA 5030B/8260	PGH	38	PASI-K
60191960028	**TB-11-201504**	EPA 5030B/8260	PGH	38	PASI-K
60191960029	**TB-12-201504**	EPA 5030B/8260	PGH	38	PASI-K
60191960030	**TB-13-201504**	EPA 5030B/8260	PGH	38	PASI-K
60191960031	**EB-02-201504**	EPA 5030B/8260	PGH	38	PASI-K
60191960032	**DUP-02-201504**	EPA 5030B/8260	PGH	38	PASI-K

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Method: **EPA 8015 - Alcohol**
Description: Alcohol by Direct Inject GCFID
Client: Environ_AR
Date: April 30, 2015

General Information:
21 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: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Environ_AR
Date: April 30, 2015

General Information:
21 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: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 30, 2015

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

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

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

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

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

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

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

QC Batch: MSV/69103

B: Analyte was detected in the associated method blank.
- BLANK for HBN 382792 [MSV/6910 (Lab ID: 1557447)
  - Bromomethane
  - Chloromethane

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

QC Batch: MSV/68954

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- LCS (Lab ID: 1552987)
  - Vinyl chloride

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

QC Batch: MSV/68917

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

QC Batch: MSV/68928

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

QC Batch: MSV/68932

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

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 30, 2015

QC Batch: MSV/68935

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

QC Batch: MSV/68954

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

QC Batch: MSV/68972

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

QC Batch: MSV/69103

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

Additional Comments:

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: Environ_AR
Date: April 30, 2015

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

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

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

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

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

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

Additional Comments:

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Method: **SM 3500-Fe B#4**
Description: Iron, Ferric (Calculation)
Client: Environ_AR
Date: April 30, 2015

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

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

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

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

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

Additional Comments:

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: April 30, 2015

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

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

H6: Analysis initiated outside of the 15 minute EPA recommended holding time.
- ITMW-1-201504 (Lab ID: 60191960009)
- ITMW-10-201504 (Lab ID: 60191960002)
- ITMW-11-201504 (Lab ID: 60191960016)
- ITMW-12-201504 (Lab ID: 60191960003)
- ITMW-13-201504 (Lab ID: 60191960010)
- ITMW-14-201504 (Lab ID: 60191960019)
- ITMW-15-201504 (Lab ID: 60191960001)
- ITMW-17-201504 (Lab ID: 60191960017)
- ITMW-19-201504 (Lab ID: 60191960015)
- ITMW-2-201504 (Lab ID: 60191960018)
- ITMW-9-201504 (Lab ID: 60191960007)
- IW-72-201504 (Lab ID: 60191960011)
- IW-73-201504 (Lab ID: 60191960021)
- IW-74-201504 (Lab ID: 60191960012)
- IW-76-201504 (Lab ID: 60191960004)
- MW-32R-201504 (Lab ID: 60191960005)
- MW-33R-201504 (Lab ID: 60191960006)
- MW-41-201504 (Lab ID: 60191960020)
- MW-65-201504 (Lab ID: 60191960014)
- MW-66-201504 (Lab ID: 60191960008)
- MW-67-201504 (Lab ID: 60191960013)

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

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

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

Additional Comments:

Analyte Comments:

QC Batch: WET/54405

1e: Field pH
- ITMW-1-201504 (Lab ID: 60191960009)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: April 30, 2015

Analyte Comments:

QC Batch: WET/54405

1e: Field pH

- ITMW-10-201504 (Lab ID: 60191960002)
  - pH at 25 Degrees C
- ITMW-12-201504 (Lab ID: 60191960003)
  - pH at 25 Degrees C
- ITMW-13-201504 (Lab ID: 60191960010)
  - pH at 25 Degrees C
- ITMW-14-201504 (Lab ID: 60191960019)
  - pH at 25 Degrees C
- ITMW-15-201504 (Lab ID: 60191960001)
  - pH at 25 Degrees C
- ITMW-17-201504 (Lab ID: 60191960017)
  - pH at 25 Degrees C
- ITMW-19-201504 (Lab ID: 60191960015)
  - pH at 25 Degrees C
- ITMW-2-201504 (Lab ID: 60191960018)
  - pH at 25 Degrees C
- ITMW-9-201504 (Lab ID: 60191960007)
  - pH at 25 Degrees C
- IW-72-201504 (Lab ID: 60191960011)
  - pH at 25 Degrees C
- IW-73-201504 (Lab ID: 60191960021)
  - pH at 25 Degrees C
- IW-74-201504 (Lab ID: 60191960012)
  - pH at 25 Degrees C
- IW-76-201504 (Lab ID: 60191960004)
  - pH at 25 Degrees C
- MW-32R-201504 (Lab ID: 60191960005)
  - pH at 25 Degrees C
- MW-33R-201504 (Lab ID: 60191960006)
  - pH at 25 Degrees C
- MW-41-201504 (Lab ID: 60191960020)
  - pH at 25 Degrees C
- MW-65-201504 (Lab ID: 60191960014)
  - pH at 25 Degrees C
- MW-66-201504 (Lab ID: 60191960008)
  - pH at 25 Degrees C
- MW-67-201504 (Lab ID: 60191960013)
  - pH at 25 Degrees C

QC Batch: WET/54406

1e: Field pH

- ITMW-11-201504 (Lab ID: 60191960016)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Environ_AR
Date: April 30, 2015

General Information:
21 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/54195

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191975009

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

- MS (Lab ID: 1552659)
  - Sulfide, Total

QC Batch: WET/54196

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191960018

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

- MS (Lab ID: 1552664)
  - 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: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Environ_AR
Date: April 30, 2015

General Information:
21 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/33777

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191862001,60191863001

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

- MS (Lab ID: 1556030)
  - Sulfate
- MS (Lab ID: 1556032)
  - Chloride

R1: RPD value was outside control limits.

- MSD (Lab ID: 1556031)
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Method: **EPA 350.1**
Description: 350.1 Ammonia
Client: Environ_AR
Date: April 30, 2015

General Information:
21 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/33692

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191932002,60191933001

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

- MS (Lab ID: 1552778)
  - Nitrogen, Ammonia
- MS (Lab ID: 1552779)
  - Nitrogen, Ammonia

QC Batch: WETA/33693

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191960019,60191970001

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

- MS (Lab ID: 1552787)
  - Nitrogen, Ammonia
- MS (Lab ID: 1552788)
  - 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: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Environ_AR
Date: April 30, 2015

General Information:
21 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.

QC Batch: WETA/33652

CU: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- ITMW-10-201504 (Lab ID: 60191960002)
  - Nitrogen, Nitrite
- ITMW-9-201504 (Lab ID: 60191960007)
  - Nitrogen, Nitrite

QC Batch: WETA/33653

CU: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

- IW-73-201504 (Lab ID: 60191960021)
  - Nitrogen, Nitrite
- MW-41-201504 (Lab ID: 60191960020)
  - Nitrogen, Nitrite

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/33652

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191951005,60191954001

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

- MS (Lab ID: 1550781)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrite

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Environ_AR
Date: April 30, 2015

QC Batch: WETA/33653

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191960021,60191966002

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

- MS (Lab ID: 1550792)
  - Nitrogen, NO2 plus NO3
- MS (Lab ID: 1550793)
  - 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: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Method: **SM 4500-CO2 D**
Description: Total Carbon Dioxide Calc
Client: Environ_AR
Date: April 30, 2015

General Information:
21 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: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Method: **SM 5310C**
Description: 5310C TOC
Client: Environ_AR
Date: April 30, 2015

General Information:
21 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/33760

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191868013

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

- MS (Lab ID: 1555571)
  - Total Organic Carbon

QC Batch: WETA/33823

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60192725001

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

- MS (Lab ID: 1557718)
  - 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: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Method: **SM 4500-P E**
Description: SM4500P-E, Total Phosphorus
Client: Environ_AR
Date: April 30, 2015

General Information:
21 samples were analyzed for SM 4500-P E. All samples were received in acceptable condition with any exceptions noted below.

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

Sample Preparation:
The samples were prepared in accordance with SM4500-P B with any exceptions noted below.

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

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

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

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

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

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-15-201504 **Lab ID: 60191960001** Collected: 04/15/15 16:00 Received: 04/16/15 01:47 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	1980	1		04/21/15 11:20	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**206**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 15:12	7439-89-6	
Manganese	**10.4**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 15:12	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**15.1**	ug/L	10.0	5.0	1		04/19/15 17:10	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 17:10	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 17:10	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 17:10	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/19/15 17:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 17:10	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 17:10	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 17:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 17:10	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 17:10	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 17:10	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/19/15 17:10	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 17:10	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 17:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 17:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 17:10	75-35-4	
cis-1,2-Dichloroethene	**7.5**	ug/L	1.0	0.50	1		04/19/15 17:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 17:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 17:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 17:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 17:10	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 17:10	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 17:10	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 17:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 17:10	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 17:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 17:10	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 17:10	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 17:10	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 17:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 17:10	79-00-5	
Trichloroethene	**101**	ug/L	1.0	0.50	1		04/19/15 17:10	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 17:10	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 17:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		04/19/15 17:10	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/19/15 17:10	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		04/19/15 17:10	2037-26-5	
Preservation pH	**4.0**		0.10	0.10	1		04/19/15 17:10		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-15-201504 **Lab ID: 60191960001** Collected: 04/15/15 16:00 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**5.0J**	mg/L	20.0	2.0	1		04/20/15 11:32		
Alkalinity, Carbonate (CaCO3)	**35.3**	mg/L	20.0	2.0	1		04/20/15 11:32		
Alkalinity, Total as CaCO3	**40.3**	mg/L	20.0	2.0	1		04/20/15 11:32		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.21**	mg/L	0.20		1		04/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**7.0**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:38	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**13.2**	mg/L	1.0	0.50	1		04/25/15 14:22	16887-00-6	
Sulfate	**11.4**	mg/L	1.0	0.24	1		04/25/15 14:22	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 16:19	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.12**	mg/L	0.10	0.014	1		04/16/15 15:37		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/16/15 15:37		
Nitrogen, NO2 plus NO3	**0.12**	mg/L	0.10	0.014	1		04/16/15 15:37		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**2.4**	mg/L	1.0	0.50	1		04/24/15 15:38	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	04/22/15 09:12	04/22/15 11:43		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-10-201504 **Lab ID: 60191960002** Collected: 04/15/15 14:35 Received: 04/16/15 01:47 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	1980	1		04/21/15 11:31	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**75.1**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 15:19	7439-89-6	
Manganese	**159**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 15:19	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		04/27/15 12:17	67-64-1	
Benzene	**0.12J**	ug/L	1.0	0.060	1		04/27/15 12:17	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 12:17	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 12:17	75-25-2	
Bromomethane	**0.47J**	ug/L	5.0	0.16	1		04/27/15 12:17	74-83-9	B
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 12:17	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/27/15 12:17	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 12:17	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 12:17	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 12:17	75-00-3	
Chloroform	**0.22J**	ug/L	1.0	0.14	1		04/27/15 12:17	67-66-3	
Chloromethane	**0.28J**	ug/L	1.0	0.080	1		04/27/15 12:17	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 12:17	124-48-1	
1,1-Dichloroethane	**2.7**	ug/L	1.0	0.050	1		04/27/15 12:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 12:17	107-06-2	
1,1-Dichloroethene	**3.2**	ug/L	1.0	0.20	1		04/27/15 12:17	75-35-4	
cis-1,2-Dichloroethene	**34.8**	ug/L	1.0	0.080	1		04/27/15 12:17	156-59-2	
trans-1,2-Dichloroethene	**0.29J**	ug/L	1.0	0.20	1		04/27/15 12:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 12:17	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 12:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 12:17	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 12:17	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 12:17	591-78-6	
Methylene chloride	**0.57J**	ug/L	1.0	0.15	1		04/27/15 12:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 12:17	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 12:17	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 12:17	79-34-5	
Tetrachloroethene	**0.46J**	ug/L	1.0	0.10	1		04/27/15 12:17	127-18-4	
Toluene	**0.48J**	ug/L	1.0	0.17	1		04/27/15 12:17	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 12:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/27/15 12:17	79-00-5	
Trichloroethene	**258**	ug/L	5.0	0.85	5		04/19/15 12:27	79-01-6	
Vinyl chloride	**0.98J**	ug/L	1.0	0.13	1		04/27/15 12:17	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 12:17	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/27/15 12:17	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		04/27/15 12:17	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/27/15 12:17	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 12:17		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-10-201504 **Lab ID: 60191960002** Collected: 04/15/15 14:35 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**87.4**	mg/L	20.0	2.0	1		04/20/15 11:36		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 11:36		
Alkalinity, Total as CaCO3	**87.4**	mg/L	20.0	2.0	1		04/20/15 11:36		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/29/15 00:00	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		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:38	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**132**	mg/L	10.0	5.0	10		04/25/15 15:33	16887-00-6	
Sulfate	**34.4**	mg/L	5.0	1.2	5		04/25/15 15:04	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 16:20	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**5.6**	mg/L	0.20	0.028	2		04/16/15 16:11		
Nitrogen, Nitrite	ND	mg/L	0.20	0.046	2		04/16/15 16:11		CU
Nitrogen, NO2 plus NO3	**5.6**	mg/L	0.20	0.028	2		04/16/15 16:11		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**190**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.0**	mg/L	1.0	0.50	1		04/24/15 15:51	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.066**	mg/L	0.030	0.010	1	04/22/15 09:12	04/22/15 11:44		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-12-201504 **Lab ID: 60191960003** Collected: 04/15/15 14:20 Received: 04/16/15 01:47 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	1980	1		04/21/15 14:58	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**55.0**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 15:26	7439-89-6	
Manganese	**46.4**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 15:26	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**8.7J**	ug/L	10.0	1.9	1		04/27/15 14:21	67-64-1	
Benzene	**0.11J**	ug/L	1.0	0.060	1		04/27/15 14:21	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 14:21	75-27-4	
Bromoform	**1.1**	ug/L	1.0	0.070	1		04/27/15 14:21	75-25-2	
Bromomethane	**0.61J**	ug/L	5.0	0.16	1		04/27/15 14:21	74-83-9	B
2-Butanone (MEK)	**0.98J**	ug/L	10.0	0.59	1		04/27/15 14:21	78-93-3	
Carbon disulfide	**0.15J**	ug/L	5.0	0.12	1		04/27/15 14:21	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 14:21	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 14:21	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 14:21	75-00-3	
Chloroform	**1.3**	ug/L	1.0	0.14	1		04/27/15 14:21	67-66-3	
Chloromethane	**0.63J**	ug/L	1.0	0.080	1		04/27/15 14:21	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 14:21	124-48-1	
1,1-Dichloroethane	**0.53J**	ug/L	1.0	0.050	1		04/27/15 14:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 14:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.20	1		04/27/15 14:21	75-35-4	
cis-1,2-Dichloroethene	**149**	ug/L	1.0	0.080	1		04/27/15 14:21	156-59-2	
trans-1,2-Dichloroethene	**25.8**	ug/L	1.0	0.20	1		04/27/15 14:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 14:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 14:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 14:21	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 14:21	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 14:21	591-78-6	
Methylene chloride	**1.3**	ug/L	1.0	0.15	1		04/27/15 14:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 14:21	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 14:21	100-42-5	
1,1,2,2-Tetrachloroethane	**0.53J**	ug/L	1.0	0.15	1		04/27/15 14:21	79-34-5	
Tetrachloroethene	**1.1**	ug/L	1.0	0.10	1		04/27/15 14:21	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/27/15 14:21	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 14:21	71-55-6	
1,1,2-Trichloroethane	**0.25J**	ug/L	1.0	0.20	1		04/27/15 14:21	79-00-5	
Trichloroethene	**2260**	ug/L	25.0	4.2	25		04/27/15 14:36	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.13	1		04/27/15 14:21	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 14:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/27/15 14:21	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/27/15 14:21	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		04/27/15 14:21	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 14:21		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-12-201504 **Lab ID: 60191960003** Collected: 04/15/15 14:20 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**37.4**	mg/L	20.0	2.0	1		04/20/15 11:43		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 11:43		
Alkalinity, Total as CaCO3	**37.4**	mg/L	20.0	2.0	1		04/20/15 11:43		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.8**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:39	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**22.5**	mg/L	2.0	1.0	2		04/25/15 16:30	16887-00-6	
Sulfate	**218**	mg/L	20.0	4.7	20		04/25/15 16:44	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 16:21	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.45**	mg/L	0.10	0.014	1		04/16/15 15:40		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/16/15 15:40		
Nitrogen, NO2 plus NO3	**0.45**	mg/L	0.10	0.014	1		04/16/15 15:40		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**157**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.1**	mg/L	1.0	0.50	1		04/27/15 12:54	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.074**	mg/L	0.030	0.010	1	04/22/15 09:12	04/22/15 11:45		

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: IW-76-201504 **Lab ID: 60191960004** Collected: 04/15/15 12:45 Received: 04/16/15 01:47 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	1980	1		04/21/15 15:09	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**15.2J**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 15:28	7439-89-6	
Manganese	**46.4**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 15:28	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**10.0**	ug/L	10.0	5.0	1		04/19/15 17:25	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 17:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 17:25	75-27-4	
Bromoform	**8.4**	ug/L	1.0	0.50	1		04/19/15 17:25	75-25-2	
Bromomethane	**7.7**	ug/L	5.0	2.5	1		04/19/15 17:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 17:25	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 17:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 17:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 17:25	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 17:25	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 17:25	67-66-3	
Chloromethane	**2.8**	ug/L	1.0	0.50	1		04/19/15 17:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 17:25	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 17:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 17:25	107-06-2	
1,1-Dichloroethene	**0.81J**	ug/L	1.0	0.50	1		04/19/15 17:25	75-35-4	
cis-1,2-Dichloroethene	**11.2**	ug/L	1.0	0.50	1		04/19/15 17:25	156-59-2	
trans-1,2-Dichloroethene	**1.1**	ug/L	1.0	0.50	1		04/19/15 17:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 17:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 17:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 17:25	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 17:25	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 17:25	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 17:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 17:25	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 17:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 17:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 17:25	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 17:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 17:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 17:25	79-00-5	
Trichloroethene	**354**	ug/L	5.0	2.5	5		04/17/15 19:45	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 17:25	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 17:25	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		04/19/15 17:25	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		04/19/15 17:25	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		04/19/15 17:25	2037-26-5	
Preservation pH	**4.0**		0.10	0.10	1		04/19/15 17:25		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: IW-76-201504 **Lab ID: 60191960004** Collected: 04/15/15 12:45 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**21.3**	mg/L	20.0	2.0	1		04/20/15 11:46		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 11:46		
Alkalinity, Total as CaCO3	**21.3**	mg/L	20.0	2.0	1		04/20/15 11:46		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.5**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:39	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**388**	mg/L	50.0	25.0	50		04/25/15 16:58	16887-00-6	
Sulfate	**232**	mg/L	50.0	11.8	50		04/25/15 16:58	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 16:22	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.53**	mg/L	0.10	0.014	1		04/16/15 15:41		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/16/15 15:41		
Nitrogen, NO2 plus NO3	**0.53**	mg/L	0.10	0.014	1		04/16/15 15:41		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**163**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/27/15 13:07	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.14**	mg/L	0.030	0.010	1	04/22/15 09:12	04/22/15 11:45		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: MW-32R-201504 **Lab ID: 60191960005** Collected: 04/15/15 09:20 Received: 04/16/15 01:47 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	1980	1		04/21/15 15:20	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**327**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 15:30	7439-89-6	
Manganese	**1320**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 15:30	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**37.9**	ug/L	10.0	5.0	1		04/19/15 12:42	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 12:42	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 12:42	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 12:42	75-25-2	
Bromomethane	**6.0**	ug/L	5.0	2.5	1		04/19/15 12:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 12:42	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 12:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 12:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 12:42	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 12:42	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 12:42	67-66-3	
Chloromethane	**6.1**	ug/L	1.0	0.50	1		04/19/15 12:42	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 12:42	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 12:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 12:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 12:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 12:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 12:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 12:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 12:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 12:42	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 12:42	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 12:42	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 12:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 12:42	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 12:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 12:42	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 12:42	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 12:42	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 12:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 12:42	79-00-5	
Trichloroethene	**11.2**	ug/L	1.0	0.50	1		04/19/15 12:42	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 12:42	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 12:42	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		04/19/15 12:42	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		04/19/15 12:42	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		04/19/15 12:42	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/19/15 12:42		

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: MW-32R-201504 **Lab ID: 60191960005** Collected: 04/15/15 09:20 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**10.1J**	mg/L	20.0	2.0	1		04/20/15 11:49		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 11:49		
Alkalinity, Total as CaCO3	**10.1J**	mg/L	20.0	2.0	1		04/20/15 11:49		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.33**	mg/L	0.20		1		04/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.0**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:39	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**255**	mg/L	50.0	25.0	50		04/25/15 17:12	16887-00-6	
Sulfate	**322**	mg/L	50.0	11.8	50		04/25/15 17:12	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 16:23	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.24**	mg/L	0.10	0.014	1		04/16/15 15:42		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/16/15 15:42		
Nitrogen, NO2 plus NO3	**0.24**	mg/L	0.10	0.014	1		04/16/15 15:42		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/27/15 13:46	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	04/22/15 09:12	04/22/15 11:45		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: MW-33R-201504 **Lab ID: 60191960006** Collected: 04/15/15 11:55 Received: 04/16/15 01:47 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	1980	1		04/21/15 15:31	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**10300**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 15:32	7439-89-6	
Manganese	**12800**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 15:32	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**11.0**	ug/L	10.0	1.9	1		04/27/15 15:07	67-64-1	
Benzene	**0.30J**	ug/L	1.0	0.060	1		04/27/15 15:07	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 15:07	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 15:07	75-25-2	
Bromomethane	ND	ug/L	5.0	0.16	1		04/27/15 15:07	74-83-9	
2-Butanone (MEK)	**1.3J**	ug/L	10.0	0.59	1		04/27/15 15:07	78-93-3	
Carbon disulfide	**1.4J**	ug/L	5.0	0.12	1		04/27/15 15:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 15:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 15:07	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 15:07	75-00-3	
Chloroform	**0.20J**	ug/L	1.0	0.14	1		04/27/15 15:07	67-66-3	
Chloromethane	**0.27J**	ug/L	1.0	0.080	1		04/27/15 15:07	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 15:07	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.050	1		04/27/15 15:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 15:07	107-06-2	
1,1-Dichloroethene	**0.55J**	ug/L	1.0	0.20	1		04/27/15 15:07	75-35-4	
cis-1,2-Dichloroethene	**12.2**	ug/L	1.0	0.080	1		04/27/15 15:07	156-59-2	
trans-1,2-Dichloroethene	**1.4**	ug/L	1.0	0.20	1		04/27/15 15:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 15:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 15:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 15:07	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 15:07	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 15:07	591-78-6	
Methylene chloride	**0.39J**	ug/L	1.0	0.15	1		04/27/15 15:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 15:07	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 15:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 15:07	79-34-5	
Tetrachloroethene	**0.13J**	ug/L	1.0	0.10	1		04/27/15 15:07	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/27/15 15:07	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 15:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/27/15 15:07	79-00-5	
Trichloroethene	**570**	ug/L	20.0	3.4	20		04/19/15 13:27	79-01-6	
Vinyl chloride	**0.37J**	ug/L	1.0	0.13	1		04/27/15 15:07	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 15:07	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/27/15 15:07	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/27/15 15:07	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		04/27/15 15:07	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 15:07		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: MW-33R-201504 **Lab ID: 60191960006** Collected: 04/15/15 11:55 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**110**	mg/L	20.0	2.0	1		04/20/15 11:53		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 11:53		
Alkalinity, Total as CaCO3	**110**	mg/L	20.0	2.0	1		04/20/15 11:53		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**10.2**	mg/L	0.20		1		04/29/15 00:00	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		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:40	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**182**	mg/L	20.0	10.0	20		04/25/15 17:41	16887-00-6	
Sulfate	**43.4**	mg/L	5.0	1.2	5		04/25/15 17:26	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 16:24	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.85**	mg/L	0.10	0.014	1		04/16/15 15:43		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/16/15 15:43		
Nitrogen, NO2 plus NO3	**0.85**	mg/L	0.10	0.014	1		04/16/15 15:43		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**228**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.58J**	mg/L	1.0	0.50	1		04/27/15 14:00	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.11**	mg/L	0.030	0.010	1	04/22/15 09:12	04/22/15 11:45		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-9-201504 **Lab ID: 60191960007** Collected: 04/15/15 11:20 Received: 04/16/15 01:47 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	1980	1		04/21/15 15:42	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**85.0**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 15:35	7439-89-6	
Manganese	**92.2**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 15:35	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/19/15 12:57	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 12:57	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 12:57	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 12:57	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/19/15 12:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 12:57	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 12:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 12:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 12:57	108-90-7	
Chloroethane	**0.57J**	ug/L	1.0	0.50	1		04/19/15 12:57	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 12:57	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/19/15 12:57	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 12:57	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 12:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 12:57	107-06-2	
1,1-Dichloroethene	**0.73J**	ug/L	1.0	0.50	1		04/19/15 12:57	75-35-4	
cis-1,2-Dichloroethene	**35.4**	ug/L	1.0	0.50	1		04/19/15 12:57	156-59-2	
trans-1,2-Dichloroethene	**1.8**	ug/L	1.0	0.50	1		04/19/15 12:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 12:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 12:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 12:57	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 12:57	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 12:57	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 12:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 12:57	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 12:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 12:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 12:57	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 12:57	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 12:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 12:57	79-00-5	
Trichloroethene	**100**	ug/L	1.0	0.50	1		04/19/15 12:57	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 12:57	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 12:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		04/19/15 12:57	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/19/15 12:57	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/19/15 12:57	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/19/15 12:57		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-9-201504 **Lab ID: 60191960007** Collected: 04/15/15 11:20 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**45.4**	mg/L	20.0	2.0	1		04/20/15 11:56		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 11:56		
Alkalinity, Total as CaCO3	**45.4**	mg/L	20.0	2.0	1		04/20/15 11:56		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.8**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:40	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**107**	mg/L	10.0	5.0	10		04/25/15 18:09	16887-00-6	
Sulfate	**23.4**	mg/L	2.0	0.47	2		04/25/15 17:55	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 16:28	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**22.3**	mg/L	1.0	0.14	10		04/16/15 16:12		
Nitrogen, Nitrite	ND	mg/L	1.0	0.23	10		04/16/15 16:12		CU
Nitrogen, NO2 plus NO3	**22.3**	mg/L	1.0	0.14	10		04/16/15 16:12		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**174**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.54J**	mg/L	1.0	0.50	1		04/27/15 14:13	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.10**	mg/L	0.030	0.010	1	04/22/15 09:12	04/22/15 11:45		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: MW-66-201504 **Lab ID: 60191960008** Collected: 04/15/15 10:55 Received: 04/16/15 01:47 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	1980	1		04/21/15 15:54	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**272**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 15:37	7439-89-6	
Manganese	**4.9J**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 15:37	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/19/15 21:22	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 21:22	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 21:22	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 21:22	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/19/15 21:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 21:22	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 21:22	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 21:22	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 21:22	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 21:22	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 21:22	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/19/15 21:22	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 21:22	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 21:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 21:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 21:22	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 21:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 21:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 21:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 21:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 21:22	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 21:22	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 21:22	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 21:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 21:22	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 21:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 21:22	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 21:22	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 21:22	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 21:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 21:22	79-00-5	
Trichloroethene	**2.6**	ug/L	1.0	0.50	1		04/19/15 21:22	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 21:22	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 21:22	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/19/15 21:22	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/19/15 21:22	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		04/19/15 21:22	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/19/15 21:22		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: MW-66-201504 **Lab ID: 60191960008** Collected: 04/15/15 10:55 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**102**	mg/L	20.0	2.0	1		04/20/15 12:08		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 12:08		
Alkalinity, Total as CaCO3	**102**	mg/L	20.0	2.0	1		04/20/15 12:08		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.27**	mg/L	0.20		1		04/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**7.0**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:40	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**170**	mg/L	20.0	10.0	20		04/25/15 18:37	16887-00-6	
Sulfate	**6.3**	mg/L	1.0	0.24	1		04/25/15 18:23	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 16:31	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.22**	mg/L	0.10	0.014	1		04/16/15 15:46		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/16/15 15:46		
Nitrogen, NO2 plus NO3	**0.22**	mg/L	0.10	0.014	1		04/16/15 15:46		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**108**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/27/15 14:26	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.10**	mg/L	0.030	0.010	1	04/22/15 09:12	04/22/15 11:45		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-1-201504 **Lab ID: 60191960009** Collected: 04/15/15 11:45 Received: 04/16/15 01:47 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	1980	1		04/21/15 16:05	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**473**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 15:39	7439-89-6	
Manganese	**16.9**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 15:39	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/19/15 21:37	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 21:37	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 21:37	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 21:37	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/19/15 21:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 21:37	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 21:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 21:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 21:37	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 21:37	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 21:37	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/19/15 21:37	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 21:37	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 21:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 21:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 21:37	75-35-4	
cis-1,2-Dichloroethene	**9.7**	ug/L	1.0	0.50	1		04/19/15 21:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 21:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 21:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 21:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 21:37	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 21:37	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 21:37	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 21:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 21:37	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 21:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 21:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 21:37	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 21:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 21:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 21:37	79-00-5	
Trichloroethene	**19.2**	ug/L	1.0	0.50	1		04/19/15 21:37	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 21:37	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 21:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/19/15 21:37	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/19/15 21:37	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		04/19/15 21:37	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/19/15 21:37		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-1-201504 **Lab ID: 60191960009** Collected: 04/15/15 11:45 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**76.0**	mg/L	20.0	2.0	1		04/20/15 12:12		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 12:12		
Alkalinity, Total as CaCO3	**76.0**	mg/L	20.0	2.0	1		04/20/15 12:12		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.47**	mg/L	0.20		1		04/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.0**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:40	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**106**	mg/L	10.0	5.0	10		04/25/15 19:34	16887-00-6	
Sulfate	**16.7**	mg/L	1.0	0.24	1		04/25/15 19:20	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 16:32	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.0**	mg/L	0.10	0.014	1		04/16/15 15:47		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/16/15 15:47		
Nitrogen, NO2 plus NO3	**1.0**	mg/L	0.10	0.014	1		04/16/15 15:47		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**209**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/27/15 14:39	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.10**	mg/L	0.030	0.010	1	04/22/15 09:12	04/22/15 11:45		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-13-201504 **Lab ID: 60191960010** Collected: 04/15/15 14:30 Received: 04/16/15 01:47 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	1980	1		04/21/15 16:16	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**444**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 15:42	7439-89-6	
Manganese	**11.4**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 15:42	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/19/15 21:51	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 21:51	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 21:51	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 21:51	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/19/15 21:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 21:51	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 21:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 21:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 21:51	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 21:51	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 21:51	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/19/15 21:51	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 21:51	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 21:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 21:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 21:51	75-35-4	
cis-1,2-Dichloroethene	**26.5**	ug/L	1.0	0.50	1		04/19/15 21:51	156-59-2	
trans-1,2-Dichloroethene	**0.74J**	ug/L	1.0	0.50	1		04/19/15 21:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 21:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 21:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 21:51	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 21:51	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 21:51	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 21:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 21:51	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 21:51	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 21:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 21:51	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 21:51	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 21:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 21:51	79-00-5	
Trichloroethene	**43.1**	ug/L	1.0	0.50	1		04/19/15 21:51	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 21:51	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 21:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		04/19/15 21:51	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/19/15 21:51	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		04/19/15 21:51	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/19/15 21:51		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-13-201504 **Lab ID: 60191960010** Collected: 04/15/15 14:30 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**76.6**	mg/L	20.0	2.0	1		04/20/15 12:19		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 12:19		
Alkalinity, Total as CaCO3	**76.6**	mg/L	20.0	2.0	1		04/20/15 12:19		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.44**	mg/L	0.20		1		04/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.0**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:40	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**20.7**	mg/L	2.0	1.0	2		04/25/15 20:03	16887-00-6	
Sulfate	**9.6**	mg/L	1.0	0.24	1		04/25/15 19:48	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 16:33	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.13**	mg/L	0.10	0.014	1		04/16/15 15:50		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/16/15 15:50		
Nitrogen, NO2 plus NO3	**0.13**	mg/L	0.10	0.014	1		04/16/15 15:50		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**207**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.56J**	mg/L	1.0	0.50	1		04/28/15 08:41	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.10**	mg/L	0.030	0.010	1	04/22/15 09:12	04/22/15 11:44		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: IW-72-201504 **Lab ID: 60191960011** Collected: 04/15/15 09:25 Received: 04/16/15 01:47 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	1980	1		04/21/15 16:50	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**129**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 15:44	7439-89-6	
Manganese	**3170**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 15:44	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/19/15 22:06	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 22:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 22:06	75-27-4	
Bromoform	**3.2**	ug/L	1.0	0.50	1		04/19/15 22:06	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/19/15 22:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 22:06	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 22:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 22:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 22:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:06	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 22:06	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/19/15 22:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 22:06	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 22:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 22:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 22:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 22:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 22:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 22:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 22:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 22:06	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 22:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 22:06	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 22:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 22:06	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 22:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:06	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 22:06	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 22:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 22:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		04/19/15 22:06	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/19/15 22:06	17060-07-0	
Toluene-d8 (S)	85	%	80-120		1		04/19/15 22:06	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/19/15 22:06		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: IW-72-201504 **Lab ID: 60191960011** Collected: 04/15/15 09:25 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**111**	mg/L	20.0	2.0	1		04/20/15 12:24		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 12:24		
Alkalinity, Total as CaCO3	**111**	mg/L	20.0	2.0	1		04/20/15 12:24		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.0**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:40	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**190**	mg/L	20.0	10.0	20		04/25/15 20:31	16887-00-6	
Sulfate	**7.5**	mg/L	1.0	0.24	1		04/25/15 20:17	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 16:35	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.2**	mg/L	0.10	0.014	1		04/16/15 15:51		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/16/15 15:51		
Nitrogen, NO2 plus NO3	**1.2**	mg/L	0.10	0.014	1		04/16/15 15:51		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**305**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/28/15 09:07	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.17**	mg/L	0.030	0.010	1	04/22/15 09:12	04/22/15 11:44		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: IW-74-201504 **Lab ID: 60191960012** Collected: 04/15/15 11:20 Received: 04/16/15 01:47 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	1980	1		04/21/15 17:01	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**73.3**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 15:46	7439-89-6	
Manganese	**788**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 15:46	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/20/15 00:05	67-64-1	
Benzene	**0.51J**	ug/L	1.0	0.50	1		04/20/15 00:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/20/15 00:05	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/20/15 00:05	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/20/15 00:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/20/15 00:05	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/20/15 00:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/20/15 00:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/20/15 00:05	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/20/15 00:05	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/20/15 00:05	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/20/15 00:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/20/15 00:05	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 00:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 00:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 00:05	75-35-4	
cis-1,2-Dichloroethene	**5.0**	ug/L	1.0	0.50	1		04/20/15 00:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 00:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/20/15 00:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 00:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 00:05	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/20/15 00:05	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/20/15 00:05	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/20/15 00:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/20/15 00:05	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/20/15 00:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/20/15 00:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/20/15 00:05	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/20/15 00:05	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 00:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 00:05	79-00-5	
Trichloroethene	**147**	ug/L	1.0	0.50	1		04/20/15 00:05	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/20/15 00:05	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/20/15 00:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/20/15 00:05	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/20/15 00:05	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		04/20/15 00:05	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/20/15 00:05		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: IW-74-201504 **Lab ID: 60191960012** Collected: 04/15/15 11:20 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**83.4**	mg/L	20.0	2.0	1		04/20/15 12:27		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 12:27		
Alkalinity, Total as CaCO3	**83.4**	mg/L	20.0	2.0	1		04/20/15 12:27		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.9**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:41	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**278**	mg/L	50.0	25.0	50		04/25/15 20:59	16887-00-6	
Sulfate	**3.2**	mg/L	1.0	0.24	1		04/25/15 20:45	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 16:36	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.42**	mg/L	0.10	0.014	1		04/16/15 15:51		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/16/15 15:51		
Nitrogen, NO2 plus NO3	**0.42**	mg/L	0.10	0.014	1		04/16/15 15:51		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**283**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/28/15 09:33	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.17**	mg/L	0.030	0.010	1	04/22/15 09:54	04/22/15 13:40		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: MW-67-201504 **Lab ID: 60191960013** Collected: 04/15/15 08:50 Received: 04/16/15 01:47 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	1980	1		04/21/15 17:12	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**2110**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 15:53	7439-89-6	
Manganese	**17.5**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 15:53	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/19/15 22:21	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 22:21	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 22:21	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 22:21	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/19/15 22:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 22:21	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 22:21	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 22:21	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 22:21	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:21	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 22:21	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/19/15 22:21	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 22:21	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 22:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 22:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 22:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 22:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 22:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 22:21	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 22:21	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 22:21	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 22:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 22:21	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 22:21	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:21	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 22:21	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 22:21	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:21	79-00-5	
Trichloroethene	**0.77J**	ug/L	1.0	0.50	1		04/19/15 22:21	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 22:21	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 22:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		04/19/15 22:21	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/19/15 22:21	17060-07-0	
Toluene-d8 (S)	94	%	80-120		1		04/19/15 22:21	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/19/15 22:21		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: MW-67-201504 **Lab ID: 60191960013** Collected: 04/15/15 08:50 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**276**	mg/L	20.0	2.0	1		04/20/15 12:32		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 12:32		
Alkalinity, Total as CaCO3	**276**	mg/L	20.0	2.0	1		04/20/15 12:32		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**1.7**	mg/L	0.20		1		04/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**7.6**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:41	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**117**	mg/L	10.0	5.0	10		04/25/15 21:28	16887-00-6	
Sulfate	**7.5**	mg/L	1.0	0.24	1		04/25/15 21:13	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 16:37	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.16**	mg/L	0.10	0.014	1		04/16/15 15:52		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/16/15 15:52		
Nitrogen, NO2 plus NO3	**0.16**	mg/L	0.10	0.014	1		04/16/15 15:52		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**258**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/28/15 09:46	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	04/22/15 09:54	04/22/15 13:41		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: MW-65-201504 **Lab ID: 60191960014** Collected: 04/15/15 09:50 Received: 04/16/15 01:47 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	1980	1		04/21/15 19:41	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**217**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 15:56	7439-89-6	
Manganese	**64.6**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 15:56	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**58.3**	ug/L	10.0	5.0	1		04/19/15 15:26	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 15:26	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 15:26	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 15:26	75-25-2	
Bromomethane	**3.8J**	ug/L	5.0	2.5	1		04/19/15 15:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 15:26	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 15:26	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 15:26	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 15:26	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:26	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 15:26	67-66-3	
Chloromethane	**2.6**	ug/L	1.0	0.50	1		04/19/15 15:26	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 15:26	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:26	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 15:26	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 15:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 15:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 15:26	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 15:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 15:26	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 15:26	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 15:26	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 15:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 15:26	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 15:26	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:26	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 15:26	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 15:26	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:26	79-00-5	
Trichloroethene	**16.0**	ug/L	1.0	0.50	1		04/19/15 15:26	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 15:26	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 15:26	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		04/19/15 15:26	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		04/19/15 15:26	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		04/19/15 15:26	2037-26-5	
Preservation pH	**4.0**		0.10	0.10	1		04/19/15 15:26		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: MW-65-201504 **Lab ID: 60191960014** Collected: 04/15/15 09:50 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 12:37		
Alkalinity, Carbonate (CaCO3)	**348**	mg/L	20.0	2.0	1		04/20/15 12:37		
Alkalinity, Total as CaCO3	**363**	mg/L	20.0	2.0	1		04/20/15 12:37		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.22**	mg/L	0.20		1		04/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**10.6**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:42	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**296**	mg/L	50.0	25.0	50		04/26/15 11:07	16887-00-6	
Sulfate	**3210**	mg/L	200	47.3	200		04/26/15 11:22	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.47**	mg/L	0.10	0.027	1		04/20/15 16:38	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**2.9**	mg/L	0.10	0.014	1		04/16/15 15:53		
Nitrogen, Nitrite	**0.12**	mg/L	0.10	0.023	1		04/16/15 15:53		
Nitrogen, NO2 plus NO3	**3.0**	mg/L	0.10	0.014	1		04/16/15 15:53		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**153**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**2.7**	mg/L	1.0	0.50	1		04/28/15 09:59	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	0.010	1	04/22/15 09:54	04/22/15 13:41		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-19-201504 **Lab ID: 60191960015** Collected: 04/15/15 16:22 Received: 04/16/15 01:47 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	1980	1		04/21/15 19:52	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	ND	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 15:58	7439-89-6	
Manganese	**15.2**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 15:58	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**55.0**	ug/L	10.0	5.0	1		04/20/15 00:20	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/20/15 00:20	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/20/15 00:20	75-27-4	
Bromoform	**3.2**	ug/L	1.0	0.50	1		04/20/15 00:20	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/20/15 00:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/20/15 00:20	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/20/15 00:20	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/20/15 00:20	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/20/15 00:20	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/20/15 00:20	75-00-3	
Chloroform	**2.3**	ug/L	1.0	0.50	1		04/20/15 00:20	67-66-3	
Chloromethane	**1.1**	ug/L	1.0	0.50	1		04/20/15 00:20	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/20/15 00:20	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 00:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 00:20	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 00:20	75-35-4	
cis-1,2-Dichloroethene	**2.2**	ug/L	1.0	0.50	1		04/20/15 00:20	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 00:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/20/15 00:20	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 00:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 00:20	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/20/15 00:20	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/20/15 00:20	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/20/15 00:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/20/15 00:20	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/20/15 00:20	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/20/15 00:20	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/20/15 00:20	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/20/15 00:20	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 00:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 00:20	79-00-5	
Trichloroethene	**594**	ug/L	10.0	5.0	10		04/20/15 23:35	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/20/15 00:20	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/20/15 00:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/20/15 00:20	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/20/15 00:20	17060-07-0	
Toluene-d8 (S)	92	%	80-120		1		04/20/15 00:20	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/20/15 00:20		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-19-201504 **Lab ID: 60191960015** Collected: 04/15/15 16:22 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 12:42		
Alkalinity, Carbonate (CaCO3)	**40.1**	mg/L	20.0	2.0	1		04/20/15 12:42		
Alkalinity, Total as CaCO3	**77.1**	mg/L	20.0	2.0	1		04/20/15 12:42		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**11.2**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:42	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**255**	mg/L	50.0	25.0	50		04/26/15 11:36	16887-00-6	
Sulfate	**1370**	mg/L	200	47.3	200		04/26/15 11:50	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.48**	mg/L	0.10	0.027	1		04/20/15 16:39	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**2.0**	mg/L	0.10	0.014	1		04/16/15 15:54		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/16/15 15:54		
Nitrogen, NO2 plus NO3	**2.0**	mg/L	0.10	0.014	1		04/16/15 15:54		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.2**	mg/L	1.0	0.50	1		04/28/15 10:12	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	ND	mg/L	0.030	0.010	1	04/22/15 09:54	04/22/15 13:41		

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-11-201504 **Lab ID: 60191960016** Collected: 04/15/15 16:40 Received: 04/16/15 01:47 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	1980	1		04/21/15 20:03	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**5510**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 16:00	7439-89-6	
Manganese	**106**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 16:00	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/19/15 15:41	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 15:41	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 15:41	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 15:41	75-25-2	
Bromomethane	**3.2J**	ug/L	5.0	2.5	1		04/19/15 15:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 15:41	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 15:41	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 15:41	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 15:41	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:41	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 15:41	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/19/15 15:41	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 15:41	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 15:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 15:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 15:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 15:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 15:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 15:41	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 15:41	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 15:41	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 15:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 15:41	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 15:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:41	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 15:41	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 15:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:41	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 15:41	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 15:41	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 15:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		04/19/15 15:41	460-00-4	
1,2-Dichloroethane-d4 (S)	120	%	80-120		1		04/19/15 15:41	17060-07-0	
Toluene-d8 (S)	92	%	80-120		1		04/19/15 15:41	2037-26-5	
Preservation pH	**2.0**		0.10	0.10	1		04/19/15 15:41		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-11-201504 **Lab ID: 60191960016** Collected: 04/15/15 16:40 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 12:44		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 12:44		
Alkalinity, Total as CaCO3	ND	mg/L	20.0	2.0	1		04/20/15 12:44		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**5.3**	mg/L	0.20		1		04/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**2.7**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:42	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**17.0**	mg/L	10.0	5.0	10		04/28/15 11:18	16887-00-6	
Sulfate	**6150**	mg/L	1000	237	1000		04/26/15 14:12	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**1.6**	mg/L	0.10	0.027	1		04/20/15 16:40	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**4.6**	mg/L	0.10	0.014	1		04/16/15 15:55		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/16/15 15:55		
Nitrogen, NO2 plus NO3	**4.6**	mg/L	0.10	0.014	1		04/16/15 15:55		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/28/15 10:51	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	0.010	1	04/22/15 09:54	04/22/15 13:41		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-17-201504 **Lab ID: 60191960017** Collected: 04/15/15 16:30 Received: 04/16/15 01:47 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	1980	1		04/21/15 20:14	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**286**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 16:03	7439-89-6	
Manganese	**124**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 16:03	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		04/27/15 15:23	67-64-1	
Benzene	**0.17J**	ug/L	1.0	0.060	1		04/27/15 15:23	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 15:23	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 15:23	75-25-2	
Bromomethane	ND	ug/L	5.0	0.16	1		04/27/15 15:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 15:23	78-93-3	
Carbon disulfide	**0.14J**	ug/L	5.0	0.12	1		04/27/15 15:23	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 15:23	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 15:23	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 15:23	75-00-3	
Chloroform	**1.2**	ug/L	1.0	0.14	1		04/27/15 15:23	67-66-3	
Chloromethane	**0.38J**	ug/L	1.0	0.080	1		04/27/15 15:23	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 15:23	124-48-1	
1,1-Dichloroethane	**0.13J**	ug/L	1.0	0.050	1		04/27/15 15:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 15:23	107-06-2	
1,1-Dichloroethene	**0.78J**	ug/L	1.0	0.20	1		04/27/15 15:23	75-35-4	
cis-1,2-Dichloroethene	**142**	ug/L	1.0	0.080	1		04/27/15 15:23	156-59-2	
trans-1,2-Dichloroethene	**21.9**	ug/L	1.0	0.20	1		04/27/15 15:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 15:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 15:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 15:23	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 15:23	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 15:23	591-78-6	
Methylene chloride	**0.65J**	ug/L	1.0	0.15	1		04/27/15 15:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 15:23	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 15:23	100-42-5	
1,1,2,2-Tetrachloroethane	**0.29J**	ug/L	1.0	0.15	1		04/27/15 15:23	79-34-5	
Tetrachloroethene	**1.5**	ug/L	1.0	0.10	1		04/27/15 15:23	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/27/15 15:23	108-88-3	
1,1,1-Trichloroethane	**0.36J**	ug/L	1.0	0.11	1		04/27/15 15:23	71-55-6	
1,1,2-Trichloroethane	**0.42J**	ug/L	1.0	0.20	1		04/27/15 15:23	79-00-5	
Trichloroethene	**3920**	ug/L	50.0	8.5	50		04/20/15 00:35	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.13	1		04/27/15 15:23	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 15:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		04/27/15 15:23	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120		1		04/27/15 15:23	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		04/27/15 15:23	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 15:23		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-17-201504 **Lab ID: 60191960017** Collected: 04/15/15 16:30 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**13.1J**	mg/L	20.0	2.0	1		04/20/15 12:56		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 12:56		
Alkalinity, Total as CaCO3	**13.1J**	mg/L	20.0	2.0	1		04/20/15 12:56		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.29**	mg/L	0.20		1		04/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.3**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:42	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**279**	mg/L	50.0	25.0	50		04/26/15 12:18	16887-00-6	
Sulfate	**113**	mg/L	10.0	2.4	10		04/26/15 12:04	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 16:41	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.22**	mg/L	0.10	0.014	1		04/16/15 15:56		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/16/15 15:56		
Nitrogen, NO2 plus NO3	**0.22**	mg/L	0.10	0.014	1		04/16/15 15:56		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.63J**	mg/L	1.0	0.50	1		04/28/15 11:05	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	04/22/15 09:54	04/22/15 13:41		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-2-201504 **Lab ID: 60191960018** Collected: 04/15/15 08:45 Received: 04/16/15 01:47 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	1980	1		04/21/15 20:26	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**589**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 16:05	7439-89-6	
Manganese	**18.3**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 16:05	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/19/15 22:36	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 22:36	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 22:36	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 22:36	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/19/15 22:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 22:36	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 22:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 22:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 22:36	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:36	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 22:36	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/19/15 22:36	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 22:36	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 22:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 22:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 22:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 22:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 22:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 22:36	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 22:36	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 22:36	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 22:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 22:36	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 22:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 22:36	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 22:36	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 22:36	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 22:36	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 22:36	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		04/19/15 22:36	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/19/15 22:36	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		04/19/15 22:36	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/19/15 22:36		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-2-201504 **Lab ID: 60191960018** Collected: 04/15/15 08:45 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**63.9**	mg/L	20.0	2.0	1		04/20/15 13:00		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 13:00		
Alkalinity, Total as CaCO3	**63.9**	mg/L	20.0	2.0	1		04/20/15 13:00		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.47**	mg/L	0.20		1		04/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.9**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:43	18496-25-8	M1
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**116**	mg/L	10.0	5.0	10		04/26/15 12:47	16887-00-6	
Sulfate	**18.4**	mg/L	2.0	0.47	2		04/26/15 12:33	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 16:45	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.0**	mg/L	0.10	0.014	1		04/16/15 15:57		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/16/15 15:57		
Nitrogen, NO2 plus NO3	**1.0**	mg/L	0.10	0.014	1		04/16/15 15:57		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**206**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/28/15 11:18	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.032**	mg/L	0.030	0.010	1	04/22/15 09:54	04/22/15 13:42		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-14-201504 **Lab ID: 60191960019** Collected: 04/15/15 09:05 Received: 04/16/15 01:47 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	1980	1		04/21/15 20:37	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**492**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 16:07	7439-89-6	
Manganese	**9.7**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 16:07	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/19/15 22:51	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 22:51	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 22:51	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 22:51	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/19/15 22:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 22:51	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 22:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 22:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 22:51	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:51	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 22:51	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/19/15 22:51	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 22:51	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 22:51	75-35-4	
cis-1,2-Dichloroethene	**10.7**	ug/L	1.0	0.50	1		04/19/15 22:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 22:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 22:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 22:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 22:51	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 22:51	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 22:51	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 22:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 22:51	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 22:51	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:51	79-34-5	
Tetrachloroethene	**18.5**	ug/L	1.0	0.50	1		04/19/15 22:51	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 22:51	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 22:51	79-00-5	
Trichloroethene	**5.0**	ug/L	1.0	0.50	1		04/19/15 22:51	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 22:51	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 22:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		04/19/15 22:51	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/19/15 22:51	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		04/19/15 22:51	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/19/15 22:51		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: ITMW-14-201504 **Lab ID: 60191960019** Collected: 04/15/15 09:05 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**53.3**	mg/L	20.0	2.0	1		04/20/15 13:03		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 13:03		
Alkalinity, Total as CaCO3	**53.3**	mg/L	20.0	2.0	1		04/20/15 13:03		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.49**	mg/L	0.20		1		04/29/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.1**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:44	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**7.4**	mg/L	1.0	0.50	1		04/26/15 13:01	16887-00-6	
Sulfate	**12.9**	mg/L	1.0	0.24	1		04/26/15 13:01	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 16:46	7664-41-7	M1
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.49**	mg/L	0.10	0.014	1		04/16/15 15:58		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/16/15 15:58		
Nitrogen, NO2 plus NO3	**0.49**	mg/L	0.10	0.014	1		04/16/15 15:58		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**124**	mg/L	20.0	20.0	1		04/29/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.73J**	mg/L	1.0	0.50	1		04/28/15 11:31	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	ND	mg/L	0.030	0.010	1	04/22/15 09:54	04/22/15 13:42		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: MW-41-201504 **Lab ID: 60191960020** Collected: 04/15/15 15:20 Received: 04/16/15 01:47 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	1980	1		04/21/15 20:48	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**3500**	ug/L	50.0	9.0	1	04/17/15 10:40	04/22/15 16:10	7439-89-6	
Manganese	**5080**	ug/L	5.0	2.4	1	04/17/15 10:40	04/22/15 16:10	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		04/27/15 14:52	67-64-1	
Benzene	ND	ug/L	1.0	0.060	1		04/27/15 14:52	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 14:52	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 14:52	75-25-2	
Bromomethane	**0.39J**	ug/L	5.0	0.16	1		04/27/15 14:52	74-83-9	B
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 14:52	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/27/15 14:52	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 14:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 14:52	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 14:52	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/27/15 14:52	67-66-3	
Chloromethane	**0.12J**	ug/L	1.0	0.080	1		04/27/15 14:52	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 14:52	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.050	1		04/27/15 14:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 14:52	107-06-2	
1,1-Dichloroethene	**1.3**	ug/L	1.0	0.20	1		04/27/15 14:52	75-35-4	
cis-1,2-Dichloroethene	**15.2**	ug/L	1.0	0.080	1		04/27/15 14:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.20	1		04/27/15 14:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 14:52	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 14:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 14:52	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 14:52	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 14:52	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.15	1		04/27/15 14:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 14:52	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 14:52	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 14:52	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.10	1		04/27/15 14:52	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/27/15 14:52	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 14:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/27/15 14:52	79-00-5	
Trichloroethene	**386**	ug/L	10.0	1.7	10		04/20/15 00:49	79-01-6	
Vinyl chloride	**0.27J**	ug/L	1.0	0.13	1		04/27/15 14:52	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 14:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		1		04/27/15 14:52	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/27/15 14:52	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		04/27/15 14:52	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 14:52		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: MW-41-201504 **Lab ID: 60191960020** Collected: 04/15/15 15:20 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**36.5**	mg/L	20.0	2.0	1		04/20/15 13:07		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 13:07		
Alkalinity, Total as CaCO3	**36.5**	mg/L	20.0	2.0	1		04/20/15 13:07		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**0.20**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.4**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:45	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**366**	mg/L	50.0	25.0	50		04/26/15 22:43	16887-00-6	
Sulfate	**2.8**	mg/L	1.0	0.24	1		04/26/15 13:57	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 16:48	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.036J**	mg/L	0.10	0.014	1		04/16/15 16:00		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/16/15 16:00		CU
Nitrogen, NO2 plus NO3	**0.036J**	mg/L	0.10	0.014	1		04/16/15 16:00		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**291**	mg/L	20.0	20.0	1		04/30/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/28/15 11:45	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	ND	mg/L	0.030	0.010	1	04/22/15 09:54	04/22/15 13:42		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: IW-73-201504 **Lab ID: 60191960021** Collected: 04/15/15 14:30 Received: 04/16/15 01:47 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	1980	1		04/21/15 20:59	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**2220**	ug/L	50.0	9.0	1	04/17/15 13:00	04/21/15 18:06	7439-89-6	
Manganese	**1850**	ug/L	5.0	2.4	1	04/17/15 13:00	04/21/15 18:06	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/19/15 23:06	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 23:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 23:06	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 23:06	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/19/15 23:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 23:06	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 23:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 23:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 23:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:06	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 23:06	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/19/15 23:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 23:06	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:06	107-06-2	
1,1-Dichloroethene	**2.2**	ug/L	1.0	0.50	1		04/19/15 23:06	75-35-4	
cis-1,2-Dichloroethene	**6.8**	ug/L	1.0	0.50	1		04/19/15 23:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 23:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 23:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 23:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 23:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 23:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 23:06	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 23:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 23:06	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 23:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 23:06	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 23:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:06	79-00-5	
Trichloroethene	**96.8**	ug/L	1.0	0.50	1		04/19/15 23:06	79-01-6	
Vinyl chloride	**1.6**	ug/L	1.0	0.50	1		04/19/15 23:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 23:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/19/15 23:06	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120		1		04/19/15 23:06	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/19/15 23:06	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/19/15 23:06		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: IW-73-201504 **Lab ID: 60191960021** Collected: 04/15/15 14:30 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**59.9**	mg/L	20.0	2.0	1		04/20/15 14:14		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/20/15 14:14		
Alkalinity, Total as CaCO3	**59.9**	mg/L	20.0	2.0	1		04/20/15 14:14		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**1.1**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.8**	Std. Units	0.10	0.10	1		04/15/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:45	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**159**	mg/L	20.0	10.0	20		04/25/15 18:39	16887-00-6	
Sulfate	**4.2**	mg/L	1.0	0.24	1		04/25/15 18:24	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/20/15 16:49	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.024J**	mg/L	0.10	0.014	1		04/16/15 16:01		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/16/15 16:01		CU
Nitrogen, NO2 plus NO3	**0.024J**	mg/L	0.10	0.014	1		04/16/15 16:01		M1
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**256**	mg/L	20.0	20.0	1		04/30/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.4**	mg/L	1.0	0.50	1		04/28/15 11:58	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	ND	mg/L	0.030	0.010	1	04/22/15 09:54	04/22/15 13:42		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: DUP-01-201504 **Lab ID: 60191960022** Collected: 04/15/15 11:55 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/19/15 23:21	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 23:21	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 23:21	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 23:21	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/19/15 23:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 23:21	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 23:21	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 23:21	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 23:21	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:21	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 23:21	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/19/15 23:21	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 23:21	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:21	107-06-2	
1,1-Dichloroethene	**0.52J**	ug/L	1.0	0.50	1		04/19/15 23:21	75-35-4	
cis-1,2-Dichloroethene	**10.5**	ug/L	1.0	0.50	1		04/19/15 23:21	156-59-2	
trans-1,2-Dichloroethene	**1.3**	ug/L	1.0	0.50	1		04/19/15 23:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 23:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 23:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 23:21	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 23:21	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 23:21	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 23:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 23:21	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 23:21	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:21	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 23:21	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 23:21	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:21	79-00-5	
Trichloroethene	**624**	ug/L	20.0	10.0	20		04/20/15 23:50	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 23:21	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 23:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		04/19/15 23:21	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120		1		04/19/15 23:21	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		04/19/15 23:21	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/19/15 23:21		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: DUP-03-201504 **Lab ID: 60191960023** Collected: 04/15/15 16:30 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/19/15 23:35	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 23:35	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 23:35	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 23:35	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/19/15 23:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 23:35	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 23:35	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 23:35	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 23:35	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:35	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 23:35	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/19/15 23:35	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 23:35	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 23:35	75-35-4	
cis-1,2-Dichloroethene	**26.7**	ug/L	1.0	0.50	1		04/19/15 23:35	156-59-2	
trans-1,2-Dichloroethene	**0.65J**	ug/L	1.0	0.50	1		04/19/15 23:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 23:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 23:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 23:35	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 23:35	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 23:35	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 23:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 23:35	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 23:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:35	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 23:35	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 23:35	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:35	79-00-5	
Trichloroethene	**47.7**	ug/L	1.0	0.50	1		04/19/15 23:35	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 23:35	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 23:35	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/19/15 23:35	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/19/15 23:35	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		04/19/15 23:35	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/19/15 23:35		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: DUP-05-201504 **Lab ID: 60191960024** Collected: 04/15/15 11:20 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/19/15 23:50	67-64-1	
Benzene	**0.50J**	ug/L	1.0	0.50	1		04/19/15 23:50	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 23:50	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 23:50	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/19/15 23:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 23:50	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 23:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 23:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 23:50	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:50	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 23:50	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/19/15 23:50	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 23:50	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 23:50	75-35-4	
cis-1,2-Dichloroethene	**4.8**	ug/L	1.0	0.50	1		04/19/15 23:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 23:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 23:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 23:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 23:50	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 23:50	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 23:50	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 23:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 23:50	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 23:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:50	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 23:50	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 23:50	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 23:50	79-00-5	
Trichloroethene	**153**	ug/L	1.0	0.50	1		04/19/15 23:50	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 23:50	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 23:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/19/15 23:50	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		04/19/15 23:50	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		04/19/15 23:50	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/19/15 23:50		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: TB-08-201504 **Lab ID: 60191960025** Collected: 04/15/15 08:45 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/20/15 21:36	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/20/15 21:36	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/20/15 21:36	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/20/15 21:36	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/20/15 21:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/20/15 21:36	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/20/15 21:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/20/15 21:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/20/15 21:36	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/20/15 21:36	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/20/15 21:36	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/20/15 21:36	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/20/15 21:36	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 21:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 21:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 21:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 21:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 21:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/20/15 21:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 21:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 21:36	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/20/15 21:36	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/20/15 21:36	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/20/15 21:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/20/15 21:36	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/20/15 21:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/20/15 21:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/20/15 21:36	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/20/15 21:36	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 21:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 21:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 21:36	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/20/15 21:36	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/20/15 21:36	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/20/15 21:36	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/20/15 21:36	17060-07-0	
Toluene-d8 (S)	94	%	80-120		1		04/20/15 21:36	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/20/15 21:36		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: TB-09-201504 **Lab ID: 60191960026** Collected: 04/15/15 08:45 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/20/15 21:51	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/20/15 21:51	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/20/15 21:51	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/20/15 21:51	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/20/15 21:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/20/15 21:51	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/20/15 21:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/20/15 21:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/20/15 21:51	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/20/15 21:51	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/20/15 21:51	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/20/15 21:51	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/20/15 21:51	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 21:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 21:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 21:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 21:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 21:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/20/15 21:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 21:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 21:51	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/20/15 21:51	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/20/15 21:51	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/20/15 21:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/20/15 21:51	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/20/15 21:51	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/20/15 21:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/20/15 21:51	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/20/15 21:51	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 21:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 21:51	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 21:51	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/20/15 21:51	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/20/15 21:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		04/20/15 21:51	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/20/15 21:51	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		04/20/15 21:51	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/20/15 21:51		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: TB-10-201504 **Lab ID: 60191960027** Collected: 04/15/15 08:45 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/20/15 22:06	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/20/15 22:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/20/15 22:06	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/20/15 22:06	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/20/15 22:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/20/15 22:06	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/20/15 22:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/20/15 22:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/20/15 22:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:06	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/20/15 22:06	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/20/15 22:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/20/15 22:06	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:06	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/20/15 22:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 22:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 22:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/20/15 22:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/20/15 22:06	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/20/15 22:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/20/15 22:06	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/20/15 22:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:06	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/20/15 22:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:06	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:06	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/20/15 22:06	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/20/15 22:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		04/20/15 22:06	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/20/15 22:06	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		04/20/15 22:06	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/20/15 22:06		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: TB-11-201504 **Lab ID: 60191960028** Collected: 04/15/15 08:45 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**10.4**	ug/L	10.0	5.0	1		04/20/15 22:21	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/20/15 22:21	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/20/15 22:21	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/20/15 22:21	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/20/15 22:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/20/15 22:21	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/20/15 22:21	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/20/15 22:21	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/20/15 22:21	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:21	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/20/15 22:21	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/20/15 22:21	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/20/15 22:21	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/20/15 22:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 22:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 22:21	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/20/15 22:21	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/20/15 22:21	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/20/15 22:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/20/15 22:21	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/20/15 22:21	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:21	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:21	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/20/15 22:21	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:21	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:21	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/20/15 22:21	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/20/15 22:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		04/20/15 22:21	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/20/15 22:21	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		04/20/15 22:21	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/20/15 22:21		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: TB-12-201504 **Lab ID: 60191960029** Collected: 04/15/15 08:45 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**10.4**	ug/L	10.0	5.0	1		04/20/15 22:36	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/20/15 22:36	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/20/15 22:36	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/20/15 22:36	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/20/15 22:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/20/15 22:36	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/20/15 22:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/20/15 22:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/20/15 22:36	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:36	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/20/15 22:36	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/20/15 22:36	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/20/15 22:36	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:36	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/20/15 22:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 22:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 22:36	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/20/15 22:36	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/20/15 22:36	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/20/15 22:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/20/15 22:36	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/20/15 22:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:36	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/20/15 22:36	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:36	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:36	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/20/15 22:36	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/20/15 22:36	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/20/15 22:36	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		04/20/15 22:36	17060-07-0	
Toluene-d8 (S)	94	%	80-120		1		04/20/15 22:36	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/20/15 22:36		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: TB-13-201504 **Lab ID: 60191960030** Collected: 04/15/15 08:45 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/20/15 22:50	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/20/15 22:50	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/20/15 22:50	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/20/15 22:50	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/20/15 22:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/20/15 22:50	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/20/15 22:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/20/15 22:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/20/15 22:50	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:50	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/20/15 22:50	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/20/15 22:50	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/20/15 22:50	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:50	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/20/15 22:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 22:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 22:50	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/20/15 22:50	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/20/15 22:50	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/20/15 22:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/20/15 22:50	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/20/15 22:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:50	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:50	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/20/15 22:50	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 22:50	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 22:50	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/20/15 22:50	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/20/15 22:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		04/20/15 22:50	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120		1		04/20/15 22:50	17060-07-0	
Toluene-d8 (S)	93	%	80-120		1		04/20/15 22:50	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/20/15 22:50		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: EB-02-201504 **Lab ID: 60191960031** Collected: 04/15/15 17:35 Received: 04/16/15 01:47 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		04/20/15 23:05	67-64-1	
Benzene	ND	ug/L	1.0	0.060	1		04/20/15 23:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/20/15 23:05	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/20/15 23:05	75-25-2	
Bromomethane	ND	ug/L	5.0	0.16	1		04/20/15 23:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/20/15 23:05	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/20/15 23:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/20/15 23:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/20/15 23:05	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/20/15 23:05	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/20/15 23:05	67-66-3	
Chloromethane	ND	ug/L	1.0	0.080	1		04/20/15 23:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/20/15 23:05	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.050	1		04/20/15 23:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/20/15 23:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.20	1		04/20/15 23:05	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.080	1		04/20/15 23:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.20	1		04/20/15 23:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/20/15 23:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/20/15 23:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/20/15 23:05	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/20/15 23:05	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/20/15 23:05	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.15	1		04/20/15 23:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/20/15 23:05	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/20/15 23:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/20/15 23:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.10	1		04/20/15 23:05	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/20/15 23:05	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/20/15 23:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/20/15 23:05	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.17	1		04/20/15 23:05	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.13	1		04/20/15 23:05	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/20/15 23:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		04/20/15 23:05	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		04/20/15 23:05	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		04/20/15 23:05	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/20/15 23:05		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Sample: DUP-02-201504 **Lab ID: 60191960032** Collected: 04/15/15 15:20 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/20/15 23:20	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/20/15 23:20	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/20/15 23:20	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/20/15 23:20	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/20/15 23:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/20/15 23:20	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/20/15 23:20	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/20/15 23:20	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/20/15 23:20	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/20/15 23:20	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/20/15 23:20	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/20/15 23:20	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/20/15 23:20	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 23:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 23:20	107-06-2	
1,1-Dichloroethene	**1.2**	ug/L	1.0	0.50	1		04/20/15 23:20	75-35-4	
cis-1,2-Dichloroethene	**13.5**	ug/L	1.0	0.50	1		04/20/15 23:20	156-59-2	
trans-1,2-Dichloroethene	**0.70J**	ug/L	1.0	0.50	1		04/20/15 23:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/20/15 23:20	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 23:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 23:20	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/20/15 23:20	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/20/15 23:20	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/20/15 23:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/20/15 23:20	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/20/15 23:20	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/20/15 23:20	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/20/15 23:20	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/20/15 23:20	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 23:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 23:20	79-00-5	
Trichloroethene	**410**	ug/L	10.0	5.0	10		04/21/15 13:20	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/20/15 23:20	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/20/15 23:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		04/20/15 23:20	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/20/15 23:20	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		04/20/15 23:20	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/20/15 23:20		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: GCSV/3742
QC Batch Method: EPA 8015 - Alcohol
Analysis Method: EPA 8015 - Alcohol
Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60191960001, 60191960002

METHOD BLANK: 134598 Matrix: Water
Associated Lab Samples: 60191960001, 60191960002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	04/20/15 16:13	

LABORATORY CONTROL SAMPLE: 134599

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	86400	86	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 134600 134601

Parameter	Units	60191794002 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	89200	92500	89	92	40-140	4	40	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: GCSV/3745 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60191960003, 60191960004, 60191960005, 60191960006, 60191960007, 60191960008, 60191960009, 60191960010, 60191960011, 60191960012, 60191960013

METHOD BLANK: 134703 Matrix: Water
Associated Lab Samples: 60191960003, 60191960004, 60191960005, 60191960006, 60191960007, 60191960008, 60191960009, 60191960010, 60191960011, 60191960012, 60191960013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	3410J	10000	04/21/15 11:53	

LABORATORY CONTROL SAMPLE: 134704

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	89200	89	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 134705 134706

Parameter	Units	60191794003 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	89200	91200	89	91	40-140	2	40	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: GCSV/3750 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60191960014, 60191960015, 60191960016, 60191960017, 60191960018, 60191960019, 60191960020, 60191960021

METHOD BLANK: 134858 Matrix: Water
Associated Lab Samples: 60191960014, 60191960015, 60191960016, 60191960017, 60191960018, 60191960019, 60191960020, 60191960021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	04/21/15 19:18	

LABORATORY CONTROL SAMPLE: 134859

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	89800	90	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 134860 134861

Parameter	Units	60191868013 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	96300	96400	96	96	40-140	0	40	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: MPRP/31443 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60191960001, 60191960002, 60191960003, 60191960004, 60191960005, 60191960006, 60191960007, 60191960008, 60191960009, 60191960010, 60191960011, 60191960012, 60191960013, 60191960014, 60191960015, 60191960016, 60191960017, 60191960018, 60191960019, 60191960020

METHOD BLANK: 1550740 Matrix: Water
Associated Lab Samples: 60191960001, 60191960002, 60191960003, 60191960004, 60191960005, 60191960006, 60191960007, 60191960008, 60191960009, 60191960010, 60191960011, 60191960012, 60191960013, 60191960014, 60191960015, 60191960016, 60191960017, 60191960018, 60191960019, 60191960020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	04/22/15 15:10	
Manganese	ug/L	ND	5.0	04/22/15 15:10	

LABORATORY CONTROL SAMPLE: 1550742

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	10400	104	80-120	
Manganese	ug/L	1000	992	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1550743 1550744

Parameter	Units	60191960001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	206	10000	10000	10700	10700	105	105	75-125	0	20	
Manganese	ug/L	10.4	1000	1000	1010	1010	100	100	75-125	0	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: MPRP/31444
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Associated Lab Samples: 60191960021

METHOD BLANK: 1550747 Matrix: Water
Associated Lab Samples: 60191960021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	04/21/15 17:34	
Manganese	ug/L	ND	5.0	04/21/15 17:34	

LABORATORY CONTROL SAMPLE: 1550748

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9870	99	80-120	
Manganese	ug/L	1000	962	96	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1550749 1550750

Parameter	Units	60191842001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	3940	10000	10000	13800	13600	98	96	75-125	2	20	
Manganese	ug/L	880	1000	1000	1840	1810	96	93	75-125	1	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: MSV/68928 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60191960002, 60191960005, 60191960006, 60191960007

METHOD BLANK: 1552631 Matrix: Water
Associated Lab Samples: 60191960002, 60191960005, 60191960006, 60191960007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/19/15 08:29	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/19/15 08:29	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/19/15 08:29	
1,1-Dichloroethane	ug/L	ND	1.0	04/19/15 08:29	
1,1-Dichloroethene	ug/L	ND	1.0	04/19/15 08:29	
1,2-Dichloroethane	ug/L	ND	1.0	04/19/15 08:29	
1,2-Dichloropropane	ug/L	ND	1.0	04/19/15 08:29	
2-Butanone (MEK)	ug/L	ND	10.0	04/19/15 08:29	
2-Hexanone	ug/L	ND	10.0	04/19/15 08:29	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/19/15 08:29	
Acetone	ug/L	ND	10.0	04/19/15 08:29	
Benzene	ug/L	ND	1.0	04/19/15 08:29	
Bromodichloromethane	ug/L	ND	1.0	04/19/15 08:29	
Bromoform	ug/L	ND	1.0	04/19/15 08:29	
Bromomethane	ug/L	ND	5.0	04/19/15 08:29	
Carbon disulfide	ug/L	ND	5.0	04/19/15 08:29	
Carbon tetrachloride	ug/L	ND	1.0	04/19/15 08:29	
Chlorobenzene	ug/L	ND	1.0	04/19/15 08:29	
Chloroethane	ug/L	ND	1.0	04/19/15 08:29	
Chloroform	ug/L	ND	1.0	04/19/15 08:29	
Chloromethane	ug/L	0.22J	1.0	04/19/15 08:29	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/19/15 08:29	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/19/15 08:29	
Dibromochloromethane	ug/L	ND	1.0	04/19/15 08:29	
Ethylbenzene	ug/L	ND	1.0	04/19/15 08:29	
Methylene chloride	ug/L	ND	1.0	04/19/15 08:29	
Styrene	ug/L	ND	1.0	04/19/15 08:29	
Tetrachloroethene	ug/L	ND	1.0	04/19/15 08:29	
Toluene	ug/L	ND	1.0	04/19/15 08:29	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/19/15 08:29	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/19/15 08:29	
Trichloroethene	ug/L	ND	1.0	04/19/15 08:29	
Vinyl chloride	ug/L	ND	1.0	04/19/15 08:29	
Xylene (Total)	ug/L	ND	3.0	04/19/15 08:29	
1,2-Dichloroethane-d4 (S)	%	99	80-120	04/19/15 08:29	
4-Bromofluorobenzene (S)	%	94	80-120	04/19/15 08:29	
Toluene-d8 (S)	%	100	80-120	04/19/15 08:29	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

LABORATORY CONTROL SAMPLE: 1552632

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.9	100	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.3	96	73-121	
1,1,2-Trichloroethane	ug/L	20	20.9	105	80-120	
1,1-Dichloroethane	ug/L	20	20.8	104	80-120	
1,1-Dichloroethene	ug/L	20	19.7	99	80-120	
1,2-Dichloroethane	ug/L	20	20.7	104	81-120	
1,2-Dichloropropane	ug/L	20	20.8	104	80-120	
2-Butanone (MEK)	ug/L	100	97.0	97	67-122	
2-Hexanone	ug/L	100	100	100	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	98.9	99	76-120	
Acetone	ug/L	100	101	101	72-120	
Benzene	ug/L	20	20.7	104	80-120	
Bromodichloromethane	ug/L	20	20.8	104	80-120	
Bromoform	ug/L	20	21.0	105	73-138	
Bromomethane	ug/L	20	20.5	102	38-137	
Carbon disulfide	ug/L	20	18.9	94	71-129	
Carbon tetrachloride	ug/L	20	21.0	105	67-146	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	18.7	93	76-120	
Chloroform	ug/L	20	19.4	97	80-120	
Chloromethane	ug/L	20	18.6	93	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.9	104	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.6	103	80-120	
Dibromochloromethane	ug/L	20	20.7	104	80-126	
Ethylbenzene	ug/L	20	20.4	102	80-120	
Methylene chloride	ug/L	20	20.2	101	80-120	
Styrene	ug/L	20	20.7	103	80-123	
Tetrachloroethene	ug/L	20	19.9	100	80-123	
Toluene	ug/L	20	20.3	101	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.0	100	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.5	97	80-129	
Trichloroethene	ug/L	20	20.1	101	80-120	
Vinyl chloride	ug/L	20	22.3	112	62-125	
Xylene (Total)	ug/L	60	61.7	103	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			93	80-120	
Toluene-d8 (S)	%			98	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: MSV/68935 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60191960008, 60191960009, 60191960010, 60191960011, 60191960012, 60191960013, 60191960015, 60191960017, 60191960018, 60191960019, 60191960020, 60191960021, 60191960022, 60191960023, 60191960024

METHOD BLANK: 1552703 Matrix: Water
Associated Lab Samples: 60191960008, 60191960009, 60191960010, 60191960011, 60191960012, 60191960013, 60191960015, 60191960017, 60191960018, 60191960019, 60191960020, 60191960021, 60191960022, 60191960023, 60191960024

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/19/15 20:37	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/19/15 20:37	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/19/15 20:37	
1,1-Dichloroethane	ug/L	ND	1.0	04/19/15 20:37	
1,1-Dichloroethene	ug/L	ND	1.0	04/19/15 20:37	
1,2-Dichloroethane	ug/L	ND	1.0	04/19/15 20:37	
1,2-Dichloropropane	ug/L	ND	1.0	04/19/15 20:37	
2-Butanone (MEK)	ug/L	ND	10.0	04/19/15 20:37	
2-Hexanone	ug/L	ND	10.0	04/19/15 20:37	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/19/15 20:37	
Acetone	ug/L	ND	10.0	04/19/15 20:37	
Benzene	ug/L	ND	1.0	04/19/15 20:37	
Bromodichloromethane	ug/L	ND	1.0	04/19/15 20:37	
Bromoform	ug/L	ND	1.0	04/19/15 20:37	
Bromomethane	ug/L	ND	5.0	04/19/15 20:37	
Carbon disulfide	ug/L	ND	5.0	04/19/15 20:37	
Carbon tetrachloride	ug/L	ND	1.0	04/19/15 20:37	
Chlorobenzene	ug/L	ND	1.0	04/19/15 20:37	
Chloroethane	ug/L	ND	1.0	04/19/15 20:37	
Chloroform	ug/L	ND	1.0	04/19/15 20:37	
Chloromethane	ug/L	0.22J	1.0	04/19/15 20:37	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/19/15 20:37	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/19/15 20:37	
Dibromochloromethane	ug/L	ND	1.0	04/19/15 20:37	
Ethylbenzene	ug/L	ND	1.0	04/19/15 20:37	
Methylene chloride	ug/L	ND	1.0	04/19/15 20:37	
Styrene	ug/L	ND	1.0	04/19/15 20:37	
Tetrachloroethene	ug/L	ND	1.0	04/19/15 20:37	
Toluene	ug/L	ND	1.0	04/19/15 20:37	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/19/15 20:37	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/19/15 20:37	
Trichloroethene	ug/L	ND	1.0	04/19/15 20:37	
Vinyl chloride	ug/L	ND	1.0	04/19/15 20:37	
Xylene (Total)	ug/L	ND	3.0	04/19/15 20:37	
1,2-Dichloroethane-d4 (S)	%	103	80-120	04/19/15 20:37	
4-Bromofluorobenzene (S)	%	96	80-120	04/19/15 20:37	
Toluene-d8 (S)	%	97	80-120	04/19/15 20:37	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

LABORATORY CONTROL SAMPLE: 1552704

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.1	106	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	18.3	92	73-121	
1,1,2-Trichloroethane	ug/L	20	20.8	104	80-120	
1,1-Dichloroethane	ug/L	20	21.5	107	80-120	
1,1-Dichloroethene	ug/L	20	20.5	102	80-120	
1,2-Dichloroethane	ug/L	20	21.7	109	81-120	
1,2-Dichloropropane	ug/L	20	20.7	103	80-120	
2-Butanone (MEK)	ug/L	100	97.3	97	67-122	
2-Hexanone	ug/L	100	96.8	97	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	100	100	76-120	
Acetone	ug/L	100	103	103	72-120	
Benzene	ug/L	20	21.6	108	80-120	
Bromodichloromethane	ug/L	20	21.4	107	80-120	
Bromoform	ug/L	20	20.1	100	73-138	
Bromomethane	ug/L	20	22.9	114	38-137	
Carbon disulfide	ug/L	20	19.4	97	71-129	
Carbon tetrachloride	ug/L	20	21.6	108	67-146	
Chlorobenzene	ug/L	20	22.0	110	80-120	
Chloroethane	ug/L	20	19.1	96	76-120	
Chloroform	ug/L	20	20.3	102	80-120	
Chloromethane	ug/L	20	16.5	83	34-165	
cis-1,2-Dichloroethene	ug/L	20	22.2	111	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.6	103	80-120	
Dibromochloromethane	ug/L	20	21.0	105	80-126	
Ethylbenzene	ug/L	20	21.0	105	80-120	
Methylene chloride	ug/L	20	20.5	102	80-120	
Styrene	ug/L	20	21.2	106	80-123	
Tetrachloroethene	ug/L	20	20.5	102	80-123	
Toluene	ug/L	20	20.6	103	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.5	102	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.8	99	80-129	
Trichloroethene	ug/L	20	21.6	108	80-120	
Vinyl chloride	ug/L	20	23.7	118	62-125	
Xylene (Total)	ug/L	60	63.9	106	80-120	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			98	80-120	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: MSV/68954 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60191960015, 60191960022, 60191960025, 60191960026, 60191960027, 60191960028, 60191960029, 60191960030, 60191960031, 60191960032

METHOD BLANK: 1552986 Matrix: Water
Associated Lab Samples: 60191960015, 60191960022, 60191960025, 60191960026, 60191960027, 60191960028, 60191960029, 60191960030, 60191960031, 60191960032

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1-Dichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1-Dichloroethene	ug/L	ND	1.0	04/20/15 21:06	
1,2-Dichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,2-Dichloropropane	ug/L	ND	1.0	04/20/15 21:06	
2-Butanone (MEK)	ug/L	ND	10.0	04/20/15 21:06	
2-Hexanone	ug/L	ND	10.0	04/20/15 21:06	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/20/15 21:06	
Acetone	ug/L	ND	10.0	04/20/15 21:06	
Benzene	ug/L	ND	1.0	04/20/15 21:06	
Bromodichloromethane	ug/L	ND	1.0	04/20/15 21:06	
Bromoform	ug/L	ND	1.0	04/20/15 21:06	
Bromomethane	ug/L	ND	5.0	04/20/15 21:06	
Carbon disulfide	ug/L	ND	5.0	04/20/15 21:06	
Carbon tetrachloride	ug/L	ND	1.0	04/20/15 21:06	
Chlorobenzene	ug/L	ND	1.0	04/20/15 21:06	
Chloroethane	ug/L	ND	1.0	04/20/15 21:06	
Chloroform	ug/L	ND	1.0	04/20/15 21:06	
Chloromethane	ug/L	0.18J	1.0	04/20/15 21:06	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/20/15 21:06	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/20/15 21:06	
Dibromochloromethane	ug/L	ND	1.0	04/20/15 21:06	
Ethylbenzene	ug/L	ND	1.0	04/20/15 21:06	
Methylene chloride	ug/L	ND	1.0	04/20/15 21:06	
Styrene	ug/L	ND	1.0	04/20/15 21:06	
Tetrachloroethene	ug/L	ND	1.0	04/20/15 21:06	
Toluene	ug/L	ND	1.0	04/20/15 21:06	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/20/15 21:06	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/20/15 21:06	
Trichloroethene	ug/L	ND	1.0	04/20/15 21:06	
Vinyl chloride	ug/L	ND	1.0	04/20/15 21:06	
Xylene (Total)	ug/L	ND	3.0	04/20/15 21:06	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/20/15 21:06	
4-Bromofluorobenzene (S)	%	96	80-120	04/20/15 21:06	
Toluene-d8 (S)	%	96	80-120	04/20/15 21:06	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

LABORATORY CONTROL SAMPLE: 1552987

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	23.1	115	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	18.8	94	73-121	
1,1,2-Trichloroethane	ug/L	20	21.0	105	80-120	
1,1-Dichloroethane	ug/L	20	22.9	114	80-120	
1,1-Dichloroethene	ug/L	20	22.7	114	80-120	
1,2-Dichloroethane	ug/L	20	22.7	114	81-120	
1,2-Dichloropropane	ug/L	20	22.6	113	80-120	
2-Butanone (MEK)	ug/L	100	109	109	67-122	
2-Hexanone	ug/L	100	98.7	99	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	111	111	76-120	
Acetone	ug/L	100	115	115	72-120	
Benzene	ug/L	20	22.8	114	80-120	
Bromodichloromethane	ug/L	20	22.7	114	80-120	
Bromoform	ug/L	20	20.4	102	73-138	
Bromomethane	ug/L	20	21.9	110	38-137	
Carbon disulfide	ug/L	20	21.2	106	71-129	
Carbon tetrachloride	ug/L	20	24.1	120	67-146	
Chlorobenzene	ug/L	20	21.3	107	80-120	
Chloroethane	ug/L	20	21.6	108	76-120	
Chloroform	ug/L	20	21.8	109	80-120	
Chloromethane	ug/L	20	24.4	122	34-165	
cis-1,2-Dichloroethene	ug/L	20	23.0	115	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.8	109	80-120	
Dibromochloromethane	ug/L	20	21.0	105	80-126	
Ethylbenzene	ug/L	20	20.8	104	80-120	
Methylene chloride	ug/L	20	23.0	115	80-120	
Styrene	ug/L	20	20.7	103	80-123	
Tetrachloroethene	ug/L	20	21.2	106	80-123	
Toluene	ug/L	20	20.7	103	80-120	
trans-1,2-Dichloroethene	ug/L	20	22.7	113	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.8	99	80-129	
Trichloroethene	ug/L	20	22.5	113	80-120	
Vinyl chloride	ug/L	20	25.7	129	62-125	L0
Xylene (Total)	ug/L	60	63.2	105	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			96	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: MSV/68972
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60191960032

METHOD BLANK: 1553602
Matrix: Water
Associated Lab Samples: 60191960032

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	ug/L	ND	1.0	04/21/15 09:22	
1,2-Dichloroethane-d4 (S)	%	105	80-120	04/21/15 09:22	
4-Bromofluorobenzene (S)	%	99	80-120	04/21/15 09:22	
Toluene-d8 (S)	%	92	80-120	04/21/15 09:22	

LABORATORY CONTROL SAMPLE: 1553603

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	20	21.8	109	80-120	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			91	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: MSV/69103 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60191960002, 60191960003, 60191960006, 60191960017, 60191960020

METHOD BLANK: 1557447 Matrix: Water
Associated Lab Samples: 60191960002, 60191960003, 60191960006, 60191960017, 60191960020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1-Dichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
1,2-Dichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,2-Dichloropropane	ug/L	ND	1.0	04/27/15 10:45	
2-Butanone (MEK)	ug/L	ND	10.0	04/27/15 10:45	
2-Hexanone	ug/L	ND	10.0	04/27/15 10:45	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/27/15 10:45	
Acetone	ug/L	ND	10.0	04/27/15 10:45	
Benzene	ug/L	ND	1.0	04/27/15 10:45	
Bromodichloromethane	ug/L	ND	1.0	04/27/15 10:45	
Bromoform	ug/L	ND	1.0	04/27/15 10:45	
Bromomethane	ug/L	0.52J	5.0	04/27/15 10:45	
Carbon disulfide	ug/L	ND	5.0	04/27/15 10:45	
Carbon tetrachloride	ug/L	ND	1.0	04/27/15 10:45	
Chlorobenzene	ug/L	ND	1.0	04/27/15 10:45	
Chloroethane	ug/L	ND	1.0	04/27/15 10:45	
Chloroform	ug/L	ND	1.0	04/27/15 10:45	
Chloromethane	ug/L	0.14J	1.0	04/27/15 10:45	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/27/15 10:45	
Dibromochloromethane	ug/L	ND	1.0	04/27/15 10:45	
Ethylbenzene	ug/L	ND	1.0	04/27/15 10:45	
Methylene chloride	ug/L	ND	1.0	04/27/15 10:45	
Styrene	ug/L	ND	1.0	04/27/15 10:45	
Tetrachloroethene	ug/L	ND	1.0	04/27/15 10:45	
Toluene	ug/L	ND	1.0	04/27/15 10:45	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/27/15 10:45	
Trichloroethene	ug/L	ND	1.0	04/27/15 10:45	
Vinyl chloride	ug/L	ND	1.0	04/27/15 10:45	
Xylene (Total)	ug/L	ND	3.0	04/27/15 10:45	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/27/15 10:45	
4-Bromofluorobenzene (S)	%	100	80-120	04/27/15 10:45	
Toluene-d8 (S)	%	103	80-120	04/27/15 10:45	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

LABORATORY CONTROL SAMPLE: 1557448

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	22.7	113	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	21.8	109	73-121	
1,1,2-Trichloroethane	ug/L	20	22.3	111	80-120	
1,1-Dichloroethane	ug/L	20	23.1	116	80-120	
1,1-Dichloroethene	ug/L	20	21.3	107	80-120	
1,2-Dichloroethane	ug/L	20	21.5	107	81-120	
1,2-Dichloropropane	ug/L	20	21.6	108	80-120	
2-Butanone (MEK)	ug/L	100	99.4	99	67-122	
2-Hexanone	ug/L	100	104	104	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	76-120	
Acetone	ug/L	100	105	105	72-120	
Benzene	ug/L	20	22.2	111	80-120	
Bromodichloromethane	ug/L	20	21.9	109	80-120	
Bromoform	ug/L	20	21.1	105	73-138	
Bromomethane	ug/L	20	24.5	122	38-137	
Carbon disulfide	ug/L	20	21.9	109	71-129	
Carbon tetrachloride	ug/L	20	22.4	112	67-146	
Chlorobenzene	ug/L	20	22.7	113	80-120	
Chloroethane	ug/L	20	22.0	110	76-120	
Chloroform	ug/L	20	22.3	111	80-120	
Chloromethane	ug/L	20	19.2	96	34-165	
cis-1,2-Dichloroethene	ug/L	20	22.5	113	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.6	108	80-120	
Dibromochloromethane	ug/L	20	21.9	110	80-126	
Ethylbenzene	ug/L	20	22.4	112	80-120	
Methylene chloride	ug/L	20	21.3	106	80-120	
Styrene	ug/L	20	22.4	112	80-123	
Tetrachloroethene	ug/L	20	23.7	119	80-123	
Toluene	ug/L	20	22.0	110	80-120	
trans-1,2-Dichloroethene	ug/L	20	22.1	111	80-120	
trans-1,3-Dichloropropene	ug/L	20	22.3	111	80-129	
Trichloroethene	ug/L	20	21.8	109	80-120	
Vinyl chloride	ug/L	20	24.6	123	62-125	
Xylene (Total)	ug/L	60	68.3	114	80-120	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			99	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: MSV/68917
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60191960004

METHOD BLANK: 1551879 Matrix: Water
Associated Lab Samples: 60191960004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	ug/L	ND	1.0	04/17/15 16:17	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/17/15 16:17	
4-Bromofluorobenzene (S)	%	100	80-120	04/17/15 16:17	
Toluene-d8 (S)	%	99	80-120	04/17/15 16:17	

LABORATORY CONTROL SAMPLE: 1551880

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	20	22.6	113	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			100	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: MSV/68932 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60191960001, 60191960004, 60191960014, 60191960016

METHOD BLANK: 1552695 Matrix: Water
Associated Lab Samples: 60191960001, 60191960004, 60191960014, 60191960016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1-Dichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1-Dichloroethene	ug/L	ND	1.0	04/19/15 14:26	
1,2-Dichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,2-Dichloropropane	ug/L	ND	1.0	04/19/15 14:26	
2-Butanone (MEK)	ug/L	ND	10.0	04/19/15 14:26	
2-Hexanone	ug/L	ND	10.0	04/19/15 14:26	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/19/15 14:26	
Acetone	ug/L	ND	10.0	04/19/15 14:26	
Benzene	ug/L	ND	1.0	04/19/15 14:26	
Bromodichloromethane	ug/L	ND	1.0	04/19/15 14:26	
Bromoform	ug/L	ND	1.0	04/19/15 14:26	
Bromomethane	ug/L	ND	5.0	04/19/15 14:26	
Carbon disulfide	ug/L	ND	5.0	04/19/15 14:26	
Carbon tetrachloride	ug/L	ND	1.0	04/19/15 14:26	
Chlorobenzene	ug/L	ND	1.0	04/19/15 14:26	
Chloroethane	ug/L	ND	1.0	04/19/15 14:26	
Chloroform	ug/L	ND	1.0	04/19/15 14:26	
Chloromethane	ug/L	0.16J	1.0	04/19/15 14:26	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/19/15 14:26	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/19/15 14:26	
Dibromochloromethane	ug/L	ND	1.0	04/19/15 14:26	
Ethylbenzene	ug/L	ND	1.0	04/19/15 14:26	
Methylene chloride	ug/L	ND	1.0	04/19/15 14:26	
Styrene	ug/L	ND	1.0	04/19/15 14:26	
Tetrachloroethene	ug/L	ND	1.0	04/19/15 14:26	
Toluene	ug/L	ND	1.0	04/19/15 14:26	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/19/15 14:26	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/19/15 14:26	
Trichloroethene	ug/L	ND	1.0	04/19/15 14:26	
Vinyl chloride	ug/L	ND	1.0	04/19/15 14:26	
Xylene (Total)	ug/L	ND	3.0	04/19/15 14:26	
1,2-Dichloroethane-d4 (S)	%	98	80-120	04/19/15 14:26	
4-Bromofluorobenzene (S)	%	101	80-120	04/19/15 14:26	
Toluene-d8 (S)	%	97	80-120	04/19/15 14:26	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

LABORATORY CONTROL SAMPLE: 1552696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.5	103	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	17.6	88	73-121	
1,1,2-Trichloroethane	ug/L	20	20.0	100	80-120	
1,1-Dichloroethane	ug/L	20	21.0	105	80-120	
1,1-Dichloroethene	ug/L	20	20.7	104	80-120	
1,2-Dichloroethane	ug/L	20	21.1	106	81-120	
1,2-Dichloropropane	ug/L	20	20.2	101	80-120	
2-Butanone (MEK)	ug/L	100	98.7	99	67-122	
2-Hexanone	ug/L	100	96.2	96	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	76-120	
Acetone	ug/L	100	99.8	100	72-120	
Benzene	ug/L	20	20.9	104	80-120	
Bromodichloromethane	ug/L	20	20.6	103	80-120	
Bromoform	ug/L	20	19.5	97	73-138	
Bromomethane	ug/L	20	17.8	89	38-137	
Carbon disulfide	ug/L	20	19.1	95	71-129	
Carbon tetrachloride	ug/L	20	21.1	106	67-146	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	20.2	101	76-120	
Chloroform	ug/L	20	20.3	101	80-120	
Chloromethane	ug/L	20	21.1	106	34-165	
cis-1,2-Dichloroethene	ug/L	20	21.0	105	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.0	100	80-120	
Dibromochloromethane	ug/L	20	19.4	97	80-126	
Ethylbenzene	ug/L	20	19.5	97	80-120	
Methylene chloride	ug/L	20	20.7	103	80-120	
Styrene	ug/L	20	19.9	99	80-123	
Tetrachloroethene	ug/L	20	19.4	97	80-123	
Toluene	ug/L	20	19.7	98	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.9	99	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.9	94	80-129	
Trichloroethene	ug/L	20	21.1	105	80-120	
Vinyl chloride	ug/L	20	22.3	112	62-125	
Xylene (Total)	ug/L	60	60.0	100	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			97	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: WET/54199 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60191960001, 60191960002, 60191960003, 60191960004, 60191960005, 60191960006, 60191960007, 60191960008, 60191960009, 60191960010, 60191960011, 60191960012, 60191960013, 60191960014, 60191960015, 60191960016, 60191960017, 60191960018, 60191960019, 60191960020

METHOD BLANK: 1552790 Matrix: Water
Associated Lab Samples: 60191960001, 60191960002, 60191960003, 60191960004, 60191960005, 60191960006, 60191960007, 60191960008, 60191960009, 60191960010, 60191960011, 60191960012, 60191960013, 60191960014, 60191960015, 60191960016, 60191960017, 60191960018, 60191960019, 60191960020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	04/20/15 11:27	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	04/20/15 11:27	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	04/20/15 11:27	

LABORATORY CONTROL SAMPLE: 1552791

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	519	104	90-110	

SAMPLE DUPLICATE: 1552792

Parameter	Units	60191960002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	87.4	88.4	1	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	87.4	88.4	1	10	

SAMPLE DUPLICATE: 1552793

Parameter	Units	60191960009 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	76.0	76.5	1	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	76.0	76.5	1	10	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: WET/54200
QC Batch Method: SM 2320B
Analysis Method: SM 2320B
Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60191960021

METHOD BLANK: 1552794
Matrix: Water
Associated Lab Samples: 60191960021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	04/20/15 13:43	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	04/20/15 13:43	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	04/20/15 13:43	

LABORATORY CONTROL SAMPLE: 1552795

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

SAMPLE DUPLICATE: 1552796

Parameter	Units	60191950001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	2390	2410	1	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	2390	2410	1	10	

SAMPLE DUPLICATE: 1552797

Parameter	Units	60191975005 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	1050	1030	3	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	1050	1030	3	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: WET/54195 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60191960001, 60191960002, 60191960003, 60191960004, 60191960005, 60191960006, 60191960007, 60191960008, 60191960009, 60191960010, 60191960011, 60191960012, 60191960013, 60191960014, 60191960015, 60191960016, 60191960017

METHOD BLANK: 1552657 Matrix: Water
Associated Lab Samples: 60191960001, 60191960002, 60191960003, 60191960004, 60191960005, 60191960006, 60191960007, 60191960008, 60191960009, 60191960010, 60191960011, 60191960012, 60191960013, 60191960014, 60191960015, 60191960016, 60191960017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	04/19/15 12:35	

LABORATORY CONTROL SAMPLE: 1552658

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.48	96	80-120	

MATRIX SPIKE SAMPLE: 1552659

Parameter	Units	60191975009 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.32	64	75-125	M1

SAMPLE DUPLICATE: 1552661

Parameter	Units	60191975010 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: WET/54196 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60191960018, 60191960019, 60191960020, 60191960021

METHOD BLANK: 1552662 Matrix: Water
Associated Lab Samples: 60191960018, 60191960019, 60191960020, 60191960021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	04/19/15 12:42	

LABORATORY CONTROL SAMPLE: 1552663

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.49	98	80-120	

MATRIX SPIKE SAMPLE: 1552664

Parameter	Units	60191960018 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.34	68	75-125	M1

SAMPLE DUPLICATE: 1552666

Parameter	Units	60191960019 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: WETA/33776 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60191960001, 60191960002, 60191960003, 60191960004, 60191960005, 60191960006, 60191960007, 60191960008, 60191960009, 60191960010, 60191960011, 60191960012, 60191960013, 60191960014, 60191960015, 60191960016, 60191960017, 60191960018, 60191960019, 60191960020

METHOD BLANK: 1556022 Matrix: Water
Associated Lab Samples: 60191960001, 60191960002, 60191960003, 60191960004, 60191960005, 60191960006, 60191960007, 60191960008, 60191960009, 60191960010, 60191960011, 60191960012, 60191960013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	04/25/15 13:54	
Sulfate	mg/L	ND	1.0	04/25/15 13:54	

METHOD BLANK: 1557792 Matrix: Water
Associated Lab Samples: 60191960014, 60191960015, 60191960016, 60191960017, 60191960018, 60191960019, 60191960020

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	04/26/15 09:52	
Sulfate	mg/L	ND	1.0	04/26/15 09:52	

METHOD BLANK: 1557818 Matrix: Water
Associated Lab Samples: 60191960016

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	04/28/15 10:49	

LABORATORY CONTROL SAMPLE: 1556023

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	97	90-110	
Sulfate	mg/L	5	5.0	100	90-110	

LABORATORY CONTROL SAMPLE: 1557793

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.0	100	90-110	
Sulfate	mg/L	5	5.4	107	90-110	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

LABORATORY CONTROL SAMPLE: 1557819

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.0	100	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1556024 1556025

Parameter	Units	60191960001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	13.2	5	5	18.0	18.1	97	98	80-120	0	15	
Sulfate	mg/L	11.4	5	5	16.1	16.2	95	97	80-120	1	15	

MATRIX SPIKE SAMPLE: 1556026

Parameter	Units	60191960002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	132	50	189	115	80-120	
Sulfate	mg/L	34.4	25	59.6	101	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: WETA/33777
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60191960021

METHOD BLANK: 1557130 Matrix: Water
Associated Lab Samples: 60191960021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	0.73J	1.0	04/25/15 17:40	
Sulfate	mg/L	ND	1.0	04/25/15 17:40	

LABORATORY CONTROL SAMPLE: 1557131

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	96	90-110	
Sulfate	mg/L	5	4.8	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1556030 1556031

Parameter	Units	60191862001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	362	250	250	591	597	92	94	80-120	1	15	
Sulfate	mg/L	63.6	250	250	570	302	203	95	80-120	61	15	M1,R1

MATRIX SPIKE SAMPLE: 1556032

Parameter	Units	60191863001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	778	250	1170	156	80-120	M1
Sulfate	mg/L	66.9	25	91.6	99	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: WETA/33692 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60191960001, 60191960002, 60191960003, 60191960004, 60191960005, 60191960006

METHOD BLANK: 1552776 Matrix: Water
Associated Lab Samples: 60191960001, 60191960002, 60191960003, 60191960004, 60191960005, 60191960006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	04/20/15 15:52	

LABORATORY CONTROL SAMPLE: 1552777

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.1	104	90-110	

MATRIX SPIKE SAMPLE: 1552778

Parameter	Units	60191932002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	10.2	10	18.8	86	90-110	M1

MATRIX SPIKE SAMPLE: 1552779

Parameter	Units	60191933001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	7.2	4	9.8	65	90-110	M1

SAMPLE DUPLICATE: 1552780

Parameter	Units	60191934001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	42.7	41.5	3	18	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: WETA/33693 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60191960007, 60191960008, 60191960009, 60191960010, 60191960011, 60191960012, 60191960013, 60191960014, 60191960015, 60191960016, 60191960017, 60191960018, 60191960019, 60191960020, 60191960021

METHOD BLANK: 1552785 Matrix: Water
Associated Lab Samples: 60191960007, 60191960008, 60191960009, 60191960010, 60191960011, 60191960012, 60191960013, 60191960014, 60191960015, 60191960016, 60191960017, 60191960018, 60191960019, 60191960020, 60191960021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	04/20/15 16:25	

LABORATORY CONTROL SAMPLE: 1552786

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.1	107	90-110	

MATRIX SPIKE SAMPLE: 1552787

Parameter	Units	60191960019 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.4	72	90-110	M1

MATRIX SPIKE SAMPLE: 1552788

Parameter	Units	60191970001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	65.2	50	104	77	90-110	M1

SAMPLE DUPLICATE: 1552789

Parameter	Units	60191984003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	0.34	0.35	2	18	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: WETA/33652 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60191960001, 60191960002, 60191960003, 60191960004, 60191960005, 60191960006, 60191960007

METHOD BLANK: 1550779 Matrix: Water
Associated Lab Samples: 60191960001, 60191960002, 60191960003, 60191960004, 60191960005, 60191960006, 60191960007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	04/16/15 15:19	
Nitrogen, Nitrite	mg/L	ND	0.10	04/16/15 15:19	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	04/16/15 15:19	

LABORATORY CONTROL SAMPLE: 1550780

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.8	110	85-115	
Nitrogen, Nitrite	mg/L	.4	0.39	98	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	107	90-110	

MATRIX SPIKE SAMPLE: 1550781

Parameter	Units	60191951005 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	ND	1.6	1.4	85	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.16	41	90-110	M1
Nitrogen, NO2 plus NO3	mg/L	ND	2	1.5	76	90-110	M1

MATRIX SPIKE SAMPLE: 1550782

Parameter	Units	60191954001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	0.095J	1.6	1.8	109	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.40	100	90-110	
Nitrogen, NO2 plus NO3	mg/L	0.095J	2	2.2	107	90-110	

SAMPLE DUPLICATE: 1550783

Parameter	Units	60191956001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.047J		20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	ND	0.047J		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: WETA/33653 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60191960008, 60191960009, 60191960010, 60191960011, 60191960012, 60191960013, 60191960014, 60191960015, 60191960016, 60191960017, 60191960018, 60191960019, 60191960020, 60191960021

METHOD BLANK: 1550790 Matrix: Water
Associated Lab Samples: 60191960008, 60191960009, 60191960010, 60191960011, 60191960012, 60191960013, 60191960014, 60191960015, 60191960016, 60191960017, 60191960018, 60191960019, 60191960020, 60191960021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	04/16/15 15:44	
Nitrogen, Nitrite	mg/L	ND	0.10	04/16/15 15:44	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	04/16/15 15:44	

LABORATORY CONTROL SAMPLE: 1550791

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.7	109	85-115	
Nitrogen, Nitrite	mg/L	.4	0.39	98	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	107	90-110	

MATRIX SPIKE SAMPLE: 1550792

Parameter	Units	60191960021 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	0.024J	1.6	1.9	114	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.42	106	90-110	
Nitrogen, NO2 plus NO3	mg/L	0.024J	2	2.3	113	90-110	M1

MATRIX SPIKE SAMPLE: 1550793

Parameter	Units	60191966002 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	2.3	1.6	3.7	86	85-115	
Nitrogen, Nitrite	mg/L	ND	.4	0.48	120	90-110	M1
Nitrogen, NO2 plus NO3	mg/L	2.3	2	4.2	92	90-110	

SAMPLE DUPLICATE: 1550794

Parameter	Units	60191982002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	13.5	13.3	1	20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	13.5	13.3	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: WETA/33760
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60191960001, 60191960002

METHOD BLANK: 1555568 Matrix: Water
Associated Lab Samples: 60191960001, 60191960002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	04/24/15 09:45	

LABORATORY CONTROL SAMPLE: 1555569

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.4	109	80-120	

MATRIX SPIKE SAMPLE: 1555571

Parameter	Units	60191868013 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	0.54J	5	4.4	77	80-120	M1

SAMPLE DUPLICATE: 1555570

Parameter	Units	60191868007 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	ND		25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: WETA/33809 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60191960003, 60191960004, 60191960005, 60191960006, 60191960007, 60191960008, 60191960009

METHOD BLANK: 1557272 Matrix: Water
Associated Lab Samples: 60191960003, 60191960004, 60191960005, 60191960006, 60191960007, 60191960008, 60191960009

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	04/27/15 08:32	

LABORATORY CONTROL SAMPLE: 1557273

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.1	103	80-120	

MATRIX SPIKE SAMPLE: 1557274

Parameter	Units	60191975001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	0.55J	5	5.1	91	80-120	

SAMPLE DUPLICATE: 1557275

Parameter	Units	60191975002 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	2.0	2.0	0	25	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: WETA/33823 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60191960010, 60191960011, 60191960012, 60191960013, 60191960014, 60191960015, 60191960016, 60191960017, 60191960018, 60191960019, 60191960020, 60191960021

METHOD BLANK: 1557715 Matrix: Water
Associated Lab Samples: 60191960010, 60191960011, 60191960012, 60191960013, 60191960014, 60191960015, 60191960016, 60191960017, 60191960018, 60191960019, 60191960020, 60191960021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	04/28/15 08:15	

LABORATORY CONTROL SAMPLE: 1557716

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.1	101	80-120	

MATRIX SPIKE SAMPLE: 1557718

Parameter	Units	60192725001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	2.0	5	5.1	63	80-120	M1

SAMPLE DUPLICATE: 1557717

Parameter	Units	60191960011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	ND		25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: WETA/7937 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60191960001, 60191960002, 60191960003, 60191960004, 60191960005, 60191960006, 60191960007, 60191960008, 60191960009, 60191960010, 60191960011

METHOD BLANK: 135085 Matrix: Water
Associated Lab Samples: 60191960001, 60191960002, 60191960003, 60191960004, 60191960005, 60191960006, 60191960007, 60191960008, 60191960009, 60191960010, 60191960011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	04/22/15 11:41	

LABORATORY CONTROL SAMPLE: 135086

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.4	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 135087 135088

Parameter	Units	7525148001 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	0.73	1.5	1.5	2.1	2.1	91	89	80-120	2	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 135091 135092

Parameter	Units	60191960001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphate as P04	mg/L	0.032	1.5	1.5	1.5	1.5	97	98	80-120	0	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

QC Batch: WETA/7939 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60191960012, 60191960013, 60191960014, 60191960015, 60191960016, 60191960017, 60191960018, 60191960019, 60191960020, 60191960021

METHOD BLANK: 135111 Matrix: Water
Associated Lab Samples: 60191960012, 60191960013, 60191960014, 60191960015, 60191960016, 60191960017, 60191960018, 60191960019, 60191960020, 60191960021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	04/22/15 13:40	

LABORATORY CONTROL SAMPLE: 135112

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.6	102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 135113 135114

Parameter	Units	60191960012 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	0.17	1.5	1.5	1.7	1.7	99	102	80-120	3	20	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 135115 135116

Parameter	Units	7525301001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Phosphate as P04	mg/L	0.032	1.5	1.5	1.7	1.7	111	109	80-120	3	20	

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

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

BATCH QUALIFIERS

Batch: MSV/68917
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/68928
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/68932
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/68935
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/68954
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/68972
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/69103
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1e Field pH

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QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
CU	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
H6	Analysis initiated outside of the 15 minute EPA recommended holding time.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191960001	ITMW-15-201504	EPA 8015 - Alcohol	GCSV/3742		
60191960002	ITMW-10-201504	EPA 8015 - Alcohol	GCSV/3742		
60191960003	ITMW-12-201504	EPA 8015 - Alcohol	GCSV/3745		
60191960004	IW-76-201504	EPA 8015 - Alcohol	GCSV/3745		
60191960005	MW-32R-201504	EPA 8015 - Alcohol	GCSV/3745		
60191960006	MW-33R-201504	EPA 8015 - Alcohol	GCSV/3745		
60191960007	ITMW-9-201504	EPA 8015 - Alcohol	GCSV/3745		
60191960008	MW-66-201504	EPA 8015 - Alcohol	GCSV/3745		
60191960009	ITMW-1-201504	EPA 8015 - Alcohol	GCSV/3745		
60191960010	ITMW-13-201504	EPA 8015 - Alcohol	GCSV/3745		
60191960011	IW-72-201504	EPA 8015 - Alcohol	GCSV/3745		
60191960012	IW-74-201504	EPA 8015 - Alcohol	GCSV/3745		
60191960013	MW-67-201504	EPA 8015 - Alcohol	GCSV/3745		
60191960014	MW-65-201504	EPA 8015 - Alcohol	GCSV/3750		
60191960015	ITMW-19-201504	EPA 8015 - Alcohol	GCSV/3750		
60191960016	ITMW-11-201504	EPA 8015 - Alcohol	GCSV/3750		
60191960017	ITMW-17-201504	EPA 8015 - Alcohol	GCSV/3750		
60191960018	ITMW-2-201504	EPA 8015 - Alcohol	GCSV/3750		
60191960019	ITMW-14-201504	EPA 8015 - Alcohol	GCSV/3750		
60191960020	MW-41-201504	EPA 8015 - Alcohol	GCSV/3750		
60191960021	IW-73-201504	EPA 8015 - Alcohol	GCSV/3750		
60191960001	ITMW-15-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960002	ITMW-10-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960003	ITMW-12-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960004	IW-76-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960005	MW-32R-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960006	MW-33R-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960007	ITMW-9-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960008	MW-66-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960009	ITMW-1-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960010	ITMW-13-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960011	IW-72-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960012	IW-74-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960013	MW-67-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960014	MW-65-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960015	ITMW-19-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960016	ITMW-11-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960017	ITMW-17-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960018	ITMW-2-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960019	ITMW-14-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960020	MW-41-201504	EPA 3010	MPRP/31443	EPA 6010	ICP/23383
60191960021	IW-73-201504	EPA 3010	MPRP/31444	EPA 6010	ICP/23390
60191960002	ITMW-10-201504	EPA 5030B/8260	MSV/68928		
60191960002	ITMW-10-201504	EPA 5030B/8260	MSV/69103		
60191960003	ITMW-12-201504	EPA 5030B/8260	MSV/69103		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191960005	**MW-32R-201504**	EPA 5030B/8260	MSV/68928		
60191960006	**MW-33R-201504**	EPA 5030B/8260	MSV/68928		
60191960006	**MW-33R-201504**	EPA 5030B/8260	MSV/69103		
60191960007	**ITMW-9-201504**	EPA 5030B/8260	MSV/68928		
60191960008	**MW-66-201504**	EPA 5030B/8260	MSV/68935		
60191960009	**ITMW-1-201504**	EPA 5030B/8260	MSV/68935		
60191960010	**ITMW-13-201504**	EPA 5030B/8260	MSV/68935		
60191960011	**IW-72-201504**	EPA 5030B/8260	MSV/68935		
60191960012	**IW-74-201504**	EPA 5030B/8260	MSV/68935		
60191960013	**MW-67-201504**	EPA 5030B/8260	MSV/68935		
60191960015	**ITMW-19-201504**	EPA 5030B/8260	MSV/68935		
60191960015	**ITMW-19-201504**	EPA 5030B/8260	MSV/68954		
60191960017	**ITMW-17-201504**	EPA 5030B/8260	MSV/68935		
60191960017	**ITMW-17-201504**	EPA 5030B/8260	MSV/69103		
60191960018	**ITMW-2-201504**	EPA 5030B/8260	MSV/68935		
60191960019	**ITMW-14-201504**	EPA 5030B/8260	MSV/68935		
60191960020	**MW-41-201504**	EPA 5030B/8260	MSV/68935		
60191960020	**MW-41-201504**	EPA 5030B/8260	MSV/69103		
60191960021	**IW-73-201504**	EPA 5030B/8260	MSV/68935		
60191960022	**DUP-01-201504**	EPA 5030B/8260	MSV/68935		
60191960022	**DUP-01-201504**	EPA 5030B/8260	MSV/68954		
60191960023	**DUP-03-201504**	EPA 5030B/8260	MSV/68935		
60191960024	**DUP-05-201504**	EPA 5030B/8260	MSV/68935		
60191960025	**TB-08-201504**	EPA 5030B/8260	MSV/68954		
60191960026	**TB-09-201504**	EPA 5030B/8260	MSV/68954		
60191960027	**TB-10-201504**	EPA 5030B/8260	MSV/68954		
60191960028	**TB-11-201504**	EPA 5030B/8260	MSV/68954		
60191960029	**TB-12-201504**	EPA 5030B/8260	MSV/68954		
60191960030	**TB-13-201504**	EPA 5030B/8260	MSV/68954		
60191960031	**EB-02-201504**	EPA 5030B/8260	MSV/68954		
60191960032	**DUP-02-201504**	EPA 5030B/8260	MSV/68954		
60191960032	**DUP-02-201504**	EPA 5030B/8260	MSV/68972		
60191960001	**ITMW-15-201504**	EPA 5030B/8260	MSV/68932		
60191960004	**IW-76-201504**	EPA 5030B/8260	MSV/68917		
60191960004	**IW-76-201504**	EPA 5030B/8260	MSV/68932		
60191960014	**MW-65-201504**	EPA 5030B/8260	MSV/68932		
60191960016	**ITMW-11-201504**	EPA 5030B/8260	MSV/68932		
60191960001	**ITMW-15-201504**	SM 2320B	WET/54199		
60191960002	**ITMW-10-201504**	SM 2320B	WET/54199		
60191960003	**ITMW-12-201504**	SM 2320B	WET/54199		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191960004	IW-76-201504	SM 2320B	WET/54199		
60191960005	MW-32R-201504	SM 2320B	WET/54199		
60191960006	MW-33R-201504	SM 2320B	WET/54199		
60191960007	ITMW-9-201504	SM 2320B	WET/54199		
60191960008	MW-66-201504	SM 2320B	WET/54199		
60191960009	ITMW-1-201504	SM 2320B	WET/54199		
60191960010	ITMW-13-201504	SM 2320B	WET/54199		
60191960011	IW-72-201504	SM 2320B	WET/54199		
60191960012	IW-74-201504	SM 2320B	WET/54199		
60191960013	MW-67-201504	SM 2320B	WET/54199		
60191960014	MW-65-201504	SM 2320B	WET/54199		
60191960015	ITMW-19-201504	SM 2320B	WET/54199		
60191960016	ITMW-11-201504	SM 2320B	WET/54199		
60191960017	ITMW-17-201504	SM 2320B	WET/54199		
60191960018	ITMW-2-201504	SM 2320B	WET/54199		
60191960019	ITMW-14-201504	SM 2320B	WET/54199		
60191960020	MW-41-201504	SM 2320B	WET/54199		
60191960021	IW-73-201504	SM 2320B	WET/54200		
60191960001	ITMW-15-201504	SM 3500-Fe B#4	WET/54375		
60191960002	ITMW-10-201504	SM 3500-Fe B#4	WET/54375		
60191960003	ITMW-12-201504	SM 3500-Fe B#4	WET/54375		
60191960004	IW-76-201504	SM 3500-Fe B#4	WET/54375		
60191960005	MW-32R-201504	SM 3500-Fe B#4	WET/54375		
60191960006	MW-33R-201504	SM 3500-Fe B#4	WET/54375		
60191960007	ITMW-9-201504	SM 3500-Fe B#4	WET/54375		
60191960008	MW-66-201504	SM 3500-Fe B#4	WET/54375		
60191960009	ITMW-1-201504	SM 3500-Fe B#4	WET/54375		
60191960010	ITMW-13-201504	SM 3500-Fe B#4	WET/54375		
60191960011	IW-72-201504	SM 3500-Fe B#4	WET/54375		
60191960012	IW-74-201504	SM 3500-Fe B#4	WET/54375		
60191960013	MW-67-201504	SM 3500-Fe B#4	WET/54375		
60191960014	MW-65-201504	SM 3500-Fe B#4	WET/54375		
60191960015	ITMW-19-201504	SM 3500-Fe B#4	WET/54375		
60191960016	ITMW-11-201504	SM 3500-Fe B#4	WET/54375		
60191960017	ITMW-17-201504	SM 3500-Fe B#4	WET/54375		
60191960018	ITMW-2-201504	SM 3500-Fe B#4	WET/54375		
60191960019	ITMW-14-201504	SM 3500-Fe B#4	WET/54375		
60191960020	MW-41-201504	SM 3500-Fe B#4	WET/54376		
60191960021	IW-73-201504	SM 3500-Fe B#4	WET/54376		
60191960001	ITMW-15-201504	SM 4500-H+B	WET/54405		
60191960002	ITMW-10-201504	SM 4500-H+B	WET/54405		
60191960003	ITMW-12-201504	SM 4500-H+B	WET/54405		
60191960004	IW-76-201504	SM 4500-H+B	WET/54405		
60191960005	MW-32R-201504	SM 4500-H+B	WET/54405		
60191960006	MW-33R-201504	SM 4500-H+B	WET/54405		
60191960007	ITMW-9-201504	SM 4500-H+B	WET/54405		
60191960008	MW-66-201504	SM 4500-H+B	WET/54405		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191960009	ITMW-1-201504	SM 4500-H+B	WET/54405		
60191960010	ITMW-13-201504	SM 4500-H+B	WET/54405		
60191960011	IW-72-201504	SM 4500-H+B	WET/54405		
60191960012	IW-74-201504	SM 4500-H+B	WET/54405		
60191960013	MW-67-201504	SM 4500-H+B	WET/54405		
60191960014	MW-65-201504	SM 4500-H+B	WET/54405		
60191960015	ITMW-19-201504	SM 4500-H+B	WET/54405		
60191960016	ITMW-11-201504	SM 4500-H+B	WET/54406		
60191960017	ITMW-17-201504	SM 4500-H+B	WET/54405		
60191960018	ITMW-2-201504	SM 4500-H+B	WET/54405		
60191960019	ITMW-14-201504	SM 4500-H+B	WET/54405		
60191960020	MW-41-201504	SM 4500-H+B	WET/54405		
60191960021	IW-73-201504	SM 4500-H+B	WET/54405		
60191960001	ITMW-15-201504	SM 4500-S-2 D	WET/54195		
60191960002	ITMW-10-201504	SM 4500-S-2 D	WET/54195		
60191960003	ITMW-12-201504	SM 4500-S-2 D	WET/54195		
60191960004	IW-76-201504	SM 4500-S-2 D	WET/54195		
60191960005	MW-32R-201504	SM 4500-S-2 D	WET/54195		
60191960006	MW-33R-201504	SM 4500-S-2 D	WET/54195		
60191960007	ITMW-9-201504	SM 4500-S-2 D	WET/54195		
60191960008	MW-66-201504	SM 4500-S-2 D	WET/54195		
60191960009	ITMW-1-201504	SM 4500-S-2 D	WET/54195		
60191960010	ITMW-13-201504	SM 4500-S-2 D	WET/54195		
60191960011	IW-72-201504	SM 4500-S-2 D	WET/54195		
60191960012	IW-74-201504	SM 4500-S-2 D	WET/54195		
60191960013	MW-67-201504	SM 4500-S-2 D	WET/54195		
60191960014	MW-65-201504	SM 4500-S-2 D	WET/54195		
60191960015	ITMW-19-201504	SM 4500-S-2 D	WET/54195		
60191960016	ITMW-11-201504	SM 4500-S-2 D	WET/54195		
60191960017	ITMW-17-201504	SM 4500-S-2 D	WET/54195		
60191960018	ITMW-2-201504	SM 4500-S-2 D	WET/54196		
60191960019	ITMW-14-201504	SM 4500-S-2 D	WET/54196		
60191960020	MW-41-201504	SM 4500-S-2 D	WET/54196		
60191960021	IW-73-201504	SM 4500-S-2 D	WET/54196		
60191960001	ITMW-15-201504	EPA 300.0	WETA/33776		
60191960002	ITMW-10-201504	EPA 300.0	WETA/33776		
60191960003	ITMW-12-201504	EPA 300.0	WETA/33776		
60191960004	IW-76-201504	EPA 300.0	WETA/33776		
60191960005	MW-32R-201504	EPA 300.0	WETA/33776		
60191960006	MW-33R-201504	EPA 300.0	WETA/33776		
60191960007	ITMW-9-201504	EPA 300.0	WETA/33776		
60191960008	MW-66-201504	EPA 300.0	WETA/33776		
60191960009	ITMW-1-201504	EPA 300.0	WETA/33776		
60191960010	ITMW-13-201504	EPA 300.0	WETA/33776		
60191960011	IW-72-201504	EPA 300.0	WETA/33776		
60191960012	IW-74-201504	EPA 300.0	WETA/33776		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191960013	MW-67-201504	EPA 300.0	WETA/33776		
60191960014	MW-65-201504	EPA 300.0	WETA/33776		
60191960015	ITMW-19-201504	EPA 300.0	WETA/33776		
60191960016	ITMW-11-201504	EPA 300.0	WETA/33776		
60191960017	ITMW-17-201504	EPA 300.0	WETA/33776		
60191960018	ITMW-2-201504	EPA 300.0	WETA/33776		
60191960019	ITMW-14-201504	EPA 300.0	WETA/33776		
60191960020	MW-41-201504	EPA 300.0	WETA/33776		
60191960021	IW-73-201504	EPA 300.0	WETA/33777		
60191960001	ITMW-15-201504	EPA 350.1	WETA/33692		
60191960002	ITMW-10-201504	EPA 350.1	WETA/33692		
60191960003	ITMW-12-201504	EPA 350.1	WETA/33692		
60191960004	IW-76-201504	EPA 350.1	WETA/33692		
60191960005	MW-32R-201504	EPA 350.1	WETA/33692		
60191960006	MW-33R-201504	EPA 350.1	WETA/33692		
60191960007	ITMW-9-201504	EPA 350.1	WETA/33693		
60191960008	MW-66-201504	EPA 350.1	WETA/33693		
60191960009	ITMW-1-201504	EPA 350.1	WETA/33693		
60191960010	ITMW-13-201504	EPA 350.1	WETA/33693		
60191960011	IW-72-201504	EPA 350.1	WETA/33693		
60191960012	IW-74-201504	EPA 350.1	WETA/33693		
60191960013	MW-67-201504	EPA 350.1	WETA/33693		
60191960014	MW-65-201504	EPA 350.1	WETA/33693		
60191960015	ITMW-19-201504	EPA 350.1	WETA/33693		
60191960016	ITMW-11-201504	EPA 350.1	WETA/33693		
60191960017	ITMW-17-201504	EPA 350.1	WETA/33693		
60191960018	ITMW-2-201504	EPA 350.1	WETA/33693		
60191960019	ITMW-14-201504	EPA 350.1	WETA/33693		
60191960020	MW-41-201504	EPA 350.1	WETA/33693		
60191960021	IW-73-201504	EPA 350.1	WETA/33693		
60191960001	ITMW-15-201504	EPA 353.2	WETA/33652		
60191960002	ITMW-10-201504	EPA 353.2	WETA/33652		
60191960003	ITMW-12-201504	EPA 353.2	WETA/33652		
60191960004	IW-76-201504	EPA 353.2	WETA/33652		
60191960005	MW-32R-201504	EPA 353.2	WETA/33652		
60191960006	MW-33R-201504	EPA 353.2	WETA/33652		
60191960007	ITMW-9-201504	EPA 353.2	WETA/33652		
60191960008	MW-66-201504	EPA 353.2	WETA/33653		
60191960009	ITMW-1-201504	EPA 353.2	WETA/33653		
60191960010	ITMW-13-201504	EPA 353.2	WETA/33653		
60191960011	IW-72-201504	EPA 353.2	WETA/33653		
60191960012	IW-74-201504	EPA 353.2	WETA/33653		
60191960013	MW-67-201504	EPA 353.2	WETA/33653		
60191960014	MW-65-201504	EPA 353.2	WETA/33653		
60191960015	ITMW-19-201504	EPA 353.2	WETA/33653		
60191960016	ITMW-11-201504	EPA 353.2	WETA/33653		

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191960017	ITMW-17-201504	EPA 353.2	WETA/33653		
60191960018	ITMW-2-201504	EPA 353.2	WETA/33653		
60191960019	ITMW-14-201504	EPA 353.2	WETA/33653		
60191960020	MW-41-201504	EPA 353.2	WETA/33653		
60191960021	IW-73-201504	EPA 353.2	WETA/33653		
60191960001	ITMW-15-201504	SM 4500-CO2 D	WETA/33867		
60191960002	ITMW-10-201504	SM 4500-CO2 D	WETA/33867		
60191960003	ITMW-12-201504	SM 4500-CO2 D	WETA/33867		
60191960004	IW-76-201504	SM 4500-CO2 D	WETA/33867		
60191960005	MW-32R-201504	SM 4500-CO2 D	WETA/33867		
60191960006	MW-33R-201504	SM 4500-CO2 D	WETA/33867		
60191960007	ITMW-9-201504	SM 4500-CO2 D	WETA/33867		
60191960008	MW-66-201504	SM 4500-CO2 D	WETA/33867		
60191960009	ITMW-1-201504	SM 4500-CO2 D	WETA/33867		
60191960010	ITMW-13-201504	SM 4500-CO2 D	WETA/33867		
60191960011	IW-72-201504	SM 4500-CO2 D	WETA/33867		
60191960012	IW-74-201504	SM 4500-CO2 D	WETA/33867		
60191960013	MW-67-201504	SM 4500-CO2 D	WETA/33867		
60191960014	MW-65-201504	SM 4500-CO2 D	WETA/33867		
60191960015	ITMW-19-201504	SM 4500-CO2 D	WETA/33867		
60191960016	ITMW-11-201504	SM 4500-CO2 D	WETA/33867		
60191960017	ITMW-17-201504	SM 4500-CO2 D	WETA/33867		
60191960018	ITMW-2-201504	SM 4500-CO2 D	WETA/33867		
60191960019	ITMW-14-201504	SM 4500-CO2 D	WETA/33867		
60191960020	MW-41-201504	SM 4500-CO2 D	WETA/33876		
60191960021	IW-73-201504	SM 4500-CO2 D	WETA/33876		
60191960001	ITMW-15-201504	SM 5310C	WETA/33760		
60191960002	ITMW-10-201504	SM 5310C	WETA/33760		
60191960003	ITMW-12-201504	SM 5310C	WETA/33809		
60191960004	IW-76-201504	SM 5310C	WETA/33809		
60191960005	MW-32R-201504	SM 5310C	WETA/33809		
60191960006	MW-33R-201504	SM 5310C	WETA/33809		
60191960007	ITMW-9-201504	SM 5310C	WETA/33809		
60191960008	MW-66-201504	SM 5310C	WETA/33809		
60191960009	ITMW-1-201504	SM 5310C	WETA/33809		
60191960010	ITMW-13-201504	SM 5310C	WETA/33823		
60191960011	IW-72-201504	SM 5310C	WETA/33823		
60191960012	IW-74-201504	SM 5310C	WETA/33823		
60191960013	MW-67-201504	SM 5310C	WETA/33823		
60191960014	MW-65-201504	SM 5310C	WETA/33823		
60191960015	ITMW-19-201504	SM 5310C	WETA/33823		
60191960016	ITMW-11-201504	SM 5310C	WETA/33823		
60191960017	ITMW-17-201504	SM 5310C	WETA/33823		
60191960018	ITMW-2-201504	SM 5310C	WETA/33823		
60191960019	ITMW-14-201504	SM 5310C	WETA/33823		
60191960020	MW-41-201504	SM 5310C	WETA/33823		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191960

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191960021	**IW-73-201504**	SM 5310C	WETA/33823		
60191960001	**ITMW-15-201504**	SM4500-P B	WETA/7937	SM 4500-P E	WETA/7940
60191960002	**ITMW-10-201504**	SM4500-P B	WETA/7937	SM 4500-P E	WETA/7940
60191960003	**ITMW-12-201504**	SM4500-P B	WETA/7937	SM 4500-P E	WETA/7940
60191960004	**IW-76-201504**	SM4500-P B	WETA/7937	SM 4500-P E	WETA/7940
60191960005	**MW-32R-201504**	SM4500-P B	WETA/7937	SM 4500-P E	WETA/7940
60191960006	**MW-33R-201504**	SM4500-P B	WETA/7937	SM 4500-P E	WETA/7940
60191960007	**ITMW-9-201504**	SM4500-P B	WETA/7937	SM 4500-P E	WETA/7940
60191960008	**MW-66-201504**	SM4500-P B	WETA/7937	SM 4500-P E	WETA/7940
60191960009	**ITMW-1-201504**	SM4500-P B	WETA/7937	SM 4500-P E	WETA/7940
60191960010	**ITMW-13-201504**	SM4500-P B	WETA/7937	SM 4500-P E	WETA/7940
60191960011	**IW-72-201504**	SM4500-P B	WETA/7937	SM 4500-P E	WETA/7940
60191960012	**IW-74-201504**	SM4500-P B	WETA/7939	SM 4500-P E	WETA/7941
60191960013	**MW-67-201504**	SM4500-P B	WETA/7939	SM 4500-P E	WETA/7941
60191960014	**MW-65-201504**	SM4500-P B	WETA/7939	SM 4500-P E	WETA/7941
60191960015	**ITMW-19-201504**	SM4500-P B	WETA/7939	SM 4500-P E	WETA/7941
60191960016	**ITMW-11-201504**	SM4500-P B	WETA/7939	SM 4500-P E	WETA/7941
60191960017	**ITMW-17-201504**	SM4500-P B	WETA/7939	SM 4500-P E	WETA/7941
60191960018	**ITMW-2-201504**	SM4500-P B	WETA/7939	SM 4500-P E	WETA/7941
60191960019	**ITMW-14-201504**	SM4500-P B	WETA/7939	SM 4500-P E	WETA/7941
60191960020	**MW-41-201504**	SM4500-P B	WETA/7939	SM 4500-P E	WETA/7941
60191960021	**IW-73-201504**	SM4500-P B	WETA/7939	SM 4500-P E	WETA/7941

Pace Analytical
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Sample Condition Upon Receipt

WO# : 60191960

60191960

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☐ UPS ☐ VIA ☒ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☐

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: CF -0.1 T-239 / CF -1.8 T-194 **Type of Ice:** Wet Blue None ☐ Samples received on ice, cooling process has begun.

Cooler Temperature: 0.3/1.3/3.7/4.3/0.1/3.3 (circle one)

Date and initials of person examining contents: PV 4/16/15

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☑Yes ☐No ☐N/A	6. NO2 NO3 Fe2+ 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	8. no volume received for DUP-08.
Pace containers used:	☑Yes ☐No ☐N/A	9. Extra samples received.
Containers intact:	☑Yes ☐No ☐N/A	10. ~~DUP-02-201505~~ DUP-02-201504 4/15/15 1520 032 3D6AH
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11. IN-73-201504 4/15/15 1430 021
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	12. 3D6AH 3D6AU 1BP3U 1A6SS 1BP3S 1BP3N 1BP3Z (2.0 2.0 2.0 10.0)
Sample labels match COC: Includes date/time/ID/analyses Matrix: WT	☑Yes ☐No ☐N/A	13. Vials for DUP-02 and IN-73 received with TB-12.
All containers needing preservation have been checked.	☑Yes ☐No ☐N/A	14. Added 2.5 mL of HNO3 to IN-74 BP3N. pH 3.0 2.0
All containers needing preservation are found to be in compliance with EPA recommendation.	☑Yes ☐No ☐N/A	
Exceptions: VOA, Coliform, O&G, WI-DRO (water)	☑Yes ☐No	Initial when completed PV / Lot # of added preservative 12989-2-7
Trip Blank present: Pace Trip Blank lot # (if purchased): 030915-3/112414-3	☑Yes ☐No ☐N/A	15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

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

Person Contacted: W. Stevestreet Date/Time: 4/16/15 email

Comments/ Resolution:

-add IW-73 to login for all parameters. Dup-08 will arrive tomorrow

Project Manager Review: MW Date: 4/16/15

CHAIN-OF-CUSTODY / Analytical Request Document

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

Pace Analytical™ www.pacelabs.com

Section A Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

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

Valid Matrix Codes

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE	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: 8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-15-201504	WT	G	4/15/15	1600				11	X	X	X		X	X			X	X	X	X	X	X	X	X	X	X	N	61919 60
2	MW-10-201504	WT	G	4/15/15	1435				11	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	N	
3	DUP-08-201504	WT	G	4/15/15	1435				3				X					X											N	
4	MW-12-201504	WT	G	4/15/15	1420				11	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	N	
5	MW-76-201504	WT	G	4/15/15	1245				11	X	X	X		X	X		X	X	X	X	X	X	X	X	X	X	X	X	N	
6	MW-32R-201504	WT	G	4/15/15	0920				11	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	N	
7	MW-33R-201504	WT	G	4/15/15	1155				11	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	N	
8	DUP-01-201504	WT	G	4/15/15	1155				3				X					X											N	
9	MW-9-201504	WT	G	4/15/15	1120				11	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	N	
10	MW-66-201504	WT	G	4/15/15	1055				11	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	N	
11	MW-1-201504	WT	G	4/15/15	1145				11	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	N	
12	MW-13-201504	WT	G	4/15/15	1430				11	X	X	X	X	X	X			X	X	X	X	X	X	X	X	X	X	X	N	Correct time 1430

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Level IV data package required	Lucy Cross / ENVIRON	4/15/15	1737		4/16/15	0947	0.5
							1-3
							3.7
							4-3

SAMPLER NAME AND SIGNATURE				
PRINT Name of SAMPLER:	Lucy Cross			
SIGNATURE of SAMPLER:	Lucy Cross	DATE Signed (MM/DD/YY):	4/15/2015	

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
3.1	Y	Y	Y

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A — **Required** Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B — **Required** Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C — Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D — **Required** Client Information

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

Valid Matrix Codes

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	DUP-03-201504 3D6AH ~~3D6AG~~	WT	G	4/15/15	1630				3				X						X									N	023
2	MW-72-201504 3D694	WT	G	4/15/15	0925	IBP3U	IA035 2nd		11	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	N	IBP3S 2-0 IBP3N 2-0 IBP3Z 10-0 011
3	MW-74-201504	WT	G	4/15/15	1120	↓	↓		11	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	N	012
4	DUP-05-201504	WT	G	4/15/15	1120				3				X						X									N	024
5	MW-67-201504	WT	G	4/15/15	850				11	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	N	013
6	MW-65-201504 3OTHR	WT	G	4/15/15	950				11	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	N	014
7	ITMW-19-201504 3D6AH	WT	G	4/15/15	1622				11	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	N	015
8	ITMW-11-201504 3OTHR	WT	G	4/15/15	1640	↓	↓		11	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	N	016
9	TB-08-201504 3D6AH	WT	G	4/15/15	—				3				X						X									N	025
10	TB-09-201504	WT	G	4/15/15	—				11	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	N	026
11	ITMW-17-201504	WT	G	4/15/15	1630				11	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	N	017
12	ITMW-2-201504	WT	G	4/15/15	0845	↓	↓		11	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	N	018

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Level IV data package required	Lucy Cross ENVIRON	4/15/15	1738	[signature]	4/16/15	0147

SAMPLE CONDITIONS

	Temp In	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
0-3	3.5	Y	Y	Y
1-3				
3-7				
4-3				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lucy Cross

SIGNATURE of SAMPLER: Lucy Cross DATE Signed (MM/DD/YY): 4/15/2015

*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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Pace Analytical
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	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B — **Required** Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C — Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

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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 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	1TMW-14-201504 3D/GAH 3D/GAH	WT	G	4/15/15	0905	1B03U	1A633		11	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	N	1BP3N 1B3P3S 1BP32 019
2	TB-10-201504	WT	G	4/15/15	—				3				X						X										N	027
3	TB-11-201504	WT	G	4/15/15	—				3				X						X										N	028
4	MW-41-201504	WT	G	4/15/15	1520	↓	↓		11	X	X	X	X	X	X				X	X	X	X	X	X	X	X	X	X	X	N	↓ ↓ ↓ 020
5	TB-12-201504	WT	G	4/15/15	—				3				X						X										N	029
6	FB TB-13-201504 2D/GAH	WT	G	4/15/15	—				2				X						X										N	030
7	FB-02-201504 3D/GAH	WT	G	4/15/15	1735				3				X						X										N	031
8																														
9																														
10																														
11																														
12																														

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
Level IV data package required	Lucy Cross / ENVIRON	4/15/15	1738	[signature] PACE	4/16/15	0147

SAMPLE CONDITIONS

	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
0-2	0.3	Y	Y	Y
2-6	1.3			
3-7	3.7			
4-8	4.3			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lucy Cross

SIGNATURE of SAMPLER: Lucy Cross DATE Signed (MM/DD/YY): 4/15/2015

*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 24, 2015

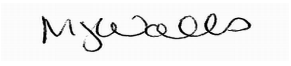
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH, AR
Pace Project No.: 60192014

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 16, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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

CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60192014

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60192014

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60192014001	**MW-175-201504**	Water	04/15/15 08:57	04/16/15 01:47

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60192014

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60192014001	**MW-175-201504**	EPA 5030B/8260	PGH	38

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Lenexa, KS 66219
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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60192014

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 24, 2015

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

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

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

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

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

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

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

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

QC Batch: MSV/68954

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

- LCS (Lab ID: 1552987)
  - Vinyl chloride

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

QC Batch: MSV/68954

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

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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

ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60192014

Sample: MW-175-201504 **Lab ID: 60192014001** Collected: 04/15/15 08:57 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**26.0**	ug/L	10.0	5.0	1		04/21/15 00:05	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 00:05	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 00:05	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 00:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 00:05	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 00:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 00:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:05	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 00:05	67-66-3	
Chloromethane	**0.68J**	ug/L	1.0	0.50	1		04/21/15 00:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 00:05	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	75-35-4	
cis-1,2-Dichloroethene	**1.5**	ug/L	1.0	0.50	1		04/21/15 00:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 00:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 00:05	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 00:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 00:05	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:05	79-00-5	
Trichloroethene	**98.8**	ug/L	1.0	0.50	1		04/21/15 00:05	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 00:05	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 00:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		04/21/15 00:05	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/21/15 00:05	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		04/21/15 00:05	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 00:05		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60192014

QC Batch: MSV/68954
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192014001

METHOD BLANK: 1552986
Matrix: Water
Associated Lab Samples: 60192014001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1-Dichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1-Dichloroethene	ug/L	ND	1.0	04/20/15 21:06	
1,2-Dichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,2-Dichloropropane	ug/L	ND	1.0	04/20/15 21:06	
2-Butanone (MEK)	ug/L	ND	10.0	04/20/15 21:06	
2-Hexanone	ug/L	ND	10.0	04/20/15 21:06	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/20/15 21:06	
Acetone	ug/L	ND	10.0	04/20/15 21:06	
Benzene	ug/L	ND	1.0	04/20/15 21:06	
Bromodichloromethane	ug/L	ND	1.0	04/20/15 21:06	
Bromoform	ug/L	ND	1.0	04/20/15 21:06	
Bromomethane	ug/L	ND	5.0	04/20/15 21:06	
Carbon disulfide	ug/L	ND	5.0	04/20/15 21:06	
Carbon tetrachloride	ug/L	ND	1.0	04/20/15 21:06	
Chlorobenzene	ug/L	ND	1.0	04/20/15 21:06	
Chloroethane	ug/L	ND	1.0	04/20/15 21:06	
Chloroform	ug/L	ND	1.0	04/20/15 21:06	
Chloromethane	ug/L	ND	1.0	04/20/15 21:06	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/20/15 21:06	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/20/15 21:06	
Dibromochloromethane	ug/L	ND	1.0	04/20/15 21:06	
Ethylbenzene	ug/L	ND	1.0	04/20/15 21:06	
Methylene chloride	ug/L	ND	1.0	04/20/15 21:06	
Styrene	ug/L	ND	1.0	04/20/15 21:06	
Tetrachloroethene	ug/L	ND	1.0	04/20/15 21:06	
Toluene	ug/L	ND	1.0	04/20/15 21:06	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/20/15 21:06	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/20/15 21:06	
Trichloroethene	ug/L	ND	1.0	04/20/15 21:06	
Vinyl chloride	ug/L	ND	1.0	04/20/15 21:06	
Xylene (Total)	ug/L	ND	3.0	04/20/15 21:06	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/20/15 21:06	
4-Bromofluorobenzene (S)	%	96	80-120	04/20/15 21:06	
Toluene-d8 (S)	%	96	80-120	04/20/15 21:06	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60192014

LABORATORY CONTROL SAMPLE: 1552987

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	23.1	115	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	18.8	94	73-121	
1,1,2-Trichloroethane	ug/L	20	21.0	105	80-120	
1,1-Dichloroethane	ug/L	20	22.9	114	80-120	
1,1-Dichloroethene	ug/L	20	22.7	114	80-120	
1,2-Dichloroethane	ug/L	20	22.7	114	81-120	
1,2-Dichloropropane	ug/L	20	22.6	113	80-120	
2-Butanone (MEK)	ug/L	100	109	109	67-122	
2-Hexanone	ug/L	100	98.7	99	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	111	111	76-120	
Acetone	ug/L	100	115	115	72-120	
Benzene	ug/L	20	22.8	114	80-120	
Bromodichloromethane	ug/L	20	22.7	114	80-120	
Bromoform	ug/L	20	20.4	102	73-138	
Bromomethane	ug/L	20	21.9	110	38-137	
Carbon disulfide	ug/L	20	21.2	106	71-129	
Carbon tetrachloride	ug/L	20	24.1	120	67-146	
Chlorobenzene	ug/L	20	21.3	107	80-120	
Chloroethane	ug/L	20	21.6	108	76-120	
Chloroform	ug/L	20	21.8	109	80-120	
Chloromethane	ug/L	20	24.4	122	34-165	
cis-1,2-Dichloroethene	ug/L	20	23.0	115	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.8	109	80-120	
Dibromochloromethane	ug/L	20	21.0	105	80-126	
Ethylbenzene	ug/L	20	20.8	104	80-120	
Methylene chloride	ug/L	20	23.0	115	80-120	
Styrene	ug/L	20	20.7	103	80-123	
Tetrachloroethene	ug/L	20	21.2	106	80-123	
Toluene	ug/L	20	20.7	103	80-120	
trans-1,2-Dichloroethene	ug/L	20	22.7	113	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.8	99	80-129	
Trichloroethene	ug/L	20	22.5	113	80-120	
Vinyl chloride	ug/L	20	25.7	129	62-125	L0
Xylene (Total)	ug/L	60	63.2	105	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			96	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60192014

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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/68954

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

ANALYTE QUALIFIERS

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

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60192014

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60192014001	**MW-175-201504**	EPA 5030B/8260	MSV/68954		

Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60192014

60192014

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☐ UPS ☐ VIA ☑ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☐

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: CF -0.1 T-239 / CF -1.8 T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 6.3

Temperature should be above freezing to 6°C

Date and initials of person examining contents: AA 4/16/15

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	6.
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, O&G, WI-DRO (water)	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes ☑No ☐N/A	
Pace Trip Blank lot # (if purchased): _____		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

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: 4/16/15

CHAIN-OF-CUSTODY / Analytical Request Document

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

Pace Analytical®
www.pacelabs.com

Microseeps

Page: 1 of 1

002953

Section A — **Required** Client Information:

Company: ENVIRON
Address: 1500 College Blvd Ste 925
Oakland Park, KS 66210
Email To: wstonestreet@environcorp.com
Phone: 913-553-5926 Fax:
Requested Due Date/TAT:

Section B — **Required** Project Information:

Report To: Wendy Stonestreet
Copy To: Tammy Gleason
Purchase Order No.: NA
Project Name: Fort Smith, AR
Project Number:

Section C — Invoice Information:

Attention: Tammy Gleason
Company Name: ENVIRON
Address: 250 monroe ave. NW Grand Rapids Michigan, 49503
Pace Quote Reference:
Pace Project Manager: MJ Walls
Pace Profile #: 7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D — **Required** Client Information

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

Matrix Codes (MATRIX / CODE)

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	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	Preservatives: H_2SO_4	Preservatives: HNO_3	Preservatives: HCl	Preservatives: TSP	Preservatives: BAK	Preservatives: Zink Acetate & NaOH	Preservatives: Other	Analysis Test Y/N	Analysis Test	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N	N		60192014
1	MW-175-201504	WT	G	4/15/15	0857				3				X						X 8260 VOCs	N	30694
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Lucy Cross / ENVIRON	4/15/15	1900	[signature] PACE	4/16/15	0147	0.3	X	X	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lucy Cross

SIGNATURE of SAMPLER: Lucy Cross

DATE Signed (MM/DD/YY): 4/15/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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

April 24, 2015

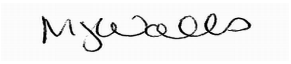
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH, AR
Pace Project No.: 60192015

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 16, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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

CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60192015

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60192015

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60192015001	**MW-90-201504**	Water	04/15/15 17:00	04/16/15 01:47
60192015002	**MW-81-201504**	Water	04/15/15 16:25	04/16/15 01:47
60192015003	**MW-82-201504**	Water	04/15/15 17:12	04/16/15 01:47

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60192015

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60192015001	**MW-90-201504**	EPA 5030B/8260	PGH	38
60192015002	**MW-81-201504**	EPA 5030B/8260	PGH	38
60192015003	**MW-82-201504**	EPA 5030B/8260	PGH	38

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60192015

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 24, 2015

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

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

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

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

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

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

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

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

QC Batch: MSV/68954

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

- LCS (Lab ID: 1552987)
  - Vinyl chloride

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

QC Batch: MSV/68932

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

QC Batch: MSV/68954

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

QC Batch: MSV/68972

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

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60192015

Sample: MW-90-201504 **Lab ID: 60192015001** Collected: 04/15/15 17:00 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/21/15 01:04	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 01:04	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 01:04	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 01:04	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 01:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 01:04	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 01:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 01:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 01:04	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 01:04	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 01:04	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 01:04	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 01:04	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 01:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 01:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 01:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 01:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 01:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 01:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 01:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 01:04	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 01:04	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 01:04	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 01:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 01:04	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 01:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 01:04	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 01:04	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 01:04	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 01:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 01:04	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 01:04	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 01:04	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 01:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		04/21/15 01:04	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		04/21/15 01:04	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		04/21/15 01:04	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 01:04		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60192015

Sample: MW-81-201504 **Lab ID: 60192015002** Collected: 04/15/15 16:25 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/21/15 13:35	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 13:35	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 13:35	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 13:35	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 13:35	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 13:35	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 13:35	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 13:35	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 13:35	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 13:35	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 13:35	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 13:35	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 13:35	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 13:35	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 13:35	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 13:35	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 13:35	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 13:35	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 13:35	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 13:35	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 13:35	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 13:35	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 13:35	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 13:35	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 13:35	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 13:35	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 13:35	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 13:35	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 13:35	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 13:35	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 13:35	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 13:35	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 13:35	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 13:35	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		04/21/15 13:35	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		04/21/15 13:35	17060-07-0	
Toluene-d8 (S)	93	%	80-120		1		04/21/15 13:35	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 13:35		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60192015

Sample: MW-82-201504 **Lab ID: 60192015003** Collected: 04/15/15 17:12 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**14.5**	ug/L	10.0	5.0	1		04/19/15 15:56	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 15:56	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 15:56	75-27-4	
Bromoform	**4.5**	ug/L	1.0	0.50	1		04/19/15 15:56	75-25-2	
Bromomethane	**10.6**	ug/L	5.0	2.5	1		04/19/15 15:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 15:56	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 15:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 15:56	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 15:56	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:56	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 15:56	67-66-3	
Chloromethane	**6.2**	ug/L	1.0	0.50	1		04/19/15 15:56	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 15:56	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:56	107-06-2	
1,1-Dichloroethene	**0.77J**	ug/L	1.0	0.50	1		04/19/15 15:56	75-35-4	
cis-1,2-Dichloroethene	**4.2**	ug/L	1.0	0.50	1		04/19/15 15:56	156-59-2	
trans-1,2-Dichloroethene	**0.64J**	ug/L	1.0	0.50	1		04/19/15 15:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 15:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 15:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 15:56	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 15:56	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 15:56	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 15:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 15:56	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 15:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 15:56	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 15:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 15:56	79-00-5	
Trichloroethene	**198**	ug/L	1.0	0.50	1		04/19/15 15:56	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 15:56	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 15:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/19/15 15:56	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		04/19/15 15:56	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		04/19/15 15:56	2037-26-5	
Preservation pH	**4.0**		0.10	0.10	1		04/19/15 15:56		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60192015

QC Batch: MSV/68954
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192015001

METHOD BLANK: 1552986
Matrix: Water
Associated Lab Samples: 60192015001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1-Dichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1-Dichloroethene	ug/L	ND	1.0	04/20/15 21:06	
1,2-Dichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,2-Dichloropropane	ug/L	ND	1.0	04/20/15 21:06	
2-Butanone (MEK)	ug/L	ND	10.0	04/20/15 21:06	
2-Hexanone	ug/L	ND	10.0	04/20/15 21:06	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/20/15 21:06	
Acetone	ug/L	ND	10.0	04/20/15 21:06	
Benzene	ug/L	ND	1.0	04/20/15 21:06	
Bromodichloromethane	ug/L	ND	1.0	04/20/15 21:06	
Bromoform	ug/L	ND	1.0	04/20/15 21:06	
Bromomethane	ug/L	ND	5.0	04/20/15 21:06	
Carbon disulfide	ug/L	ND	5.0	04/20/15 21:06	
Carbon tetrachloride	ug/L	ND	1.0	04/20/15 21:06	
Chlorobenzene	ug/L	ND	1.0	04/20/15 21:06	
Chloroethane	ug/L	ND	1.0	04/20/15 21:06	
Chloroform	ug/L	ND	1.0	04/20/15 21:06	
Chloromethane	ug/L	ND	1.0	04/20/15 21:06	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/20/15 21:06	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/20/15 21:06	
Dibromochloromethane	ug/L	ND	1.0	04/20/15 21:06	
Ethylbenzene	ug/L	ND	1.0	04/20/15 21:06	
Methylene chloride	ug/L	ND	1.0	04/20/15 21:06	
Styrene	ug/L	ND	1.0	04/20/15 21:06	
Tetrachloroethene	ug/L	ND	1.0	04/20/15 21:06	
Toluene	ug/L	ND	1.0	04/20/15 21:06	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/20/15 21:06	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/20/15 21:06	
Trichloroethene	ug/L	ND	1.0	04/20/15 21:06	
Vinyl chloride	ug/L	ND	1.0	04/20/15 21:06	
Xylene (Total)	ug/L	ND	3.0	04/20/15 21:06	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/20/15 21:06	
4-Bromofluorobenzene (S)	%	96	80-120	04/20/15 21:06	
Toluene-d8 (S)	%	96	80-120	04/20/15 21:06	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60192015

LABORATORY CONTROL SAMPLE: 1552987

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	23.1	115	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	18.8	94	73-121	
1,1,2-Trichloroethane	ug/L	20	21.0	105	80-120	
1,1-Dichloroethane	ug/L	20	22.9	114	80-120	
1,1-Dichloroethene	ug/L	20	22.7	114	80-120	
1,2-Dichloroethane	ug/L	20	22.7	114	81-120	
1,2-Dichloropropane	ug/L	20	22.6	113	80-120	
2-Butanone (MEK)	ug/L	100	109	109	67-122	
2-Hexanone	ug/L	100	98.7	99	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	111	111	76-120	
Acetone	ug/L	100	115	115	72-120	
Benzene	ug/L	20	22.8	114	80-120	
Bromodichloromethane	ug/L	20	22.7	114	80-120	
Bromoform	ug/L	20	20.4	102	73-138	
Bromomethane	ug/L	20	21.9	110	38-137	
Carbon disulfide	ug/L	20	21.2	106	71-129	
Carbon tetrachloride	ug/L	20	24.1	120	67-146	
Chlorobenzene	ug/L	20	21.3	107	80-120	
Chloroethane	ug/L	20	21.6	108	76-120	
Chloroform	ug/L	20	21.8	109	80-120	
Chloromethane	ug/L	20	24.4	122	34-165	
cis-1,2-Dichloroethene	ug/L	20	23.0	115	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.8	109	80-120	
Dibromochloromethane	ug/L	20	21.0	105	80-126	
Ethylbenzene	ug/L	20	20.8	104	80-120	
Methylene chloride	ug/L	20	23.0	115	80-120	
Styrene	ug/L	20	20.7	103	80-123	
Tetrachloroethene	ug/L	20	21.2	106	80-123	
Toluene	ug/L	20	20.7	103	80-120	
trans-1,2-Dichloroethene	ug/L	20	22.7	113	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.8	99	80-129	
Trichloroethene	ug/L	20	22.5	113	80-120	
Vinyl chloride	ug/L	20	25.7	129	62-125	L0
Xylene (Total)	ug/L	60	63.2	105	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			96	80-120	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60192015

QC Batch: MSV/68972
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192015002

METHOD BLANK: 1553602
Matrix: Water
Associated Lab Samples: 60192015002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/21/15 09:22	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/21/15 09:22	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/21/15 09:22	
1,1-Dichloroethane	ug/L	ND	1.0	04/21/15 09:22	
1,1-Dichloroethene	ug/L	ND	1.0	04/21/15 09:22	
1,2-Dichloroethane	ug/L	ND	1.0	04/21/15 09:22	
1,2-Dichloropropane	ug/L	ND	1.0	04/21/15 09:22	
2-Butanone (MEK)	ug/L	ND	10.0	04/21/15 09:22	
2-Hexanone	ug/L	ND	10.0	04/21/15 09:22	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/21/15 09:22	
Acetone	ug/L	ND	10.0	04/21/15 09:22	
Benzene	ug/L	ND	1.0	04/21/15 09:22	
Bromodichloromethane	ug/L	ND	1.0	04/21/15 09:22	
Bromoform	ug/L	ND	1.0	04/21/15 09:22	
Bromomethane	ug/L	ND	5.0	04/21/15 09:22	
Carbon disulfide	ug/L	ND	5.0	04/21/15 09:22	
Carbon tetrachloride	ug/L	ND	1.0	04/21/15 09:22	
Chlorobenzene	ug/L	ND	1.0	04/21/15 09:22	
Chloroethane	ug/L	ND	1.0	04/21/15 09:22	
Chloroform	ug/L	ND	1.0	04/21/15 09:22	
Chloromethane	ug/L	ND	1.0	04/21/15 09:22	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/21/15 09:22	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/21/15 09:22	
Dibromochloromethane	ug/L	ND	1.0	04/21/15 09:22	
Ethylbenzene	ug/L	ND	1.0	04/21/15 09:22	
Methylene chloride	ug/L	ND	1.0	04/21/15 09:22	
Styrene	ug/L	ND	1.0	04/21/15 09:22	
Tetrachloroethene	ug/L	ND	1.0	04/21/15 09:22	
Toluene	ug/L	ND	1.0	04/21/15 09:22	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/21/15 09:22	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/21/15 09:22	
Trichloroethene	ug/L	ND	1.0	04/21/15 09:22	
Vinyl chloride	ug/L	ND	1.0	04/21/15 09:22	
Xylene (Total)	ug/L	ND	3.0	04/21/15 09:22	
1,2-Dichloroethane-d4 (S)	%	105	80-120	04/21/15 09:22	
4-Bromofluorobenzene (S)	%	99	80-120	04/21/15 09:22	
Toluene-d8 (S)	%	92	80-120	04/21/15 09:22	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60192015

LABORATORY CONTROL SAMPLE: 1553603

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	22.9	115	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.5	98	73-121	
1,1,2-Trichloroethane	ug/L	20	20.8	104	80-120	
1,1-Dichloroethane	ug/L	20	22.5	112	80-120	
1,1-Dichloroethene	ug/L	20	21.2	106	80-120	
1,2-Dichloroethane	ug/L	20	23.6	118	81-120	
1,2-Dichloropropane	ug/L	20	22.8	114	80-120	
2-Butanone (MEK)	ug/L	100	114	114	67-122	
2-Hexanone	ug/L	100	103	103	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	114	114	76-120	
Acetone	ug/L	100	114	114	72-120	
Benzene	ug/L	20	22.2	111	80-120	
Bromodichloromethane	ug/L	20	23.6	118	80-120	
Bromoform	ug/L	20	20.8	104	73-138	
Bromomethane	ug/L	20	20.0	100	38-137	
Carbon disulfide	ug/L	20	20.5	103	71-129	
Carbon tetrachloride	ug/L	20	23.1	116	67-146	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	21.4	107	76-120	
Chloroform	ug/L	20	21.2	106	80-120	
Chloromethane	ug/L	20	18.1	91	34-165	
cis-1,2-Dichloroethene	ug/L	20	22.9	115	80-120	
cis-1,3-Dichloropropene	ug/L	20	22.3	112	80-120	
Dibromochloromethane	ug/L	20	21.0	105	80-126	
Ethylbenzene	ug/L	20	19.4	97	80-120	
Methylene chloride	ug/L	20	22.8	114	80-120	
Styrene	ug/L	20	20.0	100	80-123	
Tetrachloroethene	ug/L	20	19.8	99	80-123	
Toluene	ug/L	20	19.7	98	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.5	102	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.5	103	80-129	
Trichloroethene	ug/L	20	21.8	109	80-120	
Vinyl chloride	ug/L	20	24.4	122	62-125	
Xylene (Total)	ug/L	60	60.5	101	80-120	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			91	80-120	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60192015

QC Batch: MSV/68932
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60192015003

METHOD BLANK: 1552695
Matrix: Water
Associated Lab Samples: 60192015003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1-Dichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1-Dichloroethene	ug/L	ND	1.0	04/19/15 14:26	
1,2-Dichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,2-Dichloropropane	ug/L	ND	1.0	04/19/15 14:26	
2-Butanone (MEK)	ug/L	ND	10.0	04/19/15 14:26	
2-Hexanone	ug/L	ND	10.0	04/19/15 14:26	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/19/15 14:26	
Acetone	ug/L	ND	10.0	04/19/15 14:26	
Benzene	ug/L	ND	1.0	04/19/15 14:26	
Bromodichloromethane	ug/L	ND	1.0	04/19/15 14:26	
Bromoform	ug/L	ND	1.0	04/19/15 14:26	
Bromomethane	ug/L	ND	5.0	04/19/15 14:26	
Carbon disulfide	ug/L	ND	5.0	04/19/15 14:26	
Carbon tetrachloride	ug/L	ND	1.0	04/19/15 14:26	
Chlorobenzene	ug/L	ND	1.0	04/19/15 14:26	
Chloroethane	ug/L	ND	1.0	04/19/15 14:26	
Chloroform	ug/L	ND	1.0	04/19/15 14:26	
Chloromethane	ug/L	ND	1.0	04/19/15 14:26	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/19/15 14:26	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/19/15 14:26	
Dibromochloromethane	ug/L	ND	1.0	04/19/15 14:26	
Ethylbenzene	ug/L	ND	1.0	04/19/15 14:26	
Methylene chloride	ug/L	ND	1.0	04/19/15 14:26	
Styrene	ug/L	ND	1.0	04/19/15 14:26	
Tetrachloroethene	ug/L	ND	1.0	04/19/15 14:26	
Toluene	ug/L	ND	1.0	04/19/15 14:26	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/19/15 14:26	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/19/15 14:26	
Trichloroethene	ug/L	ND	1.0	04/19/15 14:26	
Vinyl chloride	ug/L	ND	1.0	04/19/15 14:26	
Xylene (Total)	ug/L	ND	3.0	04/19/15 14:26	
1,2-Dichloroethane-d4 (S)	%	98	80-120	04/19/15 14:26	
4-Bromofluorobenzene (S)	%	101	80-120	04/19/15 14:26	
Toluene-d8 (S)	%	97	80-120	04/19/15 14:26	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60192015

LABORATORY CONTROL SAMPLE: 1552696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.5	103	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	17.6	88	73-121	
1,1,2-Trichloroethane	ug/L	20	20.0	100	80-120	
1,1-Dichloroethane	ug/L	20	21.0	105	80-120	
1,1-Dichloroethene	ug/L	20	20.7	104	80-120	
1,2-Dichloroethane	ug/L	20	21.1	106	81-120	
1,2-Dichloropropane	ug/L	20	20.2	101	80-120	
2-Butanone (MEK)	ug/L	100	98.7	99	67-122	
2-Hexanone	ug/L	100	96.2	96	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	76-120	
Acetone	ug/L	100	99.8	100	72-120	
Benzene	ug/L	20	20.9	104	80-120	
Bromodichloromethane	ug/L	20	20.6	103	80-120	
Bromoform	ug/L	20	19.5	97	73-138	
Bromomethane	ug/L	20	17.8	89	38-137	
Carbon disulfide	ug/L	20	19.1	95	71-129	
Carbon tetrachloride	ug/L	20	21.1	106	67-146	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	20.2	101	76-120	
Chloroform	ug/L	20	20.3	101	80-120	
Chloromethane	ug/L	20	21.1	106	34-165	
cis-1,2-Dichloroethene	ug/L	20	21.0	105	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.0	100	80-120	
Dibromochloromethane	ug/L	20	19.4	97	80-126	
Ethylbenzene	ug/L	20	19.5	97	80-120	
Methylene chloride	ug/L	20	20.7	103	80-120	
Styrene	ug/L	20	19.9	99	80-123	
Tetrachloroethene	ug/L	20	19.4	97	80-123	
Toluene	ug/L	20	19.7	98	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.9	99	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.9	94	80-129	
Trichloroethene	ug/L	20	21.1	105	80-120	
Vinyl chloride	ug/L	20	22.3	112	62-125	
Xylene (Total)	ug/L	60	60.0	100	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			97	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60192015

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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/68932

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

Batch: MSV/68954

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

Batch: MSV/68972

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

ANALYTE QUALIFIERS

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

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60192015

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60192015001	**MW-90-201504**	EPA 5030B/8260	MSV/68954		
60192015002	**MW-81-201504**	EPA 5030B/8260	MSV/68972		
60192015003	**MW-82-201504**	EPA 5030B/8260	MSV/68932		

Pace Analytical
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Sample Condition Upon Receipt

WO# : 60192015

60192015

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☐ UPS ☐ VIA ☑ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☐

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: CF +0.1 T-239 / CF -1.8 T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 0.3

Temperature should be above freezing to 6°C

Date and initials of person examining contents: pv 4/16/15

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	6.
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, O&G, WI-DRO (water)	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes ☑No ☐N/A	
Pace Trip Blank lot # (if purchased): _____		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

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: 4/16/15

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Microseeps

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

002321

Section A
Required Client Information:

Company:	ENVIRON
Address:	7500 College Blvd Suite 925 Overland Park, KS
Email To:	WStonestreet@environcorp.com
Phone:	913-553-5926
Fax:	
Requested Due Date/TAT:	

Section B
Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	Na
Project Name:	Fort Smith, AR
Project Number:	

Section C
Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids, MI 49503
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	744, 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

Matrix Codes
MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

Requested Analysis Filtered (Y/N)

Pace Project No./ Lab I.D.: 6019 2015

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	Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zinc Acetate & NaOH	Other	Analysis Test Y/N: 8260 VOCs		Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-90-201504	WT	G	4/15/15	1700	-	-		3				X					X	3D 6/19 H		001
2	MW-81-201504	WT	G	4/15/15	1625	-	-		3				X					X			002
3	MW-82-201504	WT	G	4/15/15	1712	-	-		3								X	X	30THR 3/16 MW 4/16/15		8260 7-day hold 003
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Josh Myers / Environ	4/15/15	1745	[signature] PASI	4/16/15	0147	0.3	Y	Y	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Josh Myers

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 04/15/15

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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

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

April 24, 2015

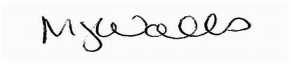
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH, AR
Pace Project No.: 60192016

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 16, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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

CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60192016

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60192016

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60192016001	**MW-174-201504**	Water	04/14/15 12:12	04/16/15 01:47
60192016002	**MW-173-201504**	Water	04/15/15 09:43	04/16/15 01:47

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60192016

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60192016001	**MW-174-201504**	EPA 5030B/8260	PGH	38
60192016002	**MW-173-201504**	EPA 5030B/8260	PGH	38

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60192016

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 24, 2015

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

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

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

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

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

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

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

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

QC Batch: MSV/68954

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

- LCS (Lab ID: 1552987)
  - Vinyl chloride

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

QC Batch: MSV/68954

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

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60192016

Sample: MW-174-201504 **Lab ID: 60192016001** Collected: 04/14/15 12:12 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**36.2**	ug/L	10.0	5.0	1		04/21/15 00:19	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 00:19	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 00:19	74-83-9	
2-Butanone (MEK)	**12.0**	ug/L	10.0	5.0	1		04/21/15 00:19	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 00:19	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 00:19	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 00:19	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 00:19	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 00:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 00:19	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	79-00-5	
Trichloroethene	**0.68J**	ug/L	1.0	0.50	1		04/21/15 00:19	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 00:19	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 00:19	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		04/21/15 00:19	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		04/21/15 00:19	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		04/21/15 00:19	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 00:19		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60192016

Sample: MW-173-201504 **Lab ID: 60192016002** Collected: 04/15/15 09:43 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**474**	ug/L	10.0	5.0	1		04/21/15 00:34	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 00:34	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 00:34	74-83-9	
2-Butanone (MEK)	**83.6**	ug/L	10.0	5.0	1		04/21/15 00:34	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 00:34	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 00:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	75-00-3	
Chloroform	**0.71J**	ug/L	1.0	0.50	1		04/21/15 00:34	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 00:34	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 00:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	**2.5J**	ug/L	10.0	2.5	1		04/21/15 00:34	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 00:34	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 00:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/21/15 00:34	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/21/15 00:34	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		04/21/15 00:34	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 00:34		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60192016

QC Batch: MSV/68954
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192016001, 60192016002

METHOD BLANK: 1552986
Matrix: Water
Associated Lab Samples: 60192016001, 60192016002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1-Dichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1-Dichloroethene	ug/L	ND	1.0	04/20/15 21:06	
1,2-Dichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,2-Dichloropropane	ug/L	ND	1.0	04/20/15 21:06	
2-Butanone (MEK)	ug/L	ND	10.0	04/20/15 21:06	
2-Hexanone	ug/L	ND	10.0	04/20/15 21:06	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/20/15 21:06	
Acetone	ug/L	ND	10.0	04/20/15 21:06	
Benzene	ug/L	ND	1.0	04/20/15 21:06	
Bromodichloromethane	ug/L	ND	1.0	04/20/15 21:06	
Bromoform	ug/L	ND	1.0	04/20/15 21:06	
Bromomethane	ug/L	ND	5.0	04/20/15 21:06	
Carbon disulfide	ug/L	ND	5.0	04/20/15 21:06	
Carbon tetrachloride	ug/L	ND	1.0	04/20/15 21:06	
Chlorobenzene	ug/L	ND	1.0	04/20/15 21:06	
Chloroethane	ug/L	ND	1.0	04/20/15 21:06	
Chloroform	ug/L	ND	1.0	04/20/15 21:06	
Chloromethane	ug/L	ND	1.0	04/20/15 21:06	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/20/15 21:06	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/20/15 21:06	
Dibromochloromethane	ug/L	ND	1.0	04/20/15 21:06	
Ethylbenzene	ug/L	ND	1.0	04/20/15 21:06	
Methylene chloride	ug/L	ND	1.0	04/20/15 21:06	
Styrene	ug/L	ND	1.0	04/20/15 21:06	
Tetrachloroethene	ug/L	ND	1.0	04/20/15 21:06	
Toluene	ug/L	ND	1.0	04/20/15 21:06	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/20/15 21:06	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/20/15 21:06	
Trichloroethene	ug/L	ND	1.0	04/20/15 21:06	
Vinyl chloride	ug/L	ND	1.0	04/20/15 21:06	
Xylene (Total)	ug/L	ND	3.0	04/20/15 21:06	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/20/15 21:06	
4-Bromofluorobenzene (S)	%	96	80-120	04/20/15 21:06	
Toluene-d8 (S)	%	96	80-120	04/20/15 21:06	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60192016

LABORATORY CONTROL SAMPLE: 1552987

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	23.1	115	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	18.8	94	73-121	
1,1,2-Trichloroethane	ug/L	20	21.0	105	80-120	
1,1-Dichloroethane	ug/L	20	22.9	114	80-120	
1,1-Dichloroethene	ug/L	20	22.7	114	80-120	
1,2-Dichloroethane	ug/L	20	22.7	114	81-120	
1,2-Dichloropropane	ug/L	20	22.6	113	80-120	
2-Butanone (MEK)	ug/L	100	109	109	67-122	
2-Hexanone	ug/L	100	98.7	99	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	111	111	76-120	
Acetone	ug/L	100	115	115	72-120	
Benzene	ug/L	20	22.8	114	80-120	
Bromodichloromethane	ug/L	20	22.7	114	80-120	
Bromoform	ug/L	20	20.4	102	73-138	
Bromomethane	ug/L	20	21.9	110	38-137	
Carbon disulfide	ug/L	20	21.2	106	71-129	
Carbon tetrachloride	ug/L	20	24.1	120	67-146	
Chlorobenzene	ug/L	20	21.3	107	80-120	
Chloroethane	ug/L	20	21.6	108	76-120	
Chloroform	ug/L	20	21.8	109	80-120	
Chloromethane	ug/L	20	24.4	122	34-165	
cis-1,2-Dichloroethene	ug/L	20	23.0	115	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.8	109	80-120	
Dibromochloromethane	ug/L	20	21.0	105	80-126	
Ethylbenzene	ug/L	20	20.8	104	80-120	
Methylene chloride	ug/L	20	23.0	115	80-120	
Styrene	ug/L	20	20.7	103	80-123	
Tetrachloroethene	ug/L	20	21.2	106	80-123	
Toluene	ug/L	20	20.7	103	80-120	
trans-1,2-Dichloroethene	ug/L	20	22.7	113	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.8	99	80-129	
Trichloroethene	ug/L	20	22.5	113	80-120	
Vinyl chloride	ug/L	20	25.7	129	62-125	L0
Xylene (Total)	ug/L	60	63.2	105	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			96	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60192016

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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/68954

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

ANALYTE QUALIFIERS

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

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60192016

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60192016001	**MW-174-201504**	EPA 5030B/8260	MSV/68954		
60192016002	**MW-173-201504**	EPA 5030B/8260	MSV/68954		

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www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60192016

60192016

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☐ UPS ☐ VIA ☑ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☐

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: CF -1.1 T-239 / CF -1.8 T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 0.3

Temperature should be above freezing to 6°C

Date and initials of person examining contents: RA 4/16/15

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	6.
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, O&G, WI-DRO (water)	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes ☑No ☐N/A	
Pace Trip Blank lot # (if purchased): _____		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

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: 4/16/15

CHAIN-OF-CUSTODY / Analytical Request Document

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

Pace Analytical
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Microseeps

Page: 1 of 1

002950

Section A Required Client Information:

Company: Environ
Address: 7500 College Blvd. Ste 925
Oakland Park, KS 66210
Email To: wstonestreet@environcorp.com
Phone: 913-553-5926 Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Wendy Stonestreet
Copy To: Tammy Gleason
Purchase Order No.: NA
Project Name: Fort Smith, AR
Project Number:

Section C Invoice Information:

Attention: Tammy Gleason
Company Name: Environ
Address: 250 Monroe Ave NW Grand Rapids Michigan, 49503
Pace Quote Reference:
Pace Project Manager: MJ Walls
Pace Profile #: 7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

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

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zinc Acetate & NaOH	Other	Analysis Test Y/N	Requested Analysis Filtered (Y/N): 8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N	N		60192016
1	MW-174-201504	WT	G	4/14/15	1212				3				X						X	N	30696H AJ
2	MW-173-201504	WT	G	4/15/15	0943				3				X						X	N	↓ WE
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Lucy Cross / Environ	4/15/15	1900	[signature]	4/16/15	0147	0.3	X	X	Y

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lucy Cross
SIGNATURE of SAMPLER: Lucy Cross
DATE Signed (MM/DD/YY): 4/15/2015

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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

May 01, 2015

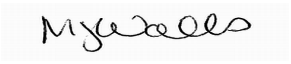
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 17, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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

CERTIFICATIONS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

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

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

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

SAMPLE SUMMARY

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60192103001	MW-38-201504	Water	04/16/15 11:00	04/17/15 10:21
60192103002	MW-58-201504	Water	04/16/15 10:15	04/17/15 10:21
60192103003	ITMW-18-201504	Water	04/16/15 10:55	04/17/15 10:21
60192103004	MW-25-201504	Water	04/16/15 13:25	04/17/15 10:21
60192103005	MW-56-201504	Water	04/16/15 13:30	04/17/15 10:21
60192103006	MW-57-201504	Water	04/16/15 12:30	04/17/15 10:21
60192103007	DUP-04-201504	Water	04/16/15 10:55	04/17/15 10:21
60192103008	EB-05-201504	Water	04/16/15 15:10	04/17/15 10:21
60192103009	EB-03-201504	Water	04/16/15 15:05	04/17/15 10:21
60192103010	EB-06-201504	Water	04/16/15 15:20	04/17/15 10:21
60192103011	EB-01-201504	Water	04/16/15 15:00	04/17/15 10:21
60192103012	TB-14-201504	Water	04/16/15 10:15	04/17/15 10:21
60192103013	DUP-08-201504	Water	04/16/15 14:35	04/17/15 10:21
60192103014	TB-15-201504	Water	04/16/15 10:15	04/17/15 10:21

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SAMPLE ANALYTE COUNT

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60192103001	**MW-38-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60192103002	**MW-58-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	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	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60192103003	**ITMW-18-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D

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SAMPLE ANALYTE COUNT

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60192103004	**MW-25-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	JTK, PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60192103005	**MW-56-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60192103006	**MW-57-201504**	EPA 8015 - Alcohol	MS1	1	PASI-D
		EPA 6010	JGP	2	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 2320B	CRT	3	PASI-K
		SM 3500-Fe B#4	TJG	1	PASI-K
		SM 4500-H+B	TJG	1	PASI-K
		SM 4500-S-2 D	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	JMC1	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
60192103007	**DUP-04-201504**	EPA 5030B/8260	PGH	38	PASI-K
60192103008	**EB-05-201504**	EPA 5030B/8260	PGH	38	PASI-K
60192103009	**EB-03-201504**	EPA 5030B/8260	PGH	38	PASI-K
60192103010	**EB-06-201504**	EPA 5030B/8260	PGH	38	PASI-K
60192103011	**EB-01-201504**	EPA 5030B/8260	PGH	38	PASI-K
60192103012	**TB-14-201504**	EPA 5030B/8260	PGH	38	PASI-K
60192103013	**DUP-08-201504**	EPA 5030B/8260	PGH	38	PASI-K
60192103014	**TB-15-201504**	EPA 5030B/8260	PGH	38	PASI-K

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PROJECT NARRATIVE

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Method: **EPA 8015 - Alcohol**
Description: Alcohol by Direct Inject GCFID
Client: Environ_AR
Date: May 01, 2015

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: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Environ_AR
Date: May 01, 2015

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: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: May 01, 2015

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

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

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

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

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

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

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

QC Batch: MSV/69103

B: Analyte was detected in the associated method blank.
- BLANK for HBN 382792 [MSV/6910 (Lab ID: 1557447)
  - Bromomethane
  - Chloromethane

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

QC Batch: MSV/68975

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- LCS (Lab ID: 1553699)
  - 1,1,1-Trichloroethane

QC Batch: MSV/68979

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- LCS (Lab ID: 1553780)
  - Vinyl chloride

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

QC Batch: MSV/68932

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

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: May 01, 2015

QC Batch: MSV/68972
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/68975
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/68979
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/68990
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/69011
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/69103
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

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PROJECT NARRATIVE

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Method: **SM 2320B**
Description: 2320B Alkalinity
Client: Environ_AR
Date: May 01, 2015

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.

Additional Comments:

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PROJECT NARRATIVE

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Method: **SM 3500-Fe B#4**
Description: Iron, Ferric (Calculation)
Client: Environ_AR
Date: May 01, 2015

General Information:
6 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: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Method: **SM 4500-H+B**
Description: 4500H+ pH, Electrometric
Client: Environ_AR
Date: May 01, 2015

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-18-201504 (Lab ID: 60192103003)
- MW-25-201504 (Lab ID: 60192103004)
- MW-38-201504 (Lab ID: 60192103001)
- MW-56-201504 (Lab ID: 60192103005)
- MW-57-201504 (Lab ID: 60192103006)

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

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

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

Additional Comments:

Analyte Comments:

QC Batch: WET/54412

1e: Field pH
- ITMW-18-201504 (Lab ID: 60192103003)
  - pH at 25 Degrees C
- MW-25-201504 (Lab ID: 60192103004)
  - pH at 25 Degrees C
- MW-38-201504 (Lab ID: 60192103001)
  - pH at 25 Degrees C
- MW-56-201504 (Lab ID: 60192103005)
  - pH at 25 Degrees C
- MW-57-201504 (Lab ID: 60192103006)
  - pH at 25 Degrees C

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PROJECT NARRATIVE

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Environ_AR
Date: May 01, 2015

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/54196

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60191960018

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

- MS (Lab ID: 1552664)
  - 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: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Environ_AR
Date: May 01, 2015

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.

Additional Comments:

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PROJECT NARRATIVE

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Method: **EPA 350.1**
Description: 350.1 Ammonia
Client: Environ_AR
Date: May 01, 2015

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/33747

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60192103001,60192108001

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

- MS (Lab ID: 1554391)
  - 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: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Environ_AR
Date: May 01, 2015

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/33673

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60192103001

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

- MS (Lab ID: 1552023)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrate
  - 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: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Method: **SM 4500-CO2 D**
Description: Total Carbon Dioxide Calc
Client: Environ_AR
Date: May 01, 2015

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: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Method: **SM 5310C**
Description: 5310C TOC
Client: Environ_AR
Date: May 01, 2015

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/33823

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60192725001

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

- MS (Lab ID: 1557718)
  - 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: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Method: **SM 4500-P E**
Description: SM4500P-E, Total Phosphorus
Client: Environ_AR
Date: May 01, 2015

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/7946

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60192103001

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

- MS (Lab ID: 135241)
  - 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: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: MW-38-201504 **Lab ID: 60192103001** Collected: 04/16/15 11:00 Received: 04/17/15 10:21 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	1980	1		04/21/15 21:10	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**1680**	ug/L	50.0	9.0	1	04/20/15 16:50	04/22/15 16:40	7439-89-6	
Manganese	**2900**	ug/L	5.0	2.4	1	04/20/15 16:50	04/22/15 16:40	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		04/27/15 15:38	67-64-1	
Benzene	**0.62J**	ug/L	1.0	0.060	1		04/27/15 15:38	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 15:38	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 15:38	75-25-2	
Bromomethane	ND	ug/L	5.0	0.16	1		04/27/15 15:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 15:38	78-93-3	
Carbon disulfide	**0.81J**	ug/L	5.0	0.12	1		04/27/15 15:38	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 15:38	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 15:38	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 15:38	75-00-3	
Chloroform	**0.73J**	ug/L	1.0	0.14	1		04/27/15 15:38	67-66-3	
Chloromethane	ND	ug/L	1.0	0.080	1		04/27/15 15:38	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 15:38	124-48-1	
1,1-Dichloroethane	**0.16J**	ug/L	1.0	0.050	1		04/27/15 15:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 15:38	107-06-2	
1,1-Dichloroethene	**23.8**	ug/L	1.0	0.20	1		04/27/15 15:38	75-35-4	
cis-1,2-Dichloroethene	**2060**	ug/L	100	8.0	100		04/21/15 13:50	156-59-2	
trans-1,2-Dichloroethene	**47.1**	ug/L	1.0	0.20	1		04/27/15 15:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 15:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 15:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 15:38	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 15:38	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 15:38	591-78-6	
Methylene chloride	**0.37J**	ug/L	1.0	0.15	1		04/27/15 15:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 15:38	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 15:38	100-42-5	
1,1,2,2-Tetrachloroethane	**0.85J**	ug/L	1.0	0.15	1		04/27/15 15:38	79-34-5	
Tetrachloroethene	**1.9**	ug/L	1.0	0.10	1		04/27/15 15:38	127-18-4	
Toluene	**0.67J**	ug/L	1.0	0.17	1		04/27/15 15:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 15:38	71-55-6	
1,1,2-Trichloroethane	**0.27J**	ug/L	1.0	0.20	1		04/27/15 15:38	79-00-5	
Trichloroethene	**3060**	ug/L	100	17.0	100		04/21/15 13:50	79-01-6	
Vinyl chloride	**33.7**	ug/L	1.0	0.13	1		04/27/15 15:38	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 15:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/27/15 15:38	460-00-4	
1,2-Dichloroethane-d4 (S)	97	%	80-120		1		04/27/15 15:38	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		04/27/15 15:38	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 15:38		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: MW-38-201504 **Lab ID: 60192103001** Collected: 04/16/15 11:00 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**242**	mg/L	20.0	2.0	1		04/21/15 08:25		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/21/15 08:25		
Alkalinity, Total as CaCO3	**242**	mg/L	20.0	2.0	1		04/21/15 08:25		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**1.6**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.6**	Std. Units	0.10	0.10	1		04/16/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:46	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**30.6**	mg/L	2.0	1.0	2		04/30/15 10:57	16887-00-6	
Sulfate	**102**	mg/L	10.0	2.4	10		04/30/15 11:54	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/25/15 07:32	7664-41-7	M1
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.014	1		04/17/15 14:46		M1
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/17/15 14:46		M1
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.014	1		04/17/15 14:46		M1
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**332**	mg/L	20.0	20.0	1		04/30/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**1.7**	mg/L	1.0	0.50	1		04/28/15 12:11	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	0.010	1	04/22/15 13:00	04/22/15 15:13		M1

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: MW-58-201504 **Lab ID: 60192103002** Collected: 04/16/15 10:15 Received: 04/17/15 10:21 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	1980	1		04/21/15 21:22	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**4290**	ug/L	50.0	9.0	1	04/20/15 16:50	04/22/15 16:42	7439-89-6	
Manganese	**415**	ug/L	5.0	2.4	1	04/20/15 16:50	04/22/15 16:42	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	1.9	1		04/27/15 12:33	67-64-1	
Benzene	ND	ug/L	1.0	0.060	1		04/27/15 12:33	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 12:33	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 12:33	75-25-2	
Bromomethane	**0.35J**	ug/L	5.0	0.16	1		04/27/15 12:33	74-83-9	B
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 12:33	78-93-3	
Carbon disulfide	**0.12J**	ug/L	5.0	0.12	1		04/27/15 12:33	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 12:33	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 12:33	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 12:33	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/27/15 12:33	67-66-3	
Chloromethane	**0.41J**	ug/L	1.0	0.080	1		04/27/15 12:33	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 12:33	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.050	1		04/27/15 12:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 12:33	107-06-2	
1,1-Dichloroethene	**2.6**	ug/L	1.0	0.20	1		04/27/15 12:33	75-35-4	
cis-1,2-Dichloroethene	**19.7**	ug/L	1.0	0.080	1		04/27/15 12:33	156-59-2	
trans-1,2-Dichloroethene	**0.34J**	ug/L	1.0	0.20	1		04/27/15 12:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 12:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 12:33	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 12:33	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 12:33	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 12:33	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.15	1		04/27/15 12:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 12:33	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 12:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 12:33	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.10	1		04/27/15 12:33	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/27/15 12:33	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 12:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/27/15 12:33	79-00-5	
Trichloroethene	**356**	ug/L	5.0	2.5	5		04/21/15 14:05	79-01-6	
Vinyl chloride	**1.5**	ug/L	1.0	0.13	1		04/27/15 12:33	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 12:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/27/15 12:33	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/27/15 12:33	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		04/27/15 12:33	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 12:33		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: MW-58-201504 **Lab ID: 60192103002** Collected: 04/16/15 10:15 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**20.2**	mg/L	20.0	2.0	1		04/21/15 08:33		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/21/15 08:33		
Alkalinity, Total as CaCO3	**20.2**	mg/L	20.0	2.0	1		04/21/15 08:33		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**4.3**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:46	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**258**	mg/L	20.0	10.0	20		04/30/15 12:37	16887-00-6	
Sulfate	**2.1**	mg/L	1.0	0.24	1		04/30/15 12:22	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/25/15 07:34	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	ND	mg/L	0.10	0.014	1		04/17/15 14:48		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/17/15 14:48		
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.014	1		04/17/15 14:48		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	ND	mg/L	1.0	0.50	1		04/28/15 12:24	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.28**	mg/L	0.030	0.010	1	04/22/15 13:00	04/22/15 15:14		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: ITMW-18-201504 **Lab ID: 60192103003** Collected: 04/16/15 10:55 Received: 04/17/15 10:21 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	1980	1		04/21/15 21:33	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**223**	ug/L	50.0	9.0	1	04/20/15 16:50	04/22/15 16:49	7439-89-6	
Manganese	**9.8**	ug/L	5.0	2.4	1	04/20/15 16:50	04/22/15 16:49	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**37.3**	ug/L	10.0	5.0	1		04/19/15 16:10	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 16:10	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 16:10	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 16:10	75-25-2	
Bromomethane	**30.4**	ug/L	5.0	2.5	1		04/19/15 16:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 16:10	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 16:10	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 16:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 16:10	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:10	75-00-3	
Chloroform	**0.69J**	ug/L	1.0	0.50	1		04/19/15 16:10	67-66-3	
Chloromethane	**10.7**	ug/L	1.0	0.50	1		04/19/15 16:10	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 16:10	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:10	107-06-2	
1,1-Dichloroethene	**0.83J**	ug/L	1.0	0.50	1		04/19/15 16:10	75-35-4	
cis-1,2-Dichloroethene	**1.6**	ug/L	1.0	0.50	1		04/19/15 16:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 16:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 16:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 16:10	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 16:10	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 16:10	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 16:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 16:10	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 16:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:10	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:10	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 16:10	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:10	79-00-5	
Trichloroethene	**43.5**	ug/L	1.0	0.50	1		04/19/15 16:10	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 16:10	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 16:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		04/19/15 16:10	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/19/15 16:10	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/19/15 16:10	2037-26-5	
Preservation pH	**2.0**		0.10	0.10	1		04/19/15 16:10		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: ITMW-18-201504 **Lab ID: 60192103003** Collected: 04/16/15 10:55 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**85.8**	mg/L	20.0	2.0	1		04/21/15 08:38		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/21/15 08:38		
Alkalinity, Total as CaCO3	**85.8**	mg/L	20.0	2.0	1		04/21/15 08:38		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	ND	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.8**	Std. Units	0.10	0.10	1		04/16/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:47	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**127**	mg/L	10.0	5.0	10		04/30/15 12:51	16887-00-6	
Sulfate	**1200**	mg/L	100	23.7	100		05/01/15 09:26	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.25**	mg/L	0.10	0.027	1		04/25/15 07:35	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**3.1**	mg/L	0.10	0.014	1		04/17/15 14:49		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/17/15 14:49		
Nitrogen, NO2 plus NO3	**3.1**	mg/L	0.10	0.014	1		04/17/15 14:49		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**335**	mg/L	20.0	20.0	1		04/30/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.51J**	mg/L	1.0	0.50	1		04/28/15 12:37	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	**0.21**	mg/L	0.030	0.010	1	04/22/15 13:00	04/22/15 15:14		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: MW-25-201504 **Lab ID: 60192103004** Collected: 04/16/15 13:25 Received: 04/17/15 10:21 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	1980	1		04/21/15 21:44	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**1550**	ug/L	50.0	9.0	1	04/20/15 16:50	04/22/15 16:51	7439-89-6	
Manganese	**937**	ug/L	5.0	2.4	1	04/20/15 16:50	04/22/15 16:51	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**108**	ug/L	10.0	5.0	1		04/22/15 19:52	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 19:52	71-43-2	
Bromodichloromethane	**5.3**	ug/L	1.0	0.50	1		04/22/15 19:52	75-27-4	
Bromoform	**6.9**	ug/L	1.0	0.50	1		04/22/15 19:52	75-25-2	
Bromomethane	**64.9**	ug/L	5.0	2.5	1		04/22/15 19:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 19:52	78-93-3	
Carbon disulfide	**3.0J**	ug/L	5.0	2.5	1		04/22/15 19:52	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 19:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 19:52	108-90-7	
Chloroethane	**2.2**	ug/L	1.0	0.50	1		04/22/15 19:52	75-00-3	
Chloroform	**14.9**	ug/L	1.0	0.50	1		04/22/15 19:52	67-66-3	
Chloromethane	**110**	ug/L	1.0	0.50	1		04/22/15 19:52	74-87-3	
Dibromochloromethane	**3.5**	ug/L	1.0	0.50	1		04/22/15 19:52	124-48-1	
1,1-Dichloroethane	**1.6**	ug/L	1.0	0.50	1		04/22/15 19:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:52	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 19:52	75-35-4	
cis-1,2-Dichloroethene	**204**	ug/L	50.0	4.0	50		04/19/15 17:40	156-59-2	
trans-1,2-Dichloroethene	**37.4**	ug/L	1.0	0.50	1		04/22/15 19:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 19:52	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 19:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 19:52	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 19:52	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 19:52	591-78-6	
Methylene chloride	**17.9**	ug/L	1.0	0.50	1		04/22/15 19:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 19:52	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 19:52	100-42-5	
1,1,2,2-Tetrachloroethane	**41.6**	ug/L	1.0	0.50	1		04/22/15 19:52	79-34-5	
Tetrachloroethene	**4.8**	ug/L	1.0	0.50	1		04/22/15 19:52	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 19:52	108-88-3	
1,1,1-Trichloroethane	**4.1**	ug/L	1.0	0.50	1		04/22/15 19:52	71-55-6	
1,1,2-Trichloroethane	**0.74J**	ug/L	1.0	0.50	1		04/22/15 19:52	79-00-5	
Trichloroethene	**4650**	ug/L	50.0	8.5	50		04/19/15 17:40	79-01-6	
Vinyl chloride	**6.4**	ug/L	1.0	0.50	1		04/22/15 19:52	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 19:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/22/15 19:52	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/22/15 19:52	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/22/15 19:52	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 19:52		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: MW-25-201504 **Lab ID: 60192103004** Collected: 04/16/15 13:25 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**36.4**	mg/L	20.0	2.0	1		04/21/15 08:41		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/21/15 08:41		
Alkalinity, Total as CaCO3	**36.4**	mg/L	20.0	2.0	1		04/21/15 08:41		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**1.4**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.4**	Std. Units	0.10	0.10	1		04/16/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:47	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**451**	mg/L	50.0	25.0	50		04/30/15 13:19	16887-00-6	
Sulfate	**3960**	mg/L	500	118	500		05/01/15 09:40	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	**0.49**	mg/L	0.10	0.027	1		04/25/15 07:36	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**1.6**	mg/L	0.10	0.014	1		04/17/15 14:50		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/17/15 14:50		
Nitrogen, NO2 plus NO3	**1.6**	mg/L	0.10	0.014	1		04/17/15 14:50		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**358**	mg/L	20.0	20.0	1		04/30/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**3.4**	mg/L	1.0	0.50	1		04/28/15 12:50	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	0.010	1	04/22/15 13:00	04/22/15 15:14		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: MW-56-201504 **Lab ID: 60192103005** Collected: 04/16/15 13:30 Received: 04/17/15 10:21 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	1980	1		04/21/15 22:07	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**3280**	ug/L	50.0	9.0	1	04/20/15 16:50	04/22/15 16:53	7439-89-6	
Manganese	**175**	ug/L	5.0	2.4	1	04/20/15 16:50	04/22/15 16:53	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**6.2J**	ug/L	10.0	1.9	1		04/27/15 12:48	67-64-1	
Benzene	ND	ug/L	1.0	0.060	1		04/27/15 12:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 12:48	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 12:48	75-25-2	
Bromomethane	**0.40J**	ug/L	5.0	0.16	1		04/27/15 12:48	74-83-9	B
2-Butanone (MEK)	**3.7J**	ug/L	10.0	0.59	1		04/27/15 12:48	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/27/15 12:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 12:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 12:48	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 12:48	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/27/15 12:48	67-66-3	
Chloromethane	**0.18J**	ug/L	1.0	0.080	1		04/27/15 12:48	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 12:48	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.050	1		04/27/15 12:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 12:48	107-06-2	
1,1-Dichloroethene	**0.47J**	ug/L	1.0	0.20	1		04/27/15 12:48	75-35-4	
cis-1,2-Dichloroethene	**8.2**	ug/L	1.0	0.080	1		04/27/15 12:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.20	1		04/27/15 12:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 12:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 12:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 12:48	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 12:48	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 12:48	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.15	1		04/27/15 12:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 12:48	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 12:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 12:48	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.10	1		04/27/15 12:48	127-18-4	
Toluene	**0.18J**	ug/L	1.0	0.17	1		04/27/15 12:48	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 12:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/27/15 12:48	79-00-5	
Trichloroethene	**495**	ug/L	5.0	2.5	5		04/21/15 14:20	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.13	1		04/27/15 12:48	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 12:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/27/15 12:48	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		04/27/15 12:48	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		04/27/15 12:48	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 12:48		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: MW-56-201504 **Lab ID: 60192103005** Collected: 04/16/15 13:30 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**27.9**	mg/L	20.0	2.0	1		04/21/15 08:44		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/21/15 08:44		
Alkalinity, Total as CaCO3	**27.9**	mg/L	20.0	2.0	1		04/21/15 08:44		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**3.3**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**6.6**	Std. Units	0.10	0.10	1		04/16/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:48	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**96.8**	mg/L	10.0	5.0	10		04/30/15 14:30	16887-00-6	
Sulfate	**8.5**	mg/L	1.0	0.24	1		04/30/15 13:48	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/25/15 07:40	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.039J**	mg/L	0.10	0.014	1		04/17/15 14:50		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/17/15 14:50		
Nitrogen, NO2 plus NO3	**0.039J**	mg/L	0.10	0.014	1		04/17/15 14:50		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	**38.5**	mg/L	20.0	20.0	1		04/30/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.91J**	mg/L	1.0	0.50	1		04/28/15 13:30	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	0.010	1	04/22/15 13:00	04/22/15 15:15		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: MW-57-201504 **Lab ID: 60192103006** Collected: 04/16/15 12:30 Received: 04/17/15 10:21 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	1980	1		04/21/15 22:29	107-07-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
Iron	**4220**	ug/L	50.0	9.0	1	04/20/15 16:50	04/22/15 16:56	7439-89-6	
Manganese	**326**	ug/L	5.0	2.4	1	04/20/15 16:50	04/22/15 16:56	7439-96-5	
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/22/15 00:43	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 00:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 00:43	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 00:43	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 00:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 00:43	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 00:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 00:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 00:43	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 00:43	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 00:43	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 00:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 00:43	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 00:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 00:43	107-06-2	
1,1-Dichloroethene	**0.67J**	ug/L	1.0	0.50	1		04/22/15 00:43	75-35-4	
cis-1,2-Dichloroethene	**4.8**	ug/L	1.0	0.50	1		04/22/15 00:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 00:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 00:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 00:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 00:43	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 00:43	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 00:43	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 00:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 00:43	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 00:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 00:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 00:43	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 00:43	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 00:43	71-55-6	L3
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 00:43	79-00-5	
Trichloroethene	**194**	ug/L	1.0	0.50	1		04/22/15 00:43	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 00:43	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 00:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		04/22/15 00:43	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		04/22/15 00:43	17060-07-0	
Toluene-d8 (S)	89	%	80-120		1		04/22/15 00:43	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 00:43		

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: MW-57-201504 **Lab ID: 60192103006** Collected: 04/16/15 12:30 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
2320B Alkalinity	Analytical Method: SM 2320B								
Alkalinity,Bicarbonate (CaCO3)	**15.5J**	mg/L	20.0	2.0	1		04/21/15 08:47		
Alkalinity, Carbonate (CaCO3)	ND	mg/L	20.0	2.0	1		04/21/15 08:47		
Alkalinity, Total as CaCO3	**15.5J**	mg/L	20.0	2.0	1		04/21/15 08:47		
Iron, Ferric (Calculation)	Analytical Method: SM 3500-Fe B#4								
Iron, Ferric	**4.2**	mg/L	0.20		1		04/28/15 00:00	7439-89-6	
4500H+ pH, Electrometric	Analytical Method: SM 4500-H+B								
pH at 25 Degrees C	**5.4**	Std. Units	0.10	0.10	1		04/16/15 00:00		1e,H6
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
Sulfide, Total	ND	mg/L	0.050	0.012	1		04/19/15 12:48	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
Chloride	**292**	mg/L	50.0	25.0	50		04/30/15 14:58	16887-00-6	
Sulfate	**14.0**	mg/L	2.0	0.47	2		04/30/15 14:44	14808-79-8	
350.1 Ammonia	Analytical Method: EPA 350.1								
Nitrogen, Ammonia	ND	mg/L	0.10	0.027	1		04/25/15 07:41	7664-41-7	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
Nitrogen, Nitrate	**0.15**	mg/L	0.10	0.014	1		04/17/15 14:51		
Nitrogen, Nitrite	ND	mg/L	0.10	0.023	1		04/17/15 14:51		
Nitrogen, NO2 plus NO3	**0.15**	mg/L	0.10	0.014	1		04/17/15 14:51		
Total Carbon Dioxide Calc	Analytical Method: SM 4500-CO2 D								
Carbon Dioxide Calculation	ND	mg/L	20.0	20.0	1		04/30/15 00:00		
5310C TOC	Analytical Method: SM 5310C								
Total Organic Carbon	**0.83J**	mg/L	1.0	0.50	1		04/28/15 13:43	7440-44-0	
SM4500P-E, Total Phosphorus	Analytical Method: SM 4500-P E Preparation Method: SM4500-P B								
Phosphate as P04	ND	mg/L	0.030	0.010	1	04/22/15 13:00	04/22/15 15:15		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: DUP-04-201504 **Lab ID: 60192103007** Collected: 04/16/15 10:55 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**43.1**	ug/L	10.0	5.0	1		04/19/15 16:25	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 16:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 16:25	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 16:25	75-25-2	
Bromomethane	**29.7**	ug/L	5.0	2.5	1		04/19/15 16:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 16:25	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 16:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 16:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 16:25	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:25	75-00-3	
Chloroform	**0.70J**	ug/L	1.0	0.50	1		04/19/15 16:25	67-66-3	
Chloromethane	**7.6**	ug/L	1.0	0.50	1		04/19/15 16:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 16:25	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:25	75-35-4	
cis-1,2-Dichloroethene	**1.7**	ug/L	1.0	0.50	1		04/19/15 16:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 16:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 16:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 16:25	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 16:25	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 16:25	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 16:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 16:25	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 16:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:25	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 16:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:25	79-00-5	
Trichloroethene	**42.8**	ug/L	1.0	0.50	1		04/19/15 16:25	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 16:25	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 16:25	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		04/19/15 16:25	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		04/19/15 16:25	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		04/19/15 16:25	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		04/19/15 16:25		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: EB-05-201504 **Lab ID: 60192103008** Collected: 04/16/15 15:10 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/22/15 00:58	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 00:58	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 00:58	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 00:58	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 00:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 00:58	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 00:58	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 00:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 00:58	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 00:58	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 00:58	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 00:58	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 00:58	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 00:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 00:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 00:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 00:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 00:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 00:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 00:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 00:58	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 00:58	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 00:58	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 00:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 00:58	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 00:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 00:58	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 00:58	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 00:58	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 00:58	71-55-6	L3
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 00:58	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:28	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 00:58	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 00:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		04/22/15 00:58	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/22/15 00:58	17060-07-0	
Toluene-d8 (S)	90	%	80-120		1		04/22/15 00:58	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 00:58		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: EB-03-201504 **Lab ID: 60192103009** Collected: 04/16/15 15:05 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/22/15 01:13	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 01:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 01:13	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 01:13	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 01:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 01:13	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 01:13	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 01:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 01:13	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 01:13	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 01:13	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 01:13	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 01:13	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 01:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 01:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 01:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 01:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 01:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 01:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 01:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 01:13	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 01:13	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 01:13	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 01:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 01:13	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 01:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 01:13	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 01:13	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 01:13	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 01:13	71-55-6	L3
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 01:13	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 01:13	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 01:13	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 01:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		04/22/15 01:13	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/22/15 01:13	17060-07-0	
Toluene-d8 (S)	93	%	80-120		1		04/22/15 01:13	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 01:13		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: EB-06-201504 **Lab ID: 60192103010** Collected: 04/16/15 15:20 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/22/15 01:28	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 01:28	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 01:28	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 01:28	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 01:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 01:28	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 01:28	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 01:28	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 01:28	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 01:28	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 01:28	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 01:28	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 01:28	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 01:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 01:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 01:28	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 01:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 01:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 01:28	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 01:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 01:28	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 01:28	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 01:28	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 01:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 01:28	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 01:28	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 01:28	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 01:28	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 01:28	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 01:28	71-55-6	L3
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 01:28	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 01:28	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 01:28	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 01:28	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		04/22/15 01:28	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/22/15 01:28	17060-07-0	
Toluene-d8 (S)	92	%	80-120		1		04/22/15 01:28	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 01:28		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: EB-01-201504 **Lab ID: 60192103011** Collected: 04/16/15 15:00 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**11.4**	ug/L	10.0	5.0	1		04/22/15 01:43	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 01:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 01:43	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 01:43	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 01:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 01:43	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 01:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 01:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 01:43	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 01:43	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 01:43	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 01:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 01:43	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 01:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 01:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 01:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 01:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 01:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 01:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 01:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 01:43	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 01:43	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 01:43	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 01:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 01:43	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 01:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 01:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 01:43	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 01:43	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 01:43	71-55-6	L3
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 01:43	79-00-5	
Trichloroethene	**0.64J**	ug/L	1.0	0.50	1		04/22/15 01:43	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 01:43	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 01:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		04/22/15 01:43	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		04/22/15 01:43	17060-07-0	
Toluene-d8 (S)	91	%	80-120		1		04/22/15 01:43	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 01:43		

REPORT OF LABORATORY ANALYSIS

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

ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: TB-14-201504 **Lab ID: 60192103012** Collected: 04/16/15 10:15 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/22/15 03:41	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 03:41	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 03:41	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 03:41	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 03:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 03:41	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 03:41	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 03:41	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 03:41	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 03:41	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 03:41	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 03:41	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 03:41	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 03:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 03:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 03:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 03:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 03:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 03:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 03:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 03:41	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 03:41	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 03:41	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 03:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 03:41	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 03:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 03:41	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 03:41	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 03:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 03:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 03:41	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 03:41	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 03:41	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 03:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		04/22/15 03:41	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/22/15 03:41	17060-07-0	
Toluene-d8 (S)	87	%	80-120		1		04/22/15 03:41	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 03:41		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: DUP-08-201504 **Lab ID: 60192103013** Collected: 04/16/15 14:35 Received: 04/17/15 10:21 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		04/27/15 13:04	67-64-1	
Benzene	**0.12J**	ug/L	1.0	0.060	1		04/27/15 13:04	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 13:04	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 13:04	75-25-2	
Bromomethane	ND	ug/L	5.0	0.16	1		04/27/15 13:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 13:04	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/27/15 13:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 13:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 13:04	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 13:04	75-00-3	
Chloroform	**0.22J**	ug/L	1.0	0.14	1		04/27/15 13:04	67-66-3	
Chloromethane	**0.22J**	ug/L	1.0	0.080	1		04/27/15 13:04	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 13:04	124-48-1	
1,1-Dichloroethane	**2.8**	ug/L	1.0	0.050	1		04/27/15 13:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 13:04	107-06-2	
1,1-Dichloroethene	**3.6**	ug/L	1.0	0.20	1		04/27/15 13:04	75-35-4	
cis-1,2-Dichloroethene	**36.1**	ug/L	1.0	0.080	1		04/27/15 13:04	156-59-2	
trans-1,2-Dichloroethene	**0.29J**	ug/L	1.0	0.20	1		04/27/15 13:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 13:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 13:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 13:04	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 13:04	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 13:04	591-78-6	
Methylene chloride	**0.66J**	ug/L	1.0	0.15	1		04/27/15 13:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 13:04	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 13:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 13:04	79-34-5	
Tetrachloroethene	**0.45J**	ug/L	1.0	0.10	1		04/27/15 13:04	127-18-4	
Toluene	**0.46J**	ug/L	1.0	0.17	1		04/27/15 13:04	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 13:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/27/15 13:04	79-00-5	
Trichloroethene	**303**	ug/L	5.0	0.85	5		04/27/15 13:19	79-01-6	
Vinyl chloride	**1.2**	ug/L	1.0	0.13	1		04/27/15 13:04	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 13:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/27/15 13:04	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/27/15 13:04	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		04/27/15 13:04	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 13:04		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Sample: TB-15-201504 **Lab ID: 60192103014** Collected: 04/16/15 10:15 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/22/15 03:56	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 03:56	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 03:56	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 03:56	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 03:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 03:56	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 03:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 03:56	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 03:56	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 03:56	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 03:56	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 03:56	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 03:56	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 03:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 03:56	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 03:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 03:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 03:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 03:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 03:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 03:56	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 03:56	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 03:56	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 03:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 03:56	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 03:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 03:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 03:56	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 03:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 03:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 03:56	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 03:56	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 03:56	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 03:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		04/22/15 03:56	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		04/22/15 03:56	17060-07-0	
Toluene-d8 (S)	90	%	80-120		1		04/22/15 03:56	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 03:56		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

QC Batch: GCSV/3750 Analysis Method: EPA 8015 - Alcohol
QC Batch Method: EPA 8015 - Alcohol Analysis Description: Alcohol by Direct Inject GCFID
Associated Lab Samples: 60192103001, 60192103002, 60192103003, 60192103004, 60192103005, 60192103006

METHOD BLANK: 134858 Matrix: Water
Associated Lab Samples: 60192103001, 60192103002, 60192103003, 60192103004, 60192103005, 60192103006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
2-Chloroethanol	ug/L	ND	10000	04/21/15 19:18	

LABORATORY CONTROL SAMPLE: 134859

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
2-Chloroethanol	ug/L	100000	89800	90	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 134860 134861

Parameter	Units	60191868013 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	96300	96400	96	96	40-140	0	40	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

QC Batch: MPRP/31482 Analysis Method: EPA 6010
QC Batch Method: EPA 3010 Analysis Description: 6010 MET
Associated Lab Samples: 60192103001, 60192103002, 60192103003, 60192103004, 60192103005, 60192103006

METHOD BLANK: 1553098 Matrix: Water
Associated Lab Samples: 60192103001, 60192103002, 60192103003, 60192103004, 60192103005, 60192103006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	04/22/15 16:14	
Manganese	ug/L	ND	5.0	04/22/15 16:14	

LABORATORY CONTROL SAMPLE: 1553099

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	10500	105	80-120	
Manganese	ug/L	1000	988	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1553100 1553101

Parameter	Units	60192231001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	20.7J	10000	10000	10400	10300	103	103	75-125	1	20	
Manganese	ug/L	20.9	1000	1000	1000	998	98	98	75-125	0	20	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

QC Batch: MSV/68972 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192103001, 60192103002, 60192103005

METHOD BLANK: 1553602 Matrix: Water
Associated Lab Samples: 60192103001, 60192103002, 60192103005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/21/15 09:22	
Trichloroethene	ug/L	ND	1.0	04/21/15 09:22	
1,2-Dichloroethane-d4 (S)	%	105	80-120	04/21/15 09:22	
4-Bromofluorobenzene (S)	%	99	80-120	04/21/15 09:22	
Toluene-d8 (S)	%	92	80-120	04/21/15 09:22	

LABORATORY CONTROL SAMPLE: 1553603

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	20	22.9	115	80-120	
Trichloroethene	ug/L	20	21.8	109	80-120	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			91	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

QC Batch: MSV/68975 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192103006, 60192103008, 60192103009, 60192103010, 60192103011

METHOD BLANK: 1553698 Matrix: Water
Associated Lab Samples: 60192103006, 60192103008, 60192103009, 60192103010, 60192103011

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/21/15 21:31	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/21/15 21:31	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/21/15 21:31	
1,1-Dichloroethane	ug/L	ND	1.0	04/21/15 21:31	
1,1-Dichloroethene	ug/L	ND	1.0	04/21/15 21:31	
1,2-Dichloroethane	ug/L	ND	1.0	04/21/15 21:31	
1,2-Dichloropropane	ug/L	ND	1.0	04/21/15 21:31	
2-Butanone (MEK)	ug/L	ND	10.0	04/21/15 21:31	
2-Hexanone	ug/L	ND	10.0	04/21/15 21:31	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/21/15 21:31	
Acetone	ug/L	ND	10.0	04/21/15 21:31	
Benzene	ug/L	ND	1.0	04/21/15 21:31	
Bromodichloromethane	ug/L	ND	1.0	04/21/15 21:31	
Bromoform	ug/L	ND	1.0	04/21/15 21:31	
Bromomethane	ug/L	ND	5.0	04/21/15 21:31	
Carbon disulfide	ug/L	ND	5.0	04/21/15 21:31	
Carbon tetrachloride	ug/L	ND	1.0	04/21/15 21:31	
Chlorobenzene	ug/L	ND	1.0	04/21/15 21:31	
Chloroethane	ug/L	ND	1.0	04/21/15 21:31	
Chloroform	ug/L	ND	1.0	04/21/15 21:31	
Chloromethane	ug/L	ND	1.0	04/21/15 21:31	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/21/15 21:31	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/21/15 21:31	
Dibromochloromethane	ug/L	ND	1.0	04/21/15 21:31	
Ethylbenzene	ug/L	ND	1.0	04/21/15 21:31	
Methylene chloride	ug/L	ND	1.0	04/21/15 21:31	
Styrene	ug/L	ND	1.0	04/21/15 21:31	
Tetrachloroethene	ug/L	ND	1.0	04/21/15 21:31	
Toluene	ug/L	ND	1.0	04/21/15 21:31	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/21/15 21:31	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/21/15 21:31	
Trichloroethene	ug/L	ND	1.0	04/21/15 21:31	
Vinyl chloride	ug/L	ND	1.0	04/21/15 21:31	
Xylene (Total)	ug/L	ND	3.0	04/21/15 21:31	
1,2-Dichloroethane-d4 (S)	%	99	80-120	04/21/15 21:31	
4-Bromofluorobenzene (S)	%	96	80-120	04/21/15 21:31	
Toluene-d8 (S)	%	91	80-120	04/21/15 21:31	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

LABORATORY CONTROL SAMPLE: 1553699

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	24.2	121	80-120	L0
1,1,2,2-Tetrachloroethane	ug/L	20	16.9	84	73-121	
1,1,2-Trichloroethane	ug/L	20	19.7	98	80-120	
1,1-Dichloroethane	ug/L	20	22.3	112	80-120	
1,1-Dichloroethene	ug/L	20	22.3	112	80-120	
1,2-Dichloroethane	ug/L	20	23.6	118	81-120	
1,2-Dichloropropane	ug/L	20	22.6	113	80-120	
2-Butanone (MEK)	ug/L	100	111	111	67-122	
2-Hexanone	ug/L	100	93.3	93	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	110	110	76-120	
Acetone	ug/L	100	112	112	72-120	
Benzene	ug/L	20	22.7	113	80-120	
Bromodichloromethane	ug/L	20	23.6	118	80-120	
Bromoform	ug/L	20	19.4	97	73-138	
Bromomethane	ug/L	20	19.7	98	38-137	
Carbon disulfide	ug/L	20	20.3	101	71-129	
Carbon tetrachloride	ug/L	20	23.8	119	67-146	
Chlorobenzene	ug/L	20	20.5	103	80-120	
Chloroethane	ug/L	20	20.0	100	76-120	
Chloroform	ug/L	20	22.5	113	80-120	
Chloromethane	ug/L	20	19.9	100	34-165	
cis-1,2-Dichloroethene	ug/L	20	23.3	116	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.6	108	80-120	
Dibromochloromethane	ug/L	20	19.9	100	80-126	
Ethylbenzene	ug/L	20	19.2	96	80-120	
Methylene chloride	ug/L	20	23.1	115	80-120	
Styrene	ug/L	20	19.1	96	80-123	
Tetrachloroethene	ug/L	20	19.8	99	80-123	
Toluene	ug/L	20	19.1	95	80-120	
trans-1,2-Dichloroethene	ug/L	20	21.9	110	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.9	94	80-129	
Trichloroethene	ug/L	20	23.3	117	80-120	
Vinyl chloride	ug/L	20	24.9	125	62-125	
Xylene (Total)	ug/L	60	57.9	97	80-120	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			96	80-120	
Toluene-d8 (S)	%			91	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

QC Batch: MSV/68979
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192103012, 60192103014

METHOD BLANK: 1553779
Matrix: Water
Associated Lab Samples: 60192103012, 60192103014

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,1-Dichloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,1-Dichloroethene	ug/L	ND	1.0	04/22/15 03:26	
1,2-Dichloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,2-Dichloropropane	ug/L	ND	1.0	04/22/15 03:26	
2-Butanone (MEK)	ug/L	ND	10.0	04/22/15 03:26	
2-Hexanone	ug/L	ND	10.0	04/22/15 03:26	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/22/15 03:26	
Acetone	ug/L	ND	10.0	04/22/15 03:26	
Benzene	ug/L	ND	1.0	04/22/15 03:26	
Bromodichloromethane	ug/L	ND	1.0	04/22/15 03:26	
Bromoform	ug/L	ND	1.0	04/22/15 03:26	
Bromomethane	ug/L	ND	5.0	04/22/15 03:26	
Carbon disulfide	ug/L	ND	5.0	04/22/15 03:26	
Carbon tetrachloride	ug/L	ND	1.0	04/22/15 03:26	
Chlorobenzene	ug/L	ND	1.0	04/22/15 03:26	
Chloroethane	ug/L	ND	1.0	04/22/15 03:26	
Chloroform	ug/L	ND	1.0	04/22/15 03:26	
Chloromethane	ug/L	0.15J	1.0	04/22/15 03:26	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 03:26	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 03:26	
Dibromochloromethane	ug/L	ND	1.0	04/22/15 03:26	
Ethylbenzene	ug/L	ND	1.0	04/22/15 03:26	
Methylene chloride	ug/L	ND	1.0	04/22/15 03:26	
Styrene	ug/L	ND	1.0	04/22/15 03:26	
Tetrachloroethene	ug/L	ND	1.0	04/22/15 03:26	
Toluene	ug/L	ND	1.0	04/22/15 03:26	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 03:26	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 03:26	
Trichloroethene	ug/L	ND	1.0	04/22/15 03:26	
Vinyl chloride	ug/L	ND	1.0	04/22/15 03:26	
Xylene (Total)	ug/L	ND	3.0	04/22/15 03:26	
1,2-Dichloroethane-d4 (S)	%	99	80-120	04/22/15 03:26	
4-Bromofluorobenzene (S)	%	96	80-120	04/22/15 03:26	
Toluene-d8 (S)	%	90	80-120	04/22/15 03:26	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

LABORATORY CONTROL SAMPLE: 1553780

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	23.3	116	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	15.9	79	73-121	
1,1,2-Trichloroethane	ug/L	20	19.0	95	80-120	
1,1-Dichloroethane	ug/L	20	22.3	112	80-120	
1,1-Dichloroethene	ug/L	20	23.1	116	80-120	
1,2-Dichloroethane	ug/L	20	22.9	115	81-120	
1,2-Dichloropropane	ug/L	20	22.2	111	80-120	
2-Butanone (MEK)	ug/L	100	109	109	67-122	
2-Hexanone	ug/L	100	94.1	94	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	114	114	76-120	
Acetone	ug/L	100	109	109	72-120	
Benzene	ug/L	20	23.0	115	80-120	
Bromodichloromethane	ug/L	20	23.5	117	80-120	
Bromoform	ug/L	20	20.4	102	73-138	
Bromomethane	ug/L	20	18.2	91	38-137	
Carbon disulfide	ug/L	20	20.1	101	71-129	
Carbon tetrachloride	ug/L	20	23.9	120	67-146	
Chlorobenzene	ug/L	20	20.1	101	80-120	
Chloroethane	ug/L	20	20.4	102	76-120	
Chloroform	ug/L	20	21.9	110	80-120	
Chloromethane	ug/L	20	19.6	98	34-165	
cis-1,2-Dichloroethene	ug/L	20	22.4	112	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.7	108	80-120	
Dibromochloromethane	ug/L	20	19.4	97	80-126	
Ethylbenzene	ug/L	20	18.6	93	80-120	
Methylene chloride	ug/L	20	23.3	117	80-120	
Styrene	ug/L	20	19.1	95	80-123	
Tetrachloroethene	ug/L	20	19.2	96	80-123	
Toluene	ug/L	20	19.3	96	80-120	
trans-1,2-Dichloroethene	ug/L	20	21.6	108	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.0	90	80-129	
Trichloroethene	ug/L	20	23.5	118	80-120	
Vinyl chloride	ug/L	20	25.3	126	62-125	L0
Xylene (Total)	ug/L	60	57.7	96	80-120	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			92	80-120	
Toluene-d8 (S)	%			91	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

QC Batch: MSV/68990
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192103008

METHOD BLANK: 1554233 Matrix: Water
Associated Lab Samples: 60192103008

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	ug/L	ND	1.0	04/22/15 12:30	
1,2-Dichloroethane-d4 (S)	%	106	80-120	04/22/15 12:30	
4-Bromofluorobenzene (S)	%	99	80-120	04/22/15 12:30	
Toluene-d8 (S)	%	102	80-120	04/22/15 12:30	

LABORATORY CONTROL SAMPLE: 1554234

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	20	21.0	105	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			100	80-120	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

QC Batch: MSV/69103 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192103001, 60192103002, 60192103005, 60192103013

METHOD BLANK: 1557447 Matrix: Water
Associated Lab Samples: 60192103001, 60192103002, 60192103005, 60192103013

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1-Dichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
1,2-Dichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,2-Dichloropropane	ug/L	ND	1.0	04/27/15 10:45	
2-Butanone (MEK)	ug/L	ND	10.0	04/27/15 10:45	
2-Hexanone	ug/L	ND	10.0	04/27/15 10:45	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/27/15 10:45	
Acetone	ug/L	ND	10.0	04/27/15 10:45	
Benzene	ug/L	ND	1.0	04/27/15 10:45	
Bromodichloromethane	ug/L	ND	1.0	04/27/15 10:45	
Bromoform	ug/L	ND	1.0	04/27/15 10:45	
Bromomethane	ug/L	0.52J	5.0	04/27/15 10:45	
Carbon disulfide	ug/L	ND	5.0	04/27/15 10:45	
Carbon tetrachloride	ug/L	ND	1.0	04/27/15 10:45	
Chlorobenzene	ug/L	ND	1.0	04/27/15 10:45	
Chloroethane	ug/L	ND	1.0	04/27/15 10:45	
Chloroform	ug/L	ND	1.0	04/27/15 10:45	
Chloromethane	ug/L	0.14J	1.0	04/27/15 10:45	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/27/15 10:45	
Dibromochloromethane	ug/L	ND	1.0	04/27/15 10:45	
Ethylbenzene	ug/L	ND	1.0	04/27/15 10:45	
Methylene chloride	ug/L	ND	1.0	04/27/15 10:45	
Styrene	ug/L	ND	1.0	04/27/15 10:45	
Tetrachloroethene	ug/L	ND	1.0	04/27/15 10:45	
Toluene	ug/L	ND	1.0	04/27/15 10:45	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/27/15 10:45	
Trichloroethene	ug/L	ND	1.0	04/27/15 10:45	
Vinyl chloride	ug/L	ND	1.0	04/27/15 10:45	
Xylene (Total)	ug/L	ND	3.0	04/27/15 10:45	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/27/15 10:45	
4-Bromofluorobenzene (S)	%	100	80-120	04/27/15 10:45	
Toluene-d8 (S)	%	103	80-120	04/27/15 10:45	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

LABORATORY CONTROL SAMPLE: 1557448

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	22.7	113	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	21.8	109	73-121	
1,1,2-Trichloroethane	ug/L	20	22.3	111	80-120	
1,1-Dichloroethane	ug/L	20	23.1	116	80-120	
1,1-Dichloroethene	ug/L	20	21.3	107	80-120	
1,2-Dichloroethane	ug/L	20	21.5	107	81-120	
1,2-Dichloropropane	ug/L	20	21.6	108	80-120	
2-Butanone (MEK)	ug/L	100	99.4	99	67-122	
2-Hexanone	ug/L	100	104	104	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	76-120	
Acetone	ug/L	100	105	105	72-120	
Benzene	ug/L	20	22.2	111	80-120	
Bromodichloromethane	ug/L	20	21.9	109	80-120	
Bromoform	ug/L	20	21.1	105	73-138	
Bromomethane	ug/L	20	24.5	122	38-137	
Carbon disulfide	ug/L	20	21.9	109	71-129	
Carbon tetrachloride	ug/L	20	22.4	112	67-146	
Chlorobenzene	ug/L	20	22.7	113	80-120	
Chloroethane	ug/L	20	22.0	110	76-120	
Chloroform	ug/L	20	22.3	111	80-120	
Chloromethane	ug/L	20	19.2	96	34-165	
cis-1,2-Dichloroethene	ug/L	20	22.5	113	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.6	108	80-120	
Dibromochloromethane	ug/L	20	21.9	110	80-126	
Ethylbenzene	ug/L	20	22.4	112	80-120	
Methylene chloride	ug/L	20	21.3	106	80-120	
Styrene	ug/L	20	22.4	112	80-123	
Tetrachloroethene	ug/L	20	23.7	119	80-123	
Toluene	ug/L	20	22.0	110	80-120	
trans-1,2-Dichloroethene	ug/L	20	22.1	111	80-120	
trans-1,3-Dichloropropene	ug/L	20	22.3	111	80-129	
Trichloroethene	ug/L	20	21.8	109	80-120	
Vinyl chloride	ug/L	20	24.6	123	62-125	
Xylene (Total)	ug/L	60	68.3	114	80-120	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			99	80-120	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

QC Batch: MSV/68932 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60192103003, 60192103004, 60192103007

METHOD BLANK: 1552695 Matrix: Water
Associated Lab Samples: 60192103003, 60192103004, 60192103007

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1-Dichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1-Dichloroethene	ug/L	ND	1.0	04/19/15 14:26	
1,2-Dichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,2-Dichloropropane	ug/L	ND	1.0	04/19/15 14:26	
2-Butanone (MEK)	ug/L	ND	10.0	04/19/15 14:26	
2-Hexanone	ug/L	ND	10.0	04/19/15 14:26	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/19/15 14:26	
Acetone	ug/L	ND	10.0	04/19/15 14:26	
Benzene	ug/L	ND	1.0	04/19/15 14:26	
Bromodichloromethane	ug/L	ND	1.0	04/19/15 14:26	
Bromoform	ug/L	ND	1.0	04/19/15 14:26	
Bromomethane	ug/L	ND	5.0	04/19/15 14:26	
Carbon disulfide	ug/L	ND	5.0	04/19/15 14:26	
Carbon tetrachloride	ug/L	ND	1.0	04/19/15 14:26	
Chlorobenzene	ug/L	ND	1.0	04/19/15 14:26	
Chloroethane	ug/L	ND	1.0	04/19/15 14:26	
Chloroform	ug/L	ND	1.0	04/19/15 14:26	
Chloromethane	ug/L	0.16J	1.0	04/19/15 14:26	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/19/15 14:26	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/19/15 14:26	
Dibromochloromethane	ug/L	ND	1.0	04/19/15 14:26	
Ethylbenzene	ug/L	ND	1.0	04/19/15 14:26	
Methylene chloride	ug/L	ND	1.0	04/19/15 14:26	
Styrene	ug/L	ND	1.0	04/19/15 14:26	
Tetrachloroethene	ug/L	ND	1.0	04/19/15 14:26	
Toluene	ug/L	ND	1.0	04/19/15 14:26	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/19/15 14:26	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/19/15 14:26	
Trichloroethene	ug/L	ND	1.0	04/19/15 14:26	
Vinyl chloride	ug/L	ND	1.0	04/19/15 14:26	
Xylene (Total)	ug/L	ND	3.0	04/19/15 14:26	
1,2-Dichloroethane-d4 (S)	%	98	80-120	04/19/15 14:26	
4-Bromofluorobenzene (S)	%	101	80-120	04/19/15 14:26	
Toluene-d8 (S)	%	97	80-120	04/19/15 14:26	

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REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

LABORATORY CONTROL SAMPLE: 1552696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.5	103	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	17.6	88	73-121	
1,1,2-Trichloroethane	ug/L	20	20.0	100	80-120	
1,1-Dichloroethane	ug/L	20	21.0	105	80-120	
1,1-Dichloroethene	ug/L	20	20.7	104	80-120	
1,2-Dichloroethane	ug/L	20	21.1	106	81-120	
1,2-Dichloropropane	ug/L	20	20.2	101	80-120	
2-Butanone (MEK)	ug/L	100	98.7	99	67-122	
2-Hexanone	ug/L	100	96.2	96	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	76-120	
Acetone	ug/L	100	99.8	100	72-120	
Benzene	ug/L	20	20.9	104	80-120	
Bromodichloromethane	ug/L	20	20.6	103	80-120	
Bromoform	ug/L	20	19.5	97	73-138	
Bromomethane	ug/L	20	17.8	89	38-137	
Carbon disulfide	ug/L	20	19.1	95	71-129	
Carbon tetrachloride	ug/L	20	21.1	106	67-146	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	20.2	101	76-120	
Chloroform	ug/L	20	20.3	101	80-120	
Chloromethane	ug/L	20	21.1	106	34-165	
cis-1,2-Dichloroethene	ug/L	20	21.0	105	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.0	100	80-120	
Dibromochloromethane	ug/L	20	19.4	97	80-126	
Ethylbenzene	ug/L	20	19.5	97	80-120	
Methylene chloride	ug/L	20	20.7	103	80-120	
Styrene	ug/L	20	19.9	99	80-123	
Tetrachloroethene	ug/L	20	19.4	97	80-123	
Toluene	ug/L	20	19.7	98	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.9	99	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.9	94	80-129	
Trichloroethene	ug/L	20	21.1	105	80-120	
Vinyl chloride	ug/L	20	22.3	112	62-125	
Xylene (Total)	ug/L	60	60.0	100	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			97	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

QC Batch: MSV/69011
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60192103004

METHOD BLANK: 1554703
Matrix: Water
Associated Lab Samples: 60192103004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/22/15 18:38	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/22/15 18:38	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/22/15 18:38	
1,1-Dichloroethane	ug/L	ND	1.0	04/22/15 18:38	
1,1-Dichloroethene	ug/L	ND	1.0	04/22/15 18:38	
1,2-Dichloroethane	ug/L	ND	1.0	04/22/15 18:38	
1,2-Dichloropropane	ug/L	ND	1.0	04/22/15 18:38	
2-Butanone (MEK)	ug/L	ND	10.0	04/22/15 18:38	
2-Hexanone	ug/L	ND	10.0	04/22/15 18:38	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/22/15 18:38	
Acetone	ug/L	ND	10.0	04/22/15 18:38	
Benzene	ug/L	ND	1.0	04/22/15 18:38	
Bromodichloromethane	ug/L	ND	1.0	04/22/15 18:38	
Bromoform	ug/L	ND	1.0	04/22/15 18:38	
Bromomethane	ug/L	3.4J	5.0	04/22/15 18:38	
Carbon disulfide	ug/L	ND	5.0	04/22/15 18:38	
Carbon tetrachloride	ug/L	ND	1.0	04/22/15 18:38	
Chlorobenzene	ug/L	ND	1.0	04/22/15 18:38	
Chloroethane	ug/L	ND	1.0	04/22/15 18:38	
Chloroform	ug/L	ND	1.0	04/22/15 18:38	
Chloromethane	ug/L	ND	1.0	04/22/15 18:38	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 18:38	
Dibromochloromethane	ug/L	ND	1.0	04/22/15 18:38	
Ethylbenzene	ug/L	ND	1.0	04/22/15 18:38	
Methylene chloride	ug/L	0.22J	1.0	04/22/15 18:38	
Styrene	ug/L	ND	1.0	04/22/15 18:38	
Tetrachloroethene	ug/L	ND	1.0	04/22/15 18:38	
Toluene	ug/L	ND	1.0	04/22/15 18:38	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 18:38	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 18:38	
Vinyl chloride	ug/L	ND	1.0	04/22/15 18:38	
Xylene (Total)	ug/L	ND	3.0	04/22/15 18:38	
1,2-Dichloroethane-d4 (S)	%	100	80-120	04/22/15 18:38	
4-Bromofluorobenzene (S)	%	100	80-120	04/22/15 18:38	
Toluene-d8 (S)	%	100	80-120	04/22/15 18:38	

LABORATORY CONTROL SAMPLE: 1554704

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.0	100	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

LABORATORY CONTROL SAMPLE: 1554704

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,2,2-Tetrachloroethane	ug/L	20	20.2	101	73-121	
1,1,2-Trichloroethane	ug/L	20	19.9	99	80-120	
1,1-Dichloroethane	ug/L	20	19.5	98	80-120	
1,1-Dichloroethene	ug/L	20	18.4	92	80-120	
1,2-Dichloroethane	ug/L	20	20.0	100	81-120	
1,2-Dichloropropane	ug/L	20	19.6	98	80-120	
2-Butanone (MEK)	ug/L	100	103	103	67-122	
2-Hexanone	ug/L	100	106	106	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	100	100	76-120	
Acetone	ug/L	100	103	103	72-120	
Benzene	ug/L	20	19.2	96	80-120	
Bromodichloromethane	ug/L	20	21.3	106	80-120	
Bromoform	ug/L	20	19.2	96	73-138	
Bromomethane	ug/L	20	20.2	101	38-137	
Carbon disulfide	ug/L	20	17.0	85	71-129	
Carbon tetrachloride	ug/L	20	18.2	91	67-146	
Chlorobenzene	ug/L	20	19.7	99	80-120	
Chloroethane	ug/L	20	18.9	95	76-120	
Chloroform	ug/L	20	19.3	97	80-120	
Chloromethane	ug/L	20	17.6	88	34-165	
cis-1,3-Dichloropropene	ug/L	20	20.7	104	80-120	
Dibromochloromethane	ug/L	20	19.0	95	80-126	
Ethylbenzene	ug/L	20	19.2	96	80-120	
Methylene chloride	ug/L	20	20.1	101	80-120	
Styrene	ug/L	20	21.0	105	80-123	
Tetrachloroethene	ug/L	20	19.3	97	80-123	
Toluene	ug/L	20	19.7	99	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.3	96	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.1	106	80-129	
Vinyl chloride	ug/L	20	19.9	100	62-125	
Xylene (Total)	ug/L	60	59.4	99	80-120	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			100	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

QC Batch: WET/54213 Analysis Method: SM 2320B
QC Batch Method: SM 2320B Analysis Description: 2320B Alkalinity
Associated Lab Samples: 60192103001, 60192103002, 60192103003, 60192103004, 60192103005, 60192103006

METHOD BLANK: 1553047 Matrix: Water
Associated Lab Samples: 60192103001, 60192103002, 60192103003, 60192103004, 60192103005, 60192103006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	20.0	04/21/15 08:11	
Alkalinity, Total as CaCO3	mg/L	ND	20.0	04/21/15 08:11	
Alkalinity,Bicarbonate (CaCO3)	mg/L	ND	20.0	04/21/15 08:11	

LABORATORY CONTROL SAMPLE: 1553048

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Alkalinity, Total as CaCO3	mg/L	500	519	104	90-110	

SAMPLE DUPLICATE: 1553049

Parameter	Units	60192103001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	242	244	1	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	242	244	1	10	

SAMPLE DUPLICATE: 1553339

Parameter	Units	60191963006 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO3)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO3	mg/L	467	476	2	10	
Alkalinity,Bicarbonate (CaCO3)	mg/L	467	476	2	10	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

QC Batch: WET/54196 Analysis Method: SM 4500-S-2 D
QC Batch Method: SM 4500-S-2 D Analysis Description: 4500S2D Sulfide, Total
Associated Lab Samples: 60192103001, 60192103002, 60192103003, 60192103004, 60192103005, 60192103006

METHOD BLANK: 1552662 Matrix: Water
Associated Lab Samples: 60192103001, 60192103002, 60192103003, 60192103004, 60192103005, 60192103006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	04/19/15 12:42	

LABORATORY CONTROL SAMPLE: 1552663

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	.5	0.49	98	80-120	

MATRIX SPIKE SAMPLE: 1552664

Parameter	Units	60191960018 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	ND	.5	0.34	68	75-125	M1

SAMPLE DUPLICATE: 1552666

Parameter	Units	60191960019 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

QC Batch: WETA/33859 Analysis Method: EPA 300.0
QC Batch Method: EPA 300.0 Analysis Description: 300.0 IC Anions
Associated Lab Samples: 60192103001, 60192103002, 60192103003, 60192103004, 60192103005, 60192103006

METHOD BLANK: 1560056 Matrix: Water
Associated Lab Samples: 60192103001, 60192103002, 60192103003, 60192103004, 60192103005, 60192103006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	04/30/15 06:56	
Sulfate	mg/L	ND	1.0	04/30/15 06:56	

METHOD BLANK: 1560105 Matrix: Water
Associated Lab Samples: 60192103003, 60192103004

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Sulfate	mg/L	ND	1.0	05/01/15 08:57	

LABORATORY CONTROL SAMPLE: 1560057

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.1	102	90-110	
Sulfate	mg/L	5	5.1	101	90-110	

LABORATORY CONTROL SAMPLE: 1560106

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1558906 1558907

Parameter	Units	60192064001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	183	100	100	283	284	101	101	80-120	0	15	
Sulfate	mg/L	375	250	250	625	652	100	111	80-120	4	15	

MATRIX SPIKE SAMPLE: 1558908

Parameter	Units	60192103001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	30.6	50	79.3	97	80-120	
Sulfate	mg/L	102	50	155	105	80-120	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

QC Batch: WETA/33747 Analysis Method: EPA 350.1
QC Batch Method: EPA 350.1 Analysis Description: 350.1 Ammonia
Associated Lab Samples: 60192103001, 60192103002, 60192103003, 60192103004, 60192103005, 60192103006

METHOD BLANK: 1554389 Matrix: Water
Associated Lab Samples: 60192103001, 60192103002, 60192103003, 60192103004, 60192103005, 60192103006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Ammonia	mg/L	ND	0.10	04/25/15 07:28	

LABORATORY CONTROL SAMPLE: 1554390

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	2	2.1	103	90-110	

MATRIX SPIKE SAMPLE: 1554391

Parameter	Units	60192103001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	ND	2	1.5	73	90-110	M1

MATRIX SPIKE SAMPLE: 1554392

Parameter	Units	60192108001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Ammonia	mg/L	0.69	2	2.6	95	90-110	

SAMPLE DUPLICATE: 1554393

Parameter	Units	60192155002 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Ammonia	mg/L	ND	ND		18	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

QC Batch: WETA/33673 Analysis Method: EPA 353.2
QC Batch Method: EPA 353.2 Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Associated Lab Samples: 60192103001, 60192103002, 60192103003, 60192103004, 60192103005, 60192103006

METHOD BLANK: 1552021 Matrix: Water
Associated Lab Samples: 60192103001, 60192103002, 60192103003, 60192103004, 60192103005, 60192103006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	04/17/15 14:44	
Nitrogen, Nitrite	mg/L	ND	0.10	04/17/15 14:44	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	04/17/15 14:44	

LABORATORY CONTROL SAMPLE: 1552022

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.6	1.7	107	85-115	
Nitrogen, Nitrite	mg/L	.4	0.37	92	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	104	90-110	

MATRIX SPIKE SAMPLE: 1552023

Parameter	Units	60192103001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	ND	1.6	2.0	126	85-115	M1
Nitrogen, Nitrite	mg/L	ND	.4	0.52	129	90-110	M1
Nitrogen, NO2 plus NO3	mg/L	ND	2	2.5	127	90-110	M1

SAMPLE DUPLICATE: 1552024

Parameter	Units	60192122003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	2.6	2.6	1	20	
Nitrogen, Nitrite	mg/L	0.80	0.81	1	20	
Nitrogen, NO2 plus NO3	mg/L	3.4	3.4	1	20	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

QC Batch: WETA/33823 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Associated Lab Samples: 60192103001, 60192103002, 60192103003, 60192103004, 60192103005, 60192103006

METHOD BLANK: 1557715 Matrix: Water
Associated Lab Samples: 60192103001, 60192103002, 60192103003, 60192103004, 60192103005, 60192103006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	04/28/15 08:15	

LABORATORY CONTROL SAMPLE: 1557716

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.1	101	80-120	

MATRIX SPIKE SAMPLE: 1557718

Parameter	Units	60192725001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	2.0	5	5.1	63	80-120	M1

SAMPLE DUPLICATE: 1557717

Parameter	Units	60191960011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	ND		25	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

QC Batch: WETA/7946 Analysis Method: SM 4500-P E
QC Batch Method: SM4500-P B Analysis Description: SM4500P-E, Total Phosphorus
Associated Lab Samples: 60192103001, 60192103002, 60192103003, 60192103004, 60192103005, 60192103006

METHOD BLANK: 135239 Matrix: Water
Associated Lab Samples: 60192103001, 60192103002, 60192103003, 60192103004, 60192103005, 60192103006

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Phosphate as P04	mg/L	ND	0.030	04/22/15 15:13	

LABORATORY CONTROL SAMPLE: 135240

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Phosphate as P04	mg/L	1.5	1.5	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 135241 135242

Parameter	Units	60192103001 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	2.1	1.9	122	109	80-120	10	20	M1

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REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

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

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

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

LABORATORIES

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

BATCH QUALIFIERS

Batch: MSV/68932
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/68972
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/68975
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/68979
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/68990
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/69011
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.
Batch: MSV/69103
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

1e Field pH

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

QUALIFIERS

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
H6	Analysis initiated outside of the 15 minute EPA recommended holding time.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60192103001	MW-38-201504	EPA 8015 - Alcohol	GCSV/3750		
60192103002	MW-58-201504	EPA 8015 - Alcohol	GCSV/3750		
60192103003	ITMW-18-201504	EPA 8015 - Alcohol	GCSV/3750		
60192103004	MW-25-201504	EPA 8015 - Alcohol	GCSV/3750		
60192103005	MW-56-201504	EPA 8015 - Alcohol	GCSV/3750		
60192103006	MW-57-201504	EPA 8015 - Alcohol	GCSV/3750		
60192103001	MW-38-201504	EPA 3010	MPRP/31482	EPA 6010	ICP/23408
60192103002	MW-58-201504	EPA 3010	MPRP/31482	EPA 6010	ICP/23408
60192103003	ITMW-18-201504	EPA 3010	MPRP/31482	EPA 6010	ICP/23408
60192103004	MW-25-201504	EPA 3010	MPRP/31482	EPA 6010	ICP/23408
60192103005	MW-56-201504	EPA 3010	MPRP/31482	EPA 6010	ICP/23408
60192103006	MW-57-201504	EPA 3010	MPRP/31482	EPA 6010	ICP/23408
60192103001	MW-38-201504	EPA 5030B/8260	MSV/68972		
60192103001	MW-38-201504	EPA 5030B/8260	MSV/69103		
60192103002	MW-58-201504	EPA 5030B/8260	MSV/68972		
60192103002	MW-58-201504	EPA 5030B/8260	MSV/69103		
60192103005	MW-56-201504	EPA 5030B/8260	MSV/68972		
60192103005	MW-56-201504	EPA 5030B/8260	MSV/69103		
60192103006	MW-57-201504	EPA 5030B/8260	MSV/68975		
60192103008	EB-05-201504	EPA 5030B/8260	MSV/68975		
60192103008	EB-05-201504	EPA 5030B/8260	MSV/68990		
60192103009	EB-03-201504	EPA 5030B/8260	MSV/68975		
60192103010	EB-06-201504	EPA 5030B/8260	MSV/68975		
60192103011	EB-01-201504	EPA 5030B/8260	MSV/68975		
60192103012	TB-14-201504	EPA 5030B/8260	MSV/68979		
60192103013	DUP-08-201504	EPA 5030B/8260	MSV/69103		
60192103014	TB-15-201504	EPA 5030B/8260	MSV/68979		
60192103003	ITMW-18-201504	EPA 5030B/8260	MSV/68932		
60192103004	MW-25-201504	EPA 5030B/8260	MSV/68932		
60192103004	MW-25-201504	EPA 5030B/8260	MSV/69011		
60192103007	DUP-04-201504	EPA 5030B/8260	MSV/68932		
60192103001	MW-38-201504	SM 2320B	WET/54213		
60192103002	MW-58-201504	SM 2320B	WET/54213		
60192103003	ITMW-18-201504	SM 2320B	WET/54213		
60192103004	MW-25-201504	SM 2320B	WET/54213		
60192103005	MW-56-201504	SM 2320B	WET/54213		
60192103006	MW-57-201504	SM 2320B	WET/54213		
60192103001	MW-38-201504	SM 3500-Fe B#4	WET/54376		
60192103002	MW-58-201504	SM 3500-Fe B#4	WET/54376		
60192103003	ITMW-18-201504	SM 3500-Fe B#4	WET/54376		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60192103004	**MW-25-201504**	SM 3500-Fe B#4	WET/54376		
60192103005	**MW-56-201504**	SM 3500-Fe B#4	WET/54376		
60192103006	**MW-57-201504**	SM 3500-Fe B#4	WET/54376		
60192103001	**MW-38-201504**	SM 4500-H+B	WET/54412		
60192103003	**ITMW-18-201504**	SM 4500-H+B	WET/54412		
60192103004	**MW-25-201504**	SM 4500-H+B	WET/54412		
60192103005	**MW-56-201504**	SM 4500-H+B	WET/54412		
60192103006	**MW-57-201504**	SM 4500-H+B	WET/54412		
60192103001	**MW-38-201504**	SM 4500-S-2 D	WET/54196		
60192103002	**MW-58-201504**	SM 4500-S-2 D	WET/54196		
60192103003	**ITMW-18-201504**	SM 4500-S-2 D	WET/54196		
60192103004	**MW-25-201504**	SM 4500-S-2 D	WET/54196		
60192103005	**MW-56-201504**	SM 4500-S-2 D	WET/54196		
60192103006	**MW-57-201504**	SM 4500-S-2 D	WET/54196		
60192103001	**MW-38-201504**	EPA 300.0	WETA/33859		
60192103002	**MW-58-201504**	EPA 300.0	WETA/33859		
60192103003	**ITMW-18-201504**	EPA 300.0	WETA/33859		
60192103004	**MW-25-201504**	EPA 300.0	WETA/33859		
60192103005	**MW-56-201504**	EPA 300.0	WETA/33859		
60192103006	**MW-57-201504**	EPA 300.0	WETA/33859		
60192103001	**MW-38-201504**	EPA 350.1	WETA/33747		
60192103002	**MW-58-201504**	EPA 350.1	WETA/33747		
60192103003	**ITMW-18-201504**	EPA 350.1	WETA/33747		
60192103004	**MW-25-201504**	EPA 350.1	WETA/33747		
60192103005	**MW-56-201504**	EPA 350.1	WETA/33747		
60192103006	**MW-57-201504**	EPA 350.1	WETA/33747		
60192103001	**MW-38-201504**	EPA 353.2	WETA/33673		
60192103002	**MW-58-201504**	EPA 353.2	WETA/33673		
60192103003	**ITMW-18-201504**	EPA 353.2	WETA/33673		
60192103004	**MW-25-201504**	EPA 353.2	WETA/33673		
60192103005	**MW-56-201504**	EPA 353.2	WETA/33673		
60192103006	**MW-57-201504**	EPA 353.2	WETA/33673		
60192103001	**MW-38-201504**	SM 4500-CO2 D	WETA/33877		
60192103003	**ITMW-18-201504**	SM 4500-CO2 D	WETA/33877		
60192103004	**MW-25-201504**	SM 4500-CO2 D	WETA/33877		
60192103005	**MW-56-201504**	SM 4500-CO2 D	WETA/33877		
60192103006	**MW-57-201504**	SM 4500-CO2 D	WETA/33877		
60192103001	**MW-38-201504**	SM 5310C	WETA/33823		
60192103002	**MW-58-201504**	SM 5310C	WETA/33823		
60192103003	**ITMW-18-201504**	SM 5310C	WETA/33823		
60192103004	**MW-25-201504**	SM 5310C	WETA/33823		
60192103005	**MW-56-201504**	SM 5310C	WETA/33823		
60192103006	**MW-57-201504**	SM 5310C	WETA/33823		
60192103001	**MW-38-201504**	SM4500-P B	WETA/7946	SM 4500-P E	WETA/7947
60192103002	**MW-58-201504**	SM4500-P B	WETA/7946	SM 4500-P E	WETA/7947

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60192103003	**ITMW-18-201504**	SM4500-P B	WETA/7946	SM 4500-P E	WETA/7947
60192103004	**MW-25-201504**	SM4500-P B	WETA/7946	SM 4500-P E	WETA/7947
60192103005	**MW-56-201504**	SM4500-P B	WETA/7946	SM 4500-P E	WETA/7947
60192103006	**MW-57-201504**	SM4500-P B	WETA/7946	SM 4500-P E	WETA/7947

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Sample Condition Upon Receipt

WO# : 60192103

60192103

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☐

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 ☐ Ice

Thermometer Used: CF -0.1 T-239 / CF -1.8 T-194 **Type of Ice:** Wet Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 5.7 / 5.5

Temperature should be above freezing to 6°C

Date and initials of person examining contents: 8 4/17/14

Chain of Custody present:	☐Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☐Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☐Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☐Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☐Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☐No ☐N/A	6. Fe^{+}, NO_2 NO_3
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, O&G, WI-DRO (water)	☐Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes ☐No ☐N/A	
Pace Trip Blank lot # (if purchased): Jan 05		15.
Headspace in VOA vials (>6mm):	☐Yes ☐No ☐N/A	2 @ 3 MW57
		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:

IRW0-16448

Project Manager Review: MW Date: 4/17/15

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 2

Section A — Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B — Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C — Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D — Required Client Information

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

Valid Matrix Codes: 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 Acetate	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-38-201504 BP3U, BP3N, BP3S	WT	G			4/16/15	1100			X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	6092103 001
2	MW-58-201504	WT	G			4/16/15	1015			X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	3(DG9H) BP3U, BP3N, BP3S 002
3	ITMW-18-201504	WT	G	3(DG9U)	3(OTHR)	4/16/15	1055			X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	7day hold 003
4	Dup-04-201504 3(OTHR)	WT	G			4/16/15	1055						X						X										7day hold 004
5	Dup-06-201504	WT	G			4/16/15	0944						X						X										005
6	MW-25-201504 BP3U, BP3S, BP3N	WT	G	3(DG9U)	3(OTHR)	4/16/15	1325			X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	7day hold 006
7	EB-05-201504 3(DG9H)	WT	G			4/16/15	1510						X						X										007
8	EB-03-201504	WT	G			4/16/15	1505						X						X										008
9	EB-06-201504	WT	G			4/16/15	1520						X						X										009
10	MW-56-201504 3(DG9U) BP3U, BP3N	WT	G	BP3S, BP3U, BP3N		4/16/15	1330			X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	010
11	MW-57-201504	WT	G			4/16/15	1230			X	X	X	X	X					X	X	X	X	X	X	X	X	X	X	011
12	EB-01-201504 3(DG9H)	WT	G			4/16/15	1500						X						X										012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Level IV data package required	Victoria Siegler / Environ	4/16/15	1800	[illegible]	4/17/15	10:27	5.7	Y	N	Y
	[illegible] Stonestreet	4/17/15	1020				5.5	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Siegler

SIGNATURE of SAMPLER: Victoria Siegler DATE Signed (MM/DD/YY): 4/16/15

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 2 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:	Tamara Gleason
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	MJ Walls
Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

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

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

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	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TB-14-201504 2CDG9HDTB					4/16/15			2				X						X		012
2	Dup-08-201504 3CDG9HD					4/16/15	1435		3				X						X		013
3	TB-15-201504 2CDG9HDTB					4/16/15			2				X						X		014
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Victoria Siegler / Environ	4/16/15	1800	[illegible]	4/17/15	1021	5.7	Y	N	Y
							5.5	Y	Y	Y

SAMPLE NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Siegler

SIGNATURE of SAMPLER: Victoria Siegler

DATE Signed (MM/DD/YY): 4/16/15

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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

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

April 24, 2015

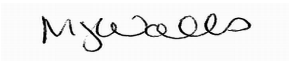
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH, AR
Pace Project No.: 60192138

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 17, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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

CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60192138

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

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60192138

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60192138001	**MW-97-201504**	Water	04/16/15 08:05	04/17/15 10:21
60192138002	**MW-99-201504**	Water	04/16/15 11:04	04/17/15 10:21
60192138003	**DUP-06-201504**	Water	04/16/15 09:46	04/17/15 10:21
60192138004	**MW-96-201504**	Water	04/16/15 09:46	04/17/15 10:21
60192138005	**MW-98-201504**	Water	04/16/15 12:47	04/17/15 10:21

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60192138

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60192138001	**MW-97-201504**	EPA 5030B/8260	PGH	38
60192138002	**MW-99-201504**	EPA 5030B/8260	PGH	38
60192138003	**DUP-06-201504**	EPA 5030B/8260	PGH	38
60192138004	**MW-96-201504**	EPA 5030B/8260	PGH	38
60192138005	**MW-98-201504**	EPA 5030B/8260	PGH	38

REPORT OF LABORATORY ANALYSIS

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

PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60192138

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 24, 2015

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

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

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

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

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

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

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

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

QC Batch: MSV/68979

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

- LCS (Lab ID: 1553780)
  - Vinyl chloride

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

QC Batch: MSV/68979

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

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60192138

Sample: MW-97-201504 **Lab ID: 60192138001** Collected: 04/16/15 08:05 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/22/15 04:41	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 04:41	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 04:41	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 04:41	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 04:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 04:41	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 04:41	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 04:41	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 04:41	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 04:41	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 04:41	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 04:41	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 04:41	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 04:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 04:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 04:41	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 04:41	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 04:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 04:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 04:41	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 04:41	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 04:41	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 04:41	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 04:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 04:41	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 04:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 04:41	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 04:41	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 04:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 04:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 04:41	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 04:41	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 04:41	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 04:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	92	%	80-120		1		04/22/15 04:41	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		04/22/15 04:41	17060-07-0	
Toluene-d8 (S)	90	%	80-120		1		04/22/15 04:41	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 04:41		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60192138

Sample: MW-99-201504 **Lab ID: 60192138002** Collected: 04/16/15 11:04 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/22/15 04:56	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 04:56	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 04:56	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 04:56	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 04:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 04:56	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 04:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 04:56	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 04:56	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 04:56	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 04:56	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 04:56	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 04:56	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 04:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 04:56	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 04:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 04:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 04:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 04:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 04:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 04:56	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 04:56	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 04:56	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 04:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 04:56	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 04:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 04:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 04:56	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 04:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 04:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 04:56	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 04:56	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 04:56	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 04:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		04/22/15 04:56	460-00-4	
1,2-Dichloroethane-d4 (S)	107	%	80-120		1		04/22/15 04:56	17060-07-0	
Toluene-d8 (S)	93	%	80-120		1		04/22/15 04:56	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 04:56		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60192138

Sample: DUP-06-201504 **Lab ID: 60192138003** Collected: 04/16/15 09:46 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/22/15 05:10	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 05:10	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 05:10	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 05:10	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 05:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 05:10	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 05:10	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 05:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 05:10	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:10	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 05:10	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 05:10	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 05:10	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:10	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 05:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 05:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 05:10	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 05:10	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 05:10	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 05:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 05:10	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 05:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:10	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:10	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 05:10	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:10	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:10	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 05:10	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 05:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		04/22/15 05:10	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		04/22/15 05:10	17060-07-0	
Toluene-d8 (S)	89	%	80-120		1		04/22/15 05:10	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 05:10		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60192138

Sample: MW-96-201504 **Lab ID: 60192138004** Collected: 04/16/15 09:46 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/22/15 05:25	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 05:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 05:25	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 05:25	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 05:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 05:25	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 05:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 05:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 05:25	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:25	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 05:25	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 05:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 05:25	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 05:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 05:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 05:25	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 05:25	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 05:25	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 05:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 05:25	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 05:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:25	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 05:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:25	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 05:25	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 05:25	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		04/22/15 05:25	460-00-4	
1,2-Dichloroethane-d4 (S)	108	%	80-120		1		04/22/15 05:25	17060-07-0	
Toluene-d8 (S)	89	%	80-120		1		04/22/15 05:25	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 05:25		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60192138

Sample: MW-98-201504 **Lab ID: 60192138005** Collected: 04/16/15 12:47 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/22/15 05:40	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 05:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 05:40	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 05:40	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 05:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 05:40	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 05:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 05:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 05:40	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:40	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 05:40	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 05:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 05:40	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 05:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 05:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 05:40	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 05:40	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 05:40	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 05:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 05:40	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 05:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:40	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 05:40	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:40	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:40	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 05:40	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 05:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		04/22/15 05:40	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		04/22/15 05:40	17060-07-0	
Toluene-d8 (S)	89	%	80-120		1		04/22/15 05:40	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 05:40		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60192138

QC Batch: MSV/68979 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192138001, 60192138002, 60192138003, 60192138004, 60192138005

METHOD BLANK: 1553779 Matrix: Water
Associated Lab Samples: 60192138001, 60192138002, 60192138003, 60192138004, 60192138005

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,1-Dichloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,1-Dichloroethene	ug/L	ND	1.0	04/22/15 03:26	
1,2-Dichloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,2-Dichloropropane	ug/L	ND	1.0	04/22/15 03:26	
2-Butanone (MEK)	ug/L	ND	10.0	04/22/15 03:26	
2-Hexanone	ug/L	ND	10.0	04/22/15 03:26	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/22/15 03:26	
Acetone	ug/L	ND	10.0	04/22/15 03:26	
Benzene	ug/L	ND	1.0	04/22/15 03:26	
Bromodichloromethane	ug/L	ND	1.0	04/22/15 03:26	
Bromoform	ug/L	ND	1.0	04/22/15 03:26	
Bromomethane	ug/L	ND	5.0	04/22/15 03:26	
Carbon disulfide	ug/L	ND	5.0	04/22/15 03:26	
Carbon tetrachloride	ug/L	ND	1.0	04/22/15 03:26	
Chlorobenzene	ug/L	ND	1.0	04/22/15 03:26	
Chloroethane	ug/L	ND	1.0	04/22/15 03:26	
Chloroform	ug/L	ND	1.0	04/22/15 03:26	
Chloromethane	ug/L	ND	1.0	04/22/15 03:26	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 03:26	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 03:26	
Dibromochloromethane	ug/L	ND	1.0	04/22/15 03:26	
Ethylbenzene	ug/L	ND	1.0	04/22/15 03:26	
Methylene chloride	ug/L	ND	1.0	04/22/15 03:26	
Styrene	ug/L	ND	1.0	04/22/15 03:26	
Tetrachloroethene	ug/L	ND	1.0	04/22/15 03:26	
Toluene	ug/L	ND	1.0	04/22/15 03:26	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 03:26	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 03:26	
Trichloroethene	ug/L	ND	1.0	04/22/15 03:26	
Vinyl chloride	ug/L	ND	1.0	04/22/15 03:26	
Xylene (Total)	ug/L	ND	3.0	04/22/15 03:26	
1,2-Dichloroethane-d4 (S)	%	99	80-120	04/22/15 03:26	
4-Bromofluorobenzene (S)	%	96	80-120	04/22/15 03:26	
Toluene-d8 (S)	%	90	80-120	04/22/15 03:26	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60192138

LABORATORY CONTROL SAMPLE: 1553780

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	23.3	116	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	15.9	79	73-121	
1,1,2-Trichloroethane	ug/L	20	19.0	95	80-120	
1,1-Dichloroethane	ug/L	20	22.3	112	80-120	
1,1-Dichloroethene	ug/L	20	23.1	116	80-120	
1,2-Dichloroethane	ug/L	20	22.9	115	81-120	
1,2-Dichloropropane	ug/L	20	22.2	111	80-120	
2-Butanone (MEK)	ug/L	100	109	109	67-122	
2-Hexanone	ug/L	100	94.1	94	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	114	114	76-120	
Acetone	ug/L	100	109	109	72-120	
Benzene	ug/L	20	23.0	115	80-120	
Bromodichloromethane	ug/L	20	23.5	117	80-120	
Bromoform	ug/L	20	20.4	102	73-138	
Bromomethane	ug/L	20	18.2	91	38-137	
Carbon disulfide	ug/L	20	20.1	101	71-129	
Carbon tetrachloride	ug/L	20	23.9	120	67-146	
Chlorobenzene	ug/L	20	20.1	101	80-120	
Chloroethane	ug/L	20	20.4	102	76-120	
Chloroform	ug/L	20	21.9	110	80-120	
Chloromethane	ug/L	20	19.6	98	34-165	
cis-1,2-Dichloroethene	ug/L	20	22.4	112	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.7	108	80-120	
Dibromochloromethane	ug/L	20	19.4	97	80-126	
Ethylbenzene	ug/L	20	18.6	93	80-120	
Methylene chloride	ug/L	20	23.3	117	80-120	
Styrene	ug/L	20	19.1	95	80-123	
Tetrachloroethene	ug/L	20	19.2	96	80-123	
Toluene	ug/L	20	19.3	96	80-120	
trans-1,2-Dichloroethene	ug/L	20	21.6	108	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.0	90	80-129	
Trichloroethene	ug/L	20	23.5	118	80-120	
Vinyl chloride	ug/L	20	25.3	126	62-125	L0
Xylene (Total)	ug/L	60	57.7	96	80-120	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			92	80-120	
Toluene-d8 (S)	%			91	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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

QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60192138

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

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

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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/68979

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

ANALYTE QUALIFIERS

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

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60192138

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60192138001	**MW-97-201504**	EPA 5030B/8260	MSV/68979		
60192138002	**MW-99-201504**	EPA 5030B/8260	MSV/68979		
60192138003	**DUP-06-201504**	EPA 5030B/8260	MSV/68979		
60192138004	**MW-96-201504**	EPA 5030B/8260	MSV/68979		
60192138005	**MW-98-201504**	EPA 5030B/8260	MSV/68979		

Pace Analytical
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Sample Condition Upon Receipt

WO# : 60192138

60192138

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☑

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

Custody Seal on Cooler/Box Present: Yes ☑ No ☐ Seals intact: Yes ☑ No ☐

Packing Material: Bubble Wrap ☐ Bubble Bags ☐ Foam ☑ None ☐ Other ☑ Zip

Thermometer Used: CF -0.1 T-239 / CF -1.8 T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 5.7/5.5

Date and initials of person examining contents: 8 4/17/15

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	6.
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, O&G, WI-DRO (water)	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes ☑No ☐N/A	
Pace Trip Blank lot # (if purchased): _____		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

MTW

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MJ Walls Date: 4/17/15

Pace Analytical
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B+GC

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:	Tammy Gleason
Address:	7500 College Blvd., Ste. 925	Copy To:	Tammy Gleason	Company Name:	Environ
	Overland Park, KS 66210			Address:	250 Monroe Ave. NW Grand Rapids
Email To:	wstonestreet@environcorp.com	Purchase Order No.:	NA	Pace Quote Reference:	Michigan, 49503
Phone: 913-553-5926	Fax:	Project Name:	Fort Smith, AR	Pace Project Manager:	MJ Walls
Requested Due Date/TAT:		Project Number:		Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

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

Valid Matrix Codes: 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 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 60192138
1	MW-97-201504	WT	G			4/16/15	0805		3				X					X											001
2	MW-99-201504	WT	G			4/16/15	1104		3				X					X											002
3	Dup-01-201504	WT	G			4/16/15	0946		3				X					X											003
4	MW-96-201504	WT	G			4/16/15	0946		3				X					X											004
5	MW-98-201504	WT	G			4/16/15	1247		3				X					X											005
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)
Level IV data package required	Victoria Sirgfen / Environ	4/16/15	1800							
	Wendy Stonestreet	4/17/15	1020	[illegible] 4/17/15		1021	5.7	Y	N	Y
							5.5	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Sirgfen

SIGNATURE of SAMPLER: Victoria Sirgfen DATE Signed (MM/DD/YY): 4/16/15

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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

May 01, 2015

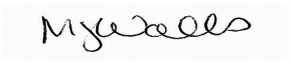
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 17, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

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

Sincerely,



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

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

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

CERTIFICATIONS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

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

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60192139001	**MW-83-201504**	Water	04/16/15 13:50	04/17/15 10:21
60192139002	**MW-84-201504**	Water	04/16/15 08:45	04/17/15 10:21
60192139003	**MW-179-201504**	Water	04/16/15 14:30	04/17/15 10:21
60192139004	**MW-95-201504**	Water	04/16/15 15:01	04/17/15 10:21
60192139005	**MW-94-201504**	Water	04/16/15 13:10	04/17/15 10:21
60192139006	**MW-180-201504**	Water	04/16/15 14:45	04/17/15 10:21
60192139007	**MW-24-201504**	Water	04/16/15 11:30	04/17/15 10:21
60192139008	**MW-178-201504**	Water	04/16/15 14:15	04/17/15 10:21
60192139009	**MW-85-201504**	Water	04/16/15 14:58	04/17/15 10:21
60192139010	**MW-86-201504**	Water	04/16/15 13:40	04/17/15 10:21
60192139011	**MW-92-201504**	Water	04/16/15 12:05	04/17/15 10:21
60192139012	**MW-172-201504**	Water	04/16/15 09:52	04/17/15 10:21
60192139013	**MW-93-201504**	Water	04/16/15 14:05	04/17/15 10:21
60192139014	**MW-88-201504**	Water	04/16/15 09:00	04/17/15 10:21
60192139015	**MW-89-201504**	Water	04/16/15 10:05	04/17/15 10:21
60192139016	**MW-91-201504**	Water	04/16/15 11:15	04/17/15 10:21
60192139017	**MW-87-201504**	Water	04/16/15 12:25	04/17/15 10:21

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SAMPLE ANALYTE COUNT

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60192139001	**MW-83-201504**	EPA 5030B/8260	PGH	38
60192139002	**MW-84-201504**	EPA 5030B/8260	PGH	38
60192139003	**MW-179-201504**	EPA 5030B/8260	PGH	38
60192139004	**MW-95-201504**	EPA 5030B/8260	PGH	38
60192139005	**MW-94-201504**	EPA 5030B/8260	PGH	38
60192139006	**MW-180-201504**	EPA 5030B/8260	PGH	38
60192139007	**MW-24-201504**	EPA 5030B/8260	PGH	38
60192139008	**MW-178-201504**	EPA 5030B/8260	PGH	38
60192139009	**MW-85-201504**	EPA 5030B/8260	JTK	38
60192139010	**MW-86-201504**	EPA 5030B/8260	JTK, PGH	38
60192139011	**MW-92-201504**	EPA 5030B/8260	JTK, PGH	38
60192139012	**MW-172-201504**	EPA 5030B/8260	JTK, PGH	38
60192139013	**MW-93-201504**	EPA 5030B/8260	PGH	38
60192139014	**MW-88-201504**	EPA 5030B/8260	PGH	38
60192139015	**MW-89-201504**	EPA 5030B/8260	PGH	38
60192139016	**MW-91-201504**	EPA 5030B/8260	PGH	38
60192139017	**MW-87-201504**	EPA 5030B/8260	PGH	38

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PROJECT NARRATIVE

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: May 01, 2015

General Information:
17 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: MSV/69011

B: Analyte was detected in the associated method blank.
- BLANK for HBN 382200 [MSV/6901 (Lab ID: 1554703)
  - Bromomethane

QC Batch: MSV/69103

B: Analyte was detected in the associated method blank.
- BLANK for HBN 382792 [MSV/6910 (Lab ID: 1557447)
  - Bromomethane
  - Chloromethane

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/68979

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- LCS (Lab ID: 1553780)
  - Vinyl chloride

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/68932

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: May 01, 2015

QC Batch: MSV/68946
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/68968
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/68979
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/69011
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/69103
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-83-201504 **Lab ID: 60192139001** Collected: 04/16/15 13:50 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**17.1**	ug/L	10.0	5.0	1		04/21/15 12:06	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 12:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 12:06	75-27-4	
Bromoform	**0.54J**	ug/L	1.0	0.50	1		04/21/15 12:06	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 12:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 12:06	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 12:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 12:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 12:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 12:06	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 12:06	67-66-3	
Chloromethane	**2.5**	ug/L	1.0	0.50	1		04/21/15 12:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 12:06	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 12:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 12:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 12:06	75-35-4	
cis-1,2-Dichloroethene	**2.8**	ug/L	1.0	0.50	1		04/21/15 12:06	156-59-2	
trans-1,2-Dichloroethene	**0.59J**	ug/L	1.0	0.50	1		04/21/15 12:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 12:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 12:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 12:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 12:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 12:06	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 12:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 12:06	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 12:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 12:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 12:06	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 12:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 12:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 12:06	79-00-5	
Trichloroethene	**151**	ug/L	1.0	0.50	1		04/21/15 12:06	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 12:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 12:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		04/21/15 12:06	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/21/15 12:06	17060-07-0	
Toluene-d8 (S)	94	%	80-120		1		04/21/15 12:06	2037-26-5	
Preservation pH	**7.0**		0.10	0.10	1		04/21/15 12:06		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-84-201504 **Lab ID: 60192139002** Collected: 04/16/15 08:45 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**89.1**	ug/L	10.0	5.0	1		04/20/15 13:56	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/20/15 13:56	75-27-4	
Bromoform	**1.9**	ug/L	1.0	0.50	1		04/20/15 13:56	75-25-2	
Bromomethane	**8.5**	ug/L	5.0	2.5	1		04/20/15 13:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/20/15 13:56	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/20/15 13:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/20/15 13:56	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/20/15 13:56	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/20/15 13:56	67-66-3	
Chloromethane	**14.5**	ug/L	1.0	0.50	1		04/20/15 13:56	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/20/15 13:56	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 13:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 13:56	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/20/15 13:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/20/15 13:56	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/20/15 13:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/20/15 13:56	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/20/15 13:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 13:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 13:56	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/20/15 13:56	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/20/15 13:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/20/15 13:56	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		04/20/15 13:56	17060-07-0	
Toluene-d8 (S)	94	%	80-120		1		04/20/15 13:56	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		04/20/15 13:56		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-179-201504 **Lab ID: 60192139003** Collected: 04/16/15 14:30 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**5.7J**	ug/L	10.0	5.0	1		04/22/15 05:55	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 05:55	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 05:55	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 05:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 05:55	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 05:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 05:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 05:55	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 05:55	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	107-06-2	
1,1-Dichloroethene	**0.62J**	ug/L	1.0	0.50	1		04/22/15 05:55	75-35-4	
cis-1,2-Dichloroethene	**1.6**	ug/L	1.0	0.50	1		04/22/15 05:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 05:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 05:55	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 05:55	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 05:55	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 05:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 05:55	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 05:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:55	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 05:55	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	79-00-5	
Trichloroethene	**41.2**	ug/L	1.0	0.50	1		04/22/15 05:55	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 05:55	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 05:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		04/22/15 05:55	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/22/15 05:55	17060-07-0	
Toluene-d8 (S)	89	%	80-120		1		04/22/15 05:55	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 05:55		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-95-201504 **Lab ID: 60192139004** Collected: 04/16/15 15:01 Received: 04/17/15 10:21 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		04/27/15 15:53	67-64-1	
Benzene	ND	ug/L	1.0	0.060	1		04/27/15 15:53	71-43-2	
Bromodichloromethane	**0.39J**	ug/L	1.0	0.19	1		04/27/15 15:53	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 15:53	75-25-2	
Bromomethane	**0.43J**	ug/L	5.0	0.16	1		04/27/15 15:53	74-83-9	B
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 15:53	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/27/15 15:53	75-15-0	
Carbon tetrachloride	**0.38J**	ug/L	1.0	0.18	1		04/27/15 15:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 15:53	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 15:53	75-00-3	
Chloroform	**6.8**	ug/L	1.0	0.14	1		04/27/15 15:53	67-66-3	
Chloromethane	**0.32J**	ug/L	1.0	0.080	1		04/27/15 15:53	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 15:53	124-48-1	
1,1-Dichloroethane	**0.50J**	ug/L	1.0	0.050	1		04/27/15 15:53	75-34-3	
1,2-Dichloroethane	**0.21J**	ug/L	1.0	0.12	1		04/27/15 15:53	107-06-2	
1,1-Dichloroethene	**41.9**	ug/L	1.0	0.20	1		04/27/15 15:53	75-35-4	
cis-1,2-Dichloroethene	**184**	ug/L	1.0	0.080	1		04/27/15 15:53	156-59-2	
trans-1,2-Dichloroethene	**1.4**	ug/L	1.0	0.20	1		04/27/15 15:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 15:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 15:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 15:53	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 15:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 15:53	591-78-6	
Methylene chloride	**4.1**	ug/L	1.0	0.15	1		04/27/15 15:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 15:53	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 15:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 15:53	79-34-5	
Tetrachloroethene	**7.6**	ug/L	1.0	0.10	1		04/27/15 15:53	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/27/15 15:53	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 15:53	71-55-6	
1,1,2-Trichloroethane	**2.3**	ug/L	1.0	0.20	1		04/27/15 15:53	79-00-5	
Trichloroethene	**26700**	ug/L	200	100	200		04/22/15 07:10	79-01-6	
Vinyl chloride	**14.9**	ug/L	1.0	0.13	1		04/27/15 15:53	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 15:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/27/15 15:53	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-120		1		04/27/15 15:53	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		04/27/15 15:53	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 15:53		

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-94-201504 **Lab ID: 60192139005** Collected: 04/16/15 13:10 Received: 04/17/15 10:21 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		04/27/15 16:09	67-64-1	
Benzene	**0.37J**	ug/L	1.0	0.060	1		04/27/15 16:09	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 16:09	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 16:09	75-25-2	
Bromomethane	ND	ug/L	5.0	0.16	1		04/27/15 16:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 16:09	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/27/15 16:09	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 16:09	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 16:09	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 16:09	75-00-3	
Chloroform	**3.2**	ug/L	1.0	0.14	1		04/27/15 16:09	67-66-3	
Chloromethane	**0.21J**	ug/L	1.0	0.080	1		04/27/15 16:09	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 16:09	124-48-1	
1,1-Dichloroethane	**2.6**	ug/L	1.0	0.050	1		04/27/15 16:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 16:09	107-06-2	
1,1-Dichloroethene	**120**	ug/L	1.0	0.20	1		04/27/15 16:09	75-35-4	
cis-1,2-Dichloroethene	**325**	ug/L	200	16.0	200		04/22/15 07:24	156-59-2	
trans-1,2-Dichloroethene	**8.8**	ug/L	1.0	0.20	1		04/27/15 16:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 16:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 16:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 16:09	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 16:09	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 16:09	591-78-6	
Methylene chloride	**0.76J**	ug/L	1.0	0.15	1		04/27/15 16:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 16:09	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 16:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 16:09	79-34-5	
Tetrachloroethene	**2.8**	ug/L	1.0	0.10	1		04/27/15 16:09	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/27/15 16:09	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 16:09	71-55-6	
1,1,2-Trichloroethane	**0.71J**	ug/L	1.0	0.20	1		04/27/15 16:09	79-00-5	
Trichloroethene	**11800**	ug/L	200	34.0	200		04/22/15 07:24	79-01-6	
Vinyl chloride	**1.3**	ug/L	1.0	0.13	1		04/27/15 16:09	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 16:09	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/27/15 16:09	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-120		1		04/27/15 16:09	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		04/27/15 16:09	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 16:09		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-180-201504 **Lab ID: 60192139006** Collected: 04/16/15 14:45 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/22/15 06:10	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 06:10	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 06:10	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 06:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 06:10	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 06:10	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 06:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 06:10	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 06:10	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:10	75-35-4	
cis-1,2-Dichloroethene	**3.8**	ug/L	1.0	0.50	1		04/22/15 06:10	156-59-2	
trans-1,2-Dichloroethene	**0.88J**	ug/L	1.0	0.50	1		04/22/15 06:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 06:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 06:10	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 06:10	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 06:10	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 06:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 06:10	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 06:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:10	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 06:10	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	79-00-5	
Trichloroethene	**21.4**	ug/L	1.0	0.50	1		04/22/15 06:10	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 06:10	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 06:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		04/22/15 06:10	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		04/22/15 06:10	17060-07-0	
Toluene-d8 (S)	90	%	80-120		1		04/22/15 06:10	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 06:10		

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-24-201504 **Lab ID: 60192139007** Collected: 04/16/15 11:30 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**71.2**	ug/L	10.0	5.0	1		04/19/15 16:55	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 16:55	75-27-4	
Bromoform	**8.7**	ug/L	1.0	0.50	1		04/19/15 16:55	75-25-2	
Bromomethane	**42.6**	ug/L	5.0	2.5	1		04/19/15 16:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 16:55	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 16:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 16:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	108-90-7	
Chloroethane	**0.64J**	ug/L	1.0	0.50	1		04/19/15 16:55	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 16:55	67-66-3	
Chloromethane	**22.6**	ug/L	1.0	0.50	1		04/19/15 16:55	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 16:55	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 16:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 16:55	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 16:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 16:55	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:55	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:55	79-00-5	
Trichloroethene	**18.8**	ug/L	1.0	0.50	1		04/19/15 16:55	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 16:55	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 16:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/19/15 16:55	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/19/15 16:55	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		04/19/15 16:55	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		04/19/15 16:55		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-178-201504 **Lab ID: 60192139008** Collected: 04/16/15 14:15 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**7.1J**	ug/L	10.0	5.0	1		04/19/15 16:40	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 16:40	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/19/15 16:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 16:40	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 16:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 16:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 16:40	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	75-35-4	
cis-1,2-Dichloroethene	**1.3**	ug/L	1.0	0.50	1		04/19/15 16:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 16:40	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 16:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 16:40	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	79-00-5	
Trichloroethene	**5.0**	ug/L	1.0	0.50	1		04/19/15 16:40	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 16:40	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 16:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		04/19/15 16:40	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/19/15 16:40	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/19/15 16:40	2037-26-5	
Preservation pH	**6.0**		0.10	0.10	1		04/19/15 16:40		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-85-201504 **Lab ID: 60192139009** Collected: 04/16/15 14:58 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**104**	ug/L	10.0	5.0	1		04/22/15 18:53	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 18:53	71-43-2	
Bromodichloromethane	**0.68J**	ug/L	1.0	0.50	1		04/22/15 18:53	75-27-4	
Bromoform	**10.5**	ug/L	1.0	0.50	1		04/22/15 18:53	75-25-2	
Bromomethane	**24.4**	ug/L	5.0	2.5	1		04/22/15 18:53	74-83-9	B
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 18:53	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 18:53	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 18:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 18:53	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 18:53	75-00-3	
Chloroform	**2.2**	ug/L	1.0	0.50	1		04/22/15 18:53	67-66-3	
Chloromethane	**8.2**	ug/L	1.0	0.50	1		04/22/15 18:53	74-87-3	
Dibromochloromethane	**2.8**	ug/L	1.0	0.50	1		04/22/15 18:53	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 18:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 18:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 18:53	75-35-4	
cis-1,2-Dichloroethene	**16.8**	ug/L	1.0	0.50	1		04/22/15 18:53	156-59-2	
trans-1,2-Dichloroethene	**2.9**	ug/L	1.0	0.50	1		04/22/15 18:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 18:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 18:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 18:53	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 18:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 18:53	591-78-6	
Methylene chloride	**5.7**	ug/L	1.0	0.50	1		04/22/15 18:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 18:53	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 18:53	100-42-5	
1,1,2,2-Tetrachloroethane	**4.6**	ug/L	1.0	0.50	1		04/22/15 18:53	79-34-5	
Tetrachloroethene	**1.5**	ug/L	1.0	0.50	1		04/22/15 18:53	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 18:53	108-88-3	
1,1,1-Trichloroethane	**9.0**	ug/L	1.0	0.50	1		04/22/15 18:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 18:53	79-00-5	
Trichloroethene	**256**	ug/L	5.0	2.5	5		04/22/15 19:08	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 18:53	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 18:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/22/15 18:53	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/22/15 18:53	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/22/15 18:53	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 18:53		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-86-201504 **Lab ID: 60192139010** Collected: 04/16/15 13:40 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**186**	ug/L	10.0	1.9	1		04/22/15 20:07	67-64-1	
Benzene	**0.29J**	ug/L	1.0	0.060	1		04/22/15 20:07	71-43-2	
Bromodichloromethane	**2.4**	ug/L	1.0	0.19	1		04/22/15 20:07	75-27-4	
Bromoform	**7.8**	ug/L	1.0	0.070	1		04/22/15 20:07	75-25-2	
Bromomethane	**6.7**	ug/L	5.0	0.16	1		04/22/15 20:07	74-83-9	B
2-Butanone (MEK)	**33.2**	ug/L	10.0	0.59	1		04/22/15 20:07	78-93-3	
Carbon disulfide	**1.5J**	ug/L	5.0	0.12	1		04/22/15 20:07	75-15-0	
Carbon tetrachloride	**5.3**	ug/L	1.0	0.18	1		04/22/15 20:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/22/15 20:07	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/22/15 20:07	75-00-3	
Chloroform	**47.5**	ug/L	1.0	0.14	1		04/22/15 20:07	67-66-3	
Chloromethane	**4.6**	ug/L	1.0	0.080	1		04/22/15 20:07	74-87-3	
Dibromochloromethane	**2.8**	ug/L	1.0	0.21	1		04/22/15 20:07	124-48-1	
1,1-Dichloroethane	**7.8**	ug/L	1.0	0.050	1		04/22/15 20:07	75-34-3	
1,2-Dichloroethane	**0.46J**	ug/L	1.0	0.12	1		04/22/15 20:07	107-06-2	
1,1-Dichloroethene	**9.1**	ug/L	1.0	0.20	1		04/22/15 20:07	75-35-4	
cis-1,2-Dichloroethene	**128**	ug/L	1.0	0.080	1		04/22/15 20:07	156-59-2	
trans-1,2-Dichloroethene	**20.6**	ug/L	1.0	0.20	1		04/22/15 20:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/22/15 20:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/22/15 20:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/22/15 20:07	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/22/15 20:07	100-41-4	
2-Hexanone	**3.0J**	ug/L	10.0	1.2	1		04/22/15 20:07	591-78-6	
Methylene chloride	**21.0**	ug/L	1.0	0.15	1		04/22/15 20:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/22/15 20:07	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/22/15 20:07	100-42-5	
1,1,2,2-Tetrachloroethane	**518J**	ug/L	2000	300	2000		04/19/15 18:24	79-34-5	
Tetrachloroethene	**27.9**	ug/L	1.0	0.10	1		04/22/15 20:07	127-18-4	
Toluene	**2.1**	ug/L	1.0	0.17	1		04/22/15 20:07	108-88-3	
1,1,1-Trichloroethane	**612J**	ug/L	2000	220	2000		04/19/15 18:24	71-55-6	
1,1,2-Trichloroethane	**5.1**	ug/L	1.0	0.20	1		04/22/15 20:07	79-00-5	
Trichloroethene	**46700**	ug/L	2000	340	2000		04/19/15 18:24	79-01-6	
Vinyl chloride	**5.8**	ug/L	1.0	0.13	1		04/22/15 20:07	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/22/15 20:07	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		04/22/15 20:07	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		04/22/15 20:07	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/22/15 20:07	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 20:07		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-92-201504 **Lab ID: 60192139011** Collected: 04/16/15 12:05 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**14.2**	ug/L	10.0	5.0	1		04/22/15 19:23	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 19:23	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 19:23	75-27-4	
Bromoform	**6.3**	ug/L	1.0	0.50	1		04/22/15 19:23	75-25-2	
Bromomethane	**8.9**	ug/L	5.0	2.5	1		04/22/15 19:23	74-83-9	B
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 19:23	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 19:23	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 19:23	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 19:23	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:23	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 19:23	67-66-3	
Chloromethane	**12.9**	ug/L	1.0	0.50	1		04/22/15 19:23	74-87-3	
Dibromochloromethane	**2.6**	ug/L	1.0	0.50	1		04/22/15 19:23	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:23	107-06-2	
1,1-Dichloroethene	**0.92J**	ug/L	1.0	0.50	1		04/22/15 19:23	75-35-4	
cis-1,2-Dichloroethene	**5.4**	ug/L	1.0	0.50	1		04/22/15 19:23	156-59-2	
trans-1,2-Dichloroethene	**0.61J**	ug/L	1.0	0.50	1		04/22/15 19:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 19:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 19:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 19:23	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 19:23	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 19:23	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 19:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 19:23	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 19:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:23	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 19:23	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 19:23	108-88-3	
1,1,1-Trichloroethane	**0.81J**	ug/L	1.0	0.50	1		04/22/15 19:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:23	79-00-5	
Trichloroethene	**736**	ug/L	25.0	12.5	25		04/19/15 18:39	79-01-6	
Vinyl chloride	**2.1**	ug/L	1.0	0.50	1		04/22/15 19:23	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 19:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/22/15 19:23	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/22/15 19:23	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/22/15 19:23	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 19:23		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-172-201504 **Lab ID: 60192139012** Collected: 04/16/15 09:52 Received: 04/17/15 10:21 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	5.0	1		04/22/15 19:37	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 19:37	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 19:37	75-27-4	
Bromoform	**5.8**	ug/L	1.0	0.50	1		04/22/15 19:37	75-25-2	
Bromomethane	**5.9**	ug/L	5.0	2.5	1		04/22/15 19:37	74-83-9	B
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 19:37	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 19:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 19:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 19:37	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:37	75-00-3	
Chloroform	**1.4**	ug/L	1.0	0.50	1		04/22/15 19:37	67-66-3	
Chloromethane	**2.7**	ug/L	1.0	0.50	1		04/22/15 19:37	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 19:37	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:37	107-06-2	
1,1-Dichloroethene	**0.64J**	ug/L	1.0	0.50	1		04/22/15 19:37	75-35-4	
cis-1,2-Dichloroethene	**11.9**	ug/L	1.0	0.50	1		04/22/15 19:37	156-59-2	
trans-1,2-Dichloroethene	**1.4**	ug/L	1.0	0.50	1		04/22/15 19:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 19:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 19:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 19:37	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 19:37	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 19:37	591-78-6	
Methylene chloride	**0.72J**	ug/L	1.0	0.50	1		04/22/15 19:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 19:37	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 19:37	100-42-5	
1,1,2,2-Tetrachloroethane	**0.95J**	ug/L	1.0	0.50	1		04/22/15 19:37	79-34-5	
Tetrachloroethene	**0.85J**	ug/L	1.0	0.50	1		04/22/15 19:37	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 19:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:37	79-00-5	
Trichloroethene	**1740**	ug/L	25.0	12.5	25		04/19/15 18:54	79-01-6	
Vinyl chloride	**0.92J**	ug/L	1.0	0.50	1		04/22/15 19:37	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 19:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/22/15 19:37	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/22/15 19:37	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/22/15 19:37	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 19:37		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-93-201504 **Lab ID: 60192139013** Collected: 04/16/15 14:05 Received: 04/17/15 10:21 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		04/27/15 16:24	67-64-1	
Benzene	**0.16J**	ug/L	1.0	0.060	1		04/27/15 16:24	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 16:24	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 16:24	75-25-2	
Bromomethane	ND	ug/L	5.0	0.16	1		04/27/15 16:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 16:24	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/27/15 16:24	75-15-0	
Carbon tetrachloride	**0.49J**	ug/L	1.0	0.18	1		04/27/15 16:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 16:24	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 16:24	75-00-3	
Chloroform	**5.6**	ug/L	1.0	0.14	1		04/27/15 16:24	67-66-3	
Chloromethane	**0.19J**	ug/L	1.0	0.080	1		04/27/15 16:24	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 16:24	124-48-1	
1,1-Dichloroethane	**0.52J**	ug/L	1.0	0.050	1		04/27/15 16:24	75-34-3	
1,2-Dichloroethane	**0.21J**	ug/L	1.0	0.12	1		04/27/15 16:24	107-06-2	
1,1-Dichloroethene	**32.9**	ug/L	1.0	0.20	1		04/27/15 16:24	75-35-4	
cis-1,2-Dichloroethene	**160**	ug/L	1.0	0.080	1		04/27/15 16:24	156-59-2	
trans-1,2-Dichloroethene	**1.5**	ug/L	1.0	0.20	1		04/27/15 16:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 16:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 16:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 16:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 16:24	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 16:24	591-78-6	
Methylene chloride	**3.8**	ug/L	1.0	0.15	1		04/27/15 16:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 16:24	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 16:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 16:24	79-34-5	
Tetrachloroethene	**5.9**	ug/L	1.0	0.10	1		04/27/15 16:24	127-18-4	
Toluene	**0.18J**	ug/L	1.0	0.17	1		04/27/15 16:24	108-88-3	
1,1,1-Trichloroethane	**0.73J**	ug/L	1.0	0.11	1		04/27/15 16:24	71-55-6	
1,1,2-Trichloroethane	**1.9**	ug/L	1.0	0.20	1		04/27/15 16:24	79-00-5	
Trichloroethene	**21500**	ug/L	200	100	200		04/22/15 07:39	79-01-6	
Vinyl chloride	**3.9**	ug/L	1.0	0.13	1		04/27/15 16:24	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 16:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		04/27/15 16:24	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-120		1		04/27/15 16:24	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		04/27/15 16:24	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 16:24		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-88-201504 **Lab ID: 60192139014** Collected: 04/16/15 09:00 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/22/15 06:25	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 06:25	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 06:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 06:25	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 06:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 06:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 06:25	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 06:25	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 06:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 06:25	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	79-00-5	
Trichloroethene	**0.58J**	ug/L	1.0	0.50	1		04/22/15 06:25	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 06:25	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 06:25	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		04/22/15 06:25	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		04/22/15 06:25	17060-07-0	
Toluene-d8 (S)	91	%	80-120		1		04/22/15 06:25	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 06:25		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-89-201504 **Lab ID: 60192139015** Collected: 04/16/15 10:05 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/22/15 06:40	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 06:40	75-25-2	
Bromomethane	**3.2J**	ug/L	5.0	2.5	1		04/22/15 06:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 06:40	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 06:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 06:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 06:40	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 06:40	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 06:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 06:40	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	79-00-5	
Trichloroethene	**15.9**	ug/L	1.0	0.50	1		04/22/15 06:40	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 06:40	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 06:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		04/22/15 06:40	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/22/15 06:40	17060-07-0	
Toluene-d8 (S)	88	%	80-120		1		04/22/15 06:40	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 06:40		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-91-201504 **Lab ID: 60192139016** Collected: 04/16/15 11:15 Received: 04/17/15 10:21 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		04/27/15 12:02	67-64-1	
Benzene	ND	ug/L	1.0	0.060	1		04/27/15 12:02	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 12:02	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 12:02	75-25-2	
Bromomethane	**0.40J**	ug/L	5.0	0.16	1		04/27/15 12:02	74-83-9	B
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 12:02	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/27/15 12:02	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 12:02	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 12:02	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 12:02	75-00-3	
Chloroform	**0.16J**	ug/L	1.0	0.14	1		04/27/15 12:02	67-66-3	
Chloromethane	**0.20J**	ug/L	1.0	0.080	1		04/27/15 12:02	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 12:02	124-48-1	
1,1-Dichloroethane	**1.5**	ug/L	1.0	0.050	1		04/27/15 12:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 12:02	107-06-2	
1,1-Dichloroethene	**4.0**	ug/L	1.0	0.20	1		04/27/15 12:02	75-35-4	
cis-1,2-Dichloroethene	**36.6**	ug/L	1.0	0.080	1		04/27/15 12:02	156-59-2	
trans-1,2-Dichloroethene	**0.42J**	ug/L	1.0	0.20	1		04/27/15 12:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 12:02	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 12:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 12:02	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 12:02	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 12:02	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.15	1		04/27/15 12:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 12:02	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 12:02	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 12:02	79-34-5	
Tetrachloroethene	**1.8**	ug/L	1.0	0.10	1		04/27/15 12:02	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/27/15 12:02	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 12:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/27/15 12:02	79-00-5	
Trichloroethene	**438**	ug/L	5.0	2.5	5		04/22/15 07:54	79-01-6	
Vinyl chloride	**0.18J**	ug/L	1.0	0.13	1		04/27/15 12:02	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 12:02	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/27/15 12:02	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		04/27/15 12:02	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/27/15 12:02	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 12:02		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-87-201504 **Lab ID: 60192139017** Collected: 04/16/15 12:25 Received: 04/17/15 10:21 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		04/27/15 14:06	67-64-1	
Benzene	**0.12J**	ug/L	1.0	0.060	1		04/27/15 14:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 14:06	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 14:06	75-25-2	
Bromomethane	**0.50J**	ug/L	5.0	0.16	1		04/27/15 14:06	74-83-9	B
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 14:06	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/27/15 14:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 14:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 14:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 14:06	75-00-3	
Chloroform	**0.25J**	ug/L	1.0	0.14	1		04/27/15 14:06	67-66-3	
Chloromethane	**0.13J**	ug/L	1.0	0.080	1		04/27/15 14:06	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 14:06	124-48-1	
1,1-Dichloroethane	**2.5**	ug/L	1.0	0.050	1		04/27/15 14:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 14:06	107-06-2	
1,1-Dichloroethene	**7.3**	ug/L	1.0	0.20	1		04/27/15 14:06	75-35-4	
cis-1,2-Dichloroethene	**58.6**	ug/L	1.0	0.080	1		04/27/15 14:06	156-59-2	
trans-1,2-Dichloroethene	**0.66J**	ug/L	1.0	0.20	1		04/27/15 14:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 14:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 14:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 14:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 14:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 14:06	591-78-6	
Methylene chloride	**0.20J**	ug/L	1.0	0.15	1		04/27/15 14:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 14:06	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 14:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 14:06	79-34-5	
Tetrachloroethene	**4.1**	ug/L	1.0	0.10	1		04/27/15 14:06	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/27/15 14:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 14:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/27/15 14:06	79-00-5	
Trichloroethene	**758**	ug/L	10.0	5.0	10		04/22/15 08:09	79-01-6	
Vinyl chloride	**0.33J**	ug/L	1.0	0.13	1		04/27/15 14:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 14:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/27/15 14:06	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/27/15 14:06	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		04/27/15 14:06	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 14:06		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

QC Batch: MSV/68979 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192139003, 60192139004, 60192139005, 60192139006, 60192139013, 60192139014, 60192139015, 60192139016, 60192139017

METHOD BLANK: 1553779 Matrix: Water
Associated Lab Samples: 60192139003, 60192139004, 60192139005, 60192139006, 60192139013, 60192139014, 60192139015, 60192139016, 60192139017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,1-Dichloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,1-Dichloroethene	ug/L	ND	1.0	04/22/15 03:26	
1,2-Dichloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,2-Dichloropropane	ug/L	ND	1.0	04/22/15 03:26	
2-Butanone (MEK)	ug/L	ND	10.0	04/22/15 03:26	
2-Hexanone	ug/L	ND	10.0	04/22/15 03:26	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/22/15 03:26	
Acetone	ug/L	ND	10.0	04/22/15 03:26	
Benzene	ug/L	ND	1.0	04/22/15 03:26	
Bromodichloromethane	ug/L	ND	1.0	04/22/15 03:26	
Bromoform	ug/L	ND	1.0	04/22/15 03:26	
Bromomethane	ug/L	ND	5.0	04/22/15 03:26	
Carbon disulfide	ug/L	ND	5.0	04/22/15 03:26	
Carbon tetrachloride	ug/L	ND	1.0	04/22/15 03:26	
Chlorobenzene	ug/L	ND	1.0	04/22/15 03:26	
Chloroethane	ug/L	ND	1.0	04/22/15 03:26	
Chloroform	ug/L	ND	1.0	04/22/15 03:26	
Chloromethane	ug/L	0.15J	1.0	04/22/15 03:26	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 03:26	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 03:26	
Dibromochloromethane	ug/L	ND	1.0	04/22/15 03:26	
Ethylbenzene	ug/L	ND	1.0	04/22/15 03:26	
Methylene chloride	ug/L	ND	1.0	04/22/15 03:26	
Styrene	ug/L	ND	1.0	04/22/15 03:26	
Tetrachloroethene	ug/L	ND	1.0	04/22/15 03:26	
Toluene	ug/L	ND	1.0	04/22/15 03:26	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 03:26	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 03:26	
Trichloroethene	ug/L	ND	1.0	04/22/15 03:26	
Vinyl chloride	ug/L	ND	1.0	04/22/15 03:26	
Xylene (Total)	ug/L	ND	3.0	04/22/15 03:26	
1,2-Dichloroethane-d4 (S)	%	99	80-120	04/22/15 03:26	
4-Bromofluorobenzene (S)	%	96	80-120	04/22/15 03:26	
Toluene-d8 (S)	%	90	80-120	04/22/15 03:26	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

LABORATORY CONTROL SAMPLE: 1553780

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	23.3	116	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	15.9	79	73-121	
1,1,2-Trichloroethane	ug/L	20	19.0	95	80-120	
1,1-Dichloroethane	ug/L	20	22.3	112	80-120	
1,1-Dichloroethene	ug/L	20	23.1	116	80-120	
1,2-Dichloroethane	ug/L	20	22.9	115	81-120	
1,2-Dichloropropane	ug/L	20	22.2	111	80-120	
2-Butanone (MEK)	ug/L	100	109	109	67-122	
2-Hexanone	ug/L	100	94.1	94	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	114	114	76-120	
Acetone	ug/L	100	109	109	72-120	
Benzene	ug/L	20	23.0	115	80-120	
Bromodichloromethane	ug/L	20	23.5	117	80-120	
Bromoform	ug/L	20	20.4	102	73-138	
Bromomethane	ug/L	20	18.2	91	38-137	
Carbon disulfide	ug/L	20	20.1	101	71-129	
Carbon tetrachloride	ug/L	20	23.9	120	67-146	
Chlorobenzene	ug/L	20	20.1	101	80-120	
Chloroethane	ug/L	20	20.4	102	76-120	
Chloroform	ug/L	20	21.9	110	80-120	
Chloromethane	ug/L	20	19.6	98	34-165	
cis-1,2-Dichloroethene	ug/L	20	22.4	112	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.7	108	80-120	
Dibromochloromethane	ug/L	20	19.4	97	80-126	
Ethylbenzene	ug/L	20	18.6	93	80-120	
Methylene chloride	ug/L	20	23.3	117	80-120	
Styrene	ug/L	20	19.1	95	80-123	
Tetrachloroethene	ug/L	20	19.2	96	80-123	
Toluene	ug/L	20	19.3	96	80-120	
trans-1,2-Dichloroethene	ug/L	20	21.6	108	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.0	90	80-129	
Trichloroethene	ug/L	20	23.5	118	80-120	
Vinyl chloride	ug/L	20	25.3	126	62-125	L0
Xylene (Total)	ug/L	60	57.7	96	80-120	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			92	80-120	
Toluene-d8 (S)	%			91	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

QC Batch: MSV/69103 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192139004, 60192139005, 60192139013, 60192139016, 60192139017

METHOD BLANK: 1557447 Matrix: Water
Associated Lab Samples: 60192139004, 60192139005, 60192139013, 60192139016, 60192139017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1-Dichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
1,2-Dichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,2-Dichloropropane	ug/L	ND	1.0	04/27/15 10:45	
2-Butanone (MEK)	ug/L	ND	10.0	04/27/15 10:45	
2-Hexanone	ug/L	ND	10.0	04/27/15 10:45	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/27/15 10:45	
Acetone	ug/L	ND	10.0	04/27/15 10:45	
Benzene	ug/L	ND	1.0	04/27/15 10:45	
Bromodichloromethane	ug/L	ND	1.0	04/27/15 10:45	
Bromoform	ug/L	ND	1.0	04/27/15 10:45	
Bromomethane	ug/L	0.52J	5.0	04/27/15 10:45	
Carbon disulfide	ug/L	ND	5.0	04/27/15 10:45	
Carbon tetrachloride	ug/L	ND	1.0	04/27/15 10:45	
Chlorobenzene	ug/L	ND	1.0	04/27/15 10:45	
Chloroethane	ug/L	ND	1.0	04/27/15 10:45	
Chloroform	ug/L	ND	1.0	04/27/15 10:45	
Chloromethane	ug/L	0.14J	1.0	04/27/15 10:45	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/27/15 10:45	
Dibromochloromethane	ug/L	ND	1.0	04/27/15 10:45	
Ethylbenzene	ug/L	ND	1.0	04/27/15 10:45	
Methylene chloride	ug/L	ND	1.0	04/27/15 10:45	
Styrene	ug/L	ND	1.0	04/27/15 10:45	
Tetrachloroethene	ug/L	ND	1.0	04/27/15 10:45	
Toluene	ug/L	ND	1.0	04/27/15 10:45	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/27/15 10:45	
Vinyl chloride	ug/L	ND	1.0	04/27/15 10:45	
Xylene (Total)	ug/L	ND	3.0	04/27/15 10:45	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/27/15 10:45	
4-Bromofluorobenzene (S)	%	100	80-120	04/27/15 10:45	
Toluene-d8 (S)	%	103	80-120	04/27/15 10:45	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

LABORATORY CONTROL SAMPLE: 1557448

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	22.7	113	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	21.8	109	73-121	
1,1,2-Trichloroethane	ug/L	20	22.3	111	80-120	
1,1-Dichloroethane	ug/L	20	23.1	116	80-120	
1,1-Dichloroethene	ug/L	20	21.3	107	80-120	
1,2-Dichloroethane	ug/L	20	21.5	107	81-120	
1,2-Dichloropropane	ug/L	20	21.6	108	80-120	
2-Butanone (MEK)	ug/L	100	99.4	99	67-122	
2-Hexanone	ug/L	100	104	104	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	76-120	
Acetone	ug/L	100	105	105	72-120	
Benzene	ug/L	20	22.2	111	80-120	
Bromodichloromethane	ug/L	20	21.9	109	80-120	
Bromoform	ug/L	20	21.1	105	73-138	
Bromomethane	ug/L	20	24.5	122	38-137	
Carbon disulfide	ug/L	20	21.9	109	71-129	
Carbon tetrachloride	ug/L	20	22.4	112	67-146	
Chlorobenzene	ug/L	20	22.7	113	80-120	
Chloroethane	ug/L	20	22.0	110	76-120	
Chloroform	ug/L	20	22.3	111	80-120	
Chloromethane	ug/L	20	19.2	96	34-165	
cis-1,2-Dichloroethene	ug/L	20	22.5	113	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.6	108	80-120	
Dibromochloromethane	ug/L	20	21.9	110	80-126	
Ethylbenzene	ug/L	20	22.4	112	80-120	
Methylene chloride	ug/L	20	21.3	106	80-120	
Styrene	ug/L	20	22.4	112	80-123	
Tetrachloroethene	ug/L	20	23.7	119	80-123	
Toluene	ug/L	20	22.0	110	80-120	
trans-1,2-Dichloroethene	ug/L	20	22.1	111	80-120	
trans-1,3-Dichloropropene	ug/L	20	22.3	111	80-129	
Vinyl chloride	ug/L	20	24.6	123	62-125	
Xylene (Total)	ug/L	60	68.3	114	80-120	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			99	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

QC Batch: MSV/68932 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60192139007, 60192139008, 60192139010, 60192139011, 60192139012

METHOD BLANK: 1552695 Matrix: Water
Associated Lab Samples: 60192139007, 60192139008, 60192139010, 60192139011, 60192139012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1-Dichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1-Dichloroethene	ug/L	ND	1.0	04/19/15 14:26	
1,2-Dichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,2-Dichloropropane	ug/L	ND	1.0	04/19/15 14:26	
2-Butanone (MEK)	ug/L	ND	10.0	04/19/15 14:26	
2-Hexanone	ug/L	ND	10.0	04/19/15 14:26	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/19/15 14:26	
Acetone	ug/L	ND	10.0	04/19/15 14:26	
Benzene	ug/L	ND	1.0	04/19/15 14:26	
Bromodichloromethane	ug/L	ND	1.0	04/19/15 14:26	
Bromoform	ug/L	ND	1.0	04/19/15 14:26	
Bromomethane	ug/L	ND	5.0	04/19/15 14:26	
Carbon disulfide	ug/L	ND	5.0	04/19/15 14:26	
Carbon tetrachloride	ug/L	ND	1.0	04/19/15 14:26	
Chlorobenzene	ug/L	ND	1.0	04/19/15 14:26	
Chloroethane	ug/L	ND	1.0	04/19/15 14:26	
Chloroform	ug/L	ND	1.0	04/19/15 14:26	
Chloromethane	ug/L	0.16J	1.0	04/19/15 14:26	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/19/15 14:26	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/19/15 14:26	
Dibromochloromethane	ug/L	ND	1.0	04/19/15 14:26	
Ethylbenzene	ug/L	ND	1.0	04/19/15 14:26	
Methylene chloride	ug/L	ND	1.0	04/19/15 14:26	
Styrene	ug/L	ND	1.0	04/19/15 14:26	
Tetrachloroethene	ug/L	ND	1.0	04/19/15 14:26	
Toluene	ug/L	ND	1.0	04/19/15 14:26	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/19/15 14:26	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/19/15 14:26	
Trichloroethene	ug/L	ND	1.0	04/19/15 14:26	
Vinyl chloride	ug/L	ND	1.0	04/19/15 14:26	
Xylene (Total)	ug/L	ND	3.0	04/19/15 14:26	
1,2-Dichloroethane-d4 (S)	%	98	80-120	04/19/15 14:26	
4-Bromofluorobenzene (S)	%	101	80-120	04/19/15 14:26	
Toluene-d8 (S)	%	97	80-120	04/19/15 14:26	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

LABORATORY CONTROL SAMPLE: 1552696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.5	103	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	17.6	88	73-121	
1,1,2-Trichloroethane	ug/L	20	20.0	100	80-120	
1,1-Dichloroethane	ug/L	20	21.0	105	80-120	
1,1-Dichloroethene	ug/L	20	20.7	104	80-120	
1,2-Dichloroethane	ug/L	20	21.1	106	81-120	
1,2-Dichloropropane	ug/L	20	20.2	101	80-120	
2-Butanone (MEK)	ug/L	100	98.7	99	67-122	
2-Hexanone	ug/L	100	96.2	96	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	76-120	
Acetone	ug/L	100	99.8	100	72-120	
Benzene	ug/L	20	20.9	104	80-120	
Bromodichloromethane	ug/L	20	20.6	103	80-120	
Bromoform	ug/L	20	19.5	97	73-138	
Bromomethane	ug/L	20	17.8	89	38-137	
Carbon disulfide	ug/L	20	19.1	95	71-129	
Carbon tetrachloride	ug/L	20	21.1	106	67-146	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	20.2	101	76-120	
Chloroform	ug/L	20	20.3	101	80-120	
Chloromethane	ug/L	20	21.1	106	34-165	
cis-1,2-Dichloroethene	ug/L	20	21.0	105	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.0	100	80-120	
Dibromochloromethane	ug/L	20	19.4	97	80-126	
Ethylbenzene	ug/L	20	19.5	97	80-120	
Methylene chloride	ug/L	20	20.7	103	80-120	
Styrene	ug/L	20	19.9	99	80-123	
Tetrachloroethene	ug/L	20	19.4	97	80-123	
Toluene	ug/L	20	19.7	98	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.9	99	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.9	94	80-129	
Trichloroethene	ug/L	20	21.1	105	80-120	
Vinyl chloride	ug/L	20	22.3	112	62-125	
Xylene (Total)	ug/L	60	60.0	100	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			97	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

QC Batch: MSV/68946
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60192139002

METHOD BLANK: 1552948
Matrix: Water
Associated Lab Samples: 60192139002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/20/15 08:59	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/20/15 08:59	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/20/15 08:59	
1,1-Dichloroethane	ug/L	ND	1.0	04/20/15 08:59	
1,1-Dichloroethene	ug/L	ND	1.0	04/20/15 08:59	
1,2-Dichloroethane	ug/L	ND	1.0	04/20/15 08:59	
1,2-Dichloropropane	ug/L	ND	1.0	04/20/15 08:59	
2-Butanone (MEK)	ug/L	ND	10.0	04/20/15 08:59	
2-Hexanone	ug/L	ND	10.0	04/20/15 08:59	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/20/15 08:59	
Acetone	ug/L	ND	10.0	04/20/15 08:59	
Benzene	ug/L	ND	1.0	04/20/15 08:59	
Bromodichloromethane	ug/L	ND	1.0	04/20/15 08:59	
Bromoform	ug/L	ND	1.0	04/20/15 08:59	
Bromomethane	ug/L	ND	5.0	04/20/15 08:59	
Carbon disulfide	ug/L	ND	5.0	04/20/15 08:59	
Carbon tetrachloride	ug/L	ND	1.0	04/20/15 08:59	
Chlorobenzene	ug/L	ND	1.0	04/20/15 08:59	
Chloroethane	ug/L	ND	1.0	04/20/15 08:59	
Chloroform	ug/L	ND	1.0	04/20/15 08:59	
Chloromethane	ug/L	0.12J	1.0	04/20/15 08:59	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/20/15 08:59	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/20/15 08:59	
Dibromochloromethane	ug/L	ND	1.0	04/20/15 08:59	
Ethylbenzene	ug/L	ND	1.0	04/20/15 08:59	
Methylene chloride	ug/L	ND	1.0	04/20/15 08:59	
Styrene	ug/L	ND	1.0	04/20/15 08:59	
Tetrachloroethene	ug/L	ND	1.0	04/20/15 08:59	
Toluene	ug/L	ND	1.0	04/20/15 08:59	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/20/15 08:59	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/20/15 08:59	
Trichloroethene	ug/L	ND	1.0	04/20/15 08:59	
Vinyl chloride	ug/L	ND	1.0	04/20/15 08:59	
Xylene (Total)	ug/L	ND	3.0	04/20/15 08:59	
1,2-Dichloroethane-d4 (S)	%	104	80-120	04/20/15 08:59	
4-Bromofluorobenzene (S)	%	98	80-120	04/20/15 08:59	
Toluene-d8 (S)	%	94	80-120	04/20/15 08:59	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

LABORATORY CONTROL SAMPLE: 1552949

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.5	103	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	18.8	94	73-121	
1,1,2-Trichloroethane	ug/L	20	20.9	104	80-120	
1,1-Dichloroethane	ug/L	20	20.6	103	80-120	
1,1-Dichloroethene	ug/L	20	20.0	100	80-120	
1,2-Dichloroethane	ug/L	20	21.2	106	81-120	
1,2-Dichloropropane	ug/L	20	20.4	102	80-120	
2-Butanone (MEK)	ug/L	100	103	103	67-122	
2-Hexanone	ug/L	100	101	101	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	106	106	76-120	
Acetone	ug/L	100	111	111	72-120	
Benzene	ug/L	20	20.7	103	80-120	
Bromodichloromethane	ug/L	20	20.8	104	80-120	
Bromoform	ug/L	20	20.7	103	73-138	
Bromomethane	ug/L	20	22.1	110	38-137	
Carbon disulfide	ug/L	20	18.4	92	71-129	
Carbon tetrachloride	ug/L	20	20.2	101	67-146	
Chlorobenzene	ug/L	20	20.6	103	80-120	
Chloroethane	ug/L	20	18.9	94	76-120	
Chloroform	ug/L	20	20.0	100	80-120	
Chloromethane	ug/L	20	18.3	91	34-165	
cis-1,2-Dichloroethene	ug/L	20	21.3	106	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.8	104	80-120	
Dibromochloromethane	ug/L	20	20.2	101	80-126	
Ethylbenzene	ug/L	20	19.9	99	80-120	
Methylene chloride	ug/L	20	21.4	107	80-120	
Styrene	ug/L	20	20.5	102	80-123	
Tetrachloroethene	ug/L	20	19.6	98	80-123	
Toluene	ug/L	20	19.5	98	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.9	99	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.8	99	80-129	
Trichloroethene	ug/L	20	19.5	97	80-120	
Vinyl chloride	ug/L	20	22.4	112	62-125	
Xylene (Total)	ug/L	60	60.2	100	80-120	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			96	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

QC Batch: MSV/68968
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60192139001

METHOD BLANK: 1553436
Matrix: Water
Associated Lab Samples: 60192139001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/21/15 09:22	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/21/15 09:22	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/21/15 09:22	
1,1-Dichloroethane	ug/L	ND	1.0	04/21/15 09:22	
1,1-Dichloroethene	ug/L	ND	1.0	04/21/15 09:22	
1,2-Dichloroethane	ug/L	ND	1.0	04/21/15 09:22	
1,2-Dichloropropane	ug/L	ND	1.0	04/21/15 09:22	
2-Butanone (MEK)	ug/L	ND	10.0	04/21/15 09:22	
2-Hexanone	ug/L	ND	10.0	04/21/15 09:22	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/21/15 09:22	
Acetone	ug/L	ND	10.0	04/21/15 09:22	
Benzene	ug/L	ND	1.0	04/21/15 09:22	
Bromodichloromethane	ug/L	ND	1.0	04/21/15 09:22	
Bromoform	ug/L	ND	1.0	04/21/15 09:22	
Bromomethane	ug/L	ND	5.0	04/21/15 09:22	
Carbon disulfide	ug/L	ND	5.0	04/21/15 09:22	
Carbon tetrachloride	ug/L	ND	1.0	04/21/15 09:22	
Chlorobenzene	ug/L	ND	1.0	04/21/15 09:22	
Chloroethane	ug/L	ND	1.0	04/21/15 09:22	
Chloroform	ug/L	ND	1.0	04/21/15 09:22	
Chloromethane	ug/L	ND	1.0	04/21/15 09:22	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/21/15 09:22	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/21/15 09:22	
Dibromochloromethane	ug/L	ND	1.0	04/21/15 09:22	
Ethylbenzene	ug/L	ND	1.0	04/21/15 09:22	
Methylene chloride	ug/L	ND	1.0	04/21/15 09:22	
Styrene	ug/L	ND	1.0	04/21/15 09:22	
Tetrachloroethene	ug/L	ND	1.0	04/21/15 09:22	
Toluene	ug/L	ND	1.0	04/21/15 09:22	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/21/15 09:22	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/21/15 09:22	
Trichloroethene	ug/L	ND	1.0	04/21/15 09:22	
Vinyl chloride	ug/L	ND	1.0	04/21/15 09:22	
Xylene (Total)	ug/L	ND	3.0	04/21/15 09:22	
1,2-Dichloroethane-d4 (S)	%	105	80-120	04/21/15 09:22	
4-Bromofluorobenzene (S)	%	99	80-120	04/21/15 09:22	
Toluene-d8 (S)	%	92	80-120	04/21/15 09:22	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

LABORATORY CONTROL SAMPLE: 1553437

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	22.9	115	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.5	98	73-121	
1,1,2-Trichloroethane	ug/L	20	20.8	104	80-120	
1,1-Dichloroethane	ug/L	20	22.5	112	80-120	
1,1-Dichloroethene	ug/L	20	21.2	106	80-120	
1,2-Dichloroethane	ug/L	20	23.6	118	81-120	
1,2-Dichloropropane	ug/L	20	22.8	114	80-120	
2-Butanone (MEK)	ug/L	100	114	114	67-122	
2-Hexanone	ug/L	100	103	103	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	114	114	76-120	
Acetone	ug/L	100	114	114	72-120	
Benzene	ug/L	20	22.2	111	80-120	
Bromodichloromethane	ug/L	20	23.6	118	80-120	
Bromoform	ug/L	20	20.8	104	73-138	
Bromomethane	ug/L	20	20.0	100	38-137	
Carbon disulfide	ug/L	20	20.5	103	71-129	
Carbon tetrachloride	ug/L	20	23.1	116	67-146	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	21.4	107	76-120	
Chloroform	ug/L	20	21.2	106	80-120	
Chloromethane	ug/L	20	18.1	91	34-165	
cis-1,2-Dichloroethene	ug/L	20	22.9	115	80-120	
cis-1,3-Dichloropropene	ug/L	20	22.3	112	80-120	
Dibromochloromethane	ug/L	20	21.0	105	80-126	
Ethylbenzene	ug/L	20	19.4	97	80-120	
Methylene chloride	ug/L	20	22.8	114	80-120	
Styrene	ug/L	20	20.0	100	80-123	
Tetrachloroethene	ug/L	20	19.8	99	80-123	
Toluene	ug/L	20	19.7	98	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.5	102	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.5	103	80-129	
Trichloroethene	ug/L	20	21.8	109	80-120	
Vinyl chloride	ug/L	20	24.4	122	62-125	
Xylene (Total)	ug/L	60	60.5	101	80-120	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			91	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

QC Batch: MSV/69011 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60192139009, 60192139010, 60192139011, 60192139012

METHOD BLANK: 1554703 Matrix: Water
Associated Lab Samples: 60192139009, 60192139010, 60192139011, 60192139012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/22/15 18:38	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/22/15 18:38	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/22/15 18:38	
1,1-Dichloroethane	ug/L	ND	1.0	04/22/15 18:38	
1,1-Dichloroethene	ug/L	ND	1.0	04/22/15 18:38	
1,2-Dichloroethane	ug/L	ND	1.0	04/22/15 18:38	
1,2-Dichloropropane	ug/L	ND	1.0	04/22/15 18:38	
2-Butanone (MEK)	ug/L	ND	10.0	04/22/15 18:38	
2-Hexanone	ug/L	ND	10.0	04/22/15 18:38	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/22/15 18:38	
Acetone	ug/L	ND	10.0	04/22/15 18:38	
Benzene	ug/L	ND	1.0	04/22/15 18:38	
Bromodichloromethane	ug/L	ND	1.0	04/22/15 18:38	
Bromoform	ug/L	ND	1.0	04/22/15 18:38	
Bromomethane	ug/L	3.4J	5.0	04/22/15 18:38	
Carbon disulfide	ug/L	ND	5.0	04/22/15 18:38	
Carbon tetrachloride	ug/L	ND	1.0	04/22/15 18:38	
Chlorobenzene	ug/L	ND	1.0	04/22/15 18:38	
Chloroethane	ug/L	ND	1.0	04/22/15 18:38	
Chloroform	ug/L	ND	1.0	04/22/15 18:38	
Chloromethane	ug/L	ND	1.0	04/22/15 18:38	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 18:38	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 18:38	
Dibromochloromethane	ug/L	ND	1.0	04/22/15 18:38	
Ethylbenzene	ug/L	ND	1.0	04/22/15 18:38	
Methylene chloride	ug/L	0.22J	1.0	04/22/15 18:38	
Styrene	ug/L	ND	1.0	04/22/15 18:38	
Tetrachloroethene	ug/L	ND	1.0	04/22/15 18:38	
Toluene	ug/L	ND	1.0	04/22/15 18:38	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 18:38	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 18:38	
Trichloroethene	ug/L	ND	1.0	04/22/15 18:38	
Vinyl chloride	ug/L	ND	1.0	04/22/15 18:38	
Xylene (Total)	ug/L	ND	3.0	04/22/15 18:38	
1,2-Dichloroethane-d4 (S)	%	100	80-120	04/22/15 18:38	
4-Bromofluorobenzene (S)	%	100	80-120	04/22/15 18:38	
Toluene-d8 (S)	%	100	80-120	04/22/15 18:38	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

LABORATORY CONTROL SAMPLE: 1554704

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.0	100	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.2	101	73-121	
1,1,2-Trichloroethane	ug/L	20	19.9	99	80-120	
1,1-Dichloroethane	ug/L	20	19.5	98	80-120	
1,1-Dichloroethene	ug/L	20	18.4	92	80-120	
1,2-Dichloroethane	ug/L	20	20.0	100	81-120	
1,2-Dichloropropane	ug/L	20	19.6	98	80-120	
2-Butanone (MEK)	ug/L	100	103	103	67-122	
2-Hexanone	ug/L	100	106	106	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	100	100	76-120	
Acetone	ug/L	100	103	103	72-120	
Benzene	ug/L	20	19.2	96	80-120	
Bromodichloromethane	ug/L	20	21.3	106	80-120	
Bromoform	ug/L	20	19.2	96	73-138	
Bromomethane	ug/L	20	20.2	101	38-137	
Carbon disulfide	ug/L	20	17.0	85	71-129	
Carbon tetrachloride	ug/L	20	18.2	91	67-146	
Chlorobenzene	ug/L	20	19.7	99	80-120	
Chloroethane	ug/L	20	18.9	95	76-120	
Chloroform	ug/L	20	19.3	97	80-120	
Chloromethane	ug/L	20	17.6	88	34-165	
cis-1,2-Dichloroethene	ug/L	20	19.4	97	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.7	104	80-120	
Dibromochloromethane	ug/L	20	19.0	95	80-126	
Ethylbenzene	ug/L	20	19.2	96	80-120	
Methylene chloride	ug/L	20	20.1	101	80-120	
Styrene	ug/L	20	21.0	105	80-123	
Tetrachloroethene	ug/L	20	19.3	97	80-123	
Toluene	ug/L	20	19.7	99	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.3	96	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.1	106	80-129	
Trichloroethene	ug/L	20	19.5	97	80-120	
Vinyl chloride	ug/L	20	19.9	100	62-125	
Xylene (Total)	ug/L	60	59.4	99	80-120	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			100	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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/68932
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/68946
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/68968
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/68979
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/69011
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/69103
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60192139003	**MW-179-201504**	EPA 5030B/8260	MSV/68979		
60192139004	**MW-95-201504**	EPA 5030B/8260	MSV/68979		
60192139004	**MW-95-201504**	EPA 5030B/8260	MSV/69103		
60192139005	**MW-94-201504**	EPA 5030B/8260	MSV/68979		
60192139005	**MW-94-201504**	EPA 5030B/8260	MSV/69103		
60192139006	**MW-180-201504**	EPA 5030B/8260	MSV/68979		
60192139013	**MW-93-201504**	EPA 5030B/8260	MSV/68979		
60192139013	**MW-93-201504**	EPA 5030B/8260	MSV/69103		
60192139014	**MW-88-201504**	EPA 5030B/8260	MSV/68979		
60192139015	**MW-89-201504**	EPA 5030B/8260	MSV/68979		
60192139016	**MW-91-201504**	EPA 5030B/8260	MSV/68979		
60192139016	**MW-91-201504**	EPA 5030B/8260	MSV/69103		
60192139017	**MW-87-201504**	EPA 5030B/8260	MSV/68979		
60192139017	**MW-87-201504**	EPA 5030B/8260	MSV/69103		
60192139001	**MW-83-201504**	EPA 5030B/8260	MSV/68968		
60192139002	**MW-84-201504**	EPA 5030B/8260	MSV/68946		
60192139007	**MW-24-201504**	EPA 5030B/8260	MSV/68932		
60192139008	**MW-178-201504**	EPA 5030B/8260	MSV/68932		
60192139009	**MW-85-201504**	EPA 5030B/8260	MSV/69011		
60192139010	**MW-86-201504**	EPA 5030B/8260	MSV/68932		
60192139010	**MW-86-201504**	EPA 5030B/8260	MSV/69011		
60192139011	**MW-92-201504**	EPA 5030B/8260	MSV/68932		
60192139011	**MW-92-201504**	EPA 5030B/8260	MSV/69011		
60192139012	**MW-172-201504**	EPA 5030B/8260	MSV/68932		
60192139012	**MW-172-201504**	EPA 5030B/8260	MSV/69011		

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Sample Condition Upon Receipt

WO# : 60192139

60192139

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☑

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: CF -0.1 T-239 / CF -1.8 T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 5.7 / 5.5

Temperature should be above freezing to 6°C

Date and initials of person examining contents:

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	sample label say mw-87 but COC
Pace containers used:	☑Yes ☐No ☐N/A	9. read mw-85 collection date+time match
Containers intact:	☑Yes ☐No ☐N/A	10. (4/14/15 1225)
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	12.
Sample labels match COC: Includes date/time/ID/analyses Matrix: WL	☑Yes ☐No ☐N/A	13.
All containers needing preservation have been checked.	☐Yes ☑No ☐N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☑No ☐N/A	
Exceptions: (VOA), Coliform, O&G, WI-DRO (water)	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present: Pace Trip Blank lot # (if purchased): _____	☐Yes ☑No ☐N/A	15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MJ Walls Date: 4/17/15

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Ascorbic acid	Analysis Test Y/N	8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 6019239
1	MW-83-201504 3(other)	WT	G			4/16/15	1350		3				X				X		X										7 day hold	001
2	MW-84-201504	WT	G			4/16/15	0845		3				X				X		X										7 day hold	002
3	MW-179-201504 3(DG9H)	WT	G			4/16/15	1430		3				X						X											003
4	MW-95-201504	WT	G			4/16/15	1501		3				X						X											004
5	MW-94-201504	WT	G			4/16/15	1310		3				X						X											005
6	MW-180-201504	WT	G			4/16/15	1445		3				X						X											006
7	MW-24-201504 3(other)	WT	G			4/16/15	1130		3				X						X										7 day hold	007
8	MW-178-201504	WT	G			4/16/15	1415		3				X						X										7 day hold	008
9	MW-85-201504	WT	G			4/16/15	1455		3				X						X										7 day hold	009
10	MW-86-201504	WT	G			4/16/15	1340		3				X						X										7 day hold	010
11	MW-92-201504	WT	G			4/16/15	1205		3				X						X										7 day hold	011
12	MW-172-201504	WT	G			4/16/15	0952		3				X						X										7 day hold	012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Level IV data package required	Victoria Siegler	4/16/15	1800	Sam B. Pace	4/17/15	1021	5.7	Y	N	Y
	Environ						5.5	Y	N	Y
	Wendy Stonestreet	4/17/15	1020							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Siegler

SIGNATURE of SAMPLER: Victoria Siegler DATE Signed (MM/DD/YY): 4/16/15

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 2 of 2

Section A
Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone:	913-553-5926 Fax:
Requested Due Date/TAT:	

Section B
Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C
Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D
Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Valid Matrix Codes MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

Pace Project No.: 60192139

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	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-93-~~201505~~ 201504	WT	G			4/16/15	1405		3				X						X													3(Da 9##) 013
2	MW-88-~~201505~~ 201504	WT	G			4/16/15	0900		3				X						X													↓ 014
3	MW-89-~~201505~~ 201504	WT	G			4/16/15	0905		3				X						X													↓ 015
4	MW-91-201504	WT	G			4/16/15	1115		3				X						X													↓ 016
5	MW-85-201504	WT	G			4/16/15	1225		3				X						X													↓ 017
6																																
7																																
8																																
9																																
10																																
11																																
12																																

VS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
Level IV data package required	Victoria Siegler / Environ	4/16/15	1800	[signature] Pace	4/17/15	1021	5.7			
							5.5			
	Wendy Stonestreet	4/17/15	1020							
							Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Siegler

SIGNATURE of SAMPLER: Victoria Siegler

DATE Signed (MM/DD/YY): 4/16/15

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-Feb-2007

Appendix C

Quarterly Summary of Field Parameter Measurements & Groundwater Sample Analytical Results

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 (^{o}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
(^{o}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

TABLE 4
SUMMARY OF FINAL WELL GROUND WATER FIELD PARAMETERS MEASUREMENTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (inches)	Date Sampled	Water Level Prior to Purging (feet btoc)	Total Depth of Well Casing (feet)	Set Tubing Depth (feet)	Time Sampled	Water Level After Purging (feet btoc)	Purge Volume (gallons)	Purge Rate (mL/min)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
ITMW-1	4	1/14/2015	14.78	30.25	25.3	15:20	14.8	1.0	100	13.68	557	5.86	1.82	152.7	1.08	0.00	Clear	ITMW-1-201501
ITMW-2	4	1/13/2015	11.89	27.20	20.2	16:20	11.89	1.8	100	16.35	34.9	6.01	1.94	62.9	2.38	0.00	Clear	ITMW-2-201501
ITMW-3^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
ITMW-4	4	1/13/2015	16.43	32.20	24.7	09:30	16.46	2.1	100	8.98	216	6.43	1.33	45.8	14.7	0.56	Yellow Hue	ITMW-4-201501
ITMW-5^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
ITMW-6	4	1/13/2015	21.54	36.70	29.6	11:48	21.55	2.9	100	16.78	1097	6.14	0.62	27.5	0.15	0.00	Clear	ITMW-6-201501
ITMW-7	4	1/14/2015	19.43	39.13	34.1	11:55	19.4	1.0	100	13.34	1016	4.94	0.85	182.7	2.77	0.00	Clear	ITMW-7-201501
ITMW-9	4	1/13/2015	20.23	33.45	28.5	09:20	20.25	1.5	100	13.40	560	6.06	0.83	62.3	0.47	0.03	Clear	ITMW-9-201501
ITMW-10	4	1/14/2015	18.95	33.60	28.6	16:47	19.01	1.0	100	14.81	717	5.74	0.63	145.7	1.36	0.00	Clear	ITMW-10-201501
ITMW-11	4	1/15/2015	10.26	28.70	23.7	10:22	10.3	2.0	100	14.68	5937	4.83	2.75	572.5	1.71	0.36	Clear	ITMW-11-201501
ITMW-12	4	1/15/2015	13.11	30.00	25.0	09:32	13.14	2.5	100	11.48	4158	5.80	0.94	361.5	0.67	0.00	Clear	ITMW-12-201501
ITMW-13	4	1/14/2015	14.27	31.98	27.0	15:20	14.31	0.9	100	15.63	214	6.07	1.54	135.2	0.69	0.00	Clear	ITMW-13-201501
ITMW-14	4	1/14/2015	13.85	29.50	24.5	14:35	13.98	2.5	100	14.78	127	5.75	1.47	-55.4	7.2	3.32	Clear	ITMW-14-201501
ITMW-15	4	1/15/2015	10.67	30.00	25.0	12:50	10.68	1.0	100	16.31	8803	6.47	4.70	385.9	4.76	0.00	Clear	ITMW-15-201501
ITMW-16	4	1/14/2015	15.10	32.00	24.5	12:35	15.54	1.8	100	16.02	222	6.92	5.73	59	17.6	0.00	Clear	ITMW-16-201501
ITMW-17	4	1/15/2015	14.25	31.00	27.0	09:47	14.28	1.0	100	14.29	1273	5.78	11.68	287	1.11	0.03	Clear	ITMW-17-201501
ITMW-18	4	1/15/2015	10.14	30.00	25.0	10:00	10.23	2.5	100	12.05	467	10.08	6.40	151.5	0.28	0.10	Clear	ITMW-18-201501
ITMW-19	4	1/15/2015	12.81	31.00	26.0	13:10	12.95	1.5	100	13.85	35689	8.37	15.89	419.6	2.2	0.16	Clear	ITMW-19-201501
ITMW-20	4	1/12/2015	13.60	29.00	24.0	16:20	14.04	1.5	100	14.38	564	6.31	3.20	19.9	0.64	0.29	Clear	ITMW-20-201501
ITMW-21	4	1/14/2015	12.56	31.00	26.0	13:50	12.84	1.0	100	16.25	2443	5.09	3.66	171	0.52	0.14	Clear	ITMW-21-201501
MW-22	4	1/13/2015	11.76	29.00	24.0	09:45	11.83	1.5	100	10.82	17,900	5.59	3.18	168	0.69	0.00	Clear	MW-22-201501
MW-23^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-24^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-25	4	1/15/2015	13.20	32.00	27.0	11:25	13.2	1.5	100	17.48	14020	4.11	0.36	441.7	2.06	0.02	Clear	MW-25-201501
MW-26	4	1/15/2015	13.74	33.50	26.0	09:00	13.91	2.1	100	10.09	1107	5.56	2.59	17.5	0.54	0.00	Clear	MW-26-201501
MW-27	4	1/14/2015	11.73	30.00	25.0	12:05	11.7	1.0	100	14.04	337	5.77	0.99	152.5	6.26	0.00	Clear	MW-27-201501
MW-28	4	1/14/2015	7.06	28.00	23.0	09:50	7.31	2.5	100	11.48	350	6.27	1.72	170	1.61	0.00	Clear	MW-28-201501
MW-29	4	1/13/2015	11.24	31.00	23.5	12:23	11.32	2.9	100	13.51	439	5.17	2.65	45.5	61.7	0.00	Sand Color	MW-29-201501
MW-30^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-31	0.75	1/12/2015	12.34	27.50	22.5	17:00	13.68	3.0	100	13.93	491	5.28	0.08	89.8	1.52	0.16	Clear	MW-31-201501
MW-31R	2	1/19/2015	11.74	30.00	25.0	15:50	11.78	2.9	100	19.46	447	5.60	0.48	-334.1	15.50	NM	Clear	MW-31R-201501
MW-32	0.75	1/14/2015	11.98	27.00	22.0	14:50	12.04	1.5	100	16.97	1570	4.56	0.15	336.5	0.44	0.00	Clear	MW-32-201501
MW-32R	2	1/19/2015	11.58	30.04	25.0	15:30	11.58	2.5	100	20.02	1969	4.94	0.32	132.2	8.49	NM	Clear	MW-32R-201501
MW-33	0.75	1/14/2015	11.18	25.80	20.8	17:00	11.62	2.0	100	16.67	738	4.97	0.58	441.5	2.6	0.00	Clear	MW-33-201501
MW-33R	2	1/18/2015	10.98	29.05	24.0	12:10	11.18	2.1	100	19.46	978	5.43	1.77	18.2	18.6	NM	Clear	MW-33R-201501
MW-34	0.75	1/13/2015	10.58	29.50	24.5	13:20	10.71	1.7	100	15.05	2435	4.55	0.49	429.7	9.89	1.00	Clear	MW-34-201501
MW-35R	4	1/13/2015	10.30	29.50	24.5	10:35	14.68	1.6	100	14.68	17960	8.31	0.82	297.2	2.61	0.00	Clear	MW-35R-201501
MW-36	0.75	1/12/2015	9.41	35.58	30.6	16:35	9.49	1.7	100	14.08	1375	5.14	0.35	399.9	1.35	0.00	Clear	MW-36-201501
MW-37^	2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-38	4	1/15/2015	11.85	29.70	24.7	11:55	11.9	2	100	15.50	1042	6.63	0.21	179.5	4	0.17	Clear	MW-38-201501
MW-39	0.75	1/12/2015	11.64	29.40	24.4	14:30	12.48	1.7	100	13.90	1138	5.07	0.46	226.6	1.21	0.00	Clear	MW-39-201501
MW-40	0.75	1/12/2015	9.55	27.75	22.8	14:45	9.66	2.5	100	14.47	818	5.14	0.09	112.2	0.21	0.00	Clear	MW-40-201501
MW-41	0.75	1/14/2015	8.34	28.32	23.3	09:55	8.37	1.2	100	11.09	1236	5.5	0.12	127.9	1.18	3.30	Clear	MW-41-201501
MW-46R	2	1/13/2015	2.46	21.60	16.6	14:55	2.7	1	100	13.25	871	4.89	0.60	-26.4	1.87	0.00	Clear	MW-46R-201501
MW-50	0.75	1/13/2015	6.28	18.00	15.5	14:30	14.87	2	100	14.48	1204	6.7	1.08	90.5	131	0.88	Turbid	MW-50-201501
MW-56	0.75	1/13/2015	0.99	19.50	17.0	11:15	Dry	<0.25	100	10.87	407	5.52	2.69	51.7	over range	0.00	Light Brown	MW-56-201501
MW-57	0.75	1/13/2015	1.59	19.00	17.5	14:37	Dry	0.5	100	13.72	1047	5.49	3.51	98.2	83.7	0.00	Brown	MW-57-201501

ENVIRON

TABLE 4
SUMMARY OF FINAL WELL GROUND WATER FIELD PARAMETERS MEASUREMENTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (inches)	Date Sampled	Water Level Prior to Purging (feet btoc)	Total Depth of Well Casing (feet)	Set Tubing Depth (feet)	Time Sampled	Water Level After Purging (feet btoc)	Purge Volume (gallons)	Purge Rate (mL/min)	Temperature (^{o}C)	Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
MW-58	0.75	1/14/2015	1.47	17.50	15.0	09:35	4.95	2	100	8.61	924	5	0.29	138.1	4.23	1.03	Cloudy	MW-58-201501
MW-60	0.75	1/13/2015	6.74	17.00	14.5	13:00	Dry	0.12	100	13.42	1193	6.91	3.49	181.9	149	0.08	Brown	MW-60-201501
MW-61	0.75	1/13/2015	8.04	15.50	13.0	16:00	Dry	0.13	100	15.53	604	6.53	3.06	94	48.3	0.11	Brown	MW-61-201501
MW-62	0.75	1/13/2015	5.12	20.50	18.0	11:20	7.50	2.5	100	14.01	649	5.50	1.77	-3	10.1	0.00	Clear	MW-62-201501
MW-63	0.75	1/13/2015	4.19	21.00	18.5	16:25	Dry	0.5	100	9.96	460	5.80	3.92	8.1		0.00	Very Cloudy	MW-63-201501
MW-65	2	1/13/2015	10.33	32.00	27.0	10:40	10.40	1.7	100	16.78	11520	11.74	6.97	211.6	5.26	0.09	Clear	MW-65-201501
MW-66	2	1/14/2015	4.50	17.60	15.1	10:20	4.92	0.5	100	11.99	785	6.07	3.20	10.9	5.98	0.02	Clear	MW-66-201501
MW-67	2	1/12/2015	4.05	14.60	9.6	14:51	8.00	1.5	100	10.72	578	6.86	5.78	130.1	282.00	0.00	Brown	MW-67-201501
MW-68	2	1/12/2015	9.06	24.00	19.0	14:10	6.07	1	100	11.81	1070	4.88	2.33	24.5	1.79	0.11	Clear	MW-68-201501
MW-70^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-71	2	1/14/2015	7.71	24.85	19.9	9:50	7.73	2	100	12.36	906	5.10	1.51	190.5	2.20	0.25	Clear	MW-71-201501
RW-69	4	1/14/2015	7.65	24.75	19.8	11:45	7.69	1.0	100	14.95	1037	5.24	1.96	215.2	0.61	0.00	Clear	RW-69-201501
IW-72	2	1/12/2015	8.02	25.00	20.0	14:00	8.14	2	100	15.47	944	2.03	2.03	644.1	1.6	0.00	Pink - light	IW-72-201501
IW-73	2	1/14/2015	7.78	24.38	19.2	10:40	7.81	1.7	100	15.21	599	6.10	0.38	83.6	5.98	2.16	Clear	IW-73-201501
IW-74	2	1/14/2015	8.44	27.35	22.4	12:10	8.47	0.9	100	17.32	897	5.91	0.50	138.4	1.81	0.00	Clear	IW-74-201501
IW-75^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
IW-76	2	1/14/2015	8.72	26.06	21.0	12:25	8.69	1.7	100	15.07	2316	5.06	0.82	321.9	6.45	0.00	Clear	IW-76-201501
IW-77	2	1/14/2015	9.19	30.00	25.0	15:05	9.18	1.6	100	16.90	6966	5.88	0.37	357.4	5.37	0.06	Clear	IW-77-201501
IW-78^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
IW-79^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
IW-80	2	1/13/2015	10.79	29.50	24.5	13:35	10.79	2	100	17.26	2587	6.31	2.13	446.2	4.54	0.03	Clear	IW-80-201501
MW-81	2	1/13/2015	9.84	26.00	23.5	16:15	9.84	1.2	100	15.26	2152	5.08	0.42	279	3.76	0.00	Clear	MW-81-201501
MW-82	2	1/13/2015	9.91	25.00	20.0	16:00	9.93	1.7	100	16.79	4506	5.89	0.30	370.9	4.60	0.03	Clear	MW-82-201501
MW-83	2	1/15/2015	11.74	26.18	24.2	13:20	11.71	3	100	17.69	2790	6.14	0.90	322.1	6.00	0.00	Clear	MW-83-201501
MW-84	2	1/14/2015	11.87	29.00	21.5	15:30	11.97	3.4	100	18.92	11942	9.25	1.21	175.5	1.65	0.00	Clear	MW-84-201501
MW-85	2	1/15/2015	10.75	29.76	24.8	14:00	10.76	1.7	100	17.90	6608	5.61	1.89	239.6	5.29	0.00	Clear	MW-85-201501
MW-86	2	1/15/2015	9.63	27.87	25.4	12:55	9.96	1.2	100	16.23	11603	6.13	13.72	139.7	2.89	0.04	Clear	MW-86-201501
MW-87	2	1/14/2015	11.10	27.00	22.0	15:13	11.14	1.5	100	15.28	405	5.87	1.18	152	2.60	0.00	Clear	MW-87-201501
MW-88	2	1/13/2015	8.68	28.00	23.0	11:58	9.70	2	100	17.10	223	8.80	4.62	143.7	31.80	0.00	Clear	MW-88-201501
MW-89	2	1/13/2015	8.87	25.00	20.0	14:41	9.59	2.5	100	15.61	1036	5.36	1.25	219.3	3.20	0.00	Clear	MW-89-201501
MW-90	2	1/12/2015	5.77	25.00	20.0	16:25	14.98	2	50	14.49	974	6.53	0.13	-141.2	7.27	3.30	Clear	MW-90-201501
MW-91	2	1/13/2015	9.97	25.00	20.0	16:31	10.13	2	100	17.57	347	6.02	1.41	162.4	8.50	0.00	Clear	MW-91-201501

Notes:

ft btoc =	Feet below top of casing	mL/min =	Milliliters per minute
ORP =	Oxidation reduction potential	mg/L =	Milligrams per liter
DO =	Dissolved oxygen	NTUs =	Nephelometric turbidity units
^{o}C =	Degrees Celcius	NM =	Not measured
Mv =	Millivolts	µS/cm =	Microsiemens per centimeter
^ =	Well not sampled	-- =	Color not noted

All wells gauged using electronic water level meter and purged using peristaltic pumps.
Tubing inlet depths based on estimated distance from total depth.

ENVIRON

TABLE 5
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FIRST QUARTER 2015)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	ITMW-1	ITMW-7	ITMW-9	ITMW-9	ITMW-10	ITMW-11	ITMW-12	ITMW-12	ITMW-13	ITMW-14	ITMW-15	ITMW-15	ITMW-17	ITMW-18	ITMW-19	ITMW-21
ENVIRON Sample ID		ITMW-1-201501	ITMW-7-201501	ITMW-9-201501	DUP-02-201501	ITMW-10-201501	ITMW-11-201501	ITMW-12-201501	DUP-04-201501	ITMW-13-201501	ITMW-14-201501	ITMW-15-201501	DUP-05-201501	ITMW-17-201501	ITMW-18-201501	ITMW-19-201501	ITMW-21-201501
Lab Sample ID(s)		027MA042, 145440002, 145440001, 60186183001	027MA035, 145440010, 145440009, 60186183017	027MA012, 145440012, 145440011, 60186097002	60186097026	027MA052, 145440014, 145440013, 60186183027	027MA064, 145440016, 145440015, 60186334012	027MA062, 145440018, 145440017, 60186334009	60186334008	027MA038, 145440020, 145440019, 60186183021	027MA047, 145440022, 145440021, 60186183006	027MA063, 145440024, 145440023, 60186334011	60186334013	027MA061, 145440028, 145440027, 60186334007	027MA056, 145440030, 145440029, 60186334001	027MA059, 145440032, 145440031, 60186334004	027MA044, 145440036, 145440035, 60186183003
Sample Date		1/14/2015	1/12/2015	1/13/2015	1/13/2015	1/12/2015	1/15/2015	1/14/2015	1/15/2015	1/14/2015	1/14/2015	1/15/2015	1/15/2015	1/14/2015	1/14/2015	1/15/2015	1/12/2015
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments					Field Duplicate				Field Duplicate				Field Duplicate				
Volatile Organic Compounds																	
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	18.9 (5.0)	19.0 (5.0)	U (5.0)	U (5.0)	29.1 (5.0)	28.2 (5.0)	U (5.0)	U (5.0)	27.8 (5.0)	U (5.0)
Benzene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	6.2 (2.5)	7.3 (2.5)	U (2.5)	U (2.5)	7.9 (2.5)	10.8 (2.5)	U (2.5)	U (2.5)	6.9 (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chlorobenzene	100	U (0.50)	0.63 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.93 J (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	190	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.9 (0.50)	4.4 (0.50)	U (0.50)	U (0.50)	8.3 (0.50)	10.3 (0.50)	U (0.50)	U (0.50)	18.5 (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.6 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.73 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7	U (0.50)	U (0.50)	1.4 (0.50)	1.4 (0.50)	4.0 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.75 J (0.50)	U (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	70	9.7 (0.50)	10.5 (0.50)	39.1 (0.50)	39.1 (0.50)	38.9 (0.50)	9.8 (0.50)	4.2 (0.50)	4.8 (0.50)	28.5 (0.50)	11.5 (0.50)	2.9 (0.50)	3.8 (0.50)	110 (0.50)	26.5 (0.50)	U (0.50)	U (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.0 (0.50)	0.77 J (0.50)	0.87 J (0.50)	U (0.50)	U (0.50)	0.55 J (0.50)	0.60 J (0.50)	15.5 (0.50)	2.2 (0.50)	U (0.50)	U (0.50)
Methylene Chloride	5	U (0.50)	U (0.50)	1.0 (0.50)	1.1 (0.50)	U (0.50)	U (0.50)	0.51 J (0.50)	1.6 (0.50)	U (0.50)	U (0.50)	0.67 J (0.50)	0.61 J (0.50)	U (0.50)	U (0.50)	0.86 J (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.66 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.0 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	20.7 (0.50)	U (0.50)	U (0.50)	1.4 (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.58 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	5	22.7 (0.50)	34.7 (0.50)	89.6 (0.50)	89.4 (0.50)	403 (2.5)	68.3 (0.50)	57.1 (0.50)	59.3 (0.50)	45.8 (0.50)	4.9 (0.50)	56.5 (0.50)	61.7 (0.50)	3840 (25.0)	488 (50.0)	17.4 (0.50)	10.8 (0.50)
Vinyl Chloride	2	U (0.50)	U (0.50)	1.4 (0.50)	1.4 (0.50)	1.4 (0.50)	1.9 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.5 (0.50)	U (0.50)	U (0.50)	U (0.50)
Metals																	
Iron	NE	U (50.0)	U (50.0)	U (50.0)	NM	U (50.0)	116 (50.0)	32.2 J (50.0)	NM	U (50.0)	839 (50.0)	155 (50.0)	NM	998 (50.0)	26.0 J (50.0)	25.8 J (50.0)	U (50.0)
Manganese	NE	U (5.0)	56.3 (5.0)	407 (5.0)	NM	403 (5.0)	16.3 (5.0)	10.3 (5.0)	NM	U (5.0)	21.0 (5.0)	7.8 (5.0)	NM	61.7 (5.0)	U (5.0)	73.1 (50.0)	256 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)																	
Alkalinity	NE	69800 (20000)	8500 J (20000)	100000 (20000)	NM	81800 (20000)	21900 (20000)	54600 (20000)	NM	67900 (20000)	31700 (20000)	228000 (20000)	NM	25200 (20000)	41600 (20000)	125000 (20000)	15900 J (20000)
Ammonia	NE	U (100)	260 (100)	U (100)	NM	U (100)	270 (100)	130 (100)	NM	U (100)	U (100)	320 (100)	NM	U (100)	220 M1 (100)	2600 (100)	U (100)
Bicarbonate Alkalinity	NE	69800 (20000)	8500 J (20000)	100000 (20000)	NM	81800 (20000)	21900 (20000)	54600 (20000)	NM	67900 (20000)	31700 (20000)	228000 (20000)	NM	25200 (20000)	U (20000)	125000 (20000)	15900 J (20000)
Carbon Dioxide	NE	446000 (20000)	U (20000)	263000 (20000)	NM	370000 (20000)	667000 (20000)	221000 (20000)	NM	175000 (20000)	141000 (20000)	6080000 (20000)	NM	106000 (20000)	U (20000)	111000 (20000)	U (20000)
Organic Carbon (total)	NE	U (1000)	U (1000)	3200 (1000)	NM	1200 (1000)	540 J (1000)	930 J (1000)	NM	U (1000)	580 (1000)	610 J (1000)	NM	2000 (1000)	690 J (1000)	U (1000)	U (1000)
Carbonate Alkalinity	NE	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	NM	U (20000)	36900 (20000)	U (20000)	U (20000)
Chloride	NE	105000 (10000)	310000 (20000)	56700 (10000)	NM	129000 (10000)	16200 (1000)	23600 (2000)	NM	24700 M1 (2000)	9000 (1000)	130000 (10000)	NM	362000 (50000)	79300 (10000)	333000 (20000)	834000 (50000)
Iron, Ferric	NE	U (200)	U (200)	U (200)	NM	U (200)	U (200)	U (200)	NM	U (200)	U (200)	U (200)	NM	1000 (200)	U (200)	U (200)	U (200)
Nitrogen	NE	1000 (100)	2700 (100)	10300 (500)	NM	5700 (200)	1000 (100)	1100 (100)	NM	160 M1 (100)	440 (100)	1500 (100)	NM	140 (100)	1200 (100)	2400 (100)	89 J (100)
Nitrogen, Nitrate (As N)	NE	1000 (100)	2700 (100)	10300 (500)	NM	5700 (200)	1000 (100)	1100 (100)	NM	160 (100)	440 (100)	1500 (100)	NM	140 (100)	1200 (100)	2400 (100)	89 J (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (500)	NM	U (200)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)
pH [STD UNITS]	NE	5.6 (0.10)	4.9 (0.10)	6.1 (0.10)	NM	5.7 (0.10)	4.8 (0.10)	5.8 (0.10)	NM	6.1 (0.10)	5.8 (0.10)	4.9 (0.10)	NM	5.8 (0.10)	10.1 (0.10)	8.4 (0.10)	5.1 (0.10)
Phosphates (total)	NE	32 (30)	32 (30)	170 (30)	NM	32 (30)	520 (30)	100 (30)	NM	66 (30)	66 (30)	940 (30)	NM	140 (30)	U (30)	170 (30)	130 (30)
Sulfide (total)	NE	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	15900 (1000)	9400 (1000)	37500 (2000)	NM	36100 (2000)	952000 (100000)	962000 (100000)	NM	7000 (1000)	12400 (1000)	1520000 (100000)	NM	62400 (10000)	58100 (10000)	8480000 (1000000)	4500 (1000)
Gases																	
Methane	NE	0.33 (0.10)	3.2 (0.10)	16 (0.10)	NM	9.8 (0.10)	1.8 (0.10)	15 (0.10)	NM	1.1 (0.10)	0.53 (0.10)	3.0 (0.10)	NM	20 (0.10)	1.1 (0.10)	3.0 (0.10)	0.76 (0.10)
Ethane	NE	U (0.025)	U (0.025)	0.075 (0.025)	NM	0.064 (0.025)	0.035 (0.025)	0.15 (0.025)	NM	0.075 (0.025)	U (0.025)	0.044 (0.025)	NM	0.19 (0.025)	0.079 (0.025)	U (0.025)	U (0.025)
Ethene	NE	U (0.025)	0.050 (0.025)	0.18 (0.025)	NM	0.045 (0.025)	0.14 (0.025)	0.029 (0.025)	NM	U (0.025)	U (0.025)	U (0.025)	NM	U (0.025)	0.067 (0.025)	U (0.025)	0.030 (0.025)
Hydrogen [nM] [4]	NE	5.6 (0.60)	0.67 (0.60)	14 (0.60)	NM	0.62 (0.60)	0.66 (0.60)	6.2 (0.60)	NM	0.95 (0.60)	2.1 (0.60)	15000 (600)	NM	7.4 (0.60)	1.8 (0.60)	260 (30)	0.81 (0.60)
Molecular Analyses																	
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (1)	U (0.5)	NM	0.9 (0.5)	U (0.5)	U (0.5)	U (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	1 (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	6.4 (1)	U (0.5)	NM	2.7 (0.5)	U (0.5)	U (0.5)	U (0.5)
tceA Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (1)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)

Notes:

1 All concentrations are presented in ug/L except where noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method - Bubble Strip.

U = Not detected
J = Estimated concentration
( ) = Method detection limit for VOCs; reporting limit for all other parameters
* = Sampled on different day than other parameters with different method

RADD = Remedial action decision document
ADEQ = Arkansas Department of Environmental Quality
VOC = Volatile organic compounds
µg/L = Micrograms per Liter
mL = Milliliters
NE = Not established
NM = Not measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 5
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FIRST QUARTER 2015)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	IW-80	MW-25	MW-32	MW-32R	MW-33	MW-33R	MW-34	MW-35R	MW-38	MW-38	MW-65	MW-83	MW-84	MW-85	MW-86	MW-87
ENVIRON Sample ID		IW-80-201501	MW-25-201501	MW-32-201501	MW-32R-GW-20150119	MW-33-201501	MW-33R-GW-20150118	MW-34-201501	MW-35R-201501	MW-38-201501	DUP-06-201501	MW-65-201501	MW-83-201501	MW-84-201501	MW-85-201501	MW-86-201501	MW-87-201501
Lab Sample ID(s)		027MA013, 145440048, 145440047, 60186097034	027MA066, 145450004, 145450003, 60186334015	027MA043, 145450016, 145450015, 60186183002	60186478002	027MA053, 145450018, 145450017, 60186183028	60186478001	027MA016, 145450020, 145450019, 60186097035	027MA014, 145450022, 145450021, 60186097003	027MA060, 145450026, 145450025, 60186334005	60186334006	027MA015, 145450038, 145450037, 60186097004	027MA065, 145460006, 145460005, 60186334014	027MA033, 145460008, 145460007, 60186183015	027MA057, 145460010, 145460009, 60186334002	027MA058, 145460012, 145460011, 60186334003	027MA048, 145460014, 145460013, 60186183007
Sample Date		1/13/2015	1/14/2015	1/13/2015	01/19/2015	1/13/2015	01/18/2015	1/13/2015	1/13/2015	1/15/2015	1/15/2015	1/13/2015	1/15/2015	1/14/2015	1/14/2015	1/15/2015	1/14/2015
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments											Field Duplicate						
Volatile Organic Compounds																	
Acetone	12000	8.3 J (5.0)	102 (5.0)	33.2 (5.0)	60.3 (5.0)	U (5.0)	U (5.0)	42.7 (5.0)	56.6 (5.0)	U (5.0)	U (5.0)	38.7 (5.0)	23.9 (5.0)	97.8 (5.0)	71.5 (5.0)	177 (5.0)	U (5.0)
Benzene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.97 J (0.50)	0.95 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromodichloromethane	80	U (0.50)	4.0 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.4 (0.50)	U (0.50)	U (0.50)
Bromoform	80	0.51 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.0 (0.50)	2.2 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.3 (0.50)	3.8 (0.50)	3.5 (0.50)	U (0.50)
Bromomethane	7	U (2.5)	36.6 (2.5)	22.5 (2.5)	34.9 (2.5)	U (2.5)	U (2.5)	18.1 (2.5)	40.0 (2.5)	U (2.5)	U (2.5)	3.0 J (2.5)	12.3 (2.5)	25.9 (2.5)	32.4 (2.5)	5.9 (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	11.6 (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	7.4 J (5.0)	43.9 (5.0)	U (5.0)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	3.0 (0.50)	U (0.50)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	1.7 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.90 J (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	18.6 (0.50)	U (0.50)	0.97 J (0.50)	U (0.50)	0.99 J (0.50)	U (0.50)	U (0.50)	0.65 J (0.50)	0.64 J (0.50)	U (0.50)	U (0.50)	U (0.50)	17.8 (0.50)	79.4 (0.50)	U (0.50)
Chloromethane	190	0.79 J (0.50)	29.6 (0.50)	10.0 (0.50)	15.5 (0.50)	U (0.50)	0.70 J (0.50)	7.4 (0.50)	46.2 (0.50)	U (0.50)	U (0.50)	3.5 (0.50)	1.4 (0.50)	16.7 (0.50)	4.3 (0.50)	1.6 (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	7.5 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	12.5 (0.50)	35.5 (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	1.7 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.2 (0.50)	10 (0.50)	2.0 (0.50)
1,2-Dichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.82 J (0.50)	0.67 J (0.50)	U (0.50)	U (0.50)	15.6 (0.50)	17.3 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	10.9 (0.50)	5.9 (0.50)
cis-1,2-Dichloroethene	70	U (0.50)	126 (25.0)	0.55 J (0.50)	U (0.50)	13.9 (0.50)	9.9 (0.50)	U (0.50)	U (0.50)	1900 (50.0)	1190 (12.5)	U (0.50)	1.8 (0.50)	U (0.50)	167 (0.50)	128 (0.50)	51.3 (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	35.2 (0.50)	U (0.50)	U (0.50)	1.5 (0.50)	0.83 J (0.50)	U (0.50)	U (0.50)	16.8 (0.50)	18.3 (0.50)	U (0.50)	U (0.50)	U (0.50)	25.3 (0.50)	18.4 (0.50)	U (0.50)
Methylene Chloride	5	U (0.50)	23.8 (0.50)	U (0.50)	U (0.50)	U (0.50)	0.64 J (0.50)	U (0.50)	U (0.50)	0.65 J (0.50)	0.94 J (0.50)	U (0.50)	U (0.50)	U (0.50)	53.2 (0.50)	20.4 (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	41.7 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.71 J (0.50)	0.60 J (0.50)	U (0.50)	U (0.50)	U (0.50)	36.4 (0.50)	1080 J (0.50)	U (0.50)
Tetrachloroethene	5	U (0.50)	7.6 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.5 (0.50)	2.1 (0.50)	U (0.50)	U (0.50)	U (0.50)	13.4 (0.50)	38.5 (0.50)	3.5 (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.76 J (0.50)	0.73 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.7 (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	8.3 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	100 (0.50)	1100 J (0.50)	U (0.50)
1,1,2-Trichloroethane	5	U (0.50)	1.2 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.1 (0.50)	8.1 (0.50)	U (0.50)
Trichloroethene	5	7.1 (0.50)	2510 (25.0)	20.2 (0.50)	12.9 (0.50)	1080 (5.0)	799 (2.5)	22.0 (0.50)	10.9 (0.50)	5440 (50.0)	3910 (12.5)	19.2 (0.50)	101 (0.50)	U (0.50)	5940 (250)	81200 (1000)	661 (5.0)
Vinyl Chloride	2	U (0.50)	1.6 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	133 (0.50)	143 (0.50)	U (0.50)	U (0.50)	U (0.50)	1.1 (0.50)	4.5 (0.50)	U (0.50)
Metals																	
Iron	NE	121 (50.0)	331 (50.0)	U (50.0)	NM	35.5 J (50.0)	NM	188 (50.0)	104 (50.0)	1130 (50.0)	NM	247 (50.0)	149 (50.0)	30.2 J (50.0)	118 (50.0)	4070 (50.0)	240 (50.0)
Manganese	NE	39.0 (5.0)	645 (5.0)	414 (5.0)	NM	99.0 (5.0)	NM	59.9 (5.0)	161 (5.0)	4240 (5.0)	NM	102 (5.0)	13.8 (5.0)	U (5.0)	12.1 (5.0)	2280 (5.0)	118 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)																	
Alkalinity	NE	140000 (20000)	10400 J (20000)	5500 J (20000)	NM	10500 J (20000)	NM	U (20000)	461000 (20000)	315000 (20000)	NM	689000 (20000)	146000 (20000)	334000 (20000)	83500 (20000)	250000 (20000)	54400 (20000)
Ammonia	NE	66 (100)	1200 (500)	U (100)	NM	U (100)	NM	U (100)	870 (100)	U (100)	NM	640 (100)	U (100)	490 (100)	290 (100)	3900 (500)	U (100)
Bicarbonate Alkalinity	NE	140000 (20000)	10400 J (20000)	5500 J (20000)	NM	10500 J (20000)	NM	U (20000)	461000 (20000)	315000 (20000)	NM	U (20000)	146000 (20000)	165000 (20000)	83500 (20000)	250000 (20000)	54400 (20000)
Carbon Dioxide	NE	261000 (20000)	U (20000)	U (20000)	NM	U (20000)	NM	U (20000)	410000 (20000)	425000 (20000)	NM	199000 (20000)	339000 (20000)	220000 (20000)	483000 (20000)	591000 (20000)	195000 (20000)
Organic Carbon (total)	NE	530 J (1000)	4300 (1000)	U (1000)	NM	U (1000)	NM	U (1000)	2200 (1000)	1900 (1000)	NM	6400 (1000)	U (1000)	960 J (1000)	2200 (1000)	38800 (5000)	630 J (1000)
Carbonate Alkalinity	NE	U (20000)	U (20000)	U (20000)	NM	U (20000)	NM	U (20000)	U (20000)	U (20000)	NM	452000 (20000)	U (20000)	169000 (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	206000 (20000)	508000 (50000)	342000 (20000)	NM	220000 (20000)	NM	286000 (20000)	308000 (20000)	38000 (2000)	NM	356000 (50000)	413000 (50000)	362000 (50000)	418000 (50000)	625000 (50000)	62300 (10000)
Iron, Ferric	NE	U (200)	310 (200)	U (200)	NM	U (200)	NM	U (200)	U (200)	960 (200)	NM	U (200)	U (200)	U (200)	U (200)	4000 (200)	240 (200)
Nitrogen	NE	790 (100)	530 (100)	240 M1 (100)	NM	2500 (100)	NM	470 (100)	2700 (100)	130 (100)	NM	2800 (100)	1600 (100)	3400 (100)	1300 (100)	3000 (100)	3700 (100)
Nitrogen, Nitrate (As N)	NE	790 (100)	530 (100)	240 M1 (100)	NM	2500 (100)	NM	470 (100)	2700 (100)	130 (100)	NM	2800 (100)	1600 (100)	3400 (100)	1300 (100)	3000 (100)	3700 (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (100)	NM	U (100)	NM	U (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
pH [STD UNITS]	NE	6.3 (0.10)	4.1 (0.10)	4.7 (0.10)	NM	5.0 (0.10)	NM	4.6 (0.10)	8.3 (0.10)	6.6 (0.10)	NM	11.7 (0.10)	6.1 (0.10)	9.2 (0.10)	5.6 (0.10)	6.1 (0.10)	5.9 (0.10)
Phosphates (total)	NE	700 (30)	66 (30)	66 (30)	NM	32 (30)	NM	U (30)	1100 (30)	66 (30)	NM	2100 (30)	520 (30)	870 (30)	350 (30)	170 (30)	32 (30)
Sulfide (total)	NE	U (50)	U (50)	U (50)	NM	U (50)	NM	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	474000 (50000)	4610000 (500000)	268000 (20000)	NM	17800 (1000)	NM	478000 (50000)	7410000 (500000)	89800 (10000)	NM	3370000 (500000)	818000 (50000)	4000000 (500000)	1530000 (200000)	5050000 (500000)	12500 (1000)
Gases																	
Methane	NE	1.5 (0.10)	92 (0.10)	7.7 (0.10)	NM	1.4 (0.10)	NM	3.8 (0.10)	19 (0.10)	18 (0.10)	NM	8.0 (0.10)	1.3 (0.10)	7.3 (0.10)	29 (0.10)	22 (0.10)	2.8 (0.10)
Ethane	NE	0.042 (0.025)	4.6 (0.025)	U (0.025)	NM	0.035 (0.025)	NM	0.029 (0.025)	0.18 (0.025)	1.2 (0.025)	NM	0.22 (0.025)	0.12 (0.025)	0.14 (0.025)	4.2 (0.025)	2.8 (0.025)	0.067 (0.025)
Ethene	NE	0.058 (0.025)	0.16 (0.025)	U (0.025)	NM	U (0.025)	NM	U (0.025)	0.026 (0.025)	12 (0.025)	NM	0.054 (0.025)	0.12 (0.025)	0.10 (0.025)	0.41 (0.025)	0.78 (0.025)	0.14 (0.025)
Hydrogen [nM] [4*]	NE	5.6 (0.60)	2500 (300)	0.88 (0.60)	NM	0.87 (0.60)	NM	16 (0.60)	6.1 (0.60)	13 (0.60)	NM	120 (12)	1700 (60)	5200 (120)	520 (24)	17000 (480)	42 (0.60)
Molecular Analyses																	
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	NM	U (0.5)	U (0.5)	3340 (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	NM	U (0.5)	U (0.5)	5200 (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
tceA Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)

Notes:

1 All concentrations are presented in ug/L except where noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method - Bubble Strip.
U = Not detected
J = Estimated concentration
( ) = Method detection limit for VOCs; reporting limit for all other parameters
* = Sampled on different day than other parameters with different method

RADD = Remedial action decision document
ADEQ = Arkansas Department of Environmental Quality
VOC = Volatile organic compounds
µg/L = Micrograms per Liter
mL = Milliliters
NE = Not established
NM = Not measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 5
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FIRST QUARTER 2015)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-88	MW-89	MW-90	MW-91	MW-91	ITMW-2	ITMW-4	ITMW-6	ITMW-16	ITMW-20	IW-72	MW-22	MW-26	MW-27	MW-28	MW-29
ENVIRON Sample ID		MW-88-201501	MW-89-201501	MW-90-201501	MW-91-201501	DUP-07-201501	ITMW-2-201501	ITMW-4-201501	ITMW-6-201501	ITMW-16-201501	ITMW-20-201501	IW-72-201501	MW-22-201501	MW-26-201501	MW-27-201501	MW-28-201501	MW-29-201501
Lab Sample ID(s)		027MA019, 145460016, 145460015, 60186097036	027MA026, 145460018, 145460017, 60186097015	027MA08, 145460020, 145460019, 60186000008	027MA025, 145460022, 145460021, 60186097013	60186097014	027MA022, 145440004, 145440003, 60186097009	027MA018, 145440006, 145440005, 60186097006	027MA017, 145440008, 145440007, 60186097005	027MA045, 145440026, 145440025, 60186183004	027MA04, 145440034, 145440033, 60186000004	027MA01, 145440038, 145440037, 60186000001	027MA023, 145450002, 145450001, 60186097010	027MA055, 145450006, 145450005, 60186183031	027MA037, 145450008, 145450007, 60186183019	027MA034, 145450010, 145450009, 60186183016	027MA021, 145450012, 145450011, 60186097008
Sample Date		1/13/2015	1/13/2015	1/12/2015	1/13/2015	1/13/2015	1/13/2015	1/12/2015	1/12/2015	1/14/2015	1/12/2015	1/12/2015	1/13/2015	1/12/2015	1/14/2015	1/14/2015	1/12/2015
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments						Field Duplicate											
Volatile Organic Compounds																	
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Benzene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	6.1 (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	190	U (0.50)	U (0.50)	1.4 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	1.1 (0.50)	1.2 (0.50)	U (0.50)	U (0.50)	4.9 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7	U (0.50)	U (0.50)	U (0.50)	3.0 (0.50)	3.1 (0.50)	U (0.50)	U (0.50)	0.65 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	70	U (0.50)	U (0.50)	U (0.50)	31.5 (0.50)	31.0 (0.50)	U (0.50)	2.3 (0.50)	5.7 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.59 J (0.50)	U (0.50)	U (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Methylene Chloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	3.0 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5	U (0.50)	U (0.50)	U (0.50)	1.6 (0.50)	1.2 (0.50)	0.54 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	5	U (0.50)	11.4 (0.50)	U (0.50)	354 (2.5)	317 (2.5)	U (0.50)	1.7 (0.50)	3.7 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.84 J (0.50)	U (0.50)	U (0.50)
Vinyl Chloride	2	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Metals																	
Iron	NE	1810 (50.0)	74.4 (50.0)	4500 (50.0)	627 (50.0)	NM	208 (50.0)	2550 (50.0)	U (50.0)	851 (50.0)	47.2 J (50.0)	114 (50.0)	U (50.0)	U (50.0)	305 (50.0)	184 (50.0)	2770 (50.0)
Manganese	NE	114 (5.0)	618 (5.0)	505 (5.0)	488 (5.0)	NM	9.5 (5.0)	3300 (5.0)	110 (5.0)	13.4 (5.0)	7.8 (5.0)	4810 (5.0)	100 (5.0)	253 (5.0)	200 (5.0)	32.6 (5.0)	188 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)																	
Alkalinity	NE	95600 (20000)	32300 (20000)	300000 (20000)	63800 (20000)	NM	53100 (20000)	91700 (20000)	145000 (20000)	41300 (20000)	85000 (20000)	119000 (20000)	47900 (20000)	24900 (20000)	40200 (20000)	92000 (20000)	13000 J (20000)
Ammonia	NE	U (100)	U (100)	49 J (100)	U (100)	NM	U (100)	250 (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
Bicarbonate Alkalinity	NE	95600 (20000)	32300 (20000)	300000 (20000)	63800 (20000)	NM	53100 (20000)	91700 (20000)	145000 (20000)	41300 (20000)	85000 (20000)	119000 (20000)	47900 (20000)	24900 (20000)	40200 (20000)	92000 (20000)	13000 J (20000)
Carbon Dioxide	NE	84400 (20000)	310000 (20000)	441000 (20000)	178000 (20000)	NM	150000 (20000)	149000 (20000)	337000 (20000)	46300 (20000)	158000 (20000)	337000 (20000)	289000 (20000)	159000 (20000)	172000 (20000)	180000 (20000)	U (20000)
Organic Carbon (total)	NE	4900 (1000)	680 J (1000)	20100 (2000)	560 J (1000)	NM	U (1000)	9100 (1000)	U (1000)	2700 (1000)	530 J (1000)	530 J (1000)	U (1000)	U (1000)	650 J (1000)	610 J (1000)	1200 (1000)
Carbonate Alkalinity	NE	U (20000)	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	15900 (1000)	51600 (5000)	91800 (10000)	48400 (5000)	NM	57300 (10000)	8800 (1000)	158000 (10000)	720 J (1000)	108000 (10000)	242000 (20000)	16400 (1000)	335000 (20000)	59000 (10000)	23200 (2000)	95900 (10000)
Iron, Ferric	NE	1800 (200)	U (200)	1200 (200)	630 (200)	NM	210 (200)	2000 (200)	U (200)	850 (200)	U (200)	U (200)	U (200)	U (200)	300 (200)	U (200)	2800 (200)
Nitrogen	NE	350 (100)	105000 (5000)	U (100)	2700 (100)	NM	1100 (100)	U (100)	28100 M1 (1000)	1500 (100)	1100 (100)	980 (100)	U (100)	2700 (100)	190 (100)	U (100)	1600 (100)
Nitrogen, Nitrate (As N)	NE	350 (100)	105000 (5000)	U (100)	2700 (100)	NM	1100 (100)	U (100)	28100 M1 (1000)	1500 (100)	1100 (100)	980 (100)	U (100)	2700 (100)	190 (100)	U (100)	1600 (100)
Nitrogen, Nitrite	NE	U (100)	U (5000)	U (100)	U (100)	NM	U (100)	U (100)	U (1000)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
pH [STD UNITS]	NE	8.8 (0.10)	5.4 (0.10)	6.5 (0.10)	6.0 (0.10)	NM	6.0 (0.10)	6.4 (0.10)	6.1 (0.10)	6.9 (0.10)	6.3 (0.10)	6.0 (0.10)	5.6 (0.10)	5.6 (0.10)	5.8 (0.10)	6.3 (0.10)	5.2 (0.10)
Phosphates (total)	NE	U (30)	32 (30)	32 (30)	U (30)	NM	66 (30)	32 (30)	77 (30)	140 (30)	66 (30)	170 (30)	32 (30)	32 (30)	170 (30)	84 (30)	170 (30)
Sulfide (total)	NE	U (50)	U (50)	1200 (50)	U (50)	NM	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	20 J (50)
Sulfate	NE	7600 (1000)	4800 (1000)	89000 (10000)	14800 (1000)	NM	16800 (1000)	19800 (1000)	102000 (10000)	50900 (10000)	16600 (1000)	8500 (1000)	15200 (1000)	9500 (1000)	16800 (1000)	39600 (5000)	53500 (10000)
Gases																	
Methane	NE	1.7 (0.10)	3.0 (0.10)	14 (0.10)	47 (0.10)	NM	0.36 (0.10)	18 (0.10)	1.2 (0.10)	0.45 (0.10)	0.80 (0.10)	1.3 (0.10)	1.3 (0.10)	0.11 (0.10)	1.0 (0.10)	0.63 (0.10)	0.50 (0.10)
Ethane	NE	U (0.025)	U (0.025)	0.66 (0.025)	0.46 (0.025)	NM	U (0.025)	0.059 (0.025)	U (0.025)	U (0.025)	U (0.025)	0.054 (0.025)	U (0.025)	U (0.025)	0.034 (0.025)	U (0.025)	0.031 (0.025)
Ethene	NE	0.42 (0.025)	0.10 (0.025)	2.7 (0.025)	0.41 (0.025)	NM	0.049 (0.025)	0.12 (0.025)	0.42 (0.025)	0.10 (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	0.033 (0.025)	U (0.025)	0.034 (0.025)
Hydrogen [nM] [4]	NE	11 (0.60)	0.93 (0.60)	1.7 (1.2)	0.72 (0.60)	NM	35 (0.60)	0.79 (0.60)	U (0.60)	2.8 (0.60)	0.77 (0.60)	0.80 (0.60)	14 (0.60)	0.82 (0.60)	1.9 (0.60)	1.8 (0.60)	0.76 (0.60)
Molecular Analyses																	
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	U (1)	U (0.666667)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.666667)
Dehalococcoides (DHC) [cells/mL]	NE	8.7 (0.5)	14.8 (1)	10.6 (0.666667)	3.9 (0.5)	NM	U (0.5)	7.1 (0.5)	U (0.5)	4.9 (0.5)	U (0.5)	U (0.5)	50.4 (0.5)	0.8 (0.5)	0.55 (0.5)	6.9 (0.5)	U (0.666667)
tceA Reductase [cells/mL]	NE	U (0.5)	1.1 (1)	U (0.666667)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	0.2 J (0.5)	U (0.5)	U (0.5)	U (0.666667)

Notes:

1 All concentrations are presented in ug/L except where noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method - Bubble Strip.

U = Not detected
J = Estimated concentration
( ) = Method detection limit for VOCs; reporting limit for all other parameters
* = Sampled on different day than other parameters with different method

RADD = Remedial action decision document
ADEQ = Arkansas Department of Environmental Quality
VOC = Volatile organic compounds
µg/L = Micrograms per Liter
mL = Milliliters
NE = Not established
NM = Not measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 5
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FIRST QUARTER 2015)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-31	MW-31R	MW-36	MW-39	MW-40	MW-50	MW-60	MW-61	MW-62	MW-63	MW-66	MW-67	MW-68	MW-96	MW-97	MW-98
ENVIRON Sample ID		MW-31-201501	MW-31R-GW-20150119	MW-36-201501	MW-39-201501	MW-40-201501	MW-50-201501	MW-60-201501	MW-61-201501	MW-62-201501	MW-63-201501	MW-66-201501	MW-67-201501	MW-68-201501	MW-96-201501	MW-97-201501	MW-98-201501
Lab Sample ID(s)		027MA05, 145450014, 145450013, 60186000005	60186478003	027MA07, 145450024, 145450023, 60186000007	027MA09, 145450028, 145450027, 60186000009	027MA06, 145450030, 145450029, 60186000006	027MA029, 145460023, 60186097018	027MA030, 145460027, 60186097019	027MA028, 145460028, 60186097017	027MA020, 145450034, 145450033, 60186097007	027MA054, 145460029, 60186097021	027MA046, 145450040, 145450039, 60186183005	027MA02, 145450042, 145450041, 60186000002	027MA03, 145450044, 145450043, 60186000003	60186371003	60186371004	60186371002
Sample Date		1/12/2015	01/19/2015	1/12/2015	1/12/2015	1/12/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/14/2015	1/12/2015	1/12/2015	01/15/2015	01/15/2015	01/15/2015
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments																	
Volatile Organic Compounds																	
Acetone	12000	U (5.0)	8.5 J (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Benzene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromodichloromethane	80	U (0.50)	0.52 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7	U (2.5)	U (2.5)	16.4 (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	6.6 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	190	U (0.50)	U (0.50)	1.2 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	70	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.0 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Methylene Chloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	10.2 (0.50)	U (0.50)	8.2 (0.50)	2.4 (0.50)	1.3 (0.50)	U (0.50)	0.59 J (0.50)	U (0.50)	U (0.50)
Vinyl Chloride	2	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Metals																	
Iron	NE	199 (50.0)	NM	112 (50.0)	44.1 J (50.0)	U (50.0)	19400 (50.0)	7920 (50.0)	13000 (50.0)	356 (50.0)	27600 (50.0)	410 (50.0)	38800 (50.0)	37.3 J (50.0)	NM	NM	NM
Manganese	NE	234 (5.0)	NM	470 (5.0)	402 (5.0)	192 (5.0)	272 (5.0)	894 (5.0)	104 (5.0)	33.7 (5.0)	207 (5.0)	7.0 (5.0)	300 (5.0)	1020 (5.0)	NM	NM	NM
Monitored Natural Attenuation Parameters (Laboratory)																	
Alkalinity	NE	16500 J (20000)	NM	13100 J (20000)	9900 J (20000)	12200 J (20000)	218000 (20000)	404000 (20000)	131000 (20000)	40100 (20000)	43500 (20000)	97900 (20000)	266000 (20000)	8200 J (20000)	NM	NM	NM
Ammonia	NE	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	NM	NM	NM
Bicarbonate Alkalinity	NE	16500 J (20000)	NM	13100 J (20000)	9900 J (20000)	12200 J (20000)	218000 (20000)	404000 (20000)	131000 (20000)	40100 (20000)	43500 (20000)	97900 (20000)	266000 (20000)	8200 J (20000)	NM	NM	NM
Carbon Dioxide	NE	U (20000)	NM	U (20000)	U (20000)	U (20000)	278000 (20000)	455000 (20000)	192000 (20000)	289000 (20000)	176000 (20000)	253000 (20000)	308000 (20000)	U (20000)	NM	NM	NM
Organic Carbon (total)	NE	750 J (1000)	NM	U (1000)	U (1000)	U (1000)	U (1000)	730 J (1000)	U (1000)	U (1000)	700 J (1000)	U (1000)	640 J (1000)	U (1000)	NM	NM	NM
Carbonate Alkalinity	NE	U (20000)	NM	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	NM	NM	NM
Chloride	NE	97800 (10000)	NM	251000 (20000)	332000 (20000)	237000 (20000)	261000 (20000)	139000 (10000)	102000 (10000)	157000 (10000)	152000 (10000)	176000 (10000)	119000 (10000)	334000 (20000)	NM	NM	NM
Iron, Ferric	NE	U (200)	NM	U (200)	U (200)	U (200)	18600 (200)	7800 (200)	12900 (200)	360 (200)	27600 (200)	390 (200)	38700 (200)	U (200)	NM	NM	NM
Nitrogen	NE	160 (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	1500 (100)	690 (100)	270 (100)	200 (100)	57 J (100)	U (100)	NM	NM	NM
Nitrogen, Nitrate (As N)	NE	160 (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	1500 (100)	690 (100)	270 (100)	200 (100)	57 J (100)	U (100)	NM	NM	NM
Nitrogen, Nitrite	NE	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	NM	NM	NM
pH [STD UNITS]	NE	5.3 (0.10)	NM	5.1 (0.10)	5.1 (0.10)	6.1 (0.10)	6.7 (0.10)	6.9 (0.10)	6.5 (0.10)	5.5 (0.10)	5.8 (0.10)	6.1 (0.10)	6.9 (0.10)	4.9 (0.10)	NM	NM	NM
Phosphates (total)	NE	66 (30)	NM	U (30)	32 (30)	32 (30)	280 (30)	170 (30)	74 (30)	66 (30)	1300 (30)	100 (30)	2000 (30)	66 (30)	NM	NM	NM
Sulfide (total)	NE	U (50)	NM	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	NM	NM	NM
Sulfate	NE	31700 (2000)	NM	77800 (10000)	6500 (1000)	2800 (1000)	2000 (1000)	32600 (2000)	17200 (2000)	4400 (1000)	9500 (1000)	6500 (1000)	10200 (1000)	1000 (1000)	NM	NM	NM
Gases																	
Methane	NE	3.6 (0.10)	NM	6.9 (0.10)	0.24 (0.10)	0.31 (0.10)	0.43 (0.10)	0.23 (0.10)	0.50 (0.10)	U (0.10)	0.45 (0.10)	U (0.10)	0.22 (0.10)	3.2 (0.10)	NM	NM	NM
Ethane	NE	U (0.025)	NM	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	NM	NM	NM
Ethene	NE	0.026 (0.025)	NM	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	0.054 (0.025)	U (0.025)	U (0.025)	0.026 (0.025)	NM	NM	NM
Hydrogen [nM] 4*	NE	U (1.2)	NM	56 (1.2)	0.80 (0.60)	0.83 (0.60)	NM	NM	NM	2.9 (0.60)	NM	2.1 (0.60)	3.0 (0.60)	2.2 (0.60)	NM	NM	NM
Molecular Analyses																	
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (5)	U (8.333333)	U (5)	U (0.5)	U (2)	U (0.5)	U (0.5)	U (0.5)	NM	NM	NM
Dehalococcoides (DHC) [cells/mL]	NE	1.1 (0.5)	NM	U (0.5)	U (0.5)	2.6 (0.5)	U (5)	U (8.333333)	U (5)	U (0.5)	U (2)	0.7 (0.5)	U (0.5)	0.4 J (0.5)	NM	NM	NM
tceA Reductase [cells/mL]	NE	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (5)	U (8.333333)	U (5)	U (0.5)	U (2)	U (0.5)	U (0.5)	U (0.5)	NM	NM	NM

Notes:
1 All concentrations are presented in ug/L except where noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method - Bubble Strip.
U = Not detected
J = Estimated concentration
( ) = Method detection limit for VOCs; reporting limit for all other parameters
* = Sampled on different day than other parameters with different method

RADD = Remedial action decision document
ADEQ = Arkansas Department of Environmental Quality
VOC = Volatile organic compounds
µg/L = Micrograms per Liter
mL = Milliliters
NE = Not established
NM = Not measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 5
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FIRST QUARTER 2015)
Whirlpool Facility - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-99	IW-73	IW-74	IW-74	IW-76	IW-77	MW-41	MW-46R	MW-46R	MW-56	MW-57	MW-58	MW-71	MW-81	MW-82	RW-69
ENVIRON Sample ID		MW-99-201501	IW-73-201501	IW-74-201501	DUP-01-201501	IW-76-201501	IW-77-201501	MW-41-201501	MW-46R-201501	DUP-03-201501	MW-56-201501	MW-57-201501	MW-58-201501	MW-71-201501	MW-81-201501	MW-82-201501	RW-69-201501
Lab Sample ID(s)		60186371005	027MA050, 145440040, 145440039, 60186183010	027MA051, 145440042, 145440041, 60186183013	60186183012	027MA032, 145440044, 145440043, 60186183014	027MA049, 145440046, 145440045, 60186183009	027MA036, 145450032, 145450031, 60186183018	027MA024, 145450036, 145450035, 60186097011	60186097012	027MA010, 145460024, 60186097033	027MA011, 145460025, 60186097001	027MA041, 145460026, 60186183024	027MA040, 145450046, 145450045, 60186183023	027MA027, 145460002, 145460001, 60186097020	027MA031, 145460004, 145460003, 60186097016	027MA039, 145450048, 145450047, 60186183022
Sample Date		01/15/2015	1/13/2015	1/13/2015	1/14/2015	1/13/2015	1/14/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/14/2015	1/14/2015	1/13/2015	1/13/2015	1/14/2015
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments					Field Duplicate					Field Duplicate							
Volatile Organic Compounds																	
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (5.0)	20.4 (5.0)	31.2 (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	110 (5.0)	88.0 (5.0)	U (5.0)
Benzene	5	U (0.50)	U (0.50)	0.70 J (0.50)	0.71 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	10.9 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	11.2 (0.50)	4.0 (0.50)	U (0.50)
Bromomethane	7	U (2.5)	U (2.5)	U (2.5)	U (2.5)	27.1 (2.5)	16.5 (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	38.2 (2.5)	9.7 (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Carbon Tetrachloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	190	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.5 (0.50)	19.1 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.4 (0.50)	1.0 (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7	U (0.50)	2.2 (0.50)	U (0.50)	U (0.50)	0.64 J (0.50)	U (0.50)	1.3 (0.50)	1.3 (0.50)	1.3 (0.50)	0.79 J (0.50)	0.77 J (0.50)	2.0 (0.50)	1.4 (0.50)	0.94 J (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	70	U (0.50)	6.3 (0.50)	3.8 (0.50)	3.5 (0.50)	8.8 (0.50)	4.8 (0.50)	15.6 (0.50)	11.6 (0.50)	12.0 (0.50)	10 (0.50)	5.4 (0.50)	14.7 (0.50)	6.0 (0.50)	9.9 (0.50)	1.2 (0.50)	4.7 (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.56 J (0.50)	0.78 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Methylene Chloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.90 J (0.50)	0.88 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	5	U (0.50)	70.8 (0.50)	141 (0.50)	139 (0.50)	288 (2.5)	201 (5.0)	425 (5.0)	452 (5.0)	428 (2.5)	326 (2.5)	177 (0.50)	385 (2.5)	170 (0.50)	385 (2.5)	66.0 (0.50)	115 (0.50)
Vinyl Chloride	2	U (0.50)	4.1 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.71 J (0.50)	0.90 J (0.50)	U (0.50)	U (0.50)	0.71 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Metals																	
Iron	NE	NM	2380 (50.0)	U (50.0)	NM	U (50.0)	140 (50.0)	3710 (50.0)	104 (50.0)	NM	2210 (50.0)	14600 (50.0)	1130 (50.0)	404 (50.0)	32.9 J (50.0)	200 (50.0)	154 (50.0)
Manganese	NE	NM	1860 (5.0)	1230 (5.0)	NM	9.1 (5.0)	44.0 (5.0)	5370 (5.0)	101 (5.0)	NM	154 (5.0)	379 (5.0)	351 (5.0)	1130 (5.0)	279 (5.0)	148 (5.0)	814 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)																	
Alkalinity	NE	NM	71400 (20000)	70700 (20000)	NM	13700 J (20000)	133000 (20000)	35700 (20000)	10600 J (20000)	NM	11200 J (20000)	23500 (20000)	8800 J (20000)	16500 J (20000)	20400 (20000)	69700 (20000)	12400 J (20000)
Ammonia	NE	NM	44 J (100)	U (100)	NM	U (100)	230 (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	320 (100)	U (100)
Bicarbonate Alkalinity	NE	NM	71400 (20000)	70700 (20000)	NM	13700 J (20000)	133000 (20000)	35700 (20000)	10600 J (20000)	NM	11200 J (20000)	23500 (20000)	8800 J (20000)	16500 J (20000)	20400 (20000)	69700 (20000)	12400 J (20000)
Carbon Dioxide	NE	NM	176000 (20000)	236000 (20000)	NM	U (20000)	467000 (20000)	257000 (20000)	U (20000)	NM	U (20000)	173000 (20000)	U (20000)	U (20000)	357000 (20000)	254000 (20000)	U (20000)
Organic Carbon (total)	NE	NM	2700 (1000)	770 J (1000)	NM	U (1000)	810 J (1000)	U (1000)	U (1000)	NM	1500 (1000)	1300 (1000)	U (1000)	U (1000)	510 J (1000)	3900 (1000)	U (1000)
Carbonate Alkalinity	NE	NM	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	NM	154000 (10000)	290000 (20000)	NM	382000 (50000)	287000 (20000)	466000 (50000)	280000 (20000)	NM	95500 (10000)	331000 (20000)	288000 (20000)	315000 (20000)	303000 (20000)	178000 (10000)	322000 M1 (20000)
Iron, Ferric	NE	NM	2200 (200)	220 (200)	NM	U (200)	U (200)	410 (200)	U (200)	NM	NM	NM	U (200)	U (200)	U (200)	U (200)	U (200)
Nitrogen	NE	NM	98 J (100)	330 (100)	NM	750 (100)	2500 (100)	21 J (100)	U (100)	NM	22 J (100)	U (100)	U (100)	27 J (100)	640 (100)	1800 (100)	150 (100)
Nitrogen, Nitrate (As N)	NE	NM	98 J (100)	330 (100)	NM	750 (100)	2500 (100)	21 J (100)	U (100)	NM	22 J (100)	U (100)	U (100)	27 J (100)	640 (100)	1500 (100)	150 (100)
Nitrogen, Nitrite	NE	NM	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	340 (100)	U (100)
pH [STD UNITS]	NE	NM	6.1 (0.10)	5.9 (0.10)	NM	5.1 (0.10)	5.9 (0.10)	5.5 (0.10)	4.9 (0.10)	NM	5.5 (0.10)	5.5 (0.10)	5.0 (0.10)	5.1 (0.10)	5.1 (0.10)	5.9 (0.10)	5.2 (0.10)
Phosphates (total)	NE	NM	280 (30)	210 (30)	NM	140 (30)	800 (30)	170 (30)	32 (30)	NM	170 (30)	280 (30)	140 (30)	U (30)	210 (30)	980 (30)	U (30)
Sulfide (total)	NE	NM	U (50)	U (50)	NM	U (50)	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	NM	6900 (1000)	2600 (1000)	NM	470000 (50000)	1680000 (100000)	2800 (1000)	670 J (1000)	NM	22800 (2000)	7400 (1000)	1600 (1000)	4200 (1000)	472000 (50000)	1460000 (10000)	4200 (1000)
Gases																	
Methane	NE	NM	13 (0.10)	4.4 (0.10)	NM	9.0 (0.10)	2.6 (0.10)	9.5 (0.10)	11 (0.10)	NM	0.96 (0.10)	1.9 (0.10)	44 (0.10)	40 (0.10)	0.93 (0.10)	13 (0.10)	2.3 (0.10)
Ethane	NE	NM	U (0.025)	0.029 (0.025)	NM	0.035 (0.025)	0.12 (0.025)	0.027 (0.025)	U (0.025)	NM	U (0.025)	U (0.025)	U (0.025)	U (0.025)	0.082 (0.025)	0.11 (0.025)	U (0.025)
Ethene	NE	NM	0.10 (0.025)	0.066 (0.025)	NM	0.036 (0.025)	0.035 (0.025)	0.036 (0.025)	0.045 (0.025)	NM	0.050 (0.025)	0.087 (0.025)	0.037 (0.025)	0.029 (0.025)	0.31 (0.025)	0.045 (0.025)	0.052 (0.025)
Hydrogen [nM] [4]	NE	NM	0.82 (0.60)	0.75 (0.60)	NM	72 (12)	52 (12)	2.3 (0.60)	2.9 (0.60)	NM	NM	NM	NM	2.2 (0.60)	120 (12)	1900 (48)	4.0 (0.60)
Molecular Analyses																	
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	NM	274 (0.5)	6.8 (0.454545)	NM	U (0.5)	U (0.5)	2.8 (0.5)	0.2 J (0.5)	NM	U (0.5)	63.5 (2.5)	3.8 (0.5)	U (0.5)	U (0.5)	U (0.384615)	0.1 J (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	NM	3530 (0.5)	120 (0.454545)	NM	U (0.5)	U (0.5)	340 (0.5)	2.8 (0.5)	NM	0.65 (0.5)	479 (2.5)	122 (0.5)	6.2 (0.5)	U (0.5)	U (0.384615)	2.6 (0.5)
tceA Reductase [cells/mL]	NE	NM	0.3 J (0.5)	U (0.454545)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NM	0.5 (0.5)	U (2.5)	U (0.5)	U (0.5)	U (0.5)	U (0.384615)	U (0.5)

Notes:

1 All concentrations are presented in ug/L except where noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method - Bubble Strip.

U = Not detected
J = Estimated concentration
( ) = Method detection limit for VOCs; reporting limit for all other parameters
* = Sampled on different day than other parameters with different method

RADD = Remedial action decision document
ADEQ = Arkansas Department of Environmental Quality
VOC = Volatile organic compounds
µg/L = Micrograms per Liter
mL = Milliliters
NE = Not established
NM = Not measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 4
SUMMARY OF FINAL WELL GROUND WATER FIELD PARAMETERS MEASUREMENTS - OCTOBER 2014
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (in)	Date Sampled	Water Level prior to Purging (ft btoc)	Total Depth of Well Casing (ft)	Set Tubing Depth (ft)	Time Sampled	Water Level after Purging (ft btoc)	Purge Volume (Gallons)	Purge Rate (ml/min)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
ITMW-1	4	10/15/2014	14.00	35.50	30.5	09:20	14.03	0.9	100	17.46	551	6.02	0.54	322.1	0.54	0.00	Clear	ITMW-1-201410
ITMW-2	4	10/15/2014	11.22	26.80	21.8	12:50	11.23	1.6	100	24.04	619	5.96	0.14	277.4	8.2	0.00	Clear	ITMW-2-201410
ITMW-3^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
ITMW-4	4	10/16/2014	15.55	33.46	28.5	08:25	13:12	1.0	100	17.83	263	6.40	1.35	-31.8	1.21	3.80	Clear	ITMW-4-201410
ITMW-5^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
ITMW-6	4	10/15/2014	20.81	40.09	35.0	14:45	20.85	2.9	100	22.50	1253	5.84	0.38	165	0.92	0.00	Clear	ITMW-6-201410
ITMW-7	4	10/15/2014	18.88	37.04	32.0	16:15	18.93	1.1	100	22.14	961	5.06	0.34	221.3	0.91	0.00	Clear	ITMW-7-201410
ITMW-9	4	10/15/2014	19.49	36.22	31.2	12:35	19.5	1.2	100	22.10	590	5.89	0.99	155.5	2.2	0.00	Clear	ITMW-9-201410
ITMW-10	4	10/15/2014	18.50	38.04	33.0	14:40	18.5	1.0	100	22.86	686	5.67	0.87	115.4	0.69	3.00	Clear	ITMW-10-201410
ITMW-11	4	10/15/2014	9.69	30.40	25.0	17:15	9.7	2.7	100	24.52	236	5.83	0.27	121	4.4	0.00	Clear	ITMW-11-201410
ITMW-12	4	10/15/2014	12.56	32.70	27.7	16:42	12.59	1.8	100	23.01	247	5.99	0.83	116.3	1.39	0.09	Clear	ITMW-12-201410
ITMW-13	4	10/15/2014	13.75	31.91	26.9	11:12	13.81	2.0	100	18.99	317	5.99	1.24	76	0.13	0.00	Clear	ITMW-13-201410
ITMW-14	4	10/15/2014	13.32	31.71	26.7	13:09	13.41	2.0	100	20.50	184	5.89	1.70	97.2	2.71	0.00	Clear	ITMW-14-201410
ITMW-15	4	10/16/2014	10.09	31.00	263.0	08:28	10.12	1.5	100	18.23	840	7.04	2.99	138.2	4.84	0.00	Clear	ITMW-15-201410
ITMW-16	4	10/15/2014	14.45	35.38	30.4	08:59	14.95	1.5	100	19.76	216	7.03	6.60	92.7	23.4	0.00	Clear	ITMW-16-201410
ITMW-17	4	10/16/2014	13.70	30.10	25.0	08:55	13.7	2.6	100	18.31	908	5.03	0.28	307.4	7.62	0.00	Clear	ITMW-17-201410
ITMW-18	4	10/15/2014	9.52	30.71	25.7	16:13	9.57	3.0	100	21.53	1984	5.71	2.15	237.6	0.17	0.00	Clear	ITMW-18-201410
ITMW-19	4	10/16/2014	12.06	34.00	29.0	08:40	12.06	1.3	100	18.64	1029	6.32	0.31	184.2	0.31	0.00	Clear	ITMW-19-201410
ITMW-20	4	10/15/2014	13.47	32.28	27.0	09:30	13.7	3.3	100	17.19	708	6.41	1.54	355.5	0.07	0.00	Clear	ITMW-20-201410
ITMW-21	4	10/15/2014	12.23	33.00	28.0	13:50	12.57	1.6	100	22.46	2579	4.91	0.34	330.1	0.9	0.00	Clear	ITMW-21-201410
MW-22	4	10/15/2014	10.50	29.19	24.2	15:00	10.55	1.5	100	22.35	176	5.55	0.23	259	0.39	0.00	Clear	MW-22-201410
MW-23^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-24^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-25	4	10/16/2014	12.44	34.11	29.1	10:55	12.54	2.5	100	21.62	2571	5.26	1.42	539.8	2.81	0.02	Clear	MW-25-201410
MW-26	4	10/14/2014	13.23	37.00	32.0	16:35	13.38	2.6	100	22.13	1225	5.05	0.31	174.4	0.13	0.00	Clear	MW-26-201410
MW-27	2	10/14/2014	11.00	30.10	25.1	15:45	11.01	1.0	100	24.56	212	5.46	0.82	135.3	12.4	0.00	Clear	MW-27-201410
MW-28	2	10/14/2014	6.25	27.43	22.4	14:05	6.39	1.0	100	25.59	374	6.13	0.73	-1.6	1.11	1.00	Clear	MW-28-201410
MW-29	2	10/15/2014	10.90	30.02	25.0	11:55	10.93	3.0	100	21.16	615	5.28	0.94	268	0.33	0.00	Clear	MW-29-201410
MW-30^	4	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-31	0.75	10/14/2014	11.65	27.00	24.5	13:10	13.34	0.9	75	21.56	346	5.28	0.42	207.1	3.48	0.02	Clear	MW-31-201410
MW-32	0.75	10/14/2014	11.30	24.30	19.3	14:30	11.36	1.1	100	22.85	1097	4.86	0.24	456.1	8.81	0.00	Clear	MW-32-201410
MW-33	0.75	10/15/2014	10.66	25.62	23.1	13:25	11.07	1.8	100	22.48	799	5.13	0.85	313.2	14.5	0.00	Light Yellow	MW-33-201410
MW-34	0.75	10/15/2014	9.95	28.58	25.0	09:15	10.12	1.1	100	18.65	2029	4.67	1.10	513.5	12.1	0.00	Light Brown	MW-34-201410
MW-35R	4	10/14/2014	9.51	32.35	29.9	16:10	9.62	1.7	100	20.95	16092	11.70	0.32	138.4	4.28	0.01	Light Yellow	MW-35R-201410
MW-36	0.75	10/14/2014	8.72	25.61	23.1	10:05	8.80	1.6	100	19.77	1461	5.08	0.52	460.8	8.4	0.00	Clear	MW-36-201410

Notes:

ft btoc	feet below top of casing	mL/min	milliliters per minute
in	inches	mg/L	milligrams per liter
ORP	oxidation reduction potential	NTUs	nephelometric turbidity units
DO	dissolved oxygen	NM	not measured
(°C)	degrees Celcius	(µS/cm)	microsiemens per centimeter
mV	millivolts	--	color not noted
^	Well not sampled		

Tubing inlet depths based on estimated distance from total depth.

All wells gauged using electronic water level meter and purged using peristaltic pumps.

ENVIRON

TABLE 4
SUMMARY OF FINAL WELL GROUND WATER FIELD PARAMETERS MEASUREMENTS - OCTOBER 2014
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (in)	Date Sampled	Water Level prior to Purging (ft btoc)	Total Depth of Well Casing (ft)	Set Tubing Depth (ft)	Time Sampled	Water Level after Purging (ft btoc)	Purge Volume (Gallons)	Purge Rate (ml/min)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
MW-37^	2	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-38	0.75	10/16/2014	10.18	29.74	24.8	11:27	10.29	3	100	22.27	1069	6.79	4.21	89.2	28.5	0.08	Clear	MW-38-201410
MW-39	0.75	10/13/2014	11.15	NM	18.0	15:31	11.51	1.1	100	20.53	1189	4.86	0.91	251.4	0.25	0.00	Clear	MW-39-201410
MW-40	0.75	10/13/2014	8.50	28.12	25.7	15:55	8.63	1.5	100	21.53	850	5.19	0.32	45	0.27	0.00	Clear	MW-40-201410
MW-41	0.75	10/15/2014	7.80	28.45	23.5	09:10	7.85	1.3	100	17.59	1341	5.57	0.27	48.2	2.31	3.30	Clear	MW-41-201410
MW-46R	2	10/16/2014	1.81	21.53	19.0	08:55	2.15	1	100	19.30	795	4.98	0.32	234.8	0.96	0.00	Clear	MW-46R-201410
MW-50	0.75	10/14/2014	3.08	18.10	15.6	11:50	12.05	1	75	19.96	1260	6.44	0.88	31.3	6.86	0.00	Clear	MW-50-201410
MW-56	0.75	10/15/2014	1.32	19.28	16.9	15:00	Dry	0.75	40	17.44	342	5.61	3.65	143.4	245	0.52	Clear	MW-56-201410
MW-57	0.75	10/15/2014	2.00	18.98	16.5	16:00	Dry	0.5	100	19.84	983	5.44	2.83	186.7	41.3	0.41	Clear	MW-57-201410
MW-58	0.75	10/15/2014	1.05	18.97	15.2	12:45	4.4	1.5	100	20.18	913	5	0.25	216.2	1.96	0.67	Clear	MW-58-201410
MW-60	0.75	10/14/2014	3.11	16.47	14.0	15:35	Dry	1	50	19.80	1280	6.68	1.27	56.7	20.4	0.00	Clear	MW-60-201410
MW-61	0.75	10/14/2014	6.34	15.36	12.9	14:15	Dry	1	60	18.77	692	6.32	2.28	141.1	141.1	0.00	Clear	MW-61-201410
MW-62	0.75	10/14/2014	4.01	20.61	15.6	11:30	6.86	1.25	75	19.73	635	5.62	1.45	267	6.6	0.00	Clear	MW-62-201410
MW-63	0.75	10/14/2014	2.67	21.04	19.0	14:45	19.51	1.25	50	19.51	607	5.63	0.26	292.8	51.00	0.07	Clear	MW-63-201410
MW-65	2	10/14/2014	9.56	32.00	29.5	16:08	9.65	1.6	100	20.18	13176	11.98	6.02	121.9	3.16	0.00	Light Yellow	MW-65-201410
MW-66	2	10/13/2014	2.73	17.30	14.8	14:55	3.34	2.5	100	22.95	836	6.07	0.68	131.3	6.57	0.00	Clear	MW-66-201410
MW-67	2	10/13/2014	8.62	13.40	10.9	15:45	10.70	1.2	40	22.79	852	6.70	3.46	286.6	76.10	1.16	Clear	MW-67-201410
MW-68	2	10/14/2014	5.38	20.34	15.0	14:05	5.46	2.85	100	22.32	1202	5.15	0.24	228	0.23	0.00	Clear	MW-68-201410
MW-70^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
MW-71	2	10/14/2014	6.88	26.99	22.6	9:50	6.92	1.1	100	19.36	1001	5.28	0.45	107.3	7.82	0.79	Clear	MW-71-201410
RW-69	4	10/14/2014	6.83	27.93	23.0	11:35	6.90	2.2	100	20.04	1062	5.20	0.27	102.5	3.16	0.95	Clear	RW-69-201410
IW-72	2	10/13/2014	6.99	26.90	24.4	15:40	7.08	1.2	100	20.19	796	6.02	2.08	704.9	4.0	0.02	Pink - light	IW-72-201410
IW-73	2	10/14/2014	7.06	29.60	27.1	15:35	7.10	1.3	100	21.26	164	6.59	1.91	47.5	23.49	0.14	Slight brown tint	IW-73-201410
IW-74	2	10/14/2014	7.72	27.52	25.0	14:05	7.80	2.2	150	21.43	969	5.91	0.77	40.5	0.81	0.00	Clear	IW-74-201410
IW-75^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
IW-76	2	10/15/2014	8.19	28.12	26.6	10:55	8.20	1.7	100	18.75	3023	5.16	0.22	694.4	2.12	0.00	Clear	IW-76-201410
IW-77	2	10/15/2014	8.81	29.85	34.4	10:55	8.80	1.1	100	18.80	3918	5.88	0.85	464.2	8.23	0.00	Clear	IW-77-201410
IW-78^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
IW-79^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NA
IW-80	2	10/14/2014	9.00	29.62	26.0	11:00	9.04	2	100	20.97	6832	6.55	1.50	379.2	13.40	0.01	Cloudy Brown	IW-80-201410

Notes:

ft btoc	feet below top of casing	mL/min	milliliters per minute
in	inches	mg/L	milligrams per liter
ORP	oxidation reduction potential	NTUs	nephelometric turbidity units
DO	dissolved oxygen	NM	not measured
(°C)	degrees Celcius	(µS/cm)	microsiemens per centimeter
mV	millivolts	--	color not noted
^	Well not sampled		

All wells gauged using electronic water level meter and purged using peristaltic pumps.
Tubing inlet depths based on estimated distance from total depth.

TABLE 5
SUMMARY OF RADD MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FOURTH QUARTER 2014)
Whirlpool Corporation - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	ITMW-1	ITMW-7	ITMW-9	ITMW-9	ITMW-10	ITMW-11	ITMW-12	ITMW-12	ITMW-13	ITMW-14	ITMW-15	ITMW-15	ITMW-17	ITMW-18	ITMW-19	ITMW-21	IW-80	MW-25
ENVIRON Sample ID		ITMW-1-201410	ITMW-7-201410	ITMW-9-201410	DUP-02-201410	ITMW-10-201410	ITMW-11-201410	ITMW-12-201410	DUP-04-201410	ITMW-13-201410	ITMW-14-201410	ITMW-15-201410	DUP-05-201410	ITMW-17-201410	ITMW-18-201410	ITMW-19-201410	ITMW-21-201410	IW-80-201410	MW-25-201410
Lab Sample ID(s)		137010007, 041LJ043, 137090010, 60180441010	137010003, 041LJ045, 137090022, 60180441022	137000002, 041LJ028, 137090014, 60180441014	60180441029	137000003, 041LJ027, 137090013, 60180441013	137010022, 041LJ046, 137090023, 60180441023	137010018, 041LJ029, 137090015, 60180441015	60180441028	137010016, 041LJ047, 137090024, 60180441024	137010014, 041LJ030, 137090016, 60180441016	137010019, 041LJ048, 137090025, 60180635001	60180635008	137010021, 041LJ052, 137090029, 60180635005	137010017, 041LJ031, 137090017, 60180441017	137010020, 041LJ051, 137090028, 60180635004	137010010, 041LJ036, 137090003, 60180441003	137000013, 041LJ015, 137080009, 60180331004	137010024, 041LJ049, 137090026, 60180635002
Sample Date		10/15/2014	10/15/2014	10/13/2014	10/15/2014	10/13/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/16/2014	10/16/2014	10/16/2014	10/15/2014	10/16/2014	10/15/2014	10/14/2014	10/16/2014
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments					Field Duplicate				Field Duplicate				Field Duplicate						
Volatile Organic Compounds																			
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	11.8 (5.0)	U (5.0)	U (5.0)	24.2 (5.0)	41.8 (5.0)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.51 J (0.50)	U (0.50)	U (0.50)	U (0.50)	0.68 J (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.0 J (0.50)	U (0.50)
Bromomethane	7.0	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	5.4 J (5.0)
Chlorobenzene	100	U (0.50)	0.56 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.89 J (0.50)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.52 J (0.50)	0.54 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.81 J (0.50)	2.2 J (0.50)	3.7 J (0.50)	U (0.50)	U (0.50)	5.6 (0.50)
Chloromethane	190	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	5.0 J (0.50)	U (0.50)	U (0.50)	0.85 J (0.50)	2.1 J (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.3 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.5 J (0.50)	U (0.50)	U (0.50)	U (0.50)	18.2 (0.50)
1,1-Dichloroethane	2.4	1.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)	2.8 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.5 J (0.50)	U (0.50)	U (0.50)	U (0.50)	5.3 (0.50)
1,2-Dichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.55 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.7 J (0.50)
1,1-Dichloroethene	7.0	U (0.50)	U (0.50)	1.5 J (0.50)	1.6 J (0.50)	3.8 J (0.50)	0.71 J (0.50)	2.0 J (0.50)	1.8 J (0.50)	U (0.50)	U (0.50)	3.4 J (0.50)	3.9 J (0.50)	5.8 (0.50)	U (0.50)	19.9 (0.50)	U (0.50)	U (0.50)	3.1 J (0.50)
cis-1,2-Dichloroethene	70	4.5 J (0.50)	10.3 (0.50)	39.1 (0.50)	38.8 (0.50)	32.3 (0.50)	70.4 (0.50)	188 (12.5)	192 (0.50)	25.9 (0.50)	9.4 (0.50)	63.0 (0.50)	66.4 (0.50)	70.5 (0.50)	68.5 (0.50)	76.7 (0.50)	U (0.50)	U (0.50)	2870 J (500)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.54 J (0.50)	1.0 J (0.50)	1.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	13.9 (0.50)	1.1 J (0.50)	U (0.50)	U (0.50)	595 J (500)
Methylene Chloride	5.0	U (0.50)	U (0.50)	0.88 J (0.50)	0.84 J (0.50)	0.61 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.59 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.76 J (0.50)	U (0.50)	U (0.50)	U (0.50)	57.7 (0.50)
Tetrachloroethene	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.64 J (0.50)	0.94 J (0.50)	1.3 J (0.50)	1.2 J (0.50)	U (0.50)	22.0 (0.50)	U (0.50)	U (0.50)	0.82 J (0.50)	1.5 J (0.50)	2.7 J (0.50)	U (0.50)	U (0.50)	18.1 (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.7 J (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	9.7 (0.50)
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.58 J (0.50)	0.92 J (0.50)	U (0.50)	U (0.50)	1.9 J (0.50)
Trichloroethene	5.0	6.1 (0.50)	33.7 (0.50)	76.9 (0.50)	75.3 (0.50)	243 (2.5)	2050 (50.0)	2570 (12.5)	2950 (50.0)	40.8 (0.50)	4.1 J (0.50)	1490 (5.0)	1660 (25.0)	3510 (25.0)	3540 (50.0)	12800 (50.0)	6.0 (0.50)	11.8 (0.50)	42500 (500)
Vinyl Chloride	2.0	U (0.50)	U (0.50)	1.8 J (0.50)	1.7 J (0.50)	1.7 J (0.50)	3.5 (0.50)	3.5 (0.50)	3.7 (0.50)	U (0.50)	U (0.50)	2.0 (0.50)	1.8 J (0.50)	3.2 (0.50)	U (0.50)	1.9 J (0.50)	U (0.50)	U (0.50)	540 J (500)
Metals																			
Iron	NE	U (50.0)	U (50.0)	U (50.0)	NM	U (50.0)	382 (50.0)	55.7 (50.0)	NM	U (50.0)	385 (50.0)	248 (50.0)	NM	150 (50.0)	45.5 J (50.0)	U (50.0)	U (50.0)	337 (50.0)	1310 (50.0)
Manganese	NE	16.4 (5.0)	80.5 (5.0)	257 (5.0)	NM	330 (5.0)	136 (5.0)	114 (5.0)	NM	16.5 (5.0)	15.1 (5.0)	24.9 (5.0)	NM	1910 (5.0)	7.7 (5.0)	78.2 (5.0)	801 (5.0)	63.8 (5.0)	248 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)																			
Total Alkalinity	NE	70900 (20000)	12100 J (20000)	91400 (20000)	NM	82800 (20000)	92900 (20000)	76800 (20000)	NM	53600 (20000)	41800 (20000)	230000 (20000)	NM	6400 J (20000)	56200 (20000)	73400 (20000)	9800 J (20000)	225000 (20000)	34800 (20000)
Ammonia	NE	U (100)	230 (100)	U (100)	NM	U (100)	U (100)	150 (100)	NM	U (100)	140 (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	350 (100)	U (100)
Bicarbonate Alkalinity	NE	70900 (20000)	12100 J (20000)	91400 (20000)	NM	82800 (20000)	92900 (20000)	76800 (20000)	NM	53600 (20000)	41800 (20000)	230000 (20000)	NM	6400 J (20000)	56200 (20000)	73400 (20000)	9800 J (20000)	225000 (20000)	34800 (20000)
Carbon Dioxide	NE	198000	0	1670000	NM	427000	356000	225000	NM	157000	145000	244000	NM	0	212000	135000	0	325000	413000
Organic Carbon (total)	NE	520 J (1000)	210 J (1000)	2600 (1000)	NM	1300 (1000)	640 J (1000)	880 J (1000)	NM	490 J (1000)	880 J (1000)	700 J (1000)	NM	290 J (1000)	630 J (1000)	260 J (1000)	U (1000)	1100 (1000)	4600 (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	96600 (10000)	278000 (50000)	61800 (10000)	NM	138000 (10000)	4600 (1000)	18500 (2000)	NM	22800 (2000)	6600 (1000)	120000 (10000)	NM	280000 (20000)	135000 (10000)	285000 (20000)	766000 (100000)	194000 (20000)	482000 (50000)
Iron, Ferric	NE	0 J (200)	80 J (200)	0 J (200)	NM	0 J (200)	380 (200)	0 J (200)	NM	14 J (200)	380 (200)	250 (200)	NM	130 J (200)	45 J (200)	6 J (200)	0 J (200)	330 (200)	1300 (200)
Nitrogen	NE	760 (100)	2700 (100)	14900 (500)	NM	5700 (200)	190 (100)	130 M1 (100)	NM	160 (100)	390 (100)	600 (100)	NM	U (100)	2900 (100)	1200 (100)	U (100)	1900 (100)	270 (100)
Nitrogen, Nitrate (As N)	NE	760 (100)	2700 (100)	14900 (500)	NM	5700 (200)	190 (100)	130 M1 (100)	NM	160 (100)	390 (100)	600 (100)	NM	U (100)	2900 (100)	1200 (100)	U (100)	1900 (100)	270 (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (500)	NM	U (200)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
pH [STD UNITS]	NE	6.0 (0.10)	5.0 (0.10)	5.1 (0.10)	NM	5.7 (0.10)	5.8 (0.10)	6.0 (0.10)	NM	6.0 (0.10)	5.9 (0.10)	7.0 (0.10)	NM	5.0 (0.10)	5.8 (0.10)	6.3 (0.10)	4.9 (0.10)	6.6 (0.10)	5.3 (0.10)
Phosphates (total)	NE	66 (30)	32 (30)	32 (30)	NM	66 (30)	U (30)	66 (30)	NM	U (30)	32 (30)	32 (30)	NM	35 (30)	66 (30)	35 (30)	32 (30)	1100 (30)	32 (30)
Sulfide (total)	NE	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	23800 (2000)	9700 (1000)	36100 (10000)	NM	39200 (10000)	14100 (1000)	13200 (2000)	NM	6200 (1000)	9400 M1 (1000)	8800 (1000)	NM	7100 (1000)	324000 (20000)	6100 (1000)	7000 (1000)	121000 (10000)	373000 (50000)
Gasses																			
Methane	NE	0.22 (0.10)	3.0 (0.10)	25 (0.10)	NM	4.7 (0.10)	18 (0.10)	64 (0.10)	NM	16 (0.10)	0.32 (0.10)	2.8 (0.10)	NM	4.8 (0.10)	2.0 (0.10)	0.78 (0.10)	24 (0.10)	1.7 (0.10)	130 (0.10)
Ethane	NE	0.027 (0.025)	U (0.025)	0.068 (0.025)	NM	0.056 (0.025)	0.20 (0.025)	2.2 (0.025)	NM	0.73 (0.025)	U (0.025)	0.46 (0.025)	NM	0.29 (0.025)	0.25 (0.025)	0.090 (0.025)	0.055 (0.025)	0.10 (0.025)	23 (0.025)
Ethene	NE	0.12 (0.025)	0.074 (0.025)	0.12 (0.025)	NM	0.14 (0.025)	0.057 (0.025)	0.041 (0.025)	NM	0.047 (0.025)	U (0.025)	0.050 (0.025)	NM	0.027 (0.025)	0.084 (0.025)	0.10 (0.025)	U (0.025)	U (0.025)	0.30 (0.025)
Hydrogen [nM] [4*]	NE	5.4 (0.60)	1.6 (0.60)	4.6 (0.60)	NM	5.0 (0.60)	4.8 (0.60)	1.5 (0.60)	NM	2.2 (0.60)	1.7 (0.60)	5.1 (0.60)	NM	3.7 (0.60)	7.3 (0.60)	4.7 (0.60)	2.4 (0.60)	21 (0.60)	2700 (60)
Molecular Analyses																			
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	4 (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.625)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	4.3 (0.5)	46.9 (0.5)	U (0.5)	NM	U (0.5)	0.3 J (0.5)	0.3 J (0.5)	NM	U (0.5)	U (0.625)	1.4 (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
tceA Reductase [cells/mL]	NE	0.6 (0.5)	2 (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.625)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	1 (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.625)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)

Notes:
1 All concentrations are presented in ug/L except where noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method

Abbreviations:
U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit for Volatile Organic Compounds; Reporting Limit for all other parameters.
* -- Sampled on different day than other parameters with different method
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L -- micrograms per Liter
mL -- milliliters
NE -- Not Established
NM -- Not Measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 5
SUMMARY OF RADD MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FOURTH QUARTER 2014)
Whirlpool Corporation - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-32	MW-33	MW-34	MW-35R	MW-38	MW-38	MW-65	ITMW-2	ITMW-4	ITMW-6	ITMW-16	ITMW-20	IW-72	MW-22	MW-26	MW-27	MW-28	MW-29
ENVIRON Sample ID		MW-32-201410	MW-33-201410	MW-34-201410	MW-35R-201410	MW-38-201410	DUP-06-201410	MW-65-201410	ITMW-2-201410	ITMW-4-201410	ITMW-6-201410	ITMW-16-201410	ITMW-20-201410	IW-72-201410	MW-22-201410	MW-26-201410	MW-27-201410	MW-28-201410	MW-29-201410
Lab Sample ID(s)		137000018, 041LJ017, 137080011, 60180331006	137000017, 041LJ040, 137090007, 60180441007	137000015, 041LJ042, 137090009, 60180441009	137000019, 041LJ010, 137080021, 60180331016	137010023, 041LJ053, 137090030, 60180635006	60180635010	137000020, 041LJ023, 137080023, 60180331018	137010011, 041LJ025, 137090011, 60180441011	137000001, 041LJ050, 137090027, 60180635003	137010006, 041LJ037, 137090004, 60180441004	137010012, 041LJ032, 137090018, 60180441018	137010005, 041LJ039, 137090006, 60180441006	137000006, 041LJ05, 137080005, 60180221005	137010008, 041LJ026, 137090012, 60180441012	137010009, 041LJ011, 137080022, 60180331017	137010015, 041LJ024, 137080024, 60180331019	137010013, 041LJ012, 137080006, 60180331001	137010004, 041LJ038, 137090005, 60180441005
Sample Date		10/14/2014	10/15/2014	10/14/2014	10/14/2014	10/16/2014	10/16/2014	10/14/2014	10/15/2014	10/13/2014	10/15/2014	10/15/2014	10/15/2014	10/13/2014	10/15/2014	10/14/2014	10/14/2014	10/14/2014	10/15/2014
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments							Field Duplicate												
Volatile Organic Compounds																			
Acetone	12000	U (5.0)	U (5.0)	30.4 (5.0)	48.9 (5.0)	U (5.0)	U (5.0)	45.3 (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	0.59 J (0.50)	U (0.50)	1.9 J (0.50)	U (0.50)	U (0.50)	U (0.50)	1.9 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	4.5 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7.0	2.8 J (2.5)	U (2.5)	34.9 (2.5)	U (2.5)	U (2.5)	U (2.5)	5.2 J (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.5 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	4.7 J (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.3 J (0.50)	2.4 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	190	1.6 (0.50)	U (0.50)	6.2 J (0.50)	7.2 J (0.50)	U (0.50)	U (0.50)	3.9 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.6 J (0.50)	2.4 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.98 J (0.50)	1.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)	4.8 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	10.2 (0.50)	10.8 (0.50)	U (0.50)	U (0.50)	U (0.50)	0.53 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	70	0.80 J (0.50)	15.3 (0.50)	0.96 J (0.50)	2.6 J (0.50)	781 (50.0)	869 (50.0)	0.54 J (0.50)	U (0.50)	4.9 J (0.50)	5.2 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	2.2 J (0.50)	U (0.50)	U (0.50)	4.1 J (0.50)	2.8 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Methylene Chloride	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	21.8 (0.50)	22.4 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.5 J (0.50)	2.5 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	2.0 J (0.50)	2.0 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.60 J (0.50)	0.69 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	5.0	29.7 (0.50)	1290 (5.0)	47.7 (0.50)	79.2 (0.50)	6750 (50.0)	6970 (50.0)	30.8 (0.50)	U (0.50)	3.4 J (0.50)	3.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Vinyl Chloride	2.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	321 (50.0)	370 (50.0)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Metals																			
Iron	NE	229 (50.0)	342 (50.0)	238 (50.0)	69.0 (50.0)	1270 (50.0)	NM	88.2 (50.0)	519 (50.0)	2770 (50.0)	U (50.0)	712 (50.0)	U (50.0)	166 (50.0)	U (50.0)	U (50.0)	473 (50.0)	438 (50.0)	U (50.0)
Manganese	NE	388 (5.0)	126 (5.0)	158 (5.0)	38.3 (5.0)	5670 (5.0)	NM	35.0 (5.0)	46.1 (5.0)	3540 (5.0)	155 (5.0)	18.4 (5.0)	6.4 (5.0)	5340 (5.0)	94.8 (5.0)	399 (5.0)	102 (5.0)	55.7 (5.0)	126 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)																			
Total Alkalinity	NE	7400 J (20000)	10200 J (20000)	3200 J (20000)	1250000 (20000)	330000 (20000)	NM	876000 (20000)	57400 (20000)	72700 (20000)	145000 (20000)	34400 (20000)	135000 (20000)	107000 (20000)	45600 (20000)	21400 (20000)	32800 (20000)	99000 (20000)	16300 J (20000)
Ammonia	NE	U (100)	U (100)	U (100)	1000 (100)	U (100)	NM	830 (100)	110 (100)	120 (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
Bicarbonate Alkalinity	NE	7400 J (20000)	10200 J (20000)	3200 J (20000)	U (20000)	330000 (20000)	NM	U (20000)	57400 (20000)	72700 (20000)	145000 (20000)	34400 (20000)	135000 (20000)	107000 (20000)	45600 (20000)	21400 (20000)	32800 (20000)	99000 (20000)	16300 J (20000)
Carbon Dioxide	NE	0	0	0	427000	397000	NM	226000	176000	122000	546000	36700	223000	298000	297000	400000	256000	234000	0
Organic Carbon (total)	NE	U (1000)	U (1000)	530 J (1000)	12900 (1000)	2400 (1000)	NM	5900 (1000)	U (1000)	12000 (1000)	700 (1000)	2900 (1000)	600 (1000)	730 J (1000)	800 J (1000)	U (1000)	1100 (1000)	820 J (1000)	880 J (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	U (20000)	U (20000)	970000 (20000)	U (20000)	NM	514000 (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	126000 (10000)	196000 (20000)	299000 (20000)	343000 (50000)	32000 (2000)	NM	307000 (20000)	110000 (10000)	9000 (1000)	161000 (10000)	1000 (1000)	108000 (10000)	175000 (10000)	14700 (1000)	416000 (50000)	31500 (2000)	23400 (2000)	113000 (10000)
Iron, Ferric	NE	230 (200)	340 (200)	240 (200)	59 J (200)	1200 (200)	NM	88 J (200)	520 (200)	0 J (200)	7 J (200)	710 (200)	0 J (200)	150 J (200)	0 J (200)	8 J (200)	63 J (200)	440 (200)	15 J (200)
Nitrogen	NE	170 (100)	2400 (100)	450 (100)	1900 (100)	6300 (200)	NM	2700 (100)	1000 (100)	U (100)	26600 (1000)	1100 (100)	1200 M1 (100)	1100 M1 (100)	U (100)	2900 (100)	310 (100)	U (100)	1900 (100)
Nitrogen, Nitrate (As N)	NE	170 (100)	2400 (100)	450 (100)	1900 (100)	4500 (200)	NM	2700 (100)	1000 (100)	U (100)	26600 (1000)	1100 (100)	1200 M1 (100)	1100 (100)	U (100)	2900 (100)	310 (100)	U (100)	1900 (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (100)	U (100)	1800 (200)	NM	U (100)	U (100)	U (100)	U (1000)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
pH [STD UNITS]	NE	4.8 (0.10)	5.1 (0.10)	4.7 (0.10)	11.7 (0.10)	6.8 (0.10)	NM	12.0 (0.10)	6.0 (0.10)	6.4 (0.10)	5.8 (0.10)	7.0 (0.10)	6.4 (0.10)	6.0 (0.10)	5.6 (0.10)	5.0 (0.10)	5.5 (0.10)	6.1 (0.10)	5.3 (0.10)
Phosphates (total)	NE	U (30)	32 (30)	32 (30)	3100 (60)	32 (30)	NM	2800 (60)	66 (30)	35 (30)	14 J (30)	66 (30)	32 (30)	49 (30)	14 J (30)	84 (30)	32 (30)	290 (30)	32 (30)
Sulfide (total)	NE	U (50)	U (50)	U (50)	U (50)	U (50)	NM	U (50)	U (50)	27 J (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	34900 (5000)	11000 (2000)	273000 (20000)	5110000 (500000)	135000 (10000)	NM	3080000 (500000)	19500 (2000)	17400 (1000)	86900 (10000)	32800 (5000)	18200 (2000)	9100 (1000)	10300 (1000)	8700 (1000)	15500 (2000)	39800 (2000)	57100 (10000)
Gasses																			
Methane	NE	9.3 (0.10)	0.44 (0.10)	2.9 (0.10)	17 (0.10)	24 (0.10)	NM	7.4 (0.10)	21 (0.10)	120 (0.10)	1.1 (0.10)	0.23 (0.10)	0.26 (0.10)	0.54 (0.10)	4.9 (0.10)	0.80 (0.10)	U (0.10)	1.2 (0.10)	0.65 (0.10)
Ethane	NE	U (0.025)	0.031 (0.025)	U (0.025)	0.72 (0.025)	1.0 (0.025)	NM	0.25 (0.025)	U (0.025)	0.16 (0.025)	U (0.025)	U (0.025)	U (0.025)	0.050 (0.025)	0.037 (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)
Ethene	NE	U (0.025)	U (0.025)	U (0.025)	0.16 (0.025)	42 (0.025)	NM	0.050 (0.025)	0.21 (0.025)	0.18 (0.025)	0.44 (0.025)	0.13 (0.025)	U (0.025)	U (0.025)	0.051 (0.025)	U (0.025)	U (0.025)	0.029 (0.025)	U (0.025)
Hydrogen [nM] [4*]	NE	1.3 (0.60)	1.3 (0.60)	9.6 (0.60)	2300 (60)	5.6 (0.60)	NM	160 (12)	4.9 (0.60)	6.7 (0.60)	1.7 (0.60)	1.7 (0.60)	2.1 (0.60)	4.8 (0.60)	7.0 (0.60)	1.2 (0.60)	4.9 (0.60)	5.3 (0.60)	1.7 (0.60)
Molecular Analyses																			
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	18000 (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.666667)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	0.5 (0.5)	U (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	26600 (0.5)	NM	U (0.5)	U (0.5)	0.6 (0.5)	U (0.5)	1.4 J (0.666667)	U (0.5)	U (0.5)	19.2 (0.5)	U (0.5)	U (0.5)	3.4 (0.5)	U (0.5)
tceA Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	0.2 J (0.5)	U (0.5)	0.4 J (0.666667)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.666667)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)

Notes:
1 All concentrations are presented in ug/L except where noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method

Abbreviations:
U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit for Volatile Organic Compounds; Reporting Limit for all other parameters.
* -- Sampled on different day than other parameters with different method
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L -- micrograms per Liter
mL -- milliliters
NE -- Not Established
NM -- Not Measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 5
SUMMARY OF RADD MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FOURTH QUARTER 2014)
Whirlpool Corporation - Fort Smith, Arkansas

Location		MW-31	MW-36	MW-39	MW-40	MW-50	MW-60	MW-61	MW-62	MW-63	MW-66	MW-67	MW-68	IW-73	IW-74	IW-74	IW-76	IW-77	MW-41
ENVIRON Sample ID		MW-31-201410	MW-36-201410	MW-39-201410	MW-40-201410	MW-50-201410	MW-60-201410	MW-61-201410	MW-62-201410	MW-63-201410	MW-66-201410	MW-67-201410	MW-68-201410	IW-73-201410	IW-74-201410	DUP-01-201410	IW-76-201410	IW-77-201410	MW-41-201410
Lab Sample ID(s)	Remedial Action Levels per ADEQ RADD Issued Dec 2013	041LJ016, 137080010, 60180331005	137000014, 041LJ014, 137080008, 60180331003	137000016, 041LJ01, 137080001, 60180221001	137000007, 041LJ04, 137080004, 60180221004	041LJ013, 137080007, 60180331002	041LJ08, 137080019, 60180331014	041LJ07, 137080018, 60180331013	137000022, 041LJ022, 137080016, 60180331011	041LJ06, 137080017, 60180331012	137000004, 041LJ02, 137080002, 60180221002	137000021, 041LJ03, 137080003, 60180221003	137010001, 041LJ020, 137080014, 60180331009	137000009, 041LJ09, 137080020, 60180331015	137000008, 041LJ021, 137080015, 60180331010		137000011, 041LJ035, 137090002, 60180441002	137000012, 041LJ041, 137090008, 60180441008	137000010, 041LJ034, 137090001, 60180441001
Sample Date		10/14/2014	10/14/2014	10/13/2014	10/13/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/13/2014	10/13/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014	10/14/2014
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments																Field Duplicate			
Volatile Organic Compounds																			
Acetone	12000	U (5.0)	6.4 J (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	23.1 (5.0)	15.9 (5.0)	U (5.0)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	9.6 (0.50)	2.3 J (0.50)	U (0.50)
Bromomethane	7.0	U (2.5)	12.1 (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	58.5 (2.5)	15.3 (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.51 J (0.50)	U (0.50)
Chloromethane	190	U (0.50)	2.9 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	11.3 (0.50)	13.9 (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.61 J (0.50)	U (0.50)	1.6 J (0.50)
cis-1,2-Dichloroethene	70	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.98 J (0.50)	U (0.50)	U (0.50)	U (0.50)	0.84 J (0.50)	3.3 J (0.50)	3.3 J (0.50)	6.7 (0.50)	15.8 (0.50)	16.9 (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.62 J (0.50)	2.9 J (0.50)	U (0.50)
Methylene Chloride	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	7.9 (0.50)	U (0.50)	9.4 (0.50)	2.3 J (0.50)	U (0.50)	U (0.50)	8.5 (0.50)	144 (0.50)	143 (0.50)	214 (2.5)	741 (10.0)	491 (5.0)
Vinyl Chloride	2.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.1 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Metals																			
Iron	NE	152 (50.0)	51.9 (50.0)	49.0 J (50.0)	29.8 J (50.0)	886 (50.0)	9510 (50.0)	2090 (50.0)	87.4 (50.0)	1290 (50.0)	74.2 (50.0)	1900 (50.0)	24.1 J (50.0)	1740 (50.0)	36.9 J (50.0)	NM	U (50.0)	64.9 (50.0)	4090 (50.0)
Manganese	NE	233 (5.0)	482 (5.0)	425 (5.0)	192 (5.0)	156 (5.0)	908 (5.0)	28.6 (5.0)	22.4 (5.0)	40.0 (5.0)	12.4 (5.0)	15.3 (5.0)	1630 (5.0)	196 (5.0)	591 (5.0)	NM	49.3 (5.0)	6.1 (5.0)	5760 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)																			
Total Alkalinity	NE	17900 J (20000)	13700 J (20000)	10600 J (20000)	14400 J (20000)	195000 (20000)	385000 (20000)	109000 (20000)	28000 (20000)	33800 (20000)	100000 (20000)	256000 (20000)	12400 J (20000)	35800 (20000)	75200 (20000)	NM	13100 J (20000)	98900 (20000)	36100 (20000)
Ammonia	NE	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	NM	U (100)	130 (100)	95 J (100)
Bicarbonate Alkalinity	NE	17900 J (20000)	13700 J (20000)	10600 J (20000)	14400 J (20000)	195000 (20000)	385000 (20000)	109000 (20000)	28000 (20000)	33800 (20000)	100000 (20000)	256000 (20000)	12400 J (20000)	35800 (20000)	75200 (20000)	NM	13100 J (20000)	98900 (20000)	36100 (20000)
Carbon Dioxide	NE	0	0	0	0	313000	500000	201000	159000	188000	259000	328000	0	50000	251000	NM	0	348000	226000
Organic Carbon (total)	NE	640 J (1000)	U (1000)	U (1000)	U (1000)	U (1000)	1900 (1000)	U (1000)	U (1000)	U (1000)	U (1000)	U (1000)	U (1000)	7800 (1000)	550 J (1000)	NM	550 J (1000)	720 J (1000)	U (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)
Chloride	NE	96400 (10000)	248000 (20000)	379000 (50000)	247000 (20000)	240000 (20000)	135000 (10000)	104000 (10000)	149000 (10000)	161000 (10000)	172000 (10000)	113000 (10000)	313000 (50000)	23600 (2000)	220000 (20000)	NM	316000 (50000)	300000 (50000)	448000 (50000)
Iron, Ferric	NE	130 J (200)	52 J (200)	49 J (200)	30 J (200)	890 (200)	9500 (200)	2100 (200)	87 J (200)	1200 (200)	74 J (200)	740 (200)	25 J (200)	1600 (200)	37 J (200)	NM	19 J (200)	65 J (200)	790 (200)
Nitrogen	NE	210 (100)	21 J (100)	25 J (100)	40 J (100)	U (100)	U (100)	1500 (100)	740 (100)	380 (100)	220 (100)	22 J (100)	U (100)	53 J (100)	530 (100)	NM	1100 (100)	2700 (100)	39 J (100)
Nitrogen, Nitrate (As N)	NE	210 (100)	21 J (100)	25 J (100)	40 J (100)	U (100)	U (100)	1500 (100)	740 (100)	380 (100)	220 (100)	22 J (100)	U (100)	53 J (100)	530 (100)	NM	1100 (100)	2700 (100)	39 J (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)
pH [STD UNITS]	NE	5.3 (0.10)	5.1 (0.10)	4.9 (0.10)	5.2 (0.10)	6.4 (0.10)	6.7 (0.10)	6.3 (0.10)	5.6 (0.10)	5.6 (0.10)	6.1 (0.10)	6.7 (0.10)	5.2 (0.10)	6.6 (0.10)	5.9 (0.10)	NM	5.2 (0.10)	5.9 (0.10)	5.6 (0.10)
Phosphates (total)	NE	U (30)	32 (30)	14 J (30)	49 (30)	170 (30)	210 (30)	500 (30)	18 J (30)	U (30)	39 (30)	32 (30)	U (30)	270 (30)	U (30)	NM	32 (30)	900 (30)	32 (30)
Sulfide (total)	NE	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)
Sulfate	NE	31500 (2000)	45500 (10000)	3800 (1000)	2500 (1000)	U (10000)	27700 (5000)	20900 (2000)	7200 (1000)	8000 (1000)	7100 (1000)	7400 (1000)	800 J (1000)	3000 (1000)	3100 (1000)	NM	477000 (50000)	669000 (50000)	2600 (1000)
Gasses																			
Methane	NE	2.8 (0.10)	5.8 (0.10)	0.20 (0.10)	0.32 (0.10)	0.53 (0.10)	1.8 (0.10)	U (0.10)	U (0.10)	0.40 (0.10)	U (0.10)	U (0.10)	21 (0.10)	5.4 (0.10)	1.7 (0.10)	NM	3.9 (0.10)	0.91 (0.10)	12 (0.10)
Ethane	NE	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	NM	0.047 (0.025)	0.066 (0.025)	0.031 (0.025)
Ethene	NE	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	U (0.025)	0.025 (0.025)	0.036 (0.025)	U (0.025)	NM	U (0.025)	U (0.025)	U (0.025)
Hydrogen [nM] [4]	NE	NM	120 (6.0)	7.3 (0.60)	8.4 (0.60)	NM	NM	NM	4.1 (0.60)	NM	5.3 (0.60)	1.4 (0.60)	1.6 (0.60)	4.5 (0.60)	6.5 (0.60)	NM	340 (12)	11 (0.60)	4.9 (0.60)
Molecular Analyses																			
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.714286)	U (0.444444)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	990 (0.5)	0.5 (0.5)	NM	U (0.5)	U (0.5)	0.2 J (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	0.6 J (0.5)	U (0.5)	2.2 (0.5)	0.6 J (0.5)	0.7 (0.5)	5.5 (0.5)	U (0.714286)	U (0.444444)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	2380 (0.5)	1.1 (0.5)	NM	U (0.5)	U (0.5)	42.3 (0.5)
tceA Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.714286)	U (0.444444)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.714286)	U (0.444444)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)

Notes:
1 All concentrations are presented in ug/L except where noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method

Abbreviations:
U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit for Volatile Organic Compounds; Reporting Limit for all other parameters.
* -- Sampled on different day than other parameters with different method
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L -- micrograms per Liter
mL -- milliliters
NE -- Not Established
NM -- Not Measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 5
SUMMARY OF RADD MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FOURTH QUARTER 2014)
Whirlpool Corporation - Fort Smith, Arkansas

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-46R	MW-46R	MW-56	MW-57	MW-58	MW-71	RW-69
ENVIRON Sample ID		MW-46R-201410	DUP-03-201410	MW-56-201410	MW-57-201410	MW-58-201410	MW-71-201410	RW-69-201410
Lab Sample ID(s)		137000005, 041LJ054, 137090031, 60180635007	60180635011	041LJ044, 137090021, 60180441021	041LJ055, 137090019, 60180441019	137010002, 041LJ033, 137090020, 60180441020	137000024, 041LJ019, 137080013, 60180331008	137000023, 041LJ018, 137080012, 60180331007
Sample Date		10/14/2014	10/16/2014	10/15/2014	10/15/2014	10/15/2014	10/14/2014	10/14/2014
Sample Method		Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow	Low Flow
Comments			Field Duplicate					
Volatile Organic Compounds								
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Bromodichloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	7.0	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	4900	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Chlorobenzene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroethane	12000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloroform	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	190	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Dibromochloromethane	80	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	7.0	1.2 J (0.50)	1.3 J (0.50)	1.0 J (0.50)	0.59 J (0.50)	2.1 J (0.50)	1.3 J (0.50)	0.85 J (0.50)
cis-1,2-Dichloroethene	70	24.6 (0.50)	25.2 (0.50)	12.1 (0.50)	4.2 J (0.50)	10.8 (0.50)	6.0 (0.50)	6.9 (0.50)
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Methylene Chloride	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2,2-Tetrachloroethane	0.066	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	1000	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,1-Trichloroethane	200	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	5.0	410 (5.0)	373 (5.0)	408 (2.5)	172 (0.50)	360 (2.5)	185 (0.50)	173 (2.5)
Vinyl Chloride	2.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.68 J (0.50)	U (0.50)	U (0.50)
Metals								
Iron	NE	128 (50.0)	NM	1210 (50.0)	7490 (50.0)	827 (50.0)	1000 (50.0)	1110 (50.0)
Manganese	NE	126 (5.0)	NM	158 (5.0)	338 (5.0)	359 (5.0)	1660 (5.0)	664 (5.0)
Monitored Natural Attenuation Parameters (Laboratory)								
Total Alkalinity	NE	6200 J (20000)	NM	26600 (20000)	30200 (20000)	9600 J (20000)	20700 (20000)	14200 J (20000)
Ammonia	NE	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)
Bicarbonate Alkalinity	NE	6200 J (20000)	NM	26600 (20000)	30200 (20000)	9600 J (20000)	20700 (20000)	14200 J (20000)
Carbon Dioxide	NE	0	NM	154000	246000	0	235000	0
Organic Carbon (total)	NE	190 J (1000)	NM	480 J (1000)	330 J (1000)	290 J (1000)	U (1000)	740 J (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	NM	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	248000 (20000)	NM	165000 (10000)	283000 (20000)	267000 (50000)	258000 (20000)	276000 (20000)
Iron, Ferric	NE	130 J (200)	NM	690 (200)	7100 (200)	160 J (200)	210 (200)	150 J (200)
Nitrogen	NE	U (100)	NM	130 (100)	U (100)	U (100)	U (100)	U (100)
Nitrogen, Nitrate (As N)	NE	U (100)	NM	130 (100)	U (100)	U (100)	U (100)	U (100)
Nitrogen, Nitrite	NE	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)
pH [STD UNITS]	NE	5.0 (0.10)	NM	5.6 (0.10)	5.4 (0.10)	5.0 (0.10)	5.3 (0.10)	5.2 (0.10)
Phosphates (total)	NE	32 (30)	NM	32 (30)	32 (30)	U (30)	U (30)	U (30)
Sulfide (total)	NE	U (50)	NM	31 J (50)	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	580 J (1000)	NM	4900 (1000)	3900 (1000)	2400 (1000)	1900 (1000)	1900 (1000)
Gasses								
Methane	NE	20 (0.10)	NM	0.49 (0.10)	2.8 (0.10)	36 (0.10)	73 (0.10)	34 (0.10)
Ethane	NE	U (0.025)	NM	U (0.025)	U (0.025)	U (0.025)	U (0.025)	0.038 (0.025)
Ethene	NE	U (0.025)	NM	0.20 (0.025)	0.091 (0.025)	0.026 (0.025)	0.050 (0.025)	0.26 (0.025)
Hydrogen [nM] [4*]	NE	7.6 (0.60)	NM	NM	NM	2.6 (0.60)	1.9 (0.60)	1.6 (0.60)
Molecular Analyses								
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	16.6 (0.5)	NM	3.1 (0.588235)	U (0.588235)	1.9 (0.5)	U (0.5)	U (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	16.9 (0.5)	NM	37.1 (0.588235)	3.6 (0.588235)	31.7 (0.5)	0.8 (0.5)	2.1 (0.5)
tceA Reductase [cells/mL]	NE	U (0.5)	NM	2.1 (0.588235)	U (0.588235)	U (0.5)	U (0.5)	U (0.5)
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	NM	0.3 J (0.588235)	U (0.588235)	U (0.5)	U (0.5)	U (0.5)

Notes:
1 All concentrations are presented in ug/L except where noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the RALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method

Abbreviations:
U -- Not Detected.
J -- Estimated Concentration.
( ) -- Method Detection Limit for Volatile Organic Compounds; Reporting Limit for all other parameters.
* -- Sampled on different day than other parameters with different method
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L -- micrograms per Liter
mL -- milliliters
NE -- Not Established
NM -- Not Measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

ENVIRON

TABLE 4
SUMMARY OF FINAL WELL GROUND WATER FIELD PARAMETERS MEASUREMENTS - MAY 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 (^{o}C)	Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
ITMW-1	4	5/13/2014	15.51	35.50	NA	16:20	15.57	0.68	100	17.81	512	5.92	2.61	284	0.21	0.00	Clear	ITMW-1-201405
ITMW-2	4	5/13/2014	12.36	27.04	NA	13:50	12.48	1.02	100	19.37	588	5.9	1.89	288	1.24	0.00	Clear	ITMW-2-201405
ITMW-3^	4	5/12/2014	12.41	28.35	NA	11:35	16.92	1.5	100	18.53	283	6.3	0.20	81.3	23.97	0.06	Clear	NA
ITMW-4	4	5/13/2014	16.89	33.46	NA	11:35	16.92	1.5	100	18.53	283	6.3	0.20	81.3	23.97	0.06	Slightly brown	ITMW-4-201405
ITMW-5^	4	5/12/2014	17.56	33.38	24.3	15:05	12.35	0.8	100	17.32	282	6.56	1.99	515.3	2.72	0.00	Clear	NA
ITMW-6	4	5/13/2014	22.03	40.09	NA	16:55	22.12	1.75	100	17.36	1301	5.92	1.84	361.1	1.26	0.01	Clear	ITMW-6-201405
ITMW-7	4	5/14/2014	20.02	37.04	32.0	13:55	20.04	0.79	100	15.79	1013	4.65	0.74	-129.9	0.88	0.00	Clear	ITMW-7-201405
ITMW-9	4	5/14/2014	20.76	36.22	NA	11:30	20.8	1.5	100	17.86	706	5.61	2.31	278.5	0.96	0.02	Clear	ITMW-9-201405
ITMW-10	4	5/14/2014	19.72	38.04	NA	11:50	19.84	1.58	100	18.82	729	5.82	3.56	95.7	1.57	0.00	Clear	ITMW-10-201405
ITMW-11	4	5/15/2014	10.91	30.40	25.0	08:55	10.93	1.03	100	18.02	271	6.41	1.38	211.5	3.32	0.25	--	ITMW-11-201405
ITMW-12	4	5/14/2014	13.81	32.70	NA	17:00	13.83	1.5	100	18.06	240	5.84	0.78	259	1.72	0.00	Clear	ITMW-12-201405
ITMW-13	4	5/14/2014	14.49	31.91	26.9	09:55	15	1.14	100	16.14	245	5.31	2.07	-71.6	1.6	0.00	Clear	ITMW-13-201405
ITMW-14	4	5/14/2014	14.54	31.71	NA	08:55	14.68	1.06	100	16.53	143	5.51	3.04	90.6	0.77	0.00	Clear	ITMW-14-201405
ITMW-15	4	5/14/2014	11.31	31.00	NA	17:05	11.41	1.32	100	19.10	683	11.33	7.11	85.9	0.5	0.00	Clear	ITMW-15-201405
ITMW-16	4	5/13/2014	14.61	35.38	NA	09:15	14.96	0.91	100	18.47	146	6.42	7.43	208.3	6.42	0.00	Light brown/clear	ITMW-16-201405
ITMW-17	4	5/15/2014	14.91	31.52	26.5	08:50	14.92	0.9	100	17.89	1052	5.36	4.21	316.8	1.75	0.06	Clear	ITMW-17-201405
ITMW-18	4	5/15/2014	10.71	30.71	25.0	08:55	10.76	2.5	100	16.91	1149	5.91	1.79	179.6	2.47	0.20	Clear	ITMW-18-201405
ITMW-19	4	5/15/2014	13.30	34.00	27.0	10:40	13.44	1	100	18.00	1131	6.71	3.42	228.6	1.11	0.77	Clear	ITMW-19-201405
ITMW-20	4	5/12/2014	13.99	32.28	27.3	16:10	14.31	1.5	100	20.10	606	6.72	3.11	203.8	0.74	0.00	Clear	ITMW-20-201405
ITMW-21	4	5/14/2014	13.21	33.01	NA	09:20	13.54	1.5	100	14.73	2235	4.89	2.51	309.7	0.56	0.00	Clear	ITMW-21-201405
MW-22	4	5/12/2014	11.75	29.71	24.7	15:20	11.75	3.5	100	22.47	142	2.13	0.56	26.4	0.24	0.05	Clear	MW-22-201405
MW-23^	4	5/12/2014	12.52	28.06	21.8	12:35	12.89	2	100	18.93	473	6.03	2.16	475.3	0.14	0.05	Clear	NA
MW-24^	4	5/12/2014	12.92	33.61	30.0	10:35	13.72	0.9	100	17.11	1290	4.88	1.45	320.1	0.74	0.13	Clear	NA
MW-25	4	5/15/2014	13.65	35.02	30.0	10:35	13.72	0.9	100	17.11	1290	4.88	1.45	320.1	0.74	0.13	Clear	MW-25-201405
MW-26	4	5/12/2014	13.96	37.00	NA	15:50	14.46	2.49	200	19.96	847	5.03	11.90	225	0.93	0.00	Clear	MW-26-201405
MW-27	2	5/13/2014	12.26	30.10	NA	11:05	12.32	0.68	100	19.89	162	5.98	3.43	189.3	27.1	0.01	Clear/light brown	MW-27-201405
MW-28	2	5/13/2014	7.50	27.43	NA	09:30	7.89	1.75	100	18.13	415	6.02	0.31	213.2	2.82	0.00	--	MW-28-201405
MW-29	2	5/13/2014	11.71	30.02	NA	13:40	11.83	1	100	18.35	707	4.77	0.41	267.7	1.34	0.00	Clear	MW-29-201405
MW-30^	4	5/12/2014	16.08	35.49	25.1	09:25	20.23	1.1	100	14.14	1040	4.79	0.63	74.9	0.09	0.00	Clear	NA
MW-31	0.75	5/13/2014	12.89	27.00	22.0	09:45	14.06	1.2	75	15.93	454	5.17	1.80	181.8	4.60	0.03	Clear	MW-31-201405
MW-32	0.75	5/13/2014	12.52	24.10	19.5	15:35	12.61	1.46	100	19.07	1198	4.65	0.61	226.2	8.7	0.30	Clear	MW-32-201405
MW-33	0.75	5/14/2014	11.74	NA	NA	14:20	12.48	2	100	17.06	727	4.88	0.44	283.9	2.04	NA	Clear but slightly turbid at start	MW-33-201405
MW-34	0.75	5/13/2014	11.05	28.32	23.0	15:35	11.14	1.5	100	17.52	840	4.86	0.20	329.6	12.8	0.00	Clear	MW-34-201405
MW-35R	4	5/13/2014	10.78	32.35	27.3	17:05	10.29	0.9	100	16.88	1478	6.26	2.35	267.4	3.79	NA	Very slightly turbid	MW-35R-201405
MW-36	0.75	5/13/2014	10.01	25.61	20.5	12:15	10.09	1.4	100	16.91	916	5.06	1.36	197.5	5.68	0.05	Clear	MW-36-201405

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
(^{o}C)	degrees Celcius	(µS/cm)	microsiemens per centimeter
mV	millivolts	--	color not noted in field samples
^	Wells not sampled		

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, Phosphate, Ammonia, Dehalococcoides, Vinyl Chloride Reductase.

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, Phosphate, Ammonia, Dehalococcoides, Vinyl Chloride Reductase.

* 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 - MAY 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 (^{o}C)	Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
MW-37^	2	5/12/2014	10.20	29.16	22.4	10:15	9.09	1.25	100	15.80	900	5.80	1.44	246.1	2.06	0.04	Clear	NA
MW-38	2	5/14/2014	11.49	29.92	NA	14:35	12.61	1.45	100	17.52	364	5.76	1.52	114.8	3.1	1.28	Clear	MW-38-201405
MW-39	0.75	5/13/2014	12.22	NM	NA	10:10	12.79	1.9	75	15.89	1223	4.84	0.29	439.5	1.72	0.14	Clear	MW-39-201405
MW-40	0.75	5/12/2014	9.80	27.95	23.0	16:20	9.9	1.24	100	20.86	807	4.74	1.62	200.3	4.94	0.00	Clear	MW-40-201405
MW-41	0.75	5/14/2014	8.94	28.45	23.5	16:55	8.95	1.7	100	16.70	1385	5.33	0.73	158.3	1.87	2.65	Clear	MW-41-201405
MW-46R	2	5/14/2014	2.98	21.31	19.3	13:55	3.24	2	100	16.63	863	5.17	0.51	159	1.66	0.00	Clear	MW-46R-201405
MW-50**	0.75	5/13/2014	6.51	17.84	15.3	17:10	16.23	1	50	16.38	1230	6.42	2.10	2.1	2.54	0.46	Clear	MW-50-201405
MW-56	0.75	6/11/2014	3.77	19.48	NA	13:36	19.48	0.53	100	19.61	662	4.39	1.00	347.5	*	NM	Clear	MW-56-201405
MW-57	0.75	6/11/2014	3.78	19.19	NA	12:21	19.19	1.25	100	21.63	834	5.31	2.90	369.8	*	NM	Clear, slight haze	MW-57-201405
MW-58	0.75	5/12/2014	0.44	17.63	15.1	16:10	2.63	2.5	100	19.70	782	5.25	0.24	31.4	3.25	2.95	Clear	MW-58-201405
MW-60**	0.75	5/13/2014	6.53	16.47	14.0	16:20	15.32	0.25	100	15.81	1259	6.65	3.64	28.2	8.51	NA	--	MW-60-201405
MW-61**	0.75	5/13/2014	7.67	15.36	12.9	15:40	12.01	1	100	15.10	639	5.69	4.90	145.1	35.10	0.18	Clear, slightly turbid when filling last bottle	MW-61-201405
MW-62	0.75	5/14/2014	5.39	20.61	18.6	11:50	7.28	1	50	14.68	639	5.54	2.02	163.2	1.5	0.42	Clear	MW-62-201405
MW-63	0.75	5/14/2014	4.72	21.04	18.5	9:20	7.90	1	50	13.21	608	5.38	0.54	164	18.70	0.03	Clear	MW-63-201405
MW-65	2	5/14/2014	10.77	36.71	26.7	9:15	10.79	1.2	100	15.36	1918	4.91	3.47	345.4	6.05	0.02	Clear	MW-65-201405
MW-66	2	5/13/2014	5.31	17.30	15.3	14:50	5.70	2.5	100	17.00	791	5.77	0.98	121.8	24.60	0.00	Clear	MW-66-201405
MW-67	2	5/13/2014	9.66	13.40	11.4	13:02	11.15	3	100	17.69	910	6.61	3.47	73.3	10.43	0.04	Clear	MW-67-201405
MW-68	2	5/14/2014	6.65	20.34	NA	15:35	6.72	1.5	100	14.74	1113	4.81	1.52	196.5	1.85	0.11	Clear	MW-68-201405
MW-70^	0.75	5/12/2014	8.10	27.20	20.6	9:10	12.60	1.1	100	16.42	620	5.13	7.90	248.2	19.4	NM	Clear	NA
MW-71	2	5/13/2014	8.19	26.99	22.0	13:30	8.19	2.38	100	16.18	932	4.71	0.82	-116.2	16.90	0.00	Light yellow	MW-71-201405
RW-69	4	5/13/2014	8.15	27.93	22.9	15:35	8.15	0.845	100	16.36	1003	4.89	0.59	-124.5	3.19	0.00	Clear	RW-69-201405
IW-72	2	5/12/2014	8.29	26.90	21.9	16:30	8.41	0.92	100	21.60	929	5.91	4.00	672.4	9.5	0.06	4 on Permanganate Chart	IW-72-201405
IW-73	2	5/14/2014	8.36	29.60	24.6	16:10	8.37	1.3	100	17.16	183	6.37	2.45	185.7	25.70	0.59	Yellow tint	IW-73-201405
IW-74	2	5/14/2014	8.99	27.50	22.5	12:05	9.04	1.2	100	17.66	1229	5.86	1.23	192.3	3.91	0.00	Slight yellow tint	IW-74-201405
IW-75^	0.75	5/12/2014	8.73	26.30	30.6	15:55	10.45	1.1	100	16.13	791	5.21	0.27	313	7.21	0.24	Cloudy	NA
IW-76	2	5/14/2014	9.30	28.17	23.1	11:15	9.31	1.5	100	15.68	1027	5.25	1.81	735.1	4.13	0.00	Pink	IW-76-201405
IW-77	2	5/14/2014	9.86	27.85	22.0	10:00	9.89	2.3	100	15.76	932	5.51	0.13	85.8	16.70	1.58	Slightly turbud	IW-77-201405
IW-78^	0.75	5/12/2014	10.05	28.81	22.0	17:35	13.74	1.1	100	16.02	992	5.02	0.26	362.2	0.10	0.04	Clear	NA
IW-79^	0.75	5/12/2014	10.39	29.65	18.2	11:35	10.78	1.4	100	16.38	774	5.17	0.39	325.2	2.46	0.00	Clear	NA
IW-80	2	5/13/2014	10.25	29.62	24.0	12:20	10.30	1.14	100	17.01	766	5.91	1.61	581.7	6.02	0.00	Slight pink hue	IW-80-201405

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
(^{o}C)	degrees Celcius	(µS/cm)	microsiemens per centimeter
mV	millivolts	--	color not noted in field samples
^	Wells not sampled		

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, Phosphate, Ammonia, Dehalococcoides, Vinyl Chloride Reductase.

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, Phosphate, Ammonia, Dehalococcoides, Vinyl Chloride Reductase.

* 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 GROUNDWATER SAMPLE ANALYTICAL RESULTS - 2ND QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-38	MW-38	MW-25	ITMW-10	ITMW-7	ITMW-11	ITMW-11	ITMW-1	ITMW-12	ITMW-13	ITMW-14	ITMW-15	ITMW-15	ITMW-17	ITMW-17	ITMW-18
ENVIRON Sample ID		MW-38-201405	DUP1-201405	MW-25-201405	ITMW-10-201405	ITMW-7-201405	ITMW-11-201405	DUP-4-201405	ITMW-1-201405	ITMW-12-201405	ITMW-13-201405	ITMW-14-201405	ITMW-15-201405	DUP2-201405	ITMW-17-201405	DUP-3-201405	ITMW-18-201405
Lab Sample ID(s):		60169284010, 121800010,	60169284021	60169379004, 121980004,	60169284003, 121800003	60169284001, 121800001,	60169379003, 121980003,	60169379008	60169189017, 121970016,	60169284019, 121800019,	60169284004, 121800004,	60169284017, 121800017,	60169284018, 121800018,	60169284025	60169379005, 121980005,	60169379009	60169379002, 121980002,
Sample Method		050LE037 Low Flow	Low Flow	050LE051 Low Flow	Low Flow	050LE028 Low Flow	050LE050 Low Flow	Low Flow	050LE022 Low Flow	050LE046 Low Flow	050LE031 Low Flow	050LE044 Low Flow	050LE045 Low Flow	Low Flow	050LE052 Low Flow	Low Flow	050LE049 Low Flow
Sample Date		05/14/2014	05/14/2014	05/15/2014	05/14/2014	05/14/2014	05/15/2014	05/15/2014	05/13/2014	05/14/2014	05/14/2014	05/14/2014	05/14/2014	05/14/2014	05/15/2014	05/15/2014	05/15/2014
Comments			Field Duplicate					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)	2.6 J (10)	2.4 J (10)	U (10)	U (10)	U (10)
Benzene	5.0	0.21 J (5)	0.2 J (5)	U (5)	0.15 J (5)	U (5)	U (5)	U (5)	U (5)	0.21 J (5)	U (5)	0.43 J (5)	U (5)	U (5)	0.11 J (5)	0.12 J (5)	0.11 J (5)
Bromodichloromethane	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)
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)	0.52 J (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)	0.95 J (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)
Chlorobenzene	100	U (5)	U (5)	U (5)	U (5)	0.36 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Chloroform	80	0.39 J (5)	0.39 J (5)	0.96 J (5)	0.19 J (5)	U (5)	0.42 J (5)	0.43 J (5)	U (5)	0.61 J (5)	U (5)	U (5)	0.25 J (5)	0.28 J (5)	1 J (5)	0.97 J (5)	1.8 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)	1.1 J (10)
Dibromochloromethane	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)
1,1-Dichloroethane	2.4	U (2.4)	U (2.4)	1.2 J (2.4)	2.7 (2.4)	U (2.4)	0.59 J (2.4)	0.47 J (2.4)	0.26 J (2.4)	0.46 J (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	0.91 J (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)	0.82 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,1-Dichloroethene	7.0	25.4 (5)	25.5 (5)	42.1 (5)	2.6 J (5)	U (5)	1.3 J (5)	1.2 J (5)	U (5)	1.9 J (5)	0.37 J (5)	U (5)	2.6 J (5)	2.6 J (5)	5.9 (5)	5.1 (5)	U (5)
cis-1,2-Dichloroethene	70	428 (125)	426 J (500)	600 J (1000)	32.4 (5)	11.1 (5)	99.5 (5)	107 (5)	8.7 (5)	164 (125)	34.7 (5)	11.3 (5)	60.7 (5)	61.7 (5)	82.9 (5)	88.5 (5)	101 (5)
trans-1,2-Dichloroethene	100	3.6 J (5)	3.1 J (5)	3.1 J (5)	0.31 J (5)	U (5)	0.62 J (5)	1.9 J (5)	U (5)	1.3 J (5)	0.34 J (5)	0.31 J (5)	0.53 J (5)	0.59 J (5)	0.41 J (5)	1.1 J (5)	19.9 (5)
Methylene Chloride	5.0	U (5)	U (5)	1.1 J (5)	U (5)	U (5)	1.2 J (5)	U (5)	U (5)	0.22 J (5)	U (5)	U (5)	0.53 J (5)	0.43 J (5)	0.26 J (5)	U (5)	0.41 J (5)
1,1,2,2-Tetrachloroethane	0.066	U (1)	U (1)	0.21 J (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	0.31 J (1)
Tetrachloroethene	5.0	0.38 J (5)	0.41 J (5)	5.1 (5)	0.58 J (5)	U (5)	0.96 J (5)	0.84 J (5)	U (5)	1.6 J (5)	0.13 J (5)	25.2 (5)	0.12 J (5)	0.11 J (5)	0.84 J (5)	0.75 J (5)	1.4 J (5)
Toluene	1000	U (5)	U (5)	0.18 J (5)	1.2 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)
1,1,1-Trichloroethane	200	U (5)	U (5)	2.6 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	0.33 J (5)	0.27 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)	0.47 J (5)	0.44 J (5)	0.6 J (5)
Trichloroethene	5.0	1650 (125)	2040 (500)	18500 (1000)	184 (5)	37 (5)	1590 (125)	1470 (50)	21.3 (5)	2740 (125)	54 (5)	5.3 (5)	729 (125)	899 (500)	3630 (250)	3370 (125)	2940 (500)
Vinyl Chloride	2.0	97.9 (2)	98.2 (2)	30.3 (2)	1.4 J (2)	0.22 J (2)	5.5 (2)	4.9 (2)	U (2)	14 (2)	0.17 J (2)	U (2)	4.1 (2)	4.4 (2)	1.3 J (2)	1.1 J (2)	U (2)
Metals																	
Iron	NE	1780 (50)	NS	51 (50)	U (50)	U (50)	141 (50)	NS	U (50)	80.3 (50)	31.4 J (50)	464 (50)	34.8 J (50)	NS	25.9 J (50)	NS	56.1 (50)
Manganese	NE	1910 (5)	NS	319 (5)	45.9 (5)	88.8 (5)	36.2 (5)	NS	7.5 (5)	16.3 (5)	2.8 J (5)	15.5 (5)	U (5)	NS	127 (5)	NS	29.4 (5)
Monitored Natural Attenuation Parameters (Laboratory)																	
Acetic acid	NE	U (5000)	NS	U (5000)	U (5000)	U (5000)	U (5000)	NS	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	NS	U (5000)	NS	U (5000)
Acetylene	NE	U (0.5)	NS	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NS	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NS	U (0.5)	NS	U (0.5)
Total Alkalinity	NE	103000 (20000)	NS	9400 J (20000)	84600 (20000)	8800 J (20000)	101000 (20000)	NS	69400 (20000)	76900 (20000)	70300 (20000)	38600 (20000)	123000 (20000)	NS	14600 J (20000)	NS	40200 (20000)
Ammonia	NE	U (100)	NS	U (100)	150 (100)	U (100)	1800 (100)	NS	U (100)	U (100)	U (100)	220 (100)	140 (100)	NS	U (100)	NS	15 J (100)
Bicarbonate Alkalinity	NE	103000 (20000)	NS	9400 J (20000)	84600 (20000)	8800 J (20000)	101000 (20000)	NS	69400 (20000)	76900 (20000)	70300 (20000)	38600 (20000)	U (20000)	NS	14600 J (20000)	NS	40200 (20000)
Butyric acid	NE	U (5000)	NS	U (5000)	U (5000)	U (5000)	U (5000)	NS	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	NS	U (5000)	NS	U (5000)
Carbon Dioxide	NE	447000	NS	0	331000	0	168000	NS	228000	290000	751000	272000	14600	NS	0	NS	134000
Organic Carbon (total)	NE	1300 (1000)	NS	U (1000)	1300 (1000)	U (1000)	560 J (1000)	NS	U (1000)	640 J (1000)	510 J (1000)	710 J (1000)	820 J (1000)	NS	U (1000)	NS	2100 (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	NS	U (20000)	U (20000)	U (20000)	U (20000)	NS	U (20000)	U (20000)	U (20000)	U (20000)	33100 (20000)	NS	U (20000)	NS	U (20000)
Chloride	NE	19700 (1000)	NS	488000 (50000)	122000 (10000)	273000 (50000)	7500 (1000)	NS	106000 (10000)	13700 (1000)	24700 (2000)	8000 (1000)	18400 (1000)	NS	274000 (50000)	NS	122000 (10000)
2-Chloroethanol	NE	U (10000)	NS	U (10000)	U (10000)	U (10000)	U (10000)	NS	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	NS	U (10000)	NS	U (10000)
Lactic Acid	NE	U (25000)	NS	U (25000)	U (25000)	U (25000)	U (25000)	NS	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	NS	U (25000)	NS	27000 (25000)
Nitrogen	NE	U (100)	NS	280 (100)	5600 (200)	3000 (100)	180 (100)	NS	980 (100)	53 J (100)	150 (100)	380 (100)	250 (100)	NS	140 (100)	NS	2500 (100)
Nitrogen, Nitrate (As N)	NE	U (100)	NS	280 (100)	5600 (200)	3000 (100)	180 (100)	NS	980 (100)	53 J (100)	150 (100)	380 (100)	250 (100)	NS	140 (100)	NS	2500 (100)
Nitrogen, Nitrite	NE	U (100)	NS	U (100)	U (200)	U (100)	U (100)	NS	U (100)	U (100)	U (100)	U (100)	U (100)	NS	U (100)	NS	U (100)
pH [STD Units]	NE	5.8 (0.1)	NS	4.9 (0.1)	5.8 (0.1)	4.6 (0.1)	6.4 (0.1)	NS	5.9 (0.1)	5.8 (0.1)	5.3 (0.1)	5.5 (0.1)	11.3 (0.1)	NS	5.4 (0.1)	NS	5.9 (0.1)
Phosphates (total)	NE	100 (30)	NS	U (30)	U (30)	32 (30)	66 (30)	NS	210 (30)	U (30)	U (30)	66 (30)	32 (30)	NS	32 (30)	NS	66 (30)
Propionic Acid	NE	U (5000)	NS	U (5000)	U (5000)	U (5000)	U (5000)	NS	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	NS	U (5000)	NS	U (5000)
Pyruvic Acid	NE	U (10000)	NS	U (10000)	U (10000)	U (10000)	U (10000)	NS	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	NS	U (10000)	NS	U (10000)
Sulfide (total)	NE	U (50)	NS	U (50)	U (50)	U (50)	U (50)	NS	U (50)	U (50)	U (50)	U (50)	U (50)	NS	U (50)	NS	U (50)
Sulfate	NE	21000 (2000)	NS	2700 (1000)	34700 (5000)	11900 (1000)	13500 (1000)	NS	16900 (1000)	13500 (1000)	7000 (1000)	11400 (1000)	5200 (1000)	NS	6500 (1000)	NS	75000 (10000)
Gases																	
Methane	NE	8.1 (0.1)	NS	16 (0.1)	2.2 (0.1)	0.57 (0.1)	3.9 (0.1)	NS	0.1 U (0.1)	10 (0.1)	2.1 (0.1)	0.33 (0.1)	1.9 (0.1)	NS	0.27 (0.1)	NS	0.68 (0.1)
Ethane	NE	0.2 (0.025)	NS	4.9 (0.025)	0.038 (0.025)	0.025 U (0.025)	0.089 (0.025)	NS	0.025 U (0.025)	2.3 (0.025)	0.13 (0.025)	0.025 (0.025)	0.31 (0.025)	NS	0.069 (0.025)	NS	0.16 (0.025)
Ethene	NE	7.1 (0.025)	NS	0.056 (0.025)	0.025 U (0.025)	0.035 (0.025)	0.025 U (0.025)	NS	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.083 (0.025)	NS	0.025 (0.025)	NS	0.03 (0.025)
Hydrogen [nM]	NE	20 (0.6)	NS	32 (0.6)	1.5 (0.6)	8.1 (0.6)	18 (0.6)	NS	6.3 (0.6)	7.5 (0.6)	10 (0.6)	5 (0.6)	12 (0.6)	NS	7.7 (0.6)	NS	50 (6)
Molecular Analyses																	
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	18800	NS	U (0.5)	LE	U (0.4)	U (0.5)	NS	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NS	U (0.5)	NS	U (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	50000	NS	U (0.5)	LE	U (0.4)	U (0.5)	NS	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NS	U (0.5)	NS	U (0.5)
tceA Reductase [cells/mL]	NE	0.4 J	NS	U (0.5)	LE	U (0.4)	U (0.5)	NS	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NS	U (0.5)	NS	U (0.5)

Notes:

1 All concentrations are presented in µg/L except where noted.

2 Only compounds with at least one detection are shown for VOCs.

3 Concentrations that exceed the RALs 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
µg/L micrograms per Liter
mL milliliters
NS Not Sampled
LE Laboratory Error. Sample was provided to the laboratory, laboratory did not analyze.
NE Not Established
Onsite wells
Offsite wells
Plume boundary wells

TABLE 5
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS - 2ND QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	ITMW-18	ITMW-19	ITMW-19	ITMW-21	ITMW-9	IW-80	MW-32	MW-33	MW-34	MW-35R	MW-65	IW-73	IW-74	IW-76	IW-77
ENVIRON Sample ID		DUP-5-201405	ITMW-19-201405	DUP-6-201405	ITMW-21-201405	ITMW-9-201405	IW-80-201405	MW-32-201405	MW-33-201405	MW-34-201405	MW-35R-201405	MW-65-201405	IW-73-201405	IW-74-201405	IW-76-201405	IW-77-201405
Lab Sample ID(s):		60169379007	60169379001, 121980001, 050LE048	60169379006	60169284016, 121800016, 050LE043	60169284002, 121800002, 050LE029	60169189006, 121970006, 050LE012	60169189007, 121970007, 050LE013	60169284009, 121920024, 050LE036	60169189008, 121970008, 050LE014	60169189022, 121970017, 050LE023	60169284014, 121920018, 050LE041	60169284005, 121800005, 050LE032	60169284006, 121800006, 050LE033	60169284007, 121800007, 050LE034	60169284008, 121800008, 050LE035
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
Sample Date		05/15/2014	05/15/2014	05/15/2014	05/14/2014	05/14/2014	05/13/2014	05/13/2014	05/14/2014	05/13/2014	05/13/2014	05/14/2014	05/14/2014	05/14/2014	05/14/2014	05/14/2014
Comments		Field Duplicate		Field Duplicate												
Volatile Organic Compounds																
Acetone	12000	5.6 J (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	2.7 J (10)	2 J (10)	U (10)	U (10)	U (10)
Benzene	5.0	U (5)	0.12 J (5)	0.11 J (5)	U (5)	U (5)	0.12 J (5)	U (5)	U (5)	U (5)	U (5)	0.12 J (5)	U (5)	0.12 J (5)	U (5)	0.15 J (5)
Bromodichloromethane	80	0.45 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)	U (5)
Bromoform	80	0.5 J (5)	U (5)	U (5)	U (5)	U (5)	0.59 J (5)	U (5)	U (5)	U (5)	1.1 J (5)	25.3 (5)	U (5)	0.19 J (5)	1.3 J (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)	4 J (10)
Carbon Disulfide	720	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	0.26 J (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Chlorobenzene	100	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)
Chloroform	80	1.6 J (5)	3.2 J (5)	3.3 J (5)	U (5)	0.21 J (5)	0.23 J (5)	U (5)	0.32 J (5)	U (5)	0.14 J (5)	0.17 J (5)	U (5)	U (5)	U (5)	0.5 J (5)
Chloromethane	190	U (10)	U (10)	0.3 J (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)
Dibromochloromethane	80	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	0.93 J (5)	U (5)	U (5)	U (5)	U (5)
1,1-Dichloroethane	2.4	0.86 J (2.4)	0.24 J (2.4)	0.24 J (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)
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)	U (5)
1,1-Dichloroethene	7.0	U (5)	15.2 (5)	15.6 (5)	U (5)	0.91 J (5)	U (5)	0.22 J (5)	1.6 J (5)	U (5)	U (5)	U (5)	0.39 J (5)	0.41 J (5)	U (5)	2.5 J (5)
cis-1,2-Dichloroethene	70	108 (5)	65.8 (5)	67.2 (5)	U (5)	42.2 (5)	U (5)	0.19 J (5)	15.1 (5)	U (5)	6.1 (5)	6.9 (5)	0.81 J (5)	4.3 J (5)	U (5)	36 (5)
trans-1,2-Dichloroethene	100	21.3 (5)	0.47 J (5)	0.4 J (5)	U (5)	0.65 J (5)	U (5)	U (5)	U (5)	U (5)	0.87 J (5)	0.78 J (5)	U (5)	U (5)	U (5)	0.34 J (5)
Methylene Chloride	5.0	U (5)	0.57 J (5)	0.55 J (5)	U (5)	U (5)	U (5)	U (5)	0.17 J (5)	U (5)	U (5)	0.15 J (5)	U (5)	U (5)	U (5)	0.3 J (5)
1,1,2,2-Tetrachloroethane	0.066	0.2 J (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)
Tetrachloroethene	5.0	1.2 J (5)	2.3 J (5)	2.3 J (5)	U (5)	U (5)	U (5)	U (5)	0.31 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	0.36 J (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)	U (5)
1,1,1-Trichloroethane	200	0.14 J (5)	0.14 J (5)	0.16 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)
1,1,2-Trichloroethane	5.0	0.57 J (5)	U (5)	0.89 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)
Trichloroethene	5.0	2500 (100)	9780 J (500)	15300 J (1000)	17.6 (5)	113 (5)	24.2 (5)	33.1 (5)	954 (50)	19.9 (5)	183 (5)	195 (5)	31.9 (5)	169 (5)	10.3 (5)	1460 (50)
Vinyl Chloride	2.0	U (2)	0.85 J (2)	0.87 J (2)	U (2)	0.64 J (2)	U (2)	U (2)	0.56 J (2)	U (2)	U (2)	U (2)	U (2)	0.8 J (2)	U (2)	0.66 J (2)
Metals																
Iron	NE	NS	U (50)	NS	U (50)	35.7 J (50)	132 (50)	184 (50)	36.3 J (50)	307 (50)	203 (50)	303 (50)	2090 (50)	139 (50)	112 (50)	1900 (50)
Manganese	NE	NS	40.6 (5)	NS	380 (5)	62.4 (5)	504 (5)	422 (5)	171 (5)	158 (5)	281 (5)	857 (5)	960 (5)	558 (5)	2060 (5)	2010 (5)
Monitored Natural Attenuation Parameters (Laboratory)																
Acetic acid	NE	NS	U (5000)	NS	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)
Acetylene	NE	NS	U (0.5)	NS	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Total Alkalinity	NE	NS	91600 (20000)	NS	12500 J (20000)	43300 (20000)	94200 (20000)	8100 J (20000)	11900 J (20000)	11900 J (20000)	218000 (20000)	13800 J (20000)	36000 (20000)	83200 (20000)	26700 (20000)	35200 (20000)
Ammonia	NE	NS	18 J (100)	NS	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	390 (100)	U (100)	94 J (100)	U (100)	52 J (100)	U (100)
Bicarbonate Alkalinity	NE	NS	91600 (20000)	NS	12500 J (20000)	43300 (20000)	94200 (20000)	8100 J (20000)	11900 J (20000)	11900 J (20000)	218000 (20000)	13800 J (20000)	36000 (20000)	83200 (20000)	26700 (20000)	35200 (20000)
Butyric acid	NE	NS	U (5000)	NS	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)
Carbon Dioxide	NE	NS	116000	NS	0	250000	315000	0	0	0	431000	0	62300	303000	323000	248000
Organic Carbon (total)	NE	NS	U (1000)	NS	U (1000)	610 J (1000)	U (1000)	U (1000)	U (1000)	U (1000)	3400 (1000)	520 J (1000)	14600 (1000)	U (1000)	U (1000)	2400 (1000)
Carbonate Alkalinity (as CaCO3)	NE	NS	U (20000)	NS	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	NS	263000 (50000)	NS	635000 (50000)	107000 (10000)	137000 (10000)	337000 (50000)	184000 (20000)	208000 (20000)	276000 B (50000)	381000 (50000)	26500 (2000)	277000 (50000)	271000 (50000)	224000 (50000)
2-Chloroethanol	NE	NS	U (10000)	NS	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)
Lactic Acid	NE	NS	U (25000)	NS	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)
Nitrogen	NE	NS	1600 (100)	NS	250 (100)	19900 (500)	220 (100)	190 (100)	1400 (100)	230 (100)	150 (100)	770 (100)	55 J (100)	680 (100)	400 (100)	320 (100)
Nitrogen, Nitrate (As N)	NE	NS	1600 (100)	NS	250 (100)	19900 (500)	220 (100)	190 (100)	1400 (100)	230 (100)	42 J (100)	770 (100)	55 J (100)	680 (100)	400 (100)	320 (100)
Nitrogen, Nitrite	NE	NS	U (100)	NS	U (100)	U (500)	U (100)	U (100)	U (100)	U (100)	100 (100)	U (100)	U (100)	U (100)	U (100)	U (100)
pH [STD Units]	NE	NS	6.7 (0.1)	NS	4.9 (0.1)	5.6 (0.1)	5.9 (0.1)	4.6 (0.1)	4.9 (0.1)	4.9 (0.1)	6.3 (0.1)	4.9 (0.1)	6.4 (0.1)	5.9 (0.1)	5.2 (0.1)	5.5 (0.1)
Phosphates (total)	NE	NS	U (30)	NS	U (30)	32 (30)	350 (30)	32 (30)	U (30)	28 J (30)	990 (30)	28 J (30)	520 (30)	150 (30)	140 (30)	350 (30)
Propionic Acid	NE	NS	U (5000)	NS	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)
Pyruvic Acid	NE	NS	U (10000)	NS	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)
Sulfide (total)	NE	NS	U (50)	NS	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	NS	6100 (1000)	NS	3300 (1000)	24300 (2000)	10200 (1000)	6300 (1000)	4700 (1000)	7900 (1000)	422000 (50000)	73300 (5000)	3100 (1000)	2800 (1000)	4600 (1000)	3200 (1000)
Gases																
Methane	NE	NS	0.34 (0.1)	NS	0.84 (0.1)	1.4 (0.1)	0.35 (0.1)	11 (0.1)	1 (0.1)	5.3 (0.1)	3.6 (0.1)	3.4 (0.1)	0.79 (0.1)	0.82 (0.1)	1.7 (0.1)	0.56 (0.1)
Ethane	NE	NS	0.071 (0.025)	NS	0.03 (0.025)	0.025 U (0.025)	0.092 (0.025)	0.025 U (0.025)	0.038 (0.025)	0.025 U (0.025)	0.19 (0.025)	0.057 (0.025)	0.025 U (0.025)	0.025 (0.025)	0.025 U (0.025)	0.038 (0.025)
Ethene	NE	NS	0.025 U (0.025)	NS	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.15 (0.025)	0.031 (0.025)	0.031 (0.025)	0.032 (0.025)	0.025 U (0.025)	0.039 (0.025)
Hydrogen [nM]	NE	NS	10 (0.6)	NS	13 (0.6)	1.9 (0.6)	6.8 (0.6)	42 (1.2)	30 (0.6)	9.5 (0.6)	13 (0.6)	27 (0.6)	4.3 (0.6)	7 (0.6)	12 (0.6)	820 (60)
Molecular Analyses																
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	NS	U (0.5)	NS	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	183	247	U (0.5)	0.7
Dehalococcoides (DHC) [cells/mL]	NE	NS	U (0.5)	NS	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	1040	554	U (0.5)	1.4
tceA Reductase [cells/mL]	NE	NS	U (0.5)	NS	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (1.5)	U (0.5)	U (0.5)	U (0.6)

Notes:

1 All concentrations are presented in µg/L except where noted.

2 Only compounds with at least one detection are shown for VOCs.

3 Concentrations that exceed the RALs 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
µg/L micrograms per Liter
mL milliliters
NS Not Sampled
LE Laboratory Error. Sample was provided to the laboratory, la
NE Not Established
Onsite wells
Offsite wells
Plume boundary wells

TABLE 5
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS - 2ND QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-41	MW-46R	MW-56
ENVIRON Sample ID		MW-41-201405	MW-46R-201405	MW-56-201405
Lab Sample ID(s):		60169284020, 121800020, 050LE047	60169284011, 121920022, 050LE038	60171206001
Sample Method		Low Flow	Low Flow	Low Flow
Sample Date		05/14/2014	05/14/2014	06/11/2014
Comments				
Volatile Organic Compounds				
Acetone	12000	U (10)	U (10)	U (10)
Benzene	5.0	U (5)	U (5)	U (5)
Bromodichloromethane	80	U (5)	U (5)	U (5)
Bromoform	80	U (5)	U (5)	U (5)
2-Butanone	4900	U (10)	U (10)	U (10)
Carbon Disulfide	720	U (10)	U (10)	U (10)
Chlorobenzene	100	U (5)	U (5)	U (5)
Chloroform	80	U (5)	U (5)	U (5)
Chloromethane	190	U (10)	U (10)	U (10)
Dibromochloromethane	80	U (5)	U (5)	U (5)
1,1-Dichloroethane	2.4	U (2.4)	U (2.4)	U (2.4)
1,2-Dichloroethane	5.0	U (5)	U (5)	U (5)
1,1-Dichloroethene	7.0	1.9 J (5)	1.5 J (5)	1.2 J (5)
cis-1,2-Dichloroethene	70	18 (5)	12.8 (5)	17.6 (5)
trans-1,2-Dichloroethene	100	U (5)	0.45 J (5)	U (5)
Methylene Chloride	5.0	U (5)	0.16 J (5)	U (5)
1,1,2,2-Tetrachloroethane	0.066	U (1)	U (1)	U (1)
Tetrachloroethene	5.0	0.14 J (5)	U (5)	U (5)
Toluene	1000	U (5)	U (5)	U (5)
1,1,1-Trichloroethane	200	U (5)	U (5)	U (5)
1,1,2-Trichloroethane	5.0	U (5)	U (5)	U (5)
Trichloroethene	5.0	518 (50)	471 (50)	307 (25)
Vinyl Chloride	2.0	0.5 J (2)	0.76 J (2)	0.16 J (2)
Metals				
Iron	NE	4890 (50)	65 (50)	2460 (50)
Manganese	NE	6380 (5)	113 (5)	298 (5)
Monitored Natural Attenuation Parameters (Laboratory)				
Acetic acid	NE	U (5000)	U (5000)	U (5000)
Acetylene	NE	U (0.5)	U (0.5)	U (0.5)
Total Alkalinity	NE	34400 (20000)	15100 J (20000)	22800 (20000)
Ammonia	NE	74 J (100)	U (100)	U (100)
Bicarbonate Alkalinity	NE	34400 (20000)	15100 J (20000)	22800 (20000)
Butyric acid	NE	U (5000)	U (5000)	U (5000)
Carbon Dioxide	NE	352000	0	1880000
Organic Carbon (total)	NE	U (1000)	U (1000)	1200 (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	U (20000)	U (20000)
Chloride	NE	377000 (50000)	240000 (50000)	172000 (10000)
2-Chloroethanol	NE	U (10000)	U (10000)	U (10000)
Lactic Acid	NE	U (25000)	U (25000)	U (25000)
Nitrogen	NE	74 J (100)	500 (100)	62 J (100)
Nitrogen, Nitrate (As N)	NE	74 J (100)	500 (100)	62 J (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (100)
pH [STD Units]	NE	5.3 (0.1)	5.2 (0.1)	4.4 (0.1)
Phosphates (total)	NE	U (30)	32 (30)	U (30)
Propionic Acid	NE	U (5000)	U (5000)	U (5000)
Pyruvic Acid	NE	U (10000)	U (10000)	U (10000)
Sulfide (total)	NE	U (50)	U (50)	U (50)
Sulfate	NE	2700 (1000)	690 J (1000)	12100 (1000)
Gases				
Methane	NE	9.8 (0.1)	22 (0.1)	1.7 (0.1)
Ethane	NE	0.025 (0.025)	0.025 U (0.025)	0.025 U (0.025)
Ethene	NE	0.025 U (0.025)	0.073 (0.025)	0.038 (0.025)
Hydrogen [nM]	NE	12 (0.6)	33 (0.6)	NS
Molecular Analyses				
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	3.9	18.1	6.9
Dehalococcoides (DHC) [cells/mL]	NE	480	97	35
tceA Reductase [cells/mL]	NE	0.1 J	U (0.5)	U (0.8)

Notes:

1 All concentrations are presented in µg/L except where noted.

2 Only compounds with at least one detection are shown for VOCs.

3 Concentrations that exceed the RALs 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
µg/L	micrograms per Liter
mL	milliliters
NS	Not Sampled
LE	Laboratory Error. Sample was provided to the laboratory, la
NE	Not Established
	Onsite wells
	Offsite wells
	Plume boundary wells

TABLE 5
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS - 2ND QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-57	MW-58	MW-71	RW-69	ITMW-20	ITMW-2	ITMW-4	ITMW-6	ITMW-16	IW-72	MW-22	MW-26	MW-27	MW-28	MW-29	MW-31
ENVIRON Sample ID		MW-57-201405	MW-58-201405	MW-71-201405	RW-69-201405	ITMW-20-201405	ITMW-2-201405	ITMW-4-201405	ITMW-6-201405	ITMW-16-201405	IW-72-201405	MW-22-201405	MW-26-201405	MW-27-201405	MW-28-201405	MW-29-201405	MW-31-201405
Lab Sample ID(s):		60171206002	60169057002, 121970019, 050LE02	60169189015, 121970014, 050LE020	60169189016, 121970015, 050LE021	60169057005, 121970023, 050LE05	60169189005, 121970005, 050LE011	60169189019, 121970024	60169189021, 121970025	60169189002, 121970002, 050LE08	60169057006, 121970027, 050LE06	60169057001, 121970020, 050LE01	60169057004, 121970022, 050LE04	60169189003, 121970003, 050LE09	60169189018, 121970018	60169189020, 121970026, 050LE027	60169189001, 121970001, 050LE07
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		06/11/2014	05/12/2014	05/13/2014	05/13/2014	05/12/2014	05/13/2014	05/13/2014	05/13/2014	05/13/2014	05/12/2014	05/12/2014	05/12/2014	05/13/2014	05/13/2014	05/13/2014	05/13/2014
Comments																	
Volatile Organic Compounds																	
Acetone	12000	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	3 J (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)	U (5)	U (5)	U (5)	0.29 J (5)	U (5)
Bromodichloromethane	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)
Bromoform	80	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	3.8 J (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)
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)
Chlorobenzene	100	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	0.58 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	11.5 (5)	0.27 J (5)
Chloroform	80	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	0.16 J (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)	U (10)	U (10)	U (10)	U (10)	U (10)
Dibromochloromethane	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)
1,1-Dichloroethane	2.4	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	0.21 J (2.4)	4.6 (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)	U (5)	U (5)	U (5)	U (5)	U (5)
1,1-Dichloroethene	7.0	0.48 J (5)	1.9 J (5)	1.4 J (5)	0.5 J (5)	U (5)	U (5)	U (5)	0.57 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
cis-1,2-Dichloroethene	70	4.4 J (5)	12.1 (5)	5.3 (5)	3.3 J (5)	U (5)	U (5)	2.1 J (5)	5.3 (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
trans-1,2-Dichloroethene	100	U (5)	0.28 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)	U (5)
Methylene Chloride	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	2.1 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,1,2,2-Tetrachloroethane	0.066	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)
Tetrachloroethene	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	0.35 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)	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)	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)	U (5)	U (5)	U (5)	U (5)	U (5)
Trichloroethene	5.0	167 (5)	397 (25)	164 (5)	110 (5)	0.21 J (5)	U (5)	2 J (5)	3.6 J (5)	U (5)	U (5)	U (5)	0.25 J (5)	U (5)	0.3 J (5)	0.18 J (5)	U (5)
Vinyl Chloride	2.0	U (2)	0.72 J (2)	0.33 J (2)	0.3 J (2)	U (2)	U (2)	0.18 J (2)	0.17 J (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)
Metals																	
Iron	NE	1360 (50)	2560 (50)	1450 (50)	425 (50)	U (50)	151 (50)	2850 (50)	29.8 J (50)	2340 (50)	266 (50)	U (50)	U (50)	1220 (50)	164 (50)	51.1 (50)	523 (50)
Manganese	NE	344 (5)	452 (5)	1060 (5)	945 (5)	6.2 (5)	13.4 (5)	3440 (5)	34.4 (5)	35.8 (5)	7670 (5)	105 (5)	276 (5)	15.9 (5)	70.7 (5)	280 (5)	278 (5)
Monitored Natural Attenuation Parameters (Laboratory)																	
Acetic acid	NE	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)	U (5000)	U (5000)
Acetylene	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Total Alkalinity	NE	23400 (20000)	23200 (20000)	39100 (20000)	12700 J (20000)	112000 (20000)	60600 (20000)	94700 (20000)	137000 (20000)	38900 (20000)	113000 (20000)	49100 (20000)	25300 (20000)	42300 (20000)	94500 (20000)	8500 J (20000)	28200 (20000)
Ammonia	NE	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	340 (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
Bicarbonate Alkalinity	NE	23400 (20000)	23200 (20000)	39100 (20000)	12700 J (20000)	112000 (20000)	60600 (20000)	94700 (20000)	137000 (20000)	38900 (20000)	113000 (20000)	49100 (20000)	25300 (20000)	42300 (20000)	94500 (20000)	8500 J (20000)	28200 (20000)
Butyric acid	NE	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)	U (5000)	U (5000)
Carbon Dioxide	NE	250000	281000	1560000	0	142000	206000	178000	457000	63900	379000	161000	495000	126000	264000	0	407000
Organic Carbon (total)	NE	1600 (1000)	U (1000)	U (1000)	U (1000)	570 J (1000)	U (1000)	8900 (1000)	540 J (1000)	6100 (1000)	U (1000)	540 J (1000)	U (1000)	1400 (1000)	500 J (1000)	660 J (1000)	710 J (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	265000 (20000)	230000 (20000)	260000 (50000)	289000 (50000)	94200 (10000)	118000 (10000)	8400 (1000)	150000 (20000)	1500 (1000)	195000 (20000)	13700 (1000)	270000 (20000)	20200 (2000)	24600 (2000)	116000 (10000)	89400 (5000)
2-Chloroethanol	NE	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)	U (10000)	U (10000)
Lactic Acid	NE	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)	U (25000)	U (25000)
Nitrogen	NE	990 (100)	U (100)	U (100)	140 (100)	1400 (100)	1600 (100)	U (100)	23100 (500)	3600 (100)	660 J (1000)	U (100)	2900 (100)	810 (100)	U (100)	2100 (100)	240 (100)
Nitrogen, Nitrate (As N)	NE	990 (100)	U (100)	U (100)	140 (100)	1400 (100)	1600 (100)	U (100)	23100 (500)	3600 (100)	660 J (1000)	U (100)	2900 (100)	810 (100)	U (100)	2100 (100)	240 (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (500)	U (100)	U (1000)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
pH [STD Units]	NE	5.3 (0.1)	5.2 (0.1)	4.7 (0.1)	4.9 (0.1)	6.7 (0.1)	5.9 (0.1)	6.3 (0.1)	5.9 (0.1)	6.4 (0.1)	5.9 (0.1)	5.9 (0.1)	5 (0.1)	6 (0.1)	6 (0.1)	4.8 (0.1)	5.2 (0.1)
Phosphates (total)	NE	U (30)	340 (30)	32 (30)	32 (30)	U (30)	32 (30)	66 (30)	120 (30)	32 (30)	U (30)	U (30)	U (30)	170 (30)	32 (30)	32 (30)	350 (30)
Propionic Acid	NE	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)	U (5000)	U (5000)
Pyruvic Acid	NE	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)	U (10000)	U (10000)
Sulfide (total)	NE	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	20600 (2000)	3100 (1000)	3200 (1000)	4000 (1000)	19400 (2000)	18200 (1000)	17000 (1000)	86400 (20000)	18100 (1000)	7800 (1000)	12300 (1000)	9200 (1000)	13100 (1000)	40600 (5000)	73400 (10000)	33500 (5000)
Gases																	
Methane	NE	2 (0.1)	110 (0.1)	36 (0.1)	3.1 (0.1)	0.1 U (0.1)	0.85 (0.1)	33 (0.1)	0.47 (0.1)	0.1 U (0.1)	0.6 (0.1)	1.1 (0.1)	0.1 U (0.1)	0.12 (0.1)	0.24 (0.1)	0.16 (0.1)	1.5 (0.1)
Ethane	NE	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.05 (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.083 (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.064 (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)
Ethene	NE	0.13 (0.025)	0.025 U (0.025)	0.073 (0.025)	0.042 (0.025)	0.033 (0.025)	0.03 (0.025)	0.073 (0.025)	0.051 (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)
Hydrogen [nM]	NE	NS	9 (0.6)	12 (0.6)	15 (0.6)	6.4 (0.6)	0.9 (0.6)	5.6 (0.6)	1.5 (0.6)	1.2 (0.6)	3.7 (0.6)	1.8 (0.6)	12 (0.6)	10 (0.6)	23 (0.6)	4.9 (0.6)	24 (0.6)
Molecular Analyses																	
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	0.7 J	9.8	U (0.5)	81.3	U (0.5)	U (0.4)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	2	441	U (0.5)	93.1	U (0.5)	U (0.4)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	20.7	0.7	U (0.5)	U (0.5)	U (0.5)	6
tceA Reductase [cells/mL]	NE	U (1.1)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.4)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)

Notes:

1 All concentrations are presented in µg/L except where noted.

2 Only compounds with at least one detection are shown for VOCs.

3 Concentrations that exceed the RALs 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
µg/L micrograms per Liter
mL milliliters
NS Not Sampled
LE Laboratory Error. Sample was provided to the laboratory, la
NE Not Established
Onsite wells
Offsite wells
Plume boundary wells

TABLE 5
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS - 2ND QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location		MW-36	MW-39	MW-40	MW-50	MW-60	MW-61	MW-62	MW-63	MW-66	MW-67	MW-68
ENVIRON Sample ID	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-36-201405	MW-39-201405	MW-40-201405	MW-50-201405	MW-60-201405	MW-61-201405	MW-62-201405	MW-63-201405	MW-66-201405	MW-67-201405	MW-68-201405
Lab Sample ID(s):		60169189004, 121970004,	60169189009, 121970009,	60169057003, 121970021,	60169189010, 121970010	60169189011	60169189012, 121970011,	60169284012, 121920021,	60169284013, 121920020,	60169189013, 121970012,	60169189014, 121970013,	60169284015, 121800015,
Sample Method		050LE010 Low Flow	050LE015 Low Flow	050LE03 Low Flow	Low Flow	Low Flow	050LE017 Low Flow	050LE039 Low Flow	050LE040 Low Flow	050LE018 Low Flow	050LE019 Low Flow	050LE042 Low Flow
Sample Date		05/13/2014	05/13/2014	05/12/2014	05/13/2014	05/13/2014	05/13/2014	05/14/2014	05/14/2014	05/13/2014	05/13/2014	05/14/2014
Comments												
Volatile Organic Compounds												
Acetone	12000	U (10)	U (10)	U (10)	U (10)	2.1 J (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)
Bromodichloromethane	80	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)	0.14 J (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)
Chlorobenzene	100	0.24 J (5)	U (5)	U (5)	U (5)	U (5)	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)	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)
Dibromochloromethane	80	U (5)	U (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)	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	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
cis-1,2-Dichloroethene	70	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	0.61 J (5)	U (5)	U (5)	U (5)
trans-1,2-Dichloroethene	100	U (5)	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)	U (5)
1,1,2,2-Tetrachloroethane	0.066	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)
Tetrachloroethene	5.0	U (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	U (5)	0.23 J (5)	0.76 J (5)	U (5)	0.21 J (5)	6.6 (5)	0.62 J (5)	12.2 (5)	3.1 J (5)	U (5)	0.49 J (5)
Vinyl Chloride	2.0	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	0.13 J (2)	U (2)	U (2)	U (2)
Metals												
Iron	NE	277 (50)	32.9 J (50)	U (50)	1330 (50)	3180 (50)	1600 (50)	25.6 J (50)	719 (50)	779 (50)	679 (50)	U (50)
Manganese	NE	513 (5)	492 (5)	210 (5)	223 (5)	946 (5)	14 (5)	35.4 (5)	38 (5)	19.8 (5)	4.5 J (5)	805 (5)
Monitored Natural Attenuation Parameters (Laboratory)												
Acetic acid	NE	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)
Acetylene	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Total Alkalinity	NE	21200 (20000)	12700 J (20000)	13100 J (20000)	207000 (20000)	389000 (20000)	115000 (20000)	36100 (20000)	43500 (20000)	91100 (20000)	242000 (20000)	8000 J (20000)
Ammonia	NE	U (100)	U (100)	U (100)	U (100)	390 (100)	84 J (100)	U (100)	U (100)	U (100)	U (100)	U (100)
Bicarbonate Alkalinity	NE	21200 (20000)	12700 J (20000)	13100 J (20000)	207000 (20000)	389000 (20000)	115000 (20000)	36100 (20000)	43500 (20000)	91100 (20000)	242000 (20000)	8000 J (20000)
Butyric acid	NE	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)
Carbon Dioxide	NE	387000	0	0	339000	517000	573000	240000	401000	390000	332000	0
Organic Carbon (total)	NE	U (1000)	U (1000)	U (1000)	U (1000)	910 J (1000)	910 J (1000)	U (1000)	U (1000)	U (1000)	U (1000)	U (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	266000 (50000)	320000 (50000)	217000 (20000)	240000 (50000)	138000 (10000)	89900 (5000)	150000 (20000)	142000 (10000)	166000 (20000)	117000 (10000)	306000 (50000)
2-Chloroethanol	NE	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)
Lactic Acid	NE	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)	U (25000)
Nitrogen	NE	U (100)	24 J (100)	50 J (100)	U (100)	U (100)	900 (100)	730 (100)	380 (100)	420 (100)	33 J (100)	U (100)
Nitrogen, Nitrate (As N)	NE	U (100)	U (100)	50 J (100)	U (100)	U (100)	900 (100)	730 (100)	380 (100)	420 (100)	33 J (100)	U (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
pH [STD Units]	NE	5.1 (0.1)	4.8 (0.1)	4.7 (0.1)	6.4 (0.1)	6.6 (0.1)	5.7 (0.1)	5.5 (0.1)	5.4 (0.1)	5.8 (0.1)	6.6 (0.1)	4.8 (0.1)
Phosphates (total)	NE	32 (30)	32 (30)	U (30)	100 (30)	350 (30)	350 (30)	84 (30)	U (30)	32 (30)	32 (30)	66 (30)
Propionic Acid	NE	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)	U (5000)
Pyruvic Acid	NE	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)
Sulfide (total)	NE	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	4800 (1000)	10300 (1000)	2400 (1000)	1600 (1000)	29900 (2000)	47900 (5000)	4200 (1000)	8900 (1000)	6600 (1000)	9100 (1000)	1500 (1000)
Gases												
Methane	NE	13 (0.1)	0.28 (0.1)	0.25 (0.1)	0.27 (0.1)	NS	0.1 U (0.1)	0.1 U (0.1)	0.25 (0.1)	0.1 U (0.1)	0.1 U (0.1)	1 (0.1)
Ethane	NE	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	NS	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.029 (0.025)
Ethene	NE	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	NS	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)
Hydrogen [nM]	NE	24 (0.6)	4.8 (0.6)	7.8 (0.6)	NS	NS	NS	42 (1.2)	35 (0.6)	5.3 (0.6)	5.8 (0.6)	27 (0.6)
Molecular Analyses												
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	NS	NS	U (1.5)	U (0.5)	U (0.6)	U (0.5)	U (0.5)	U (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	U (0.5)	U (0.5)	4.6	NS	NS	U (1.5)	U (0.5)	U (0.6)	U (0.5)	U (0.5)	0.3 J
tceA Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	NS	NS	U (1.5)	U (0.5)	U (0.6)	U (0.5)	U (0.5)	U (0.5)

Notes:

1 All concentrations are presented in µg/L except where noted.

2 Only compounds with at least one detection are shown for VOCs.

3 Concentrations that exceed the RALs 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
µg/L micrograms per Liter
mL milliliters
NS Not Sampled
LE Laboratory Error. Sample was provided to the laboratory, la
NE Not Established
Onsite wells
Offsite wells
Plume boundary wells

TABLE 4
SUMMARY OF FINAL WELL GROUND WATER FIELD PARAMETERS MEASUREMENTS - JULY 2014
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (in)	Date Sampled	Water Level prior to Purging (ft btoc)	Total Depth of Well Casing (ft)	Set Tubing Depth (ft)	Time Sampled	Water Level after Purging (ft btoc)	Purge Volume (Gallons)	Purge Rate (ml/min)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
ITMW-1	4	7/30/2014	14.31	34.10	29.1	12:48	14.35	2.0	100	21.45	534	6.05	1.09	-24.1	0	0.20	Clear	ITMW-1-201407
ITMW-2	4	7/30/2014	11.38	26.80	20.8	10:37	11.47	1.0	100	22.12	761	5.96	0.79	74.4	0.09	0.00	Clear	ITMW-2-201407
ITMW-4	4	7/30/2014	15.98	33.38	28.4	17:15	16:00	1.5	100	22.71	283	6.21	0.56	-5.7	1.3	2.20	Clear	ITMW-4-201407
ITMW-6	4	7/30/2014	21.25	40.09	36.0	11:30	21.31	1.0	100	19.86	1137	5.64	1.51	610.8	0.79	0.00	Clear	ITMW-6-201407
ITMW-7	4	7/30/2014	19.52	37.04	32.0	15:10	NA	1.4	100	21.38	997	4.96	0.37	313.4	0.47	0.00	Clear	ITMW-7-201407
ITMW-9	4	7/30/2014	19.83	36.22	31.2	14:45	19.85	1.0	100	21.09	727	5.33	1.15	261.1	0.64	0.00	Clear	ITMW-9-201407
ITMW-10	4	7/30/2014	18.89	37.00	33.0	14:10	18.94	1.0	100	21.36	695	5.43	1.09	606.7	0.96	0.00	Clear	ITMW-10-201407
ITMW-11	4	7/31/2014	10.10	30.40	25.4	10:40	10.03	0.9	100	22.75	284	6.23	0.46	127.9	4.51	1.20	Clear	ITMW-11-201407
ITMW-12	4	7/31/2014	12.97	32.70	24.9	11:05	13.03	1.6	100	21.58	298	6.12	0.35	289.2	2.34	0.02	Clear	ITMW-12-201407
ITMW-13	4	7/30/2014	14.13	31.91	24.4	13:05	14.18	1.7	100	20.62	274	5.99	0.31	240.9	1.02	0.00	Clear	ITMW-13-201407
ITMW-14	4	7/30/2014	13.70	31.71	24.2	11:20	13.8	1.2	100	20.86	155	5.80	0.49	182.2	4.31	0.00	Clear	ITMW-14-201407
ITMW-15	4	7/30/2014	10.42	30.00	25.0	16:00	10.43	1.2	100	24.47	969	7.21	0.72	131.4	9.94	0.00	Clear	ITMW-15-201407
ITMW-16	4	7/30/2014	14.85	35.38	30.4	16:20	14.91	1.0	100	21.53	233	5.78	0.42	172.6	5.54	0.00	Clear	ITMW-16-201407
ITMW-17	4	7/30/2014	14.01	30.10	25.1	15:11	14.02	1.0	100	22.84	999	5.28	3.16	-8	0.18	0.00	Clear	ITMW-17-201407
ITMW-18	4	7/31/2014	9.87	30.71	23.2	09:25	9.93	1.7	100	20.90	1785	5.84	0.37	455.8	4.07	0.00	Clear	ITMW-18-201407
ITMW-19	4	7/31/2014	12.41	34.00	29.0	09:20	12.54	1.5	100	20.29	1204	6.08	1.16	160.4	2.94	0.00	Clear	ITMW-19-201407
ITMW-20	4	7/30/2014	13.79	32.28	24.8	13:00	14.13	1.6	100	21.58	715	6.58	1.83	158.4	0.63	0.30	Clear	ITMW-20-201407
ITMW-21	4	7/30/2014	12.51	33.00	29.0	15:50	12.85	1.0	100	20.45	2530	4.55	1.14	488.5	0.36	0.00	Clear	ITMW-21-201407
MW-22	4	7/30/2014	10.89	29.19	24.2	09:05	10.98	1.3	100	22.95	144	5.51	0.92	85.5	0.22	0.00	Clear	MW-22-201407
MW-25	4	7/31/2014	12.83	34.11	29.1	11:50	12.93	1.0	100	21.13	5282	5.55	6.79	379.2	3.31	0.11	Clear	MW-25-201407
MW-26	4	7/30/2014	13.63	37.00	29.5	10:56	13.88	1.0	100	20.83	1142	5.19	0.27	168.3	6.15	0.20	Clear	MW-26-201407
MW-27	2	7/30/2014	11.35	30.10	25.1	11:55	11.42	1.0	100	23.00	287	5.11	0.17	313.9	19.4	0.00	Clear	MW-27-201407
MW-28	2	7/30/2014	6.63	27.43	22.4	13:55	6.86	0.8	100	23.69	359	5.70	0.17	90.4	0.34	0.17	Clear	MW-28-201407
MW-29	2	7/30/2014	11.52	30.02	25.0	12:00	11.68	1.0	100	20.97	686	4.66	0.49	346.1	3.58	0.09	Clear	MW-29-201407
MW-31	0.75	7/30/2014	11.92	30.02	20.0	08:45	14.61	1.8	95	21.15	454	5.00	0.16	154.9	3.13	1.50	Clear	MW-31-201407
MW-32	0.75	7/29/2014	11.68	24.30	19.3	13:18	11.78	1.0	100	26.28	1133	4.66	0.41	593	1.29	0.01	Clear	MW-32-201407
MW-33	0.75	7/29/2014	10.87	25.62	20.6	15:20	11.8	1.8	100	26.10	731	4.97	0.88	147.8	1.77	0.00	Clear	MW-33-201407
MW-34	0.75	7/29/2014	10.21	28.58	25.0	17:15	11.01	2.0	100	26.66	1549	4.51	1.10	350.9	6.5	0.00	Light Brown	MW-34-201407
MW-35R	4	7/30/2014	9.38	32.35	27.3	09:35	9.95	1.2	100	20.40	20232	12.11	0.30	163	2.46	0.00	Light Yellow	MW-35R-201407
MW-36	0.75	7/29/2014	9.24	25.61	20.6	15:20	9.15	1.2	100	22.40	1415	4.85	0.15	168.3	8.87	0.00	Yellow	MW-36-201407

Notes:

ft btoc	feet below top of casing	mL/min	milliliters per minute
in	inches	mg/L	milligrams per liter
ORP	oxidation reduction potential	NTUs	nephelometric turbidity units
DO	dissolved oxygen	NM	not measured
(°C)	degrees Celcius	(µS/cm)	microsiemens per centimeter
mV	millivolts	--	color not noted
^	Well not sampled		

Tubing inlet depths based on estimated distance from total depth.

All wells gauged using electronic water level meter and purged using peristaltic pumps.

TABLE 4
SUMMARY OF FINAL WELL GROUND WATER FIELD PARAMETERS MEASUREMENTS - JULY 2014
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (in)	Date Sampled	Water Level prior to Purging (ft btoc)	Total Depth of Well Casing (ft)	Set Tubing Depth (ft)	Time Sampled	Water Level after Purging (ft btoc)	Purge Volume (Gallons)	Purge Rate (ml/min)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
MW-38	0.75	7/31/2014	10.53	29.94	24.9	09:15	10.62	1.8	100	22.09	348	6.03	0.22	94.5	4.95	0.04	Clear	MW-38-201407
MW-39	0.75	7/29/2014	11.39	NM	18.0	12:05	12.44	0.9	100	20.70	1211	5.01	0.23	119.5	1.40	0.00	Clear	MW-39-201407
MW-40	0.75	7/29/2014	9.31	28.20	26.0	09:40	9.5	1	100	22.14	806	4.62	0.34	315.2	0.00	0.00	Clear	MW-40-201407
MW-41	0.75	7/30/2014	8.07	28.45	23.0	09:00	8.08	1.5	100	19.32	1351	5.41	0.42	113.5	5.00	3.30	Clear	MW-41-201407
MW-46R	0.75	7/29/2014	2.10	21.53	19.0	11:35	2.45	1	100	24.02	805	4.73	0.39	220.6	0.00	0.00	Clear	MW-46R-201407
MW-50	0.75	7/28/2014	4.01	18.10	18.0	14:50	18.01	0.8	50	26.26	1080	6.64	6.67	50.7	6.13	0.40	Clear	MW-50-201407
MW-56	0.75	7/29/2014	2.62	17.28	16.9	14:50	16.47	0.6	50	20.55	751	5.43	1.55	148.7	28.3	0.27	Light brown	MW-56-201407
MW-57	0.75	7/29/2014	2.42	18.98	16.5	15:40	Dry	0.6	50	23.29	1115	5.43	2.15	192.7	49.4	0.16	Light brown	MW-57-201407
MW-58	0.75	7/29/2014	0.00	17.63	15.1	12:25	0.88	1.4	100	20.13	944	4.97	0.12	116.1	1.07	0.66	Clear	MW-58-201407
MW-60	0.75	7/28/2014	3.95	16.47	11.5	17:00	13.68	0.5	50	26.12	1197	7.01	6.32	-5.3	12.6	1.20	Clear	MW-60-201407
MW-61	0.75	7/28/2014	6.29	15.36	12.9	17:10	Dry	1	75	22.50	637	6.39	1.04	135.5	184	0.18	Light brown	MW-61-201407
MW-62	0.75	7/29/2014	3.99	20.61	15.6	10:05	7.78	1.5	100	19.71	648	5.55	1.40	119.1	11.0	0.00	Clear	MW-62-201407
MW-63	0.75	7/28/2014	3.19	21.04	16.0	16:45	16.88	1.3	75	22.72	569	5.87	3.34	135.7	131.00	0.00	Light yellow	MW-63-201407
MW-65	2	7/30/2014	10.09	32.00	29.0	9:30	10.05	1.1	100	20.42	28015	12.63	9.83	302.1	3.70	0.00	Clear	MW-65-201407
MW-66	2	7/28/2014	3.70	17.30	14.8	16:40	3.85	0.8	100	24.18	743	5.72	1.11	78.6	10.90	0.00	Clear	MW-66-201407
MW-67	2	7/28/2014	1.40	13.40	10.9	14:40	6.92	0.9	100	24.93	832	6.38	3.67	59.8	5.24	0.00	Clear	MW-67-201407
MW-68	2	7/29/2014	5.83	20.34	15.3	14:32	5.97	0.95	100	23.14	1164	4.80	0.25	99.7	3.53	0.30	Clear	MW-68-201407
MW-71	2	7/29/2014	7.38	26.99	21.9	12:40	7.41	1.25	100	20.18	982	5.10	0.44	173.5	15.20	0.32	Clear	MW-71-201407
RW-69	4	7/29/2014	7.26	27.93	22.9	15:00	7.31	1.0	100	19.53	1035	5.09	0.36	159.4	7.20	0.98	Clear	RW-69-201407
IW-72	2	7/29/2014	7.98	26.90	21.9	15:20	7.81	0.8	100	23.87	935	5.52	2.15	745.6	10.4	0.43	Pink - light	IW-72-201407
IW-73	2	7/29/2014	7.51	29.60	24.6	10:25	7.53	1.5	100	20.66	877	5.89	0.41	-23.7	5.18	3.30	Slight brown tint	IW-73-201407
IW-74	2	7/29/2014	8.11	27.52	24.0	14:00	8.15	1	100	22.88	1129	5.79	0.46	113.8	0.45	0.00	Clear	IW-74-201407
IW-76	2	7/29/2014	8.42	28.12	23.1	10:10	8.43	1.75	100	18.95	2751	5.19	0.58	727.2	8.38	0.00	Clear	IW-76-201407
IW-77	2	7/29/2014	8.94	29.85	24.9	17:40	8.98	1.5	100	21.88	3667	6.74	0.60	264.4	19.80	0.00	Slightly yellow	IW-77-201407
IW-80	2	7/30/2014	9.34	29.62	24.6	9:35	9.41	1.75	100	19.84	4624	6.45	2.19	345.8	13.00	0.00	Slightly opaque brown/yellow	IW-80-201407

Notes:

ft btoc	feet below top of casing	mL/min	milliliters per minute
in	inches	mg/L	milligrams per liter
ORP	oxidation reduction potential	NTUs	nephelometric turbidity units
DO	dissolved oxygen	NM	not measured
(°C)	degrees Celcius	(µS/cm)	microsiemens per centimeter
mV	millivolts	--	color not noted
^	Well not sampled		

All wells gauged using electronic water level meter and purged using peristaltic pumps.

Tubing inlet depths based on estimated distance from total depth.

TABLE 5
SUMMARY OF MONITORING WELL GROUND WATER SAMPLE ANALYTICAL RESULTS - 3RD QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location		ITMW-1	ITMW-1	ITMW-7	ITMW-9	ITMW-9	ITMW-10	ITMW-11	ITMW-12	ITMW-13	ITMW-14	ITMW-15	ITMW-15	ITMW-17	ITMW-18	ITMW-19	ITMW-21
ENVIRON Sample ID		ITMW-1-201407	DUP-5-201407	ITMW-7-201407	ITMW-9-201407	DUP-6-201407	ITMW-10-201407	ITMW-11-201407	ITMW-12-201407	ITMW-13-201407	ITMW-14-201407	ITMW-15-201407	DUP-4-201407	ITMW-17-201407	ITMW-18-201407	ITMW-19-201407	ITMW-21-201407
Lab Sample ID(s)	Remedial Action Levels per ADEQ RADD Issued Dec 2013	083LG-27, 129020004, 129470010, 60174754003	60174754004	083LG-34, 129020011, 129470019 60174754012	083LG-32, 129020009, 129470001, 60174754009	60174754010	083LG-33, 129020010, 129470020, 60174754011	129470017, 083LG-53, 129020029, 60174844005	129460007, 083LG-50, 129020026, 60174844002	083LG-29, 129020006, 129460013, 60174754006	083LG-40, 129020016, 129460008, 60174754018	083LG-41, 129020017, 129470018, 60174754019	60174754020	083LG-28, 129020005, 129470004, 60174754005	129460011, 083LG-49, 129020025, 60174844001	129470023, 083LG-51, 129020027, 129470011, 60174844003	083LG-45, 129020021, 129470021, 60174754024
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		07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/31/2014	07/31/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/31/2014	07/31/2014	07/30/2014
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)	24.6 (10)	U (10)	U (10)
Bromodichloromethane	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)
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)
Bromomethane	7.0	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	4.2 J (7)	U (7)	U (7)
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)
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)
Chlorobenzene	100	U (5)	U (5)	0.57 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)
Chloroethane	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)
Chloroform	80	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	1.4 J (5)	0.55 J (5)	U (5)	U (5)	0.57 J (5)	0.62 J (5)	0.67 J (5)	2.5 J (5)	4 J (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)	3.7 J (10)	U (10)	U (10)
Dibromochloromethane	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)
1,1-Dichloroethane	2.4	0.82 J (2.4)	0.78 J (2.4)	U (2.4)	U (2.4)	U (2.4)	2.9 (2.4)	0.78 J (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)	1.8 J (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)	U (5)	U (5)	U (5)	U (5)
1,1-Dichloroethene	7.0	U (5)	U (5)	U (5)	0.74 J (5)	0.84 J (5)	4.1 J (5)	2.3 J (5)	2.1 J (5)	U (5)	U (5)	5.1 (5)	5 J (5)	2.7 J (5)	22.9 (5)	21.8 (5)	U (5)
cis-1,2-Dichloroethene	70	5.4 (5)	5.7 (5)	11.2 (5)	44.4 (5)	43.9 (5)	38.3 (5)	156 (5)	173 (125)	27.5 (5)	9.2 (5)	82.5 (5)	82.8 (5)	64.7 (5)	139 (5)	85.5 (5)	U (5)
trans-1,2-Dichloroethene	100	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	1.1 J (5)	1.3 J (5)	U (5)	U (5)	0.64 J (5)	0.64 J (5)	U (5)	22 (5)	0.58 J (5)	U (5)
Methylene Chloride	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	1.5 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	0.59 J (5)	U (5)	U (5)
1,1,2,2-Tetrachloroethane	0.066	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	3 (1)	U (1)	U (1)
Tetrachloroethene	5.0	U (5)	U (5)	U (5)	U (5)	U (5)	0.64 J (5)	2.4 J (5)	1.6 J (5)	U (5)	24.5 (5)	U (5)	U (5)	0.56 J (5)	2.4 J (5)	2.7 J (5)	U (5)
Toluene	1000	U (5)	U (5)	U (5)	U (5)	U (5)	0.62 J (5)	0.59 J (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)	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)	U (5)	U (5)	0.64 J (5)	0.68 J (5)	U (5)
Trichloroethene	5.0	8.9 (5)	9.2 (5)	36.7 (5)	141 (5)	143 (5)	273 (25)	7380 (250)	2710 (125)	36.5 (5)	4 J (5)	1820 (50)	1850 (50)	2260 (250)	5360 (500)	13300 (500)	9.4 (5)
Vinyl Chloride	2.0	U (2)	U (2)	U (2)	0.53 J (2)	0.54 J (2)	1.8 J (2)	6.9 (2)	13.6 (2)	U (2)	U (2)	3.1 (2)	3 (2)	U (2)	1.6 J (2)	0.96 J (2)	U (2)
Metals																	
Iron	NE	U (50)	NM	U (50)	30.1 J (50)	NM	U (50)	236 (50)	26.5 J (50)	30 J (50)	503 (50)	249 (50)	NM	U (50)	46.7 J (50)	U (50)	43.7 J (50)
Manganese	NE	6.5 (5)	NM	88.8 (5)	111 (5)	NM	46.3 (5)	74.9 (5)	39.5 (5)	4.2 J (5)	13.6 (5)	15 (5)	NM	117 (5)	12.1 (5)	91 (5)	621 (5)
Monitored Natural Attenuation Parameters (Laboratory)																	
Acetic acid	NE	5000 U (5000)	NM	5000 U (5000)	5000 U (5000)	NM	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	NM	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)
Acetylene	NE	0.5 U (0.5)	NM	0.5 U (0.5)	0.5 U (0.5)	NM	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	NM	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)
Total Alkalinity	NE	72300 (20000)	NM	12800 J (20000)	38600 (20000)	NM	104000 (20000)	93400 (20000)	82300 (20000)	71800 (20000)	44300 (20000)	179000 (20000)	NM	14600 J (20000)	67600 (20000)	105000 (20000)	22300 (20000)
Ammonia	NE	U (100)	NM	160 M1 (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)
Bicarbonate Alkalinity	NE	72300 (20000)	NM	12800 J (20000)	38600 (20000)	NM	104000 (20000)	93400 (20000)	82300 (20000)	71800 (20000)	44300 (20000)	179000 (20000)	NM	14600 J (20000)	67600 (20000)	105000 (20000)	22300 (20000)
Butyric acid	NE	5000 U (5000)	NM	5000 U (5000)	5000 U (5000)	NM	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	NM	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)
Carbon Dioxide	NE	192000	NM	0	395000	NM	868000	192000	197000	210000	179000	180000	NM	0	255000	267000	1270000
Organic Carbon (total)	NE	U (1000)	NM	U (1000)	730 J (1000)	NM	1200 (1000)	670 J (1000)	670 J (1000)	U (1000)	610 J (1000)	U (1000)	NM	U (1000)	720 J (1000)	U (1000)	U (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	NM	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	90700 (10000)	NM	259000 (50000)	108000 (10000)	NM	117000 (10000)	16500 (1000)	24300 (2000)	23000 (2000)	8200 (1000)	167000 (20000)	NM	278000 (50000)	130000 (20000)	274000 (50000)	750000 (100000)
2-Chloroethanol	NE	U (10000)	NM	U (10000)	U (10000)	NM	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	NM	U (10000)	U (10000)	U (10000)	U (10000)
Lactic Acid	NE	25000 U (25000)	NM	25000 U (25000)	25000 U (25000)	NM	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	NM	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)
Nitrogen	NE	730 (100)	NM	2800 (100)	20300 (500)	NM	5600 (200)	240 (100)	220 (100)	170 (100)	400 (100)	770 (100)	NM	110 (100)	2700 (100)	1900 (100)	15 J (100)
Nitrogen, Nitrate (As N)	NE	730 (100)	NM	2800 (100)	20300 (500)	NM	5600 (200)	240 (100)	220 (100)	170 (100)	400 (100)	770 (100)	NM	110 (100)	2700 (100)	1900 (100)	U (100)
Nitrogen, Nitrite	NE	U (100)	NM	U (100)	U (500)	NM	U (200)	U (100)	U (100)	U (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)
pH [STD Units]	NE	6 (0.1)	NM	5 (0.1)	5.3 (0.1)	NM	5.4 (0.1)	6.2 (0.1)	6.1 (0.1)	6 (0.1)	5.8 (0.1)	7.2 (0.1)	NM	5.3 (0.1)	5.8 (0.1)	6.1 (0.1)	4.6 (0.1)
Phosphates (total)	NE	U (30)	NM	U (30)	U (30)	NM	U (30)	25 J (30)	U (30)	U (30)	32 (30)	U (30)	NM	U (30)	32 (30)	U (30)	170 (30)
Propionic Acid	NE	5000 U (5000)	NM	5000 U (5000)	5000 U (5000)	NM	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	NM	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)
Pyruvic Acid	NE	10000 U (10000)	NM	10000 U (10000)	10000 U (10000)	NM	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	NM	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)
Sulfide (total)	NE	U (50)	NM	U (50)	U (50)	NM	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	21700 (2000)	NM	10700 (1000)	23000 (2000)	NM	33600 (5000)	18500 (1000)	12700 (1000)	6900 (1000)	9500 (1000)	7200 (1000)	NM	7300 (1000)	205000 (20000)	7700 (1000)	7400 (1000)
Gases																	
Methane	NE	0.1 U (0.1)	NM	0.98 (0.1)	2.3 (0.1)	NM	2.4 (0.1)	13 (0.1)	61 (0.1)	1.2 (0.1)	0.36 (0.1)	4.4 (0.1)	NM	9 (0.1)	1.4 (0.1)	0.49 (0.1)	0.64 (0.1)
Ethane	NE	0.025 U (0.025)	NM	0.025 U (0.025)	0.025 U (0.025)	NM	0.046 (0.025)	0.18 (0.025)	2.4 (0.025)	0.13 (0.025)	0.025 U (0.025)	0.62 (0.025)	NM	0.66 (0.025)	0.28 (0.025)	0.093 (0.025)	0.025 U (0.025)
Ethene	NE	0.025 U (0.025)	NM	0.13 (0.025)	0.025 U (0.025)	NM	0.025 U (0.025)	0.025 U (0.025)	0.032 (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.04 (0.025)	NM	0.025 U (0.025)	0.054 (0.025)	0.025 U (0.025)	0.025 U (0.025)
Hydrogen [NM] [4]	NE	3.1 (0.6)	NM	5.4 (2.4)	1.5 (0.6)	NM	3.2 (0.6)	2.4 (0.6)	2.4 (0.6)	2.2 (0.6)	6.4 (1.2)	2.4 (0.6)	NM	3 (0.6)	3 (0.6)	3.1 (0.6)	3.2 (0.6)
Molecular Analyses																	
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	NM	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.6)	U (0.5)	NM	U (0.5)	1 (0.5)	U (0.5)	U (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	7.8 (0.5)	NM	U (0.5)	U (0.5)	NM	6.6 (0.5)	0.6 (0.5)	1 (0.5)	3.9 (0.5)	U (0.6)	2.1 (0.5)	NM	U (0.5)	1.4 (0.5)	U (0.5)	1.7 (0.5)
tceA Reductase [cells/mL]	NE	0.7 (0.5)	NM	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.6)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	NM	U (0.5)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.6)	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)

Notes:

1 All concentrations are presented in ug/L except where noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the ALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method - Bubble Strip.

Onsite Wells
Offsite Wells
Plume Boundary Wells

Abbreviations:

U -- Not Detected
J -- Estimated Concentration
( ) -- Reporting Limit
* -- Sampled on different day than other parameters with different method
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L -- micrograms per Liter
mL -- milliliters
NE -- Not Established
NM -- Not Measured

TABLE 5
SUMMARY OF MONITORING WELL GROUND WATER SAMPLE ANALYTICAL RESULTS - 3RD QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location		ITMW-21	IW-80	MW-25	MW-32	MW-33	MW-34	MW-35R	MW-38	MW-65	ITMW-2	ITMW-4	ITMW-6	ITMW-16	ITMW-20	IW-72	MW-22
ENVIRON Sample ID		DUP-3-201407	IW-80-201407	MW-25-201407	MW-32-201407	MW-33-201407	MW-34-201407	MW-35R-201407	MW-38-201407	MW-65-201407	ITMW-2-201407	ITMW-4-201407	ITMW-6-201407	ITMW-16-201407	ITMW-20-201407	IW-72-201407	MW-22-201407
Lab Sample ID(s)	Remedial Action Levels per ADEQ RADD Issued Dec 2013	60174754025	129470008, 083LG-43, 129020019, 60174754022	129470009, 083LG-54, 129020030, 129460012, 60174844006	083LG-7, 129100007, 129470002	083LG-6, 129100006, 129470022	083LG-19, 129460017	129460006, 083LG-36, 129020012, 60174754014	129470024, 083LG-52, 129020028, 60174844004	129460005, 083LG-44, 129020020, 60174754023	083LG-26, 129020003, 129470006 60174754002	083LG-48, 129020024, 129470014, 60174754036	083LG-35, 129020031, 129470015, 60174754013	083LG-46, 129020022, 129470016, 60174754027	083LG-31, 129020008, 60174754008	083LG-15, 129100015, 129460002	083LG-25, 129020002, 60174754001, 129460015
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		07/30/2014	07/30/2014	07/31/2014	07/29/2014	07/29/2014	07/29/2014	07/30/2014	07/31/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/29/2014	07/30/2014
Comments		Field Duplicate															
Volatile Organic Compounds																	
Acetone	12000	U (10)	195 (10)	537 (10)	U (10)	U (10)	11.2 (10)	184 (10)	U (10)	589 (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Bromodichloromethane	80	U (5)	U (5)	2.7 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)
Bromoform	80	U (5)	1.8 J (5)	0.82 J (5)	U (5)	U (5)	3.7 J (5)	U (5)	U (5)	1.8 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	1.6 J (5)	U (5)
Bromomethane	7.0	U (7)	U (7)	U (7)	U (7)	U (7)	3.8 J (7)	3 J (7)	U (7)	6.6 J (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)
2-Butanone	4900	U (10)	U (10)	18.6 (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)	2.8 J (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)
Chlorobenzene	100	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	1.1 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Chloroethane	12000	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	1.2 J (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Chloroform	80	U (5)	U (5)	21.6 (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)
Chloromethane	190	U (10)	0.62 J (10)	4.2 J (10)	U (10)	U (10)	2.8 J (10)	4.6 J (10)	U (10)	4.6 J (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Dibromochloromethane	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)
1,1-Dichloroethane	2.4	U (2.4)	U (2.4)	7.2 (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)	4.4 (2.4)	U (2.4)	U (2.4)	U (2.4)	U (2.4)
1,2-Dichloroethane	5.0	U (5)	U (5)	1.8 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)
1,1-Dichloroethene	7.0	U (5)	U (5)	7.3 (5)	U (5)	2.1 J (5)	U (5)	U (5)	U (5)	27.1 (5)	U (5)	U (5)	0.73 J (5)	U (5)	U (5)	U (5)	U (5)
cis-1,2-Dichloroethene	70	U (5)	0.85 J (5)	2310 J (5000)	1 J (5)	20.8 (5)	1.7 J (5)	2.8 J (5)	637 (125)	U (5)	U (5)	4.6 J (5)	6.7 (5)	U (5)	U (5)	U (5)	U (5)
trans-1,2-Dichloroethene	100	U (5)	U (5)	428 (5)	U (5)	U (5)	U (5)	U (5)	6.7 (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)	10.7 (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	2.1 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)
1,1,2,2-Tetrachloroethane	0.066	U (1)	U (1)	114 (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)
Tetrachloroethene	5.0	U (5)	U (5)	33.8 (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)
Toluene	1000	U (5)	U (5)	1.5 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)
1,1,1-Trichloroethane	200	U (5)	U (5)	25.3 (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)
1,1,2-Trichloroethane	5.0	U (5)	U (5)	3.2 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)
Trichloroethene	5.0	9.3 (5)	25.6 (5)	71700 (5000)	37.2 (5)	1600 (50)	78.2 (5)	64.7 (5)	1720 (125)	17.1 (5)	U (5)	2.8 J (5)	4.4 J (5)	U (5)	U (5)	U (5)	U (5)
Vinyl Chloride	2.0	U (2)	U (2)	230 (2)	U (2)	0.59 J (2)	U (2)	U (2)	197 (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)
Metals																	
Iron	NE	NM	366 (50)	3450 (50)	37.7 J (50)	66.8 (50)	300 (50)	134 (50)	3110 (50)	318 (50)	37.4 J (50)	6380 (50)	89 (50)	265 (50)	U (50)	327 (50)	U (50)
Manganese	NE	NM	70.9 (5)	268 (5)	423 (5)	109 (5)	302 (5)	211 (5)	3570 (5)	373 (25)	40.1 (5)	3450 (5)	18 (5)	69.3 (5)	3.3 J (5)	4920 (5)	101 (5)
Monitored Natural Attenuation Parameters (Laboratory)																	
Acetic acid	NE	NM	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	NA	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)
Acetylene	NE	NM	0.5 U (0.5)	1.3 (0.5)	0.5 U (0.5)	0.5 U (0.5)	NA	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)
Total Alkalinity	NE	NM	206000 (20000)	81100 (20000)	8200 J (20000)	13600 J (20000)	7700 J (20000)	2550000 (60000)	101000 (20000)	2680000 (60000)	78800 (20000)	91400 (20000)	134000 (20000)	52800 (20000)	149000 (20000)	112000 (20000)	51700 (20000)
Ammonia	NE	NM	310 (100)	400 (100)	U (100)	U (100)	110 (100)	2100 (100)	U (100)	2000 (100)	U (100)	280 (100)	U (100)	U (100)	U (100)	23 J (100)	U (100)
Bicarbonate Alkalinity	NE	NM	206000 (20000)	81100 (20000)	8200 J (20000)	13600 J (20000)	7700 J (20000)	U (60000)	101000 (20000)	U (60000)	78800 (20000)	91400 (20000)	134000 (20000)	52800 (20000)	149000 (20000)	112000 (20000)	51700 (20000)
Butyric acid	NE	NM	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	NA	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)
Carbon Dioxide	NE	NM	328000	528000	0	0	0	589000	277000	328000	242000	193000	734000	222000	210000	773000	365000
Organic Carbon (total)	NE	NM	870 J (1000)	13000 (1000)	U (1000)	U (1000)	U (1000)	28500 (2000)	2000 (1000)	10300 (1000)	U (1000)	9900 (1000)	520 J (1000)	3100 (1000)	U (1000)	U (1000)	530 J (1000)
Carbonate Alkalinity (as CaCO3)	NE	NM	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	1340000 (60000)	U (20000)	745000 (60000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	NM	195000 (20000)	513000 (100000)	305000 B (50000)	194000 (10000)	268000 (20000)	274000 (50000)	19000 (2000)	353000 (50000)	153000 (20000)	9200 (1000)	142000 (10000)	1700 (1000)	107000 (10000)	224000 (20000)	14300 (1000)
2-Chloroethanol	NE	NM	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)	U (10000)
Lactic Acid	NE	NM	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	NA	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)
Nitrogen	NE	NM	780 (100)	340 (100)	140 (100)	2000 (100)	350 (100)	1700 (100)	U (100)	3100 M1 (100)	850 (100)	U (100)	22700 (500)	1800 (100)	1200 (100)	760 (100)	U (100)
Nitrogen, Nitrate (As N)	NE	NM	780 (100)	330 (100)	140 (100)	2000 (100)	350 (100)	1500 (100)	U (100)	2700 M1 (100)	850 (100)	U (100)	22700 (500)	1800 (100)	1200 (100)	760 (100)	U (100)
Nitrogen, Nitrite	NE	NM	U (100)	U (100)	U (100)	U (100)	U (100)	280 (100)	U (100)	460 M1 (100)	U (100)	U (100)	U (500)	U (100)	U (100)	U (100)	U (100)
pH [STD Units]	NE	NM	6.4 (0.1)	5.6 (0.1)	4.7 (0.1)	5 (0.1)	4.5 (0.1)	12.1 (0.1)	6 (0.1)	12.6 (0.1)	6 (0.1)	6.2 (0.1)	5.6 (0.1)	5.8 (0.1)	6.6 (0.1)	5.5 (0.1)	5.5 (0.1)
Phosphates (total)	NE	NM	5500 (300)	25 J (30)	28 J (30)	32 (30)	66 (30)	5500 (300)	32 (30)	U (30)	U (30)	350 (30)	170 (30)	32 (30)	U (30)	310 (30)	U (30)
Propionic Acid	NE	NM	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	NA	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)
Pyruvic Acid	NE	NM	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	NA	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)
Sulfide (total)	NE	NM	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 (250)	U (50)
Sulfate	NE	NM	467000 (50000)	733000 (100000)	7400 (1000)	4700 (1000)	133000 (10000)	5500000 (500000)	21300 (2000)	3760000 (500000)	19500 (1000)	18000 (2000)	82000 (10000)	52100 (10000)	16900 (1000)	8600 (1000)	10800 (1000)
Gases																	
Methane	NE	NM	0.93 (0.1)	110 (0.1)	11 (0.1)	0.55 (0.1)	NA	12 (0.1)	24 (0.1)	6.7 (0.1)	34 (0.1)	88 (0.1)	0.53 (0.1)	0.39 (0.1)	0.1 U (0.1)	0.66 (0.1)	5.4 (0.1)
Ethane	NE	NM	0.066 (0.025)	17 (0.025)	0.025 U (0.025)	0.033 (0.025)	NA	0.22 (0.025)	0.34 (0.025)	0.11 (0.025)	0.025 U (0.025)	0.16 (0.025)	0.026 (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.062 (0.025)	0.043 (0.025)
Ethene	NE	NM	0.084 (0.025)	0.16 (0.025)	0.025 U (0.025)	0.025 U (0.025)	NA	0.1 (0.025)	46 (0.025)	0.025 U (0.025)	0.12 (0.025)	0.25 (0.025)	0.025 U (0.025)	0.032 (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)
Hydrogen [NM] [4]	NE	NM	71 (2.4)	2.6 (0.6)	2.6 (0.6)	14 (0.6)	8.2 (0.6)	4500 (120)	3.9 (0.6)	220 (30)	3 (0.6)	2.4 (0.6)	2.4 (0.6)	3 (0.6)	8.6 (0.6)	2.4 (0.6)	2.9 (0.6)
Molecular Analyses																	
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	117000 (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	NM	U (0.5)	U (0.5)	0.2 J (0.5)	8.6 (0.5)	4.4 (0.5)	U (0.5)	256000 (0.5)	U (0.5)	6.5 (0.5)	2.1 (0.5)	4.7 (0.5)	6.3 (0.5)	1.7 (0.5)	3.3 (0.5)	692 (0.5)
tceA Reductase [cells/mL]	NE	NM	U (0.5)	U (0.5)	U (0.5)	0.6 (0.5)	1.2 (0.5)	U (0.5)	U (0.5)	U (0.5)	0.3 J (0.5)	U (0.5)	0.617 (0.5)	U (0.5)	U (0.5)	0.2 J (0.5)	U (0.5)
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	NM	U (0.5)	U (0.5)	U (0.5)	0.2 J (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.5)

Notes:

1 All concentrations are presented in ug/L except where noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the ALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.
4 Concentration presented in nM = nanomolar. Sampling Method - Bubble Strip.

Abbreviations:

U -- Not Detected
J -- Estimated Concentration
( ) -- Reporting Limit
* -- Sampled on different day than other parameters with different method
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L -- micrograms per Liter
mL -- milliliters
NE -- Not Established
NM -- Not Measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

TABLE 5
SUMMARY OF MONITORING WELL GROUND WATER SAMPLE ANALYTICAL RESULTS - 3RD QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location		MW-26	MW-27	MW-28	MW-29	MW-31	MW-31	MW-36	MW-39	MW-40	MW-50	MW-60	MW-61	MW-62	MW-63	MW-66	MW-67
ENVIRON Sample ID		MW-26-201407	MW-27-201407	MW-28-201407	MW-29-201407	MW-31-201407	DUP-1-201407	MW-36-201407	MW-39-201407	MW-40-201407	MW-50-201407	MW-60-201407	MW-61-201407	MW-62-201407	MW-63-201407	MW-66-201407	MW-67-201407
Lab Sample ID(s)	Remedial Action Levels per ADEQ RADD Issued Dec 2013	083LG-30, 129020007, 60174754007	083LG-38, 129020014, 60174754016, 129470013	083LG-47, 129020023, 129460016, 60174754029	083LG-39, 129020015, 129470005, 60174754017	083LG-37, 129020013, 60174754015	60174754028	083LG-18, 129100017, 129470007	083LG-9, 129100009, 129460020	083LG-14, 129100014, 129460001	083LG-4, 129100004	083LG-3, 129100003	083LG-5	129460003, 083LG-13, 129100013	083LG-17, 129100005	083LG-1, 129100001, 129460024	083LG-2, 129100002, 129460023
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		07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/29/2014	07/29/2014	07/29/2014	07/28/2014	07/28/2014	07/28/2014	07/29/2014	07/28/2014	07/28/2014	07/28/2014
Comments							Field Duplicate										
Volatile Organic Compounds																	
Acetone	12000	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	410 (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Bromodichloromethane	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)
Bromoform	80	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	0.72 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Bromomethane	7.0	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)
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)
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)
Chlorobenzene	100	U (5)	U (5)	U (5)	8.9 (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)
Chloroethane	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)
Chloroform	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)
Chloromethane	190	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	1.1 J (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Dibromochloromethane	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)
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)	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)	U (5)	U (5)
1,1-Dichloroethene	7.0	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)
cis-1,2-Dichloroethene	70	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)	0.99 J (5)	U (5)	U (5)
trans-1,2-Dichloroethene	100	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)
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)	U (5)	U (5)
1,1,2,2-Tetrachloroethane	0.066	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)
Tetrachloroethene	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)
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)	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)	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)	U (5)	U (5)
Trichloroethene	5.0	U (5)	0.63 J (5)	U (5)	U (5)	U (5)	U (5)	0.61 J (5)	0.79 J (5)	U (5)	U (5)	1.0 J (5)	8.1 (5)	U (5)	8.3 (5)	2.6 J (5)	U (5)
Vinyl Chloride	2.0	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)	U (2)
Metals																	
Iron	NE	U (50)	702 (50)	440 (50)	98.7 (50)	143 (50)	NM	35 J (50)	49.3 J (50)	U (50)	533 (50)	235 (50)	15000 (50)	237 (50)	2930 (50)	96.1 (50)	293 (50)
Manganese	NE	398 (5)	62.1 (5)	75 (5)	309 (5)	233 (5)	NM	413 (5)	510 (5)	222 (5)	151 (5)	670 (5)	150 (5)	27.4 (5)	50.5 (5)	9 (5)	2.9 J (5)
Monitored Natural Attenuation Parameters (Laboratory)																	
Acetic acid	NE	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	NM	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)
Acetylene	NE	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	NM	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)
Total Alkalinity	NE	41700 (20000)	51700 (20000)	97100 (20000)	25500 (20000)	39400 (20000)	NM	17600 J (20000)	10600 J (20000)	16500 J (20000)	210000 (20000)	419000 (20000)	120000 (20000)	40200 (20000)	53100 (20000)	108000 (20000)	264000 (20000)
Ammonia	NE	U (100)	U (100)	U (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	240 (100)	U (100)	U (100)	U (100)	U (100)
Bicarbonate Alkalinity	NE	41700 (20000)	51700 (20000)	97100 (20000)	25500 (20000)	39400 (20000)	NM	17600 J (20000)	10600 J (20000)	16500 J (20000)	210000 (20000)	419000 (20000)	120000 (20000)	40200 (20000)	53100 (20000)	108000 (20000)	264000 (20000)
Butyric acid	NE	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	NM	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)
Carbon Dioxide	NE	575000	847000	473000	1140000	823000	NM	0	0	0	281000	451000	204000	262000	190000	509000	452000
Organic Carbon (total)	NE	U (1000)	670 (500)	730 (1000)	520 J (1000)	630 J (1000)	NM	U (1000)	U (1000)	U (1000)	U (1000)	650 J (1000)	U (1000)	U (1000)	U (1000)	U (1000)	550 J (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	285000 (50000)	42800 (5000)	23500 (5000)	123000 (10000)	88500 (10000)	NM	225000 (20000)	335000 B (50000)	230000 (20000)	241000 (20000)	132000 (10000)	98000 (10000)	153000 (10000)	143000 (10000)	180000 (10000)	114000 (10000)
2-Chloroethanol	NE	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	NM	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)
Lactic Acid	NE	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	NM	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)
Nitrogen	NE	2600 (100)	260 (100)	54 J (100)	2100 (100)	260 (100)	NM	U (100)	U (100)	37 J (100)	U (100)	U (100)	1400 (100)	650 (100)	340 (100)	170 (100)	U (100)
Nitrogen, Nitrate (As N)	NE	2600 (100)	260 (100)	54 J (100)	2100 (100)	260 (100)	NM	U (100)	U (100)	37 J (100)	U (100)	U (100)	1400 (100)	650 (100)	340 (100)	170 (100)	U (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
pH [STD Units]	NE	5.2 (0.1)	5.1 (0.1)	5.7 (0.1)	4.7 (0.1)	5 (0.1)	NM	4.8 (0.1)	5 (0.1)	4.6 (0.1)	6.6 (0.1)	7 (0.1)	6.4 (0.1)	5.6 (0.1)	5.9 (0.1)	5.7 (0.1)	6.4 (0.1)
Phosphates (total)	NE	U (30)	350 (30)	350 (30)	U (30)	U (30)	NM	32 (30)	32 (30)	U (30)	32 (30)	140 (30)	520 (30)	32 (30)	32 (30)	32 (30)	140 (30)
Propionic Acid	NE	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	NM	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)
Pyruvic Acid	NE	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	NM	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)
Sulfide (total)	NE	U (50)	U (50)	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	9600 (1000)	17400 (1000)	40200 (5000)	68100 (10000)	34600 (2000)	NM	31500 (5000)	6700 (1000)	2500 (1000)	3200 (1000)	27100 (2000)	17800 (2000)	3900 (1000)	8100 (1000)	7400 (1000)	9100 (1000)
Gases																	
Methane	NE	0.19 (0.1)	0.14 (0.1)	0.59 (0.1)	0.13 (0.1)	2.8 (0.1)	NM	5.3 (0.1)	0.22 (0.1)	0.29 (0.1)	0.1 U (0.1)	0.14 (0.1)	0.14 (0.1)	0.1 U (0.1)	0.27 (0.1)	0.1 U (0.1)	0.1 U (0.1)
Ethane	NE	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	NM	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)
Ethene	NE	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	NM	0.025 U (0.025)	14 (0.6)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)
Hydrogen [NM] [4]	NE	7 (0.6)	2.3 (0.6)	3 (0.6)	8.4 (0.6)	NA	NM	460 (12)	14 (0.6)	14 (0.6)	NA	NA	NA	20 (0.6)	NA	15 (0.6)	8.3 (0.6)
Molecular Analyses																	
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	0.7 (0.6)	NM	U (0.5)	0.7 (0.5)	U (0.5)	U (0.5)	U (0.6)	U (0.9)	U (0.5)	U (1)	U (0.5)	U (0.6)
Dehalococcoides (DHC) [cells/mL]	NE	U (0.5)	9.8 (0.5)	102 (0.5)	3.8 (0.5)	23.4 (0.6)	NM	U (0.5)	4.4 (0.5)	9.9 (0.5)	0.4 J (0.5)	122 (0.6)	U (0.9)	9.6 (0.5)	19.2 (1)	2.5 (0.5)	7.7 (0.6)
tceA Reductase [cells/mL]	NE	U (0.5)	U (0.5)	0.4 J (0.5)	U (0.5)	0.8 (0.6)	NM	U (0.5)	0.8 (0.5)	0.4 J (0.5)	U (0.5)	U (0.6)	U (0.9)	0.8 (0.5)	2.8 (1)	U (0.5)	U (0.6)
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.6)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	U (0.6)	U (0.9)	U (0.5)	U (1)	U (0.5)	U (0.6)

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 ALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.

4 Concentration presented in nM = nanomolar. Sampling Method - Bubble Strip.

Onsite Wells
Offsite Wells
Plume Boundary Wells

Abbreviations:

U -- Not Detected
J -- Estimated Concentration
( ) -- Reporting Limit
* -- Sampled on different day than other parameters with different method
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L -- micrograms per Liter
mL -- milliliters
NE -- Not Established
NM -- Not Measured

TABLE 5
SUMMARY OF MONITORING WELL GROUND WATER SAMPLE ANALYTICAL RESULTS - 3RD QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location		MW-68	IW-73	IW-74	IW-76	IW-77	MW-41	MW-41	MW-46R	MW-56	MW-57	MW-58	MW-71	RW-69
ENVIRON Sample ID		MW-68-201407	IW-73-201407	IW-74-201407	IW-76-201407	IW-77-201407	MW-41-201407	DUP-2-201407	MW-46R-201407	MW-56-201407	MW-57-201407	MW-58-201407	MW-71-201407	RW-69-201407
Lab Sample ID(s)	Remedial Action Levels per ADEQ RADD Issued Dec 2013	129460004, 083LG-24, 129100022	083LG-12, 129100012, 129470012	083LG-23, 129020001, 129460019	083LG-8, 129100008, 129460010	083LG-20, 129100018, 129460014	129460021, 083LG-42, 129020018, 60174754021	60174754026	129460022, 083LG-16, 129100016	083LG-21, 129100020	129100019	129460009, 083LG-22, 129100021	129470003, 083LG-10, 129100010	083LG-11, 129460018, 129100011
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
Sample Date		07/29/2014	07/29/2014	07/29/2014	07/29/2014	07/29/2014	07/30/2014	07/30/2014	07/29/2014	07/29/2014	07/29/2014	07/29/2014	07/29/2014	07/29/2014
Comments								Field Duplicate						
Volatile Organic Compounds														
Acetone	12000	U (10)	U (10)	U (10)	10.3 (10)	9.8 J (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Bromodichloromethane	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)
Bromoform	80	U (5)	U (5)	U (5)	16.4 M1 (5)	1.2 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)
Bromomethane	7.0	U (7)	U (7)	U (7)	8.7 (7)	3.8 J (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)	U (7)
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)
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)
Chlorobenzene	100	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)
Chloroethane	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)
Chloroform	80	U (5)	U (5)	U (5)	U (5)	0.8 J (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)	5.6 J (10)	4 J (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)	U (10)
Dibromochloromethane	80	U (5)	U (5)	U (5)	0.71 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)	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)	U (5)
1,1-Dichloroethene	7.0	U (5)	2.8 J (5)	0.6 J (5)	U (5)	0.87 J (5)	1.9 J (5)	1.8 J (5)	1.2 J (5)	1.7 J (5)	1.3 J (5)	2.5 J (5)	1.7 J (5)	0.9 J (5)
cis-1,2-Dichloroethene	70	U (5)	24.3 (5)	5.8 (5)	2.7 J (5)	35.2 (5)	19.7 (5)	19.1 (5)	13.7 (5)	19.3 (5)	8.2 (5)	12.7 (5)	6.4 (5)	5.6 (5)
trans-1,2-Dichloroethene	100	U (5)	U (5)	U (5)	0.74 J (5)	5.2 (5)	U (5)	U (5)	0.65 J (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)	U (5)	U (5)	U (5)
1,1,2,2-Tetrachloroethane	0.066	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)	U (1)
Tetrachloroethene	5.0	U (5)	U (5)	U (5)	U (5)	0.51 J (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)	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)
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)
Trichloroethene	5.0	U (5)	138 (5)	177 (10)	319 (25)	1540 (100)	480 (50)	511 (50)	472 (50)	516 (25)	308 (25)	399 (25)	181 (10)	164 (5)
Vinyl Chloride	2.0	U (2)	26.1 (2)	0.91 J (2)	U (2)	U (2)	U (2)	U (2)	0.64 J (2)	U (2)	U (2)	0.76 J (2)	U (2)	0.5 J (2)
Metals														
Iron	NE	U (50)	11400 (50)	U (50)	262 (50)	314 (50)	4460 (50)	NM	29.9 J (50)	919 (50)	1500 (50)	718 (50)	808 (50)	1470 (50)
Manganese	NE	1560 (5)	3220 (5)	710 (5)	100 (5)	14.8 (5)	6190 (5)	NM	108 (5)	209 (5)	357 (5)	379 (5)	1710 (5)	840 (5)
Monitored Natural Attenuation Parameters (Laboratory)														
Acetic acid	NE	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	NM	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)
Acetylene	NE	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	NM	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)
Total Alkalinity	NE	14000 J (20000)	72900 (20000)	88900 (20000)	23400 (20000)	206000 (20000)	37700 (20000)	NM	12700 J (20000)	34000 (20000)	32800 (20000)	12600 J (20000)	16100 J (20000)	14300 J (20000)
Ammonia	NE	U (100)	310 (100)	110 (100)	79 J (100)	280 (100)	90 J (100)	NM	U (100)	U (100)	20 J (100)	U (100)	U (100)	U (100)
Bicarbonate Alkalinity	NE	14000 J (20000)	72900 (20000)	88900 (20000)	23400 (20000)	206000 (20000)	37700 (20000)	NM	12700 J (20000)	34000 (20000)	32800 (20000)	12600 J (20000)	16100 J (20000)	14300 J (20000)
Butyric acid	NE	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	NM	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)
Carbon Dioxide	NE	0	252000	366000	322000	256000	327000	NM	0	282000	272000	0	0	0
Organic Carbon (total)	NE	U (1000)	1100 (1000)	U (1000)	U (1000)	1200 (1000)	U (1000)	NM	U (1000)	530 J (1000)	U (1000)	U (1000)	U (1000)	640 J (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	NM	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)	U (20000)
Chloride	NE	320000 (20000)	210000 (20000)	300000 (20000)	289000 (20000)	269000 (20000)	405000 (50000)	NM	231000 (20000)	184000 (10000)	275000 (20000)	249000 (20000)	267000 (20000)	284000 (20000)
2-Chloroethanol	NE		U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	NM	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)	U (10000)
Lactic Acid	NE	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	NM	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)
Nitrogen	NE	U (100)	37 J (100)	470 (100)	840 (100)	2000 (100)	27 J (100)	NM	U (100)	47 J (100)	U (100)	U (100)	U (100)	U (100)
Nitrogen, Nitrate (As N)	NE	U (100)	37 J (100)	470 (100)	840 (100)	2000 (100)	U (100)	NM	U (100)	47 J (100)	U (100)	U (100)	U (100)	U (100)
Nitrogen, Nitrite	NE	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)	NM	U (100)	U (100)	U (100)	U (100)	U (100)	U (100)
pH [STD Units]	NE	4.8 (0.1)	5.9 (0.1)	5.8 (0.1)	5.2 (0.1)	6.7 (0.1)	5.4 (0.1)	NM	4.7 (0.1)	5.4 (0.1)	5.4 (0.1)	5.9 (0.1)	5.1 (0.1)	5.1 (0.1)
Phosphates (total)	NE	U (30)	660 (30)	U (30)	140 (30)	2500 (30)	1600 (30)	NM	32 (30)	310 (30)	U (30)	U (30)	66 (30)	32 (30)
Propionic Acid	NE	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	NM	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)	5000 U (5000)
Pyruvic Acid	NE	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	NM	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)
Sulfide (total)	NE	U (50)	110 (50)	U (50)	U (50)	U (50)	U (50)	NM	U (50)	U (50)	U (50)	U (50)	U (50)	U (50)
Sulfate	NE	1000 J (1000)	2400 (1000)	2400 (1000)	122000 (10000)	450000 (50000)	3400 (1000)	NM	690 J (1000)	4600 (1000)	3900 (1000)	1900 (1000)	2600 (1000)	2400 (1000)
Gases														
Methane	NE	11 (0.1)	62 (0.1)	5.8 (0.1)	6.2 (0.1)	1.4 (0.1)	11 (0.1)	NM	21 (0.1)	0.18 (0.1)	4.2 (0.1)	33 (0.1)	60 (0.1)	36 (0.1)
Ethane	NE	0.025 U (0.025)	0.038 (0.025)	0.029 (0.025)	0.042 (0.025)	0.05 (0.025)	0.031 (0.025)	NM	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.051 (0.025)
Ethene	NE	0.025 U (0.025)	0.4 (0.025)	0.05 (0.025)	0.025 U (0.025)	0.025 U (0.025)	0.025 U (0.025)	NM	0.056 (0.025)	0.032 (0.025)	0.05 (0.025)	0.025 U (0.025)	0.048 (0.025)	0.36 (0.025)
Hydrogen [NM] [4]	NE	15 (0.6)	13 (0.6)	11 (0.6)	32 (0.6)	30 (0.6)	29 (0.6)	NM	41 (1.2)	NA	NA	14 (0.6)	12 (0.6)	14 (0.6)
Molecular Analyses														
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	4610 (0.5)	13.5 (0.5)	U (0.5)	U (0.5)	0.9 (0.5)	NM	1.2 (0.5)	312 (1)	NA	6.8 (0.5)	U (0.5)	2.5 (0.5)
Dehalococcoides (DHC) [cells/mL]	NE	3.9 (0.5)	21700 (0.5)	64 (0.5)	23.7 (0.5)	4.7 (0.5)	352 (0.5)	NM	20.4 (0.5)	1760 (1)	NA	43.4 (0.5)	19.3 (0.5)	33.3 (0.5)
tceA Reductase [cells/mL]	NE	0.2 J (0.5)	U (0.5)	2 (0.5)	0.8 (0.5)	1.6 (0.5)	U (0.5)	NM	0.4 J (0.5)	1.6 (1)	NA	0.5 (0.5)	U (0.5)	2 (0.5)
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	U (0.5)	U (0.5)	0.1 J (0.5)	U (0.5)	U (0.5)	NM	U (0.5)	U (1)	NA	U (0.5)	U (0.5)	U (0.5)

Notes:

1 All concentrations are presented in ug/L except where noted.
2 Only compounds with at least one detection are shown.
3 Concentrations that exceed the ALs for Fort Smith ADEQ RADD Issued Dec 2013 are double underlined.

4 Concentration presented in nM = nanomolar. Sampling Method - Bubble Strip.

Abbreviations:

U -- Not Detected
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( ) -- Reporting Limit
* -- Sampled on different day than other parameters with different method
RADD -- Remedial Action Decision Document
ADEQ -- Arkansas Department of Environmental Quality
ug/L -- micrograms per Liter
mL -- milliliters
NE -- Not Established
NM -- Not Measured

Onsite Wells
Offsite Wells
Plume Boundary Wells

Appendix D

Data Validation Report

DATA VALIDATION REVIEW
2nd Quarter Groundwater Monitoring Event 2015
Whirlpool Corporation
Fort Smith, Arkansas

Laboratory Sample Delivery Groups (SDGs): 60191794, 60191868, 60191960 and 60192103

Laboratory: PACE Analytical, Lenexa, Kansas

Reviewer: Wendy Stonestreet **Date Reviewed: May 18, 2015**

This data validation report has been prepared by Ramboll Environ US Corporation (Ramboll Environ) to assess the validity and usability of laboratory analytical data generated from samples collected during the second quarter groundwater sampling event at the Whirlpool Corporation, Fort Smith, Arkansas Site (the "site") from April 13, 2015 to April 16, 2015.

The analytical data were evaluated for quality assurance and quality control (QA/QC) based on the following document: *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (June 2008). Analytical services for volatile organic compounds (VOC) analysis of 83 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 groundwater samples, seven blind groundwater field duplicates, three matrix spike/matrix spike duplicate (MS/MSD), six equipment rinsate blanks and 15 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: 60191794				
MW-68-201504	SA	60191794001	Aqueous	X
ITMW-20-201504	SA/MS/MSD	60191794002	Aqueous	X
MW-28-201504	SA/MS/MSD	60191794003	Aqueous	X
EB-07-201504	EB	60191794004	Aqueous	X
TB-01-201504	TB	60191794005	Aqueous	X
MW-22-201504	SA	60191794006	Aqueous	X
MW-26-201504	SA	60191794007	Aqueous	X
TB-02-201504	TB	60191794008	Aqueous	X
MW-27-201504	SA	60191794009	Aqueous	X
SDG: 60191868				
IW-77-201504	SA	60191868001	Aqueous	X
MW-39-201504	SA	60191868002	Aqueous	X
MW-40-201504	SA	60191868003	Aqueous	X

Field ID	Sample Type	Lab ID	Matrix	Analyses
				VOCs
MW-71-201504	SA	60191868004	Aqueous	X
RW-69-201504	SA	60191868005	Aqueous	X
MW-60-201504	SA	60191868006	Aqueous	X
ITMW-7-201504	SA	60191868007	Aqueous	X
MW-50-201504	SA	60191868008	Aqueous	X
MW-29-201504	SA	60191868009	Aqueous	X
ITMW-21-201504	SA	60191868010	Aqueous	X
MW-63-201504	SA	60191868011	Aqueous	X
ITMW-4-201504	SA	60191868012	Aqueous	X
ITMW-6-201504	SA/MS/MSD	60191868013	Aqueous	X
MW-62-201504	SA	60191868014	Aqueous	X
MW-34-20104	SA	60191868015	Aqueous	X
IW-80-201504	SA	60191868016	Aqueous	X
MW-36-201504	SA	60191868017	Aqueous	X
MW-35R-201504	SA	60191868018	Aqueous	X
MW-61-201504	SA	60191868019	Aqueous	X
MW-46R-201504	SA	60191868020	Aqueous	X
MW-31R-201504	SA	60191868021	Aqueous	X
ITMW-16-201504	SA	60191868022	Aqueous	X
DUP-07-201504	FD	20191868023	Aqueous	X
TB-03-201504	TB	60191868024	Aqueous	X
TB-04-201504	TB	60191868025	Aqueous	X
TB-05-201504	TB	60191868026	Aqueous	X
TB-06-201504	TB	60191868027	Aqueous	X
TB-07-201504	TB	60191868028	Aqueous	X
SDG: 60191960				
ITMW-15-201504	SA	60191960001	Aqueous	X
ITMW-10-201504	SA	60191960002	Aqueous	X
ITMW-12-201504	SA	60191960003	Aqueous	X
IW-76-201504	SA	60191960004	Aqueous	X
MW-32R-201504	SA	60191960005	Aqueous	X
MW-33R-201504	SA	60191960006	Aqueous	X
ITMW-9-201504	SA	60191960007	Aqueous	X
MW-66-201504	SA	60191960008	Aqueous	X
ITMW-1-201504	SA	60191960009	Aqueous	X
ITMW-13-201504	SA	60191960010	Aqueous	X
IW-72-201504	SA	60191960011	Aqueous	X
IW-74-201504	SA	60191960012	Aqueous	X
MW-67-201504	SA	60191960013	Aqueous	X
MW-65-201504	SA	60191960014	Aqueous	X
ITMW-19-201504	SA	60191960015	Aqueous	X
ITMW-11-201504	SA	60191960016	Aqueous	X
ITMW-17-201504	SA	60191960017	Aqueous	X
ITMW-2-201504	SA	60191960018	Aqueous	X
ITMW-14-201504	SA	60191960019	Aqueous	X
MW-41-201504	SA	60191960020	Aqueous	X
IW-73-201504	SA	60191960021	Aqueous	X

Field ID	Sample Type	Lab ID	Matrix	Analyses
				VOCs
DUP-01-201504	FD	60191960022	Aqueous	X
DUP-03-201504	FD	60191960023	Aqueous	X
DUP-05-201504	FD	60191960024	Aqueous	X
TB-08-201504	TB	60191960025	Aqueous	X
TB-09-201504	TB	60191960026	Aqueous	X
TB-10-201504	TB	60191960027	Aqueous	X
TB-11-201504	TB	60191960028	Aqueous	X
TB-12-201504	TB	60191960029	Aqueous	X
TB-13-201504	TB	60191960030	Aqueous	X
EB-02-201504	EB	60191960031	Aqueous	X
DUP-02-201504	FD	60191960032	Aqueous	X
SDG: 60192103				
MW-38-201504	SA	60192103001	Aqueous	X
MW-58-201504	SA	60192103002	Aqueous	X
ITMW-18-201504	SA	60192103003	Aqueous	X
MW-25-201504	SA	60192103004	Aqueous	X
MW-56-201504	SA	60192103005	Aqueous	X
MW-57-201504	SA	60192103006	Aqueous	X
DUP-04-201504	FD	60192103007	Aqueous	X
EB-05-201504	EB	60192103008	Aqueous	X
EB-03-201504	EB	60192103009	Aqueous	X
EB-06-201504	EB	60192103010	Aqueous	X
EB-01-201504	EB	60192103011	Aqueous	X
TB-14-201504	TB	60192103012	Aqueous	X
DUP-08-201504	FD	60192103013	Aqueous	X
TB-15-201504	TB	60192103014	Aqueous	X

Sample Type: SA = Sample TB = Trip Blank FD = Field Duplicate RB = Rinsate Blank
MS =Matrix Spike MSD = Matrix Spike Duplicate
VOCs = Volatile Organic Compounds by USEPA Method SW-846 8260B by Gas Chromatography/Mass Spectrometry (GC/MS) Medium Level.

The following laboratory submittals were evaluated:

- Data Package Completeness,
- Sample Prevention and Holding Times,
- Blanks,
- Surrogate Compound Recoveries
- Laboratory Control Samples,
- Matrix Spike/Matrix Spike Duplicates,
- Laboratory and Field Precision,
- Overall Assessment of Data.

General Overall Assessment:

_____ Data are usable without qualification.

__X__ Data are usable with qualification (noted below).

_____ Some or all data are unusable for any purpose (detailed below).

Case Narrative Comments: Any case narrative comments concerning data qualification were noted below.

1.0 Data Package Completeness

Were all items delivered as specified on the COC and is the data package complete?

Yes, the analysis was performed as requested on the chain-of-custody records. All samples were received by the laboratory and analyzed properly with appropriate corrective actions taken when appropriate. No data points were rejected. The data completeness measure for this data package is 100% and is acceptable.

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: 60191794:** The laboratory indicated that the matrix spike (MS) was reported outside of laboratory control requirements for vinyl chloride. See Section 11.0 for further discussion and resultant data qualification.
- **SDG: 60186097:** The laboratory indicated that bromomethane and chloromethane were detected in a method blank. See Section 4.0 for further discussion and resultant data qualification. The laboratory indicated that the matrix spike (MS) and or matrix spike duplicate or relative percent difference (RPD) was reported outside of laboratory control requirements for several analytes. See Section 11.0 for further discussion and resultant data qualification.
- **SDG: 60191960:** The laboratory indicated that bromomethane and chloromethane were detected in a method blank. See Section 4.0 for further discussion and resultant data qualification. The laboratory indicated that the laboratory control sample (LCS) was reported outside of laboratory control requirements for vinyl chloride. See Section 7.0 for further discussion and resultant data qualification.
- **SDG: 60192103:** The laboratory indicated that bromomethane and chloromethane were detected in a method blank. See Section 4.0 for further discussion and resultant data qualification. The laboratory indicated that the laboratory control sample (LCS) was reported outside of laboratory control requirements for vinyl chloride and 1,1,1-Trichloroethane. See Section 7.0 for further discussion and resultant data qualification.

Samples were received at the PACE, Lenexa, Kansas laboratory in good condition and at proper temperature 4˚C ± 2˚C (fifteen coolers at 3.3˚C, 2.5˚C, 5.1˚C, 5.5˚C, 1.1˚C, 3.2˚C, 4.1˚C, 2.3˚C, 1.3˚C, 3.7˚C, 4.3˚C, 3.3˚C, 5.7˚C and 5.5˚C). Sample preservation requirements were met. Temperature upon receipt for two coolers was 0.1˚C and 0.3˚C respectively. However, given that the temperature was taken using an Infrared thermometer, which has an error tolerance of +/-1.0 degrees Celsius and the laboratory did not note any freezing of the samples, this non-conformance does not affect the usability of the data.

Dup-08-201504 was listed on the Chain of Custody for SDG 60191960, however the sample inadvertently was not placed in a cooler for shipment on 4/15/2015. The sample was placed on

ice and shipped to the laboratory on 4/16/2015 and the analysis of the sample was included in SDG 60192103.

Sample DUP-03-201504 was collected on 04/15/2015 at 14:30 instead of 16:30 which was noted on the COC and sample bottle.

3.0 Technical Holding Times

Were samples extracted/analysed within method specific holding time requirements?

Yes. All samples were prepared and/or analysed within the method specific required holding time of 14 days for hydrochloric (HCl) acid preserved samples. Samples which were preserved with ascorbic acid and samples with pH preservation recorded above 2.0 (IW-80-201504, IW-77-201504, MW-34-201504, MW-36-201504, MW-35R-201504, ITMW-15-201504, IW-76-201504, MW-65-201504, ITMW-18-201504, DUP-04-201504 and MW-25-201504) whose holding time was reduced to seven days also were analysed within holding time.

4.0 Blank Contamination

Were any analytes detected in the associated laboratory or field blanks?

Yes. The following table summarizes analytes detected in sample-associated blanks after accounting for method blank contamination.

SDG	Blank ID	Blank Type	Parameter	Analyte	Concentration	Units
60191794	TB-01-201504	Trip	8260B	Acetone	7.9 J	µg/L
60191794	1551596	Method	8260B	Chloromethane	0.13 J	µg/L
60191868	1551596	Method	8260B	Chloromethane	0.13 J	µg/L
60191868	1553607	Method	8260B	Chloromethane	0.15 J	µg/L
60191868	1554233	Method	8260B	4-Methyl-2-pentanone	2.5 J	µg/L
60191868	1554233	Method	8260B	Carbon disulphide	0.15 J	µg/L
60191868	1554233	Method	8260B	Chloromethane	0.21 J	µg/L
60191868	`1557447	Method	8260B	Bromomethane	0.52 J	µg/L
60191868	`1557447	Method	8260B	Chloromethane	0.14 J	µg/L
60191868	1550535	Method	8260B	Chloromethane	0.17J	µg/L
60191868	1552695	Method	8260B	Chloromethane	0.16J	µg/L
60191868	TB-04-201504	Trip	8260B	Acetone	7.7 J	µg/L
60191868	TB-05-201504	Trip	8260B	Acetone	7.1 J	µg/L
60191960	TB-11-201504	Trip	8260B	Acetone	10.4	µg/L
60191960	TB-12-201504	Trip	8260B	Acetone	10.4	µg/L
60191960	1552631	Method	8260B	Chloromethane	0.22 J	µg/L
60191960	1552703	Method	8260B	Chloromethane	0.22 J	µg/L
60191960	1552986	Method	8260B	Chloromethane	0.18 J	µg/L
60191960	1557447	Method	8260B	Bromomethane	0.52 J	µg/L
60191960	1557447	Method	8260B	Chloromethane	0.14 J	µg/L
60191960	1552695	Method	8260B	Chloromethane	0.16 J	µg/L
60192103	EB-01-201504	Equipment	8260B	Acetone	11.4	µg/L
60192103	EB-01-201504	Equipment	8260B	Trichloroethene	0.64 J	µg/L
60192103	1553779	Method	8260B	Chloromethane	0.15 J	µg/L
60192103	1557447	Method	8260B	Bromomethane	0.52 J	µg/L
60192103	1557447	Method	8260B	Chloromethane	0.14 J	µg/L
60192103	1552695	Method	8260B	Chloromethane	0.16 J	µg/L
60192103	1554703	Method	8260B	Bromomethane	3.4 J	µg/L
60192103	1554703	Method	8260B	Methylene chloride	0.22 J	µg/L

ID = Identification µg/L = micrograms per Liter

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. Data qualification of sample results due to blank contamination is summarized in the table below.

SDG	Field ID	Parameter	Analyte	Qualification
60191868	IW-77-201504	8260B	Acetone	**U**
60191868	ITMW-7-201504	8260B	Acetone	**U**
60191868	ITMW-21-201504	8260B	Acetone	**U**
60191868	ITMW-4-201504	8260B	Acetone	**U**
60191868	MW-34-201504	8260B	Acetone	**U**
60191868	IW-80-201504	8260B	Acetone	**U**
60191868	MW-36-201504	8260B	Acetone	**U**
60191868	MW-35R-201504	8260B	Acetone	**U**
60191868	MW-46R-201504	8260B	Bromomethane	**U**
60191868	MW-46R-201504	8260B	Chloromethane	**U**
60191868	DUP-07-201504	8260B	Chloromethane	**U**
60191960	ITMW-15-201504	8260B	Acetone	**U**
60191960	ITMW-10-201504	8260B	Bromomethane	**U**
60191960	ITMW-10-201504	8260B	Chloromethane	**U**
60191960	ITMW-12-201504	8260B	Bromomethane	**U**
60191960	ITMW-12-201504	8260B	Chloromethane	**U**
60191960	ITMW-12-201504	8260B	Acetone	**U**
60191960	IW-76-201504	8260B	Acetone	**U**
60191960	MW-32R-201504	8260B	Acetone	**U**
60191960	MW-33R-201504	8260B	Acetone	**U**
60191960	MW-33R-201504	8260B	Chloromethane	**U**
60191960	MW-65-201504	8260B	Acetone	**U**
60191960	ITMW-19-201504	8260B	Acetone	**U**
60191960	ITMW-17-201504	8260B	Chloromethane	**U**
60191960	MW-41-201504	8260B	Bromomethane	**U**
60191960	MW-41-201504	8260B	Chloromethane	**U**
60192103	ITMW-18-201504	8260B	Acetone	**U**
60192103	MW-25-201504	8260B	Acetone	**U**
60192103	MW-56-201504	8260B	Acetone	**U**
60192103	MW-56-201504	8260B	Bromomethane	**U**
60192103	MW-56-201504	8260B	Chloromethane	**U**
60192103	DUP-04-201504	8260B	Acetone	**U**

5.0 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.

6.0 Internal Standards

Were the Internal standard areas within control limits and was the retention time criteria met?

Yes. Internal standards indicate whether GC/MS sensitivity and response were stable during each analysis. The laboratory reported that all criteria were within method requirements.

No analytical data were qualified based on the results of internal standard recovery

7.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No. The laboratory control sample (LCS) provides information on the accuracy of the analytical method and on the laboratory performance. The following table summarizes the LCS results that were outside the acceptance limits.

SDG	LCS ID	Parameter	Analyte	LCS/ (%)	LCS/ (Recovery %)
60191960	1552987	8260B	Vinyl chloride	**129**	62-125
60192103	1553780	8260B	Vinyl chloride	**126**	62-125
60192103	1553699	8260B	1,1,1-Trichloroethene	**121**	80-120

ID = Identification LCS/D = Laboratory Control Sample/Duplicate RPD = Relative Percent Difference % = Percent

Analytical data reported as non-detect and associated with LCS/LCSD recoveries above evaluation criteria, indicating a possible high bias, did not require qualification.

8.0 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 (%)
60191794	ITMW-20-201504	8260B	Vinyl chloride	**135**/129	4	58-130/11
60191868	ITMW-6-201504	8260B	Bromodichloromethane	109/122	**11**	77-127/10
60191868	ITMW-6-201504	8260B	cis-1,2-Dichloroethene	114/**123**	6	85-117/10
60191868	ITMW-6-201504	8260B	Styrene	**8/9**	10	17-174/10
60191868	ITMW-6-201504	8260B	Tetrachloroethene	92/102	**10**	78-127/9

MS = Matrix Spike MSD = Matrix Spike Duplicate RPD = Relative Percent Difference % = Percent

Analytical results reported as non-detect and associated with MS/MSD recoveries above evaluation criteria, indicating a possible high bias, did not require qualification. Parent sample results at concentrations greater than 4 times the matrix spike concentration were not considered appropriate for evaluating matrix interference. The following table summarizes the MS/MSD results that were outside the acceptance limits. Data qualification of sample results due to MS/MSD recovery is summarized in the table below.

SDG	Field ID	Parameter	Analyte	Qualification
60191868	ITMW-6-201504	8260B	cis-1,2-Dichloroethene	**J**
60191868	ITMW-6-201504	8260B	Styrene	**J**

9.0 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.

10.0 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
60191868	MW-46R-201504	DUP-07-201504
60191960	MW-33R-201504	DUP-01-201504
60191960	IW-74-201504	DUP-05-201504
60191960	ITMW-13-201504	DUP-03-201504
60191960	MW-41-201504	DUP-02-201504
60191960/60192103	ITMW-10-201504	DUP-08-201504
60192103	ITMW-18-201504	DUP-04-201504

Were field duplicates within evaluation criteria?

No. RPD values were less than the control limit of <30% for all compounds with concentrations greater than the reporting limit, with the exception of Trichloroethene for sample MW-46R-201504/DUP-07-201504. While this non-conformance may indicate slightly poor precision and the sample result was **J** qualified as estimate, it did affect the usability of the data. The following table summarizes sample and duplicate result concentrations and their relative percent difference.

SDG	Field ID	Duplicate ID	Analyte	Sample Result (ug/L)	Duplicate Result (ug/L)	RPD (%)
60186097	MW-46R-201504	DUP-07-201504	1,1-Dichloroethene	1.4	1.4	0.00
			cis-1,2-Dichloroethene	13.8	13.9	3.38
			trans-1,2-Dichloroethene	0.47 J*	0.57 J*	19.23
			Methylene chloride	ND	0.18 J*	NA
			Tetrachloroethene	ND	0.11 J*	NA
			Trichloroethene	220 **J**	482	**74.64**
			Vinyl chloride	0.47 J*	0.90 J*	8.16
60191960	MW-33R-201504	DUP-01-201504	Benzene	0.30	ND	NA
			2-Butanone	1.3 J*	ND	NA
			Carbon disulfide	1.4 J*	ND	NA
			Chloroform	0.20 J*	ND	NA
			1,1-Dichloroethene	0.55 J*	0.52J	5.60
			cis-1,2-Dichloroethene	12.2	10.5	14.98
			trans-1,2-Dichloroethene	1.4	1.3	7.41
			Methylene chloride	0.39 J*	ND	NA
			Tetrachloroethene	0.13 J*	ND	NA
			Trichloroethene	570	624	9.05
60191960	MW-33R-201504	DUP-01-201504	Vinyl chloride	0.37 J*	ND	NA
60191960	IW-74-201504	DUP-05-201504	Benzene	0.51 J*	0.50 J*	1.98
			cis-1,2-Dichloroethene	5.0	4.8	4.08
			Trichloroethene	147	153	4.00
60191960	ITMW-13-201504	DUP-03-201504	cis-1,2-Dichloroethene	26.5	26.7	0.75
			trans-1,2-Dichloroethene	0.74 J*	0.65 J*	12.95
			Trichloroethene	43.1	47.7	10.13
60191960	MW-41-201504	DUP-02-201504	1,1-Dichloroethene	1.3	1.2	8.00
			cis-1,2-Dichloroethene	15.2	13.5	11.85
			trans-1,2-Dichloroethene	ND	0.70 J*	NA
			Trichloroethene	386	410	6.03
			Vinyl chloride	0.27 J*	ND	NA
60191960/ 60192103	ITMW-10-201504	DUP-08-201504	Benzene	0.12 J*	0.12 J*	0.00
			Chloroform	0.22 J*	0.22 J*	0.00
			Chloromethane	0.28 J*	0.22 J*	24.00
			1,1-Dichloroethane	2.7	2.8	3.64
			1,1-Dichloroethene	3.2	3.6	11.76
			cis-1,2-Dichloroethene	34.8	36.1	3.67
			trans-1,2-Dichloroethene	0.29 J*	0.29 J*	0.00
			Methylene chloride	0.57 J*	0.66 J*	14.63
			Tetrachloroethene	0.46 J*	0.45 J*	2.20
			Toluene	0.48 J*	0.46 J*	4.26
			Trichloroethene	258	303	16.04
			Vinyl chloride	0.98 J*	1.2	20.18
60192103	ITMW-18-201504	DUP-04-201504	Bromomethane	30.4	29.7	2.33
			Chloroform	0.69 J*	0.70 J*	1.44
			Chloromethane	10.7	7.6	**33.88**
			1,1-Dichloroethene	0.83 J*	ND	NA
			cis-1,2-Dichloroethene	1.6	1.7	6.06
			Trichloroethene	43.5	42.8	1.62

ug/L = micrograms/Liter RPD = Relative Percent Difference * = Results reported below reporting limit. ND = Not Detected. NE = Not evaluated

11.0 Detects and Calibration Range

For samples that were diluted and nondetect, were undiluted results also reported?

Not Applicable. All samples which were diluted had detections.

For samples that were not diluted and detected, were the results within calibration range?

Yes

12.0 Additional Qualifications

Were additional qualifications applied?

No

13.0 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
60191868	IW-77-201504	8260B	Acetone	**U**	1
60191868	ITMW-7-201504	8260B	Acetone	**U**	1
60191868	ITMW-21-201504	8260B	Acetone	**U**	1
60191868	ITMW-4-201504	8260B	Acetone	**U**	1
60191868	MW-34-201504	8260B	Acetone	**U**	1
60191868	IW-80-201504	8260B	Acetone	**U**	1
60191868	MW-36-201504	8260B	Acetone	**U**	1
60191868	MW-35R-201504	8260B	Acetone	**U**	1
60191868	MW-46R-201504	8260B	Bromomethane	**U**	1
60191868	MW-46R-201504	8260B	Chloromethane	**U**	1
60191868	DUP-07-201504	8260B	Chloromethane	**U**	1
60191960	ITMW-15-201504	8260B	Acetone	**U**	1
60191960	ITMW-10-201504	8260B	Bromomethane	**U**	1
60191960	ITMW-10-201504	8260B	Chloromethane	**U**	1
60191960	ITMW-12-201504	8260B	Bromomethane	**U**	1
60191960	ITMW-12-201504	8260B	Chloromethane	**U**	1
60191960	ITMW-12-201504	8260B	Acetone	**U**	1
60191960	IW-76-201504	8260B	Acetone	**U**	1
60191960	MW-32R-201504	8260B	Acetone	**U**	1
60191960	MW-33R-201504	8260B	Acetone	**U**	1
60191960	MW-33R-201504	8260B	Chloromethane	**U**	1
60191960	MW-65-201504	8260B	Acetone	**U**	1
60191960	ITMW-19-201504	8260B	Acetone	**U**	1
60191960	ITMW-17-201504	8260B	Chloromethane	**U**	1
60191960	MW-41-201504	8260B	Bromomethane	**U**	1
60191960	MW-41-201504	8260B	Chloromethane	**U**	1
60192103	ITMW-18-201504	8260B	Acetone	**U**	1
60192103	MW-25-201504	8260B	Acetone	**U**	1

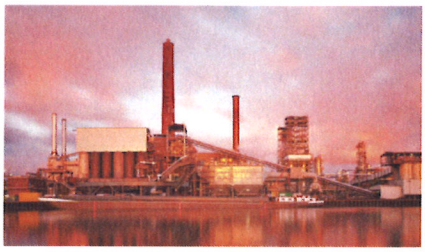
SDG	Field ID	Analysis	Analyte	Qualifier	Reason Code
60192103	MW-56-201504	8260B	Acetone	**U**	1
60192103	MW-56-201504	8260B	Bromomethane	**U**	1
60192103	MW-56-201504	8260B	Chloromethane	**U**	1
60192103	DUP-04-201504	8260B	Acetone	**U**	1
60191868	ITMW-6-201504	8260B	cis-1,2-Dichloroethene	**J**	2
60191868	ITMW-6-201504	8260B	Styrene	**J**	2
60186097	MW-46R-201504	8260B	Trichloroethene	**J**	3

Data Validation Qualifier Codes:

U = Non-detect. The compound was analysed 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 Samples were qualified as non-detect due to blank contamination.
2 Samples were qualified as estimated due to matrix spike recoveries outside of laboratory control criteria and the results may be biased high.
3 Duplicate recovery RPD was above project criteria limits.


ATTACHMENT B
Second Quarter 2015 Soil Vapor Monitoring and Vapor Intrusion Assessment Report
Whirlpool Corporation
Fort Smith, Arkansas

Prepared for:
Whirlpool Corporation

Prepared by:
Ramboll Environ US Corporation

Date:
August 2015

Project Number:
34-37500A

STATE OF ARKANSAS
REGISTERED PROFESSIONAL GEOLOGIST
No. 2016
WAYNE ALLEN WEBER

RAMBOLL ENVIRON

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1 Introduction

Ramboll Environ US Corporation (Ramboll Environ) has prepared this Second Quarter 2015 Soil Vapor Monitoring and Vapor Intrusion Assessment Report for the Fort Smith, Arkansas, Site (Site) on behalf of Whirlpool Corporation, in accordance with the December 27, 2013, Remedial Action Decision Document (RADD) issued by the Arkansas Department of Environmental Quality (ADEQ 2013). This report is Attachment B of the Second Quarter 2015 Progress Report for the Site.

Whirlpool has been monitoring groundwater at the Site since 1989. In 2012, the potential for vapor intrusion from groundwater into buildings in the neighborhood north of the Site was evaluated using multiple lines of evidence in a human health risk assessment, which was presented as Appendix A of the Revised Risk Management Plan (RRMP) (ENVIRON 2013). The risk assessment included the use of groundwater and soil vapor data in the evaluation of the potential for vapor intrusion. This report provides an updated evaluation of the potential for vapor intrusion based on the data collected from groundwater monitoring wells and vapor monitoring points during the second quarter of 2015. The evaluation of multiple lines of evidence in this report is consistent with United States Environmental Protection Agency's (USEPA's) recommendations in its final vapor intrusion guidance documents (USEPA 2015a and 2015b). This report also includes an evaluation of the outdoor, crawl space and indoor air data that were collected at the request of a property owner to provide additional lines of evidence in the evaluation of the potential for vapor intrusion.

2 Soil Vapor Monitoring Point Installation and Sample Collection

The following subsections summarize the prior installation of the soil vapor monitoring points, as well as the sample collection methods and procedures that were used during the second quarter 2015 monitoring event.

2.1 Prior Installation of Soil Vapor Monitoring Points

In May 2012, Whirlpool installed two sets of soil vapor points. One set (locations SV-03S and SV-04D) was installed offsite at the Whirlpool owned property (Parcel 1) and the other set (locations SV-01S and SV-02D) was installed onsite on the Whirlpool property, as shown on Figure 1. During subsequent monitoring events, both sets of soil vapor points eventually filled with water and became ineffective for sampling soil vapor. Two additional sets of soil vapor points were installed in February 2014. Nested locations VP-1S and VP-1D, as well as VP-2S and VP-2D were installed at the locations shown on Figure 1. These soil vapor points also filled with water over time and became ineffective for sampling soil vapor. Because the soil vapor points installed in 2012 and 2014 were ineffective for sampling soil vapor, they were properly abandoned in December 2014 and January 2015.

Per the ADEQ-approved Offsite Shallow Groundwater Investigation Work Plan (ENVIRON 2014c), Whirlpool installed co-located soil vapor monitoring points and shallow groundwater monitoring wells at five areas (identified as Parcels 1 through 5 on Figure 2) in January 2015. Whirlpool installed eight soil vapor monitoring points (VP-5 through VP-10, VP-12 and VP-14) at these Parcels. Whirlpool also attempted to install two additional vapor points (VP-11 on Parcel 4 and VP-13 on Parcel 5); however, installation was unsuccessful because of water in the borings. VP-11 and VP-13 were instead installed as monitoring wells MW-181 and MW-180, respectively.

2.2 Second Quarter 2015 Sampling

Soil vapor sampling was completed on April 22 and 23, 2015, following USEPA and industry standard methods. The field procedures used during the soil vapor sampling event were consistent with the methodology described in the First Quarter 2014 Soil Vapor Monitoring/ Vapor Intrusion Report (ENVIRON 2014a) and the modifications discussed in the Second Quarter 2014 Soil Vapor Monitoring/Vapor Intrusion Report (ENVIRON 2014b), except the sampling attempt was not preceded by at least five consecutive days with less than 0.1 inch of rain: 0.38 inch of rain was recorded on April 18, 2015 and 0.17 inch of rain was recorded on April 19, 2015. The only other days preceding the sampling in April with at least 0.1 inch of rain were April 13 and 15, 2015, which were more than five days prior to the second quarter vapor sampling. Precipitation data for the month of April are provided in Appendix B.

Among the existing soil vapor sampling points, soil vapor samples were collected from VP-7 and VP-9. Water filled the vapor points at locations VP-5, VP-6, VP-8, VP-10 and VP-12 and the water from these monitoring points could not be purged from the sampling train. Consistent with

the modifications to the sampling plan proposed in the Second Quarter 2014 Soil Vapor Monitoring/Vapor Intrusion Report, water samples were collected from these latter vapor points. At VP-14, water droplets in the sample train prevented the collection of a vapor sample and the water volume was insufficient for sampling despite sustained vacuum for 4 hours. Table 1 summarizes the matrices encountered at the soil vapor monitoring points and the types of samples that were collected during quarterly events in 2014 and 2015.

Outdoor, crawl space and indoor air samples were also collected at Parcel 3, at the request of the property owner.

The volatile organic compound (VOC) results for the soil vapor, groundwater, water, outdoor air, crawl space air and indoor air samples collected during Second Quarter 2015 are discussed in Section 3. The analytical data reports for the samples are provided in Appendix A.

3 Results

3.1 Summary of Prior Assessment

Groundwater and soil vapor data collected prior to 2013 were evaluated and the results were presented in the RRMP and ADEQ's RADD[1]. Quarterly groundwater, water and soil vapor data collected from First Quarter 2014 through First Quarter 2015 were similarly evaluated and the results were presented in the corresponding Quarterly Vapor Monitoring and Vapor Intrusion Assessment reports.

The water and soil vapor data collected over the groundwater plume in the neighborhood through First Quarter 2015 have shown that TCE vapor from the groundwater is not indicative of a public health concern associated with vapor intrusion. These findings corroborate the groundwater vapor intrusion modeling results which indicate vapor intrusion from groundwater is not occurring at levels that would present a public health concern.

3.2 Current Assessment

Groundwater data from monitoring wells (which have identifiers beginning with "MW-") in the neighborhood (Figure 3) collected during Second Quarter 2015 are summarized in Table 2a. Groundwater data from monitoring wells south of the neighborhood are summarized on Table 2b and are included in the report because these wells are near VP-14 and where the highest detected concentration of TCE has been found at the Site's property boundary. Water data and soil vapor data from soil vapor points sampled during Second Quarter 2015 are included in Tables 3a and 3b, respectively. Outdoor, crawl space and indoor air data collected at Parcel 3 during Second Quarter 2015 are included in Table 4. As discussed in Attachment A of this progress report, the concentrations of TCE in groundwater in the neighborhood, including at MW-71 (Parcel 4) and MW-33/MW-33R (which replaced MW-33) (Parcel 5), have been stable or decreasing since May 2012.

The maximum detected groundwater concentrations among the monitoring wells in the neighborhood that were sampled in April 2015 are summarized in Table 5. These concentrations were used to calculate upper-bound risk estimates for potential vapor intrusion from groundwater into residences in the neighborhood using the approach in Section 6.5.2 of the ADEQ-approved RRMP. The calculation of and input parameters for these risk estimates are included as Appendix C. The verification of the vapor intrusion calculations is included as Appendix D. As shown in Table 5, the calculations resulted in upper-bound cumulative cancer risk and non-cancer hazard index (HI) estimates of 2×10^{-6} and 0.4, respectively. These risk estimates are below ADEQ's risk management limits of 10^{-5} and 1, respectively.

As described in Section 0, soil vapor monitoring points and groundwater monitoring wells were installed at five parcels in January 2015 to provide additional lines of evidence to evaluate the

[1] Included in Appendix A of the April 2013 RRMP (ENVIRON 2013) and Section 3.A of the December 2013 Remedial Action Decision Document (ADEQ 2013).

potential for vapor intrusion from groundwater. At each parcel where soil vapor data could be collected, the soil vapor data were used to confirm the conclusions of the groundwater vapor intrusion risk assessment, consistent with the approach used in prior Quarterly Soil Vapor Monitoring/Vapor Intrusion Reports (ENVIRON 2014a, b, d, 2015a, b) and as discussed in Section 6.8.2 of the RRMP (ENVIRON 2013). Where soil vapor data could not be collected but water samples could be collected from the soil vapor monitoring points, these data were used to confirm the conclusions of the groundwater vapor intrusion risk assessment.

Outdoor, crawl space and indoor air samples were also collected at Parcel 3 in April 2015, at the request of the property owner. These data were used as additional lines of evidence to evaluate the potential for vapor intrusion from groundwater.

The following sections describe the evaluation of groundwater, water, soil vapor and air data from each of the five parcels. The calculation of single chemical risk estimates discussed in this section is included in Appendix C.

3.2.1 Parcel 1

At Parcel 1, vapor intrusion risks were estimated based on the water data from VP-6, using the approach for groundwater (as described in Section 6.5.2 of the ADEQ-approved RRMP) except the depth to water was increased to 14 feet below ground surface (bgs) to match the depth of the water sample at VP-6. As shown on Table 6, the upper-bound cumulative cancer risk and non-cancer HI estimates for water at VP-6 are 9×10^{-9} and 0.002, respectively, which are well within ADEQ's risk management limits for reasonable maximum exposure (RME) risks.

Upper-bound risk estimates were also calculated using the shallower water data from VP-5, which is located adjacent to VP-6, as an additional line of evidence for assessing the degree of vapor intrusion from groundwater. The estimates were calculated using the approach discussed above for groundwater, except the depth to water was decreased to 7.5 feet bgs. As shown in Table 6, the upper-bound cumulative cancer risk and non-cancer HI estimates for water at VP-5 are 3×10^{-8} and 0.001, respectively, which are well within ADEQ's risk management limits for RME risks.

These results confirm that vapor intrusion from groundwater does not pose an unacceptable risk at Parcel 1. Only water data were evaluated at Parcel 1 because a soil vapor sample could not be collected from the vapor monitoring points at this location.

3.2.2 Parcel 2

At Parcel 2, vapor intrusion risks were estimated based on the water data from VP-8 and the approach discussed above for groundwater, except the depth to water was decreased to 10.5 feet bgs. As shown in Table 6, the upper-bound cumulative cancer risk and non-cancer HI estimates for water at VP-8 are 1×10^{-8} and 0.001, respectively, which are well within ADEQ's risk management limits for RME risks.

Upper-bound risk estimates were calculated using the soil vapor data from VP-7, which is located adjacent to VP-8, as an additional line of evidence for assessing the degree of vapor intrusion from groundwater. These risk estimates were calculated using USEPA's highly conservative 95th percentile subslab soil vapor attenuation factor of 0.03 (USEPA 2015). As shown in Table 6, the upper-bound cumulative cancer risk and non-cancer HI estimates from soil vapor at VP-7 are 6 x 10^{-7} and 0.004, respectively, which are well within ADEQ's risk management limits for RME risks.

The upper-bound risk estimates for soil vapor from VP-7 are somewhat higher than the risk estimates based on the water data from VP-8. These higher risk estimates should not be interpreted as an indication that the risk estimates from the water data are not adequately conservative. Rather, the interpretation should be that the risk estimates based on the soil vapor data are upper-bound rather than reasonable worst-case and thus, are more conservative than necessary. As discussed in Section 6.8.2 of the RRMP, these risk estimates ignore the attenuation due to the approximately 5 feet of silty clay between the soil vapor sample depth and the assumed subslab depth, which is likely to be substantial (i.e., a factor of 10 or more) based on the observed attenuation between shallow and deep TCE soil vapor concentrations at other soil vapor monitoring points (ENVIRON 2013). Accounting for such attenuation would result in risk estimates for VP-7 that are lower than those shown in Table 6.

These results confirm that vapor intrusion from groundwater does not pose an unacceptable risk at Parcel 2.

3.2.3 Parcel 3

At Parcel 3, vapor intrusion risks were estimated based on the water data from VP-10 and the approach discussed above for groundwater, except the depth to water was decreased to 11 feet bgs. As shown in Table 6, the upper-bound cumulative cancer risk and non-cancer HI estimates for water at VP-10 are 1 x 10^{-6} and 0.3, respectively, which are well within ADEQ's risk management limits for RME risks.

Upper-bound risk estimates were calculated using the soil vapor data from VP-9, which is located adjacent to VP-10, as an additional line of evidence for assessing the degree of vapor intrusion from groundwater. These risk estimates were calculated following the approach discussed above for soil vapor at Parcel 2. As shown in Table 6, the upper-bound cumulative cancer risk and non-cancer HI estimates from soil vapor at VP-9 are 3 x 10^{-6} and 0.01, respectively, which are well within ADEQ's risk management limits for RME risks. As discussed in Section 3.2.2, these soil vapor risk estimates are more conservative than necessary because they ignore the attenuation due to the approximately 5 feet of silty clay between the soil gas sample and the assumed subslab.

As shown on Table 4, only two chemicals [1,2-dichloroethane (1,2-DCA) and tetrachloroethene (PCE)] were detected in the outdoor, crawl space and indoor air samples. Neither of these chemicals are believed to be related to contamination in the offsite groundwater because neither

chemical was detected in groundwater at Parcel 3 nor detected elsewhere in offsite groundwater at concentrations that exceed the drinking water standard[2]. The concentration of 1,2-DCA in the indoor air appears to be related to an indoor source (or sources) because the indoor air concentration is approximately 20 times higher than the concentrations in the outdoor air and crawl space air. The concentration of PCE in indoor air appears to be related to outdoor sources because it is nearly the same as the PCE concentrations in the outdoor air and crawl space air. Because the detected concentrations in outdoor, crawl space and indoor air samples are not associated with the groundwater conditions related to the Site, the calculation of risk estimates is unnecessary to evaluate the degree of potential for vapor intrusion from groundwater.

These results confirm that vapor intrusion from groundwater does not pose an unacceptable risk at Parcel 3.

3.2.4 Parcel 4

At Parcel 4, vapor intrusion risks were estimated based on the groundwater data from MW-71, which had the highest concentrations in groundwater from monitoring wells at this Parcel and the approach discussed above for groundwater. As shown in Table 6, the upper-bound cumulative cancer risk and non-cancer HI estimates from groundwater at MW-71 are 6×10^{-7} and 0.1, respectively, which are well within ADEQ's risk management limits for RME risks.

Upper-bound risk estimates were also calculated using the shallow groundwater data from MW-177, which is located adjacent to MW-71, as an additional line of evidence for assessing the degree of vapor intrusion from groundwater. Only groundwater data were evaluated at this parcel because a soil vapor sample could not be collected from the vapor monitoring point (VP-12, where the screen is set deeper than the screen at MW-71) at Parcel 4. Vapor intrusion risks were calculated using the groundwater from MW-177 and the approach discussed above for groundwater, except the depth to water was decreased to 9.5 feet bgs. As shown in Table 6, the upper-bound cumulative cancer risk and non-cancer HI estimates from groundwater at MW-177 are 8×10^{-9} and 0.00002, respectively, which are well within ADEQ's risk management limits for RME risks.

These results confirm that vapor intrusion from groundwater does not pose an unacceptable risk at Parcel 4. Further, TCE was non-detect in groundwater from MW-177, which is primary reason the risk estimates for groundwater from MW-177 are almost two orders of magnitude lower than those for groundwater from MW-71.

[2] 1,2-DCA was only detected offsite in groundwater at MW-31 (2008) at a concentration of 3 micrograms per liter (µg/L). MW-31 is more than 600 feet from Parcel 3. PCE was detected offsite in groundwater at MW-33/33R (2014/2015), MW-41 (2014), MW-43 (2006), MW-46R (2015), MW-58 (2014) and MW-176 (2015) at concentrations ranging from 0.11 µg/L to 1 µg/L. MW-176 is located on Parcel 3 and the highest detected concentration of PCE was 0.14 µg/L, which is below the maximum contaminant level (MCL) of 5 µg/L.

3.2.5 Parcel 5

Risk estimates for potential vapor intrusion from groundwater into residential buildings were estimated based on the data collected at Parcel 5, which is located south of Ingersoll Avenue and the residential neighborhood. Groundwater vapor intrusion risks were conservatively calculated using the groundwater data from MW-33R, which is adjacent to VP-14 at this parcel and the approach discussed above for groundwater. As shown in Table 7, the upper-bound cumulative cancer risk and non-cancer HI estimates from groundwater at MW-33R are 2×10^{-6} and 0.5, respectively, which are below ADEQ's risk management limits for RME risks.

Upper-bound risk estimates were calculated using shallow groundwater data from MW-180 and MW-178 (which are located within 40 feet of MW-33R) and the approach discussed above for groundwater, except the depth to groundwater was reduced to 6.5 feet bgs and 7.5 feet bgs, respectively. Shallow groundwater data was evaluated at this parcel because a shallow soil vapor monitoring point (VP-13) could not be installed due to the presence of shallow water, as discussed in Section 0. As shown in Table 7, the upper-bound cumulative cancer risk and non-cancer HI estimates from groundwater at MW-180 are 8×10^{-8} and 0.02, respectively and at MW-178 are 2×10^{-8} and 0.004, respectively, all of which are well within ADEQ's risk management limits for RME risks.

These risk estimates show that vapor intrusion from groundwater would not pose an unacceptable risk if there was a residence at Parcel 5.

4 Summary and Conclusion

- The concentrations of TCE in groundwater are stable or decreasing compared to previous reporting periods and historic results;
- Risk estimates for vapor intrusion from groundwater in the neighborhood are below ADEQ's risk management limits of 10^{-5} and 1 for cumulative cancer risk and non-cancer hazards, respectively;
- Vapor intrusion modeling using shallow water and soil gas confirms the modeling results using VOC concentrations in water collected from groundwater monitoring wells; and
- Measured concentrations of 1,2 DCA and PCE in outdoor, crawl space and indoor air at Parcel 3 are not associated with the groundwater conditions related to the Site.

5 References

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Tables

TABLE 1
SUMMARY OF MATRICES ENCOUNTERED AND SAMPLED AT SOIL VAPOR MONITORING POINTS
Whirlpool Facility - Fort Smith, Arkansas

Quarter of Collection	Date of Collection	In Neighborhood									South of Neighborhood	
		Parcel 1		Parcel 2		Parcel 3			Parcel 4		Parcel 5	
		VP-5	VP-6	VP-7	VP-8	CS/OA/IA	VP-9	VP-10	VP-1S+	VP-1D / VP-12	VP-2S+	VP-2D / VP-14
2nd Q 2015	4/2015	**Water**	**Water**	**Air**	**Water**	**Air**	**Air**	**Water**	--	**Water**	--	*Water*
1st Q 2015	1/2015	**Air**	**Water**	**Air**	*Water*	--	**Air**	**Water**	--	**Water**	--	**Air**
4th Q 2014	10/2014	--	--	--	--	--	--	--	**Water**	*Air*	**Water**	**Water**
3rd Q 2014	9/2014	--	--	--	--	--	--	--	**Water**	*Air**	**Water**	**Water**
3rd Q 2014	7/2014	--	--	--	--	--	--	--	*Water*	*Water*	**Water**	**Water**
2nd Q 2014	5/2014	--	--	--	--	--	--	--	Water	**Air**	Water	Water
1st Q 2014	3/2014	--	--	--	--	--	--	--	**Air**	**Air**	Water	**Air**

Notes:

* During the September 2014 sampling event, no air or water sample could be collected at VP-1D; a water sample was collected at the nearby port SV-04D to characterize VOC concentrations in the area.

+ During the First Quarter 2015, VP-1S and VP-2S were abandoned and installation of VP-11 and VP-13 was attempted in Parcels 4 and 5, respectively. However, because of water in the borings for VP-11 and VP-13, monitoring wells MW-181 and MW-180, respectively, were installed.

Shaded and **bolded** cells indicate that a sample was collected.

Italicized cells indicate that insufficient volume was available for sample collection.

Dashes (indicate) indicate the location was not installed or was abandoned during this sampling event.

Prior to the Third Quarter 2014, water encountered in the soil vapor monitoring points was not sampled per the quarterly sampling plan.

During the First Quarter 2015, locations VP-1D and VP-2D were replaced by VP-12 and VP-14, respectively.

TABLE 2a
SECOND QUARTER 2015 GROUNDWATER VOC DATA FOR MONITORING WELLS IN THE NEIGHBORHOOD
Whirlpool Facility - Fort Smith, Arkansas

Location	MW-36	MW-39	MW-40	MW-41	MW-41	MW-46R	MW-46R
ENVIRON Sample ID	MW-36-201504	MW-39-201504	MW-40-201504	MW-41-201504	DUP-02-201504	MW-46R-201504	DUP-07-201504
Lab Sample ID	60191868017	60191868002	60191868003	60191960020	60191960032	60191868020	60191868023
Sample Date	4/14/2015	4/14/2015	4/14/2015	4/15/2015	4/15/2015	4/14/2015	4/14/2015
Comments					Field Duplicate		Field Duplicate
Volatile Organic Compounds							
Acetone	U (5.0)	U (5.0)	U (5.0)	U (1.9)	U (5.0)	U (1.9)	U (1.9)
Benzene	U (0.50)	U (0.50)	U (0.50)	U (0.060)	U (0.50)	U (0.060)	U (0.060)
Bromoform	U (0.50)	U (0.50)	U (0.50)	U (0.070)	U (0.50)	U (0.070)	U (0.070)
Bromomethane	14.4 (2.5)	U (2.5)	U (2.5)	U (0.16)	U (2.5)	U (0.16)	U (0.16)
2-Butanone	U (5.0)	U (5.0)	U (5.0)	U (0.59)	U (5.0)	U (0.59)	U (0.59)
Carbon Disulfide	U (2.5)	U (2.5)	U (2.5)	U (0.12)	U (2.5)	U (0.12)	U (0.12)
Chloroform	U (0.50)	U (0.50)	U (0.50)	U (0.14)	U (0.50)	U (0.14)	U (0.14)
Chloromethane	5.7 (0.50)	U (0.50)	U (0.50)	U (0.080)	U (0.50)	U (0.080)	U (0.080)
1,1-Dichloroethane	U (0.50)	U (0.50)	U (0.50)	U (0.050)	U (0.50)	U (0.050)	U (0.050)
1,2-Dichloroethane	U (0.50)	U (0.50)	U (0.50)	U (0.12)	U (0.50)	U (0.12)	U (0.12)
1,1-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	1.3 (0.20)	1.2 (0.50)	1.4 (0.20)	1.4 (0.20)
cis-1,2-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	15.2 (0.080)	13.5 (0.50)	13.8 (0.080)	13.9 (0.080)
trans-1,2-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.20)	0.70 J (0.50)	0.47 J (0.20)	0.57 J (0.20)
Ethyl Benzene	U (0.50)	U (0.50)	U (0.50)	U (0.18)	U (0.50)	U (0.18)	U (0.18)
2-Hexanone	U (5.0)	U (5.0)	U (5.0)	U (1.2)	U (5.0)	U (1.2)	U (1.2)
4-Methyl-2-pentanone	U (2.5)	U (2.5)	U (2.5)	U (0.42)	U (2.5)	U (0.42)	U (0.42)
Methylene Chloride	U (0.50)	U (0.50)	U (0.50)	U (0.15)	U (0.50)	U (0.15)	0.18 J (0.15)
Styrene	U (0.50)	U (0.50)	U (0.50)	U (0.12)	U (0.50)	U (0.12)	U (0.12)
Tetrachloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.10)	U (0.50)	U (0.10)	0.11 J (0.10)
Toluene	U (0.50)	U (0.50)	U (0.50)	U (0.17)	U (0.50)	U (0.17)	U (0.17)
Trichloroethene	U (0.50)	U (0.50)	U (0.50)	386 (1.7)	410 (5.0)	220 J (2.5)	482 (1.7)
Vinyl Chloride	U (0.50)	U (0.50)	U (0.50)	0.27 J (0.13)	U (0.50)	0.47 J (0.13)	0.51 J (0.13)

Notes:

1 All concentrations are presented in µg/L (ppb).

2 Only chemicals with at least one detection in any water, soil vapor, or air sample are shown.

U = Not detected

J = Estimated concentration

( ) = Detection limit

µg/L = Micrograms per liter

TABLE 2a
SECOND QUARTER 2015 GROUNDWATER VOC DATA FOR MONITORING WELLS IN THE NEIGHBORHOOD
Whirlpool Facility - Fort Smith, Arkansas

Location	MW-50	MW-56	MW-57	MW-58	MW-60	MW-61	MW-62
ENVIRON Sample ID	MW-50-201504	MW-56-201504	MW-57-201504	MW-58-201504	MW-60-201504	MW-61-201504	MW-62-201504
Lab Sample ID	60191868008	60192103005	60192103006	60192103002	60191868006	60191868019	60191868014
Sample Date	4/14/2015	4/16/2015	4/16/2015	4/16/2015	4/14/2015	4/14/2015	4/14/2015
Comments							
Volatile Organic Compounds							
Acetone	U (5.0)	U (1.9)	U (5.0)	U (1.9)	U (5.0)	U (5.0)	U (5.0)
Benzene	U (0.50)	U (0.060)	U (0.50)	U (0.060)	U (0.50)	U (0.50)	U (0.50)
Bromoform	U (0.50)	U (0.070)	U (0.50)	U (0.070)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	U (2.5)	U (0.16)	U (2.5)	0.35 (0.16)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	U (5.0)	3.7 J (0.59)	U (5.0)	U (0.59)	U (5.0)	U (5.0)	U (5.0)
Carbon Disulfide	U (2.5)	U (0.12)	U (2.5)	0.12 J (0.12)	U (2.5)	U (2.5)	U (2.5)
Chloroform	U (0.50)	U (0.14)	U (0.50)	U (0.14)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	U (0.50)	U (0.080)	U (0.50)	0.41 (0.080)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	U (0.50)	U (0.050)	U (0.50)	U (0.050)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	U (0.50)	U (0.12)	U (0.50)	U (0.12)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	U (0.50)	0.47 J (0.20)	0.67 J (0.50)	2.6 (0.20)	U (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	U (0.50)	8.2 (0.080)	4.8 (0.50)	19.7 (0.080)	U (0.50)	U (0.50)	U (0.50)
trans-1,2-Dichloroethene	U (0.50)	U (0.20)	U (0.50)	0.34 J (0.20)	U (0.50)	U (0.50)	U (0.50)
Ethyl Benzene	U (0.50)	U (0.18)	U (0.50)	U (0.18)	U (0.50)	U (0.50)	U (0.50)
2-Hexanone	U (5.0)	U (1.2)	U (5.0)	U (1.2)	U (5.0)	U (5.0)	U (5.0)
4-Methyl-2-pentanone	U (2.5)	U (0.42)	U (2.5)	U (0.42)	U (2.5)	U (2.5)	U (2.5)
Methylene Chloride	U (0.50)	U (0.15)	U (0.50)	U (0.15)	U (0.50)	U (0.50)	U (0.50)
Styrene	U (0.50)	U (0.12)	U (0.50)	U (0.12)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	U (0.50)	U (0.10)	U (0.50)	U (0.10)	U (0.50)	U (0.50)	U (0.50)
Toluene	U (0.50)	0.18 J (0.17)	U (0.50)	U (0.17)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	U (0.50)	495 (2.5)	194 (0.50)	356 (2.5)	U (0.50)	10.9 (0.50)	U (0.50)
Vinyl Chloride	U (0.50)	U (0.13)	U (0.50)	1.5 (0.13)	U (0.50)	U (0.50)	U (0.50)

Notes:

1 All concentrations are presented in µg/L (ppb).

2 Only chemicals with at least one detection in any water, soil vapor, or air sample are shown.

U = Not detected

J = Estimated concentration

( ) = Detection limit

µg/L = Micrograms per liter

TABLE 2a
SECOND QUARTER 2015 GROUNDWATER VOC DATA FOR MONITORING WELLS IN THE NEIGHBORHOOD
Whirlpool Facility - Fort Smith, Arkansas

Location	MW-63	MW-65	MW-66	MW-67	MW-68	MW-71	MW-81
ENVIRON Sample ID	MW-63-201504	MW-65-201504	MW-66-201504	MW-67-201504	MW-68-201504	MW-71-201504	MW-81-201504
Lab Sample ID	60191868011	60191960014	60191960008	60191960013	60191794001	60191868004	60192015003
Sample Date	4/14/2015	4/15/2015	4/15/2015	4/15/2015	4/13/2015	4/14/2015	4/15/2015
Comments							
Volatile Organic Compounds							
Acetone	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	14.5 (5.0)
Benzene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	4.5 (0.50)
Bromomethane	U (2.5)	3.8 J (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	10.6 (2.5)
2-Butanone	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Carbon Disulfide	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Chloroform	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	U (0.50)	2.6 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	6.2 (0.50)
1,1-Dichloroethane	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.7 (0.50)	0.77 J (0.50)
cis-1,2-Dichloroethene	0.99 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	5.7 (0.50)	4.2 (0.50)
trans-1,2-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.53 J (0.50)	0.64 J (0.50)
Ethyl Benzene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
2-Hexanone	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
4-Methyl-2-pentanone	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Methylene Chloride	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Styrene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	9.2 (0.50)	16.0 (0.50)	2.6 (0.50)	0.77 J (0.50)	U (0.50)	156 (0.50)	198 (0.50)
Vinyl Chloride	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)

Notes:

1 All concentrations are presented in µg/L (ppb).

2 Only chemicals with at least one detection in any water, soil vapor, or air sample are shown.

U = Not detected

J = Estimated concentration

( ) = Detection limit

µg/L = Micrograms per liter

TABLE 2a
SECOND QUARTER 2015 GROUNDWATER VOC DATA FOR MONITORING WELLS IN THE NEIGHBORHOOD
Whirlpool Facility - Fort Smith, Arkansas

Location	MW-82	MW-96	MW-96	MW-97	MW-98	MW-99	MW-173
ENVIRON Sample ID	MW-82-201504	MW-96-201504	DUP-06-201504	MW-97-201504	MW-98-201504	MW-99-201504	MW-173-201504
Lab Sample ID	60192015002	60192138004	60192138003	60192138001	60192138005	60192138002	60192016002
Sample Date	4/15/2015	4/16/2015	4/16/2015	4/16/2015	4/16/2015	4/16/2015	4/15/2015
Comments			Field Duplicate				
Volatile Organic Compounds							
Acetone	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	474 (5.0)
Benzene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	83.6 (5.0)
Carbon Disulfide	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Chloroform	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.71 J (0.50)
Chloromethane	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
trans-1,2-Dichloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Ethyl Benzene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
2-Hexanone	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
4-Methyl-2-pentanone	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	2.5 J (2.5)
Methylene Chloride	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Styrene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Vinyl Chloride	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)

Notes:

1 All concentrations are presented in µg/L (ppb).

2 Only chemicals with at least one detection in any water, soil vapor, or air sample are shown.

U = Not detected

J = Estimated concentration

( ) = Detection limit

µg/L = Micrograms per liter

TABLE 2a
SECOND QUARTER 2015 GROUNDWATER VOC DATA FOR MONITORING WELLS IN THE NEIGHBORHOOD
Whirlpool Facility - Fort Smith, Arkansas

Location	MW-174	MW-175	MW-176	MW-177	MW-181
ENVIRON Sample ID	MW-174-201504	MW-175-201504	MW-176-201504	MW-177-201504	MW-181-201504
Lab Sample ID	60192016001	60192014001	60191896001	60191895001	60191895002
Sample Date	4/14/2015	4/15/2015	4/14/2015	4/14/2015	4/14/2015
Comments					
Volatile Organic Compounds					
Acetone	36.2 (5.0)	26.0 (5.0)	7.5 J (1.9)	U (5.0)	U (5.0)
Benzene	U (0.50)	U (0.50)	U (0.060)	U (0.50)	U (0.50)
Bromoform	U (0.50)	U (0.50)	U (0.070)	U (0.50)	U (0.50)
Bromomethane	U (2.5)	U (2.5)	0.44 (0.16)	U (2.5)	U (2.5)
2-Butanone	12.0 (5.0)	U (5.0)	10.0 (0.59)	U (5.0)	U (5.0)
Carbon Disulfide	U (2.5)	U (2.5)	U (0.12)	U (2.5)	U (2.5)
Chloroform	U (0.50)	U (0.50)	U (0.14)	0.61 J (0.50)	U (0.50)
Chloromethane	U (0.50)	0.68 J (0.50)	0.13 (0.080)	U (0.50)	U (0.50)
1,1-Dichloroethane	U (0.50)	U (0.50)	U (0.050)	U (0.50)	U (0.50)
1,2-Dichloroethane	U (0.50)	U (0.50)	U (0.12)	U (0.50)	U (0.50)
1,1-Dichloroethene	U (0.50)	U (0.50)	2.7 (0.20)	U (0.50)	U (0.50)
cis-1,2-Dichloroethene	U (0.50)	1.5 (0.50)	16.7 (0.080)	U (0.50)	U (0.50)
trans-1,2-Dichloroethene	U (0.50)	U (0.50)	0.87 J (0.20)	U (0.50)	U (0.50)
Ethyl Benzene	U (0.50)	U (0.50)	U (0.18)	U (0.50)	U (0.50)
2-Hexanone	U (5.0)	U (5.0)	U (1.2)	U (5.0)	U (5.0)
4-Methyl-2-pentanone	U (2.5)	U (2.5)	U (0.42)	U (2.5)	U (2.5)
Methylene Chloride	U (0.50)	U (0.50)	U (0.15)	U (0.50)	U (0.50)
Styrene	U (0.50)	U (0.50)	U (0.12)	U (0.50)	U (0.50)
Tetrachloroethene	U (0.50)	U (0.50)	0.14 J (0.10)	U (0.50)	U (0.50)
Toluene	U (0.50)	U (0.50)	U (0.17)	U (0.50)	U (0.50)
Trichloroethene	0.68 J (0.50)	98.8 (0.50)	528 (1.7)	U (0.50)	U (0.50)
Vinyl Chloride	U (0.50)	U (0.50)	0.69 J (0.13)	U (0.50)	U (0.50)

Notes:

1 All concentrations are presented in µg/L (ppb).

2 Only chemicals with at least one detection in any water, soil vapor, or air sample are shown.

U = Not detected

J = Estimated concentration

( ) = Detection limit

µg/L = Micrograms per liter

TABLE 2b
SECOND QUARTER 2015 GROUNDWATER VOC DATA FOR MONITORING WELLS SOUTH OF THE NEIGHBORHOOD
Whirlpool Facility - Fort Smith, Arkansas

Location	MW-31R	MW-32R	MW-33R	MW-33R	MW-178	MW-179	MW-180
Area	South of Neighborhood	South of Neighborhood	South of Neighborhood	South of Neighborhood	South of Neighborhood	South of Neighborhood	South of Neighborhood
ENVIRON Sample ID	MW-31R-201504	MW-32R-201504	MW-33R-201504	DUP-01-201504	MW-178-201504	MW-179-201504	MW-180-201504
Lab Sample ID	60191868021	60191960005	60191960006	60191960022	60192139008	60192139003	60192139006
Sample Date	4/14/2015	4/15/2015	4/15/2015	4/15/2015	4/16/2015	4/16/2015	4/16/2015
Comments				Field Duplicate			
Volatile Organic Compounds							
Acetone	U (5.0)	U (5.0)	U (1.9)	U (5.0)	7.1 J (5.0)	5.7 J (5.0)	U (5.0)
Benzene	U (0.50)	U (0.50)	0.30 J (0.060)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromoform	U (0.50)	U (0.50)	U (0.070)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Bromomethane	U (2.5)	6.0 (2.5)	U (0.16)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
2-Butanone	U (5.0)	U (5.0)	1.3 J (0.59)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
Carbon Disulfide	U (2.5)	U (2.5)	1.4 J (0.12)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Chloroform	0.52 J (0.50)	U (0.50)	0.20 J (0.14)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Chloromethane	U (0.50)	6.1 (0.50)	U (0.080)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethane	U (0.50)	U (0.50)	U (0.050)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,2-Dichloroethane	U (0.50)	U (0.50)	U (0.12)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
1,1-Dichloroethene	U (0.50)	U (0.50)	0.55 J (0.20)	0.52 J (0.50)	U (0.50)	0.62 J (0.50)	U (0.50)
cis-1,2-Dichloroethene	U (0.50)	U (0.50)	12.2 (0.080)	10.5 (0.50)	1.3 (0.50)	1.6 (0.50)	3.8 (0.50)
trans-1,2-Dichloroethene	U (0.50)	U (0.50)	1.4 (0.20)	1.3 (0.50)	U (0.50)	U (0.50)	0.88 J (0.50)
Ethyl Benzene	U (0.50)	U (0.50)	U (0.18)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
2-Hexanone	U (5.0)	U (5.0)	U (1.2)	U (5.0)	U (5.0)	U (5.0)	U (5.0)
4-Methyl-2-pentanone	U (2.5)	U (2.5)	U (0.42)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Methylene Chloride	U (0.50)	U (0.50)	0.39 J (0.15)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Styrene	U (0.50)	U (0.50)	U (0.12)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Tetrachloroethene	U (0.50)	U (0.50)	0.13 J (0.10)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Toluene	U (0.50)	U (0.50)	U (0.17)	U (0.50)	U (0.50)	U (0.50)	U (0.50)
Trichloroethene	U (0.50)	11.2 (0.50)	570 (3.4)	624 (10.0)	5.0 (0.50)	41.2 (0.50)	21.4 (0.50)
Vinyl Chloride	U (0.50)	U (0.50)	0.37 J (0.13)	U (0.50)	U (0.50)	U (0.50)	U (0.50)

Notes:
1 All concentrations are presented in µg/L (ppb).
2 Only chemicals with at least one detection in any water, soil vapor, or air sample are shown.
U = Not detected
J = Estimated concentration
( ) = Detection limit
µg/L = Micrograms per liter

TABLE 3A
SECOND QUARTER 2015 WATER DATA FROM SOIL VAPOR MONITORING POINTS
Whirlpool Facility - Fort Smith, Arkansas

Parcel	1	1	2	3	4
Location	VP-5	VP-6	VP-8	VP-10	VP-12
ENVIRON Sample ID	VP-05-20150422	VP-06-20150422	VP-08-20150422	VP-10-20150422	VP-12-20150422
Lab Sample ID	60192707001	60192707002	60192706001	60192709001	60192708001
Collection Depth (ft bgs)	7.5	14	10.5	11	12.5
Sample Date	4/22/2015	4/22/2015	4/22/2015	4/22/2015	4/22/2015
Comments					
Volatile Organic Compounds					
Acetone	160 (1.9)	24.5 (1.9)	140 (1.9)	16.4 (1.9)	3.2 J (1.9)
Benzene	0.44 J (0.060)	0.22 J (0.060)	0.33 J (0.060)	0.15 J (0.060)	U (0.060)
Bromoform	U (0.070)	U (0.070)	U (0.070)	U (0.070)	U (0.070)
Bromomethane	2.4 J (0.16)	0.99 J (0.16)	U (0.16)	U (0.16)	U (0.16)
2-Butanone	29.0 (0.59)	4.6 J (0.59)	26.4 (0.59)	U (0.59)	U (0.59)
Carbon Disulfide	0.19 J (0.12)	U (0.12)	0.12 J (0.12)	U (0.12)	0.27 J (0.12)
Chloroform	1.9 (0.14)	U (0.14)	0.62 J (0.14)	0.55 J (0.14)	0.45 J (0.14)
Chloromethane	U (0.080)	1.5 (0.080)	0.88 J (0.080)	U (0.080)	1.7 (0.080)
1,1-Dichloroethane	U (0.050)	U (0.050)	U (0.050)	U (0.050)	U (0.050)
1,2-Dichloroethane	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)
1,1-Dichloroethene	U (0.20)	U (0.20)	U (0.20)	1.7 (0.20)	U (0.20)
cis-1,2-Dichloroethene	U (0.080)	0.30 J (0.080)	U (0.080)	11.2 (0.080)	U (0.080)
trans-1,2-Dichloroethene	U (0.20)	U (0.20)	U (0.20)	0.92 J (0.20)	U (0.20)
Ethyl Benzene	U (0.18)	U (0.18)	0.27 J (0.18)	U (0.18)	U (0.18)
2-Hexanone	10.9 (1.2)	U (1.2)	6.5 J (1.2)	U (1.2)	U (1.2)
4-Methyl-2-pentanone	2.5 J (0.42)	0.50 J (0.42)	0.70 J (0.42)	U (0.42)	U (0.42)
Methylene Chloride	1.5 B (0.15)	0.59 (0.15)	0.59 (0.15)	0.74 (0.15)	0.46 (0.15)
Styrene	U (0.12)	U (0.12)	0.16 J (0.12)	U (0.12)	U (0.12)
Tetrachloroethene	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)
Toluene	0.23 J (0.17)	U (0.17)	0.50 J (0.17)	0.36 J (0.17)	U (0.17)
Trichloroethene	U (0.17)	2.3 (0.17)	1.2 (0.17)	395 (1.7)	U (0.17)
Vinyl Chloride	U (0.13)	U (0.13)	U (0.13)	0.35 J (0.13)	U (0.13)

Notes:

1 All concentrations are presented in µg/L (ppb).

2 Only chemicals with at least one detection in any water, soil vapor, or air sample are shown.

U = Not detected

J = Estimated concentration

( ) = Method detection limit

µg/L = Micrograms per liter

ft bgs = Feet below ground surface

TABLE 3B
SECOND QUARTER 2015 SOIL VAPOR DATA
Whirlpool Corporation; Fort Smith, Arkansas

Parcel	2	3
Location	VP-7	VP-9
ENVIRON Sample ID	VP-07-20150423	VP-09-20150423
Lab Sample ID	P1501723-001	P1501724-001
Collection Depth (ft bgs)	5.5	5.5
Sample Date	4/23/2015	4/23/2015
Comments		
Volatile Organic Compounds		
1,1-Dichloroethane	0.54 (0.0084)	2.5 (0.0085)
1,2-Dichloroethane	0.082 (0.012)	0.088 (0.012)
1,1-Dichloroethene	0.77 (0.012)	10 (0.012)
cis-1,2-Dichloroethene	U (0.013)	0.066 (0.013)
trans-1,2-Dichloroethene	U (0.010)	0.060 (0.010)
Tetrachloroethene	0.051 (0.011)	0.050 (0.011)
Trichloroethene	0.15 (0.012)	0.25 (0.012)
Vinyl Chloride	3.2 (0.010)	16 (0.011)

Notes:

1 All concentrations are presented in µg/m^3.

2 Only analyzed chemicals with at least one detection in any water, soil vapor, or air sample are shown.

U = Not detected

J = Estimated concentration

µg/L = Micrograms per liter

ft bgs = Feet below ground surface

TABLE 4
SECOND QUARTER 2015 OUTDOOR AIR, CRAWL SPACE, and INDOOR AIR DATA
Whirlpool Corporation; Fort Smith, Arkansas

Parcel	3	3	3
Location	AA-P3-Outdoor	AA-P3-Crawl Space	AA-P3-Indoor
ENVIRON Sample ID	Outdoor-AA-20150422	Crawl Space-AA-20150422	Indoor-AA-20150423
Lab Sample ID	P1501720-003	P1501720-001	P1501720-002
Sample Date	4/22/2015	4/22/2015	4/23/2015
Comments			
Volatile Organic Compounds			
1,1-Dichloroethane	U (0.0089)	U (0.0079)	U (0.0094)
1,2-Dichloroethane	0.059 (0.012)	0.058 (0.011)	1.2 (0.013)
1,1-Dichloroethene	U (0.013)	U (0.011)	U (0.013)
cis-1,2-Dichloroethene	U (0.013)	U (0.012)	U (0.014)
trans-1,2-Dichloroethene	U (0.011)	U (0.0095)	U (0.011)
Tetrachloroethene	0.080 (0.012)	0.077 (0.011)	0.081 (0.013)
Trichloroethene	U (0.012)	U (0.011)	U (0.013)
Vinyl Chloride	U (0.011)	U (0.0099)	U (0.012)

Notes:

1 All concentrations are presented in $\mu g/m^3$.

2 Only analyzed chemicals with at least one detection in any water, soil vapor, or air sample are shown.

U = Not detected

$\mu g/m^3$ = Micrograms per cubic meter

TABLE 5
UPPER-BOUND VAPOR INTRUSION RISK ESTIMATES
BASED ON SECOND QUARTER 2015 GROUNDWATER DATA IN THE NEIGHBORHOOD
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	Maximum Detected Concentration in Groundwater in Neighborhood (mg/L)	Location of Maximum Detected Concentration in Groundwater in Neighborhood	Residential VI	
					Risk	HQ
VOC	Acetone	67-64-1	4.74E-01	MW-173		3.1E-06
VOC	Bromoform	75-25-2	4.50E-03	MW-81	4.7E-10	
VOC	Bromomethane	74-83-9	2.29E-02	MW-35R		7.0E-03
VOC	2-Butanone	78-93-3	8.36E-02	MW-173		3.3E-06
VOC	Carbon Disulfide	75-15-0	1.20E-04	MW-58		4.8E-07
VOC	Chloroform	67-66-3	7.10E-04	MW-173	8.5E-09	1.7E-05
VOC	Chloromethane	74-87-3	2.92E-02	MW-35R		5.1E-04
VOC	1,1-Dichloroethene	75-35-4	2.70E-03	MW-176		3.5E-05
VOC	cis-1,2-Dichloroethene	156-59-2	1.97E-02	MW-58		
VOC	trans-1,2-Dichloroethene	156-60-5	8.80E-04	MW-180		
VOC	4-Methyl-2-pentanone	108-10-1	2.50E-03	MW-173		1.9E-07
VOC	Methylene Chloride	75-09-2	1.80E-04	MW-46R	2.1E-12	3.2E-07
VOC	Tetrachloroethene	127-18-4	1.40E-04	MW-176	2.7E-11	6.0E-06
VOC	Toluene	108-88-3	1.80E-04	MW-93		4.6E-08
VOC	Trichloroethene	79-01-6	5.28E-01	MW-176	2.0E-06	4.1E-01
VOC	Vinyl Chloride	75-01-4	1.50E-03	MW-58	3.1E-08	4.7E-05

Cumulative Risk and HI:	2E-06	4E-01

Note:
Only VOCs detected in monitoring wells in the neighborhood are shown.
Detected concentrations are from samples collected from groundwater monitoring wells in the Second Quarter of 2015.

Risks were calculated using the model derived by Johnson & Ettinger (1991), as discussed in Section 3.3.1 of the April 2013 Revised Risk Management Plan.

TABLE 6
EVALUATION OF VOCS IN SOIL GAS AND WATER AT PARCELS IN THE NEIGHBORHOOD
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	Parcel 1				Parcel 2				Parcel 3				Parcel 4			
			7.5 ft bgs		14 ft bgs		5.5 ft bgs		10.5 ft bgs		5.5 ft bgs		11 ft bgs		9.5 ft bgs		12 ft bgs	
			VP-5		VP-6		VP-7		VP-8		VP-9		VP-10		MW-177		MW-71	
			Water		Water		Soil Vapor		Water		Soil Vapor		Water		Shallow Groundwater		Groundwater	
			Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ	Risk	HQ
VOC	Acetone	67-64-1		1.7E-06		1.4E-07				1.0E-06				1.2E-07				
VOC	Benzene	71-43-2	2.0E-09	2.0E-05	9.5E-10	9.5E-06			1.5E-09	1.5E-05			6.7E-10	6.7E-06				
VOC	Bromomethane	74-83-9		7.7E-04		3.0E-04												
VOC	2-Butanone	78-93-3		1.8E-06		1.6E-07				1.2E-06								
VOC	Carbon Disulfide	75-15-0		7.6E-07						4.7E-07								
VOC	Chloroform	67-66-3	2.4E-08	4.9E-05					7.5E-09	1.5E-05			6.7E-09	1.4E-05	7.5E-09	1.5E-05		
VOC	Chloromethane	74-87-3				2.6E-05				1.5E-05								
VOC	1,1-Dichloroethane	75-34-3						3.1E-05				1.4E-04						
VOC	1,2-Dichloroethane	107-06-2					2.6E-08	3.4E-04			2.8E-08	3.6E-04						
VOC	1,1-Dichloroethene	75-35-4						1.1E-04				1.4E-03		2.2E-05				2.2E-05
VOC	Ethyl Benzene	100-41-4								3.3E-07								
VOC	2-Hexanone	591-78-6		1.2E-04						5.3E-05								
VOC	4-Methyl-2-pentanone	108-10-1		2.6E-07		3.5E-08				5.8E-08								
VOC	Methylene Chloride	75-09-2	1.9E-11	2.9E-06	6.6E-12	1.0E-06			6.9E-12	1.1E-06			8.7E-12	1.3E-06				
VOC	Styrene	100-42-5								1.2E-07								
VOC	Tetrachloroethene	127-18-4					1.6E-10	3.7E-05			1.6E-10	3.6E-05						
VOC	Toluene	108-88-3		6.2E-08						1.3E-07				9.3E-08				
VOC	Trichloroethene	79-01-6			8.4E-09	1.7E-03	1.0E-08	2.2E-03	4.5E-09	9.3E-04	1.7E-08	3.6E-03	1.5E-06	3.1E-01			5.8E-07	1.2E-01
VOC	Vinyl Chloride	75-01-4					6.0E-07	9.2E-04			3.0E-06	4.6E-03	7.2E-09	1.1E-05				
	Cumulative Risk and HI:		3E-08	1E-03	9E-09	2E-03	6E-07	4E-03	1E-08	1E-03	3E-06	1E-02	1E-06	3E-01	8E-09	2E-05	6E-07	1E-01

Notes:
Only VOCs detected in the Second Quarter 2015 samples at locations listed on the table are shown.
Risk and HQ estimates were not calculated for detected chemicals with inadequate toxicity or physical/chemical parameters or where chemical concentrations were non-detect.
Risks based on soil vapor data were calculated using USEPA's default attenuation factor for subslab gas to indoor air of 0.03, as discussed in Section 6.8.2 of the April 2013 Revised Risk Management Plan.
Risks based on concentrations measured in groundwater were calculated using the model derived by Johnson & Ettinger (1991), as discussed in Section 3.3.1 of the April 2013 Revised Risk Management Plan.
Risks based on concentrations measured in water from the soil vapor ports or shallow groundwater were calculated using the same approach used for groundwater, except the depth was assumed to be the depth of the port or the depth of the screen, respectively, as discussed in Section 3 of the Second Quarter 2015 Vapor Intrusion Report.
Cumulative cancer risk and HI estimates were below Arkansas Department of Environmental Quality (ADEQ)'s risk limits (1E-5 and 1, respectively).

TABLE 7
EVALUATION OF VOCS IN SOIL GAS AND WATER AT PARCEL 5 (SOUTH OF NEIGHBORHOOD)
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	6.5 ft bgs MW-180 Shallow Groundwater		7.5 ft bgs MW-178 Shallow Groundwater		12 ft bgs MW-33R Groundwater	
			Risk	HQ	Risk	HQ	Risk	HQ
VOC	Acetone	67-64-1				7.5E-08		
VOC	Benzene	71-43-2					1.3E-09	1.3E-05
VOC	Bromoform	75-25-2						
VOC	2-Butanone	78-93-3						5.1E-08
VOC	Carbon Disulfide	75-15-0						5.5E-06
VOC	Chloroform	67-66-3					2.4E-09	4.9E-06
VOC	Chloromethane	74-87-3						
VOC	1,1-Dichloroethene	75-35-4						7.1E-06
VOC	Methylene Chloride	75-09-2					4.5E-12	6.9E-07
VOC	Tetrachloroethene	127-18-4					2.5E-11	5.5E-06
VOC	Trichloroethene	79-01-6	8.4E-08	1.7E-02	1.9E-08	4.0E-03	2.3E-06	4.8E-01
VOC	Vinyl Chloride	75-01-4					7.6E-09	1.2E-05
	Cumulative Risk and HI:		8E-08	2E-02	2E-08	4E-03	2E-06	5E-01

Notes:

Only VOCs detected in the Second Quarter 2015 samples at locations listed on the table are shown.

Risk and HQ estimates were not calculated for detected chemicals with inadequate toxicity or physical/chemical parameters or where chemical concentrations were non-detect.

Risks based on concentrations measured in groundwater were calculated using the model derived by Johnson & Ettinger (1991), as discussed in Section 3.3.1 of the April 2013 Revised Risk Management Plan.

Risks based on concentrations measured in shallow groundwater were calculated using the same approach used for groundwater, except the depth was assumed to be the depth of the screen, as discussed in Section 3 of the Second Quarter 2015 Vapor Intrusion Report.

Cumulative cancer risk and HI estimates were below Arkansas Department of Environmental Quality (ADEQ)'s risk limits (1E-5 and 1, respectively).

Figures

RAMBOLL ENVIRON

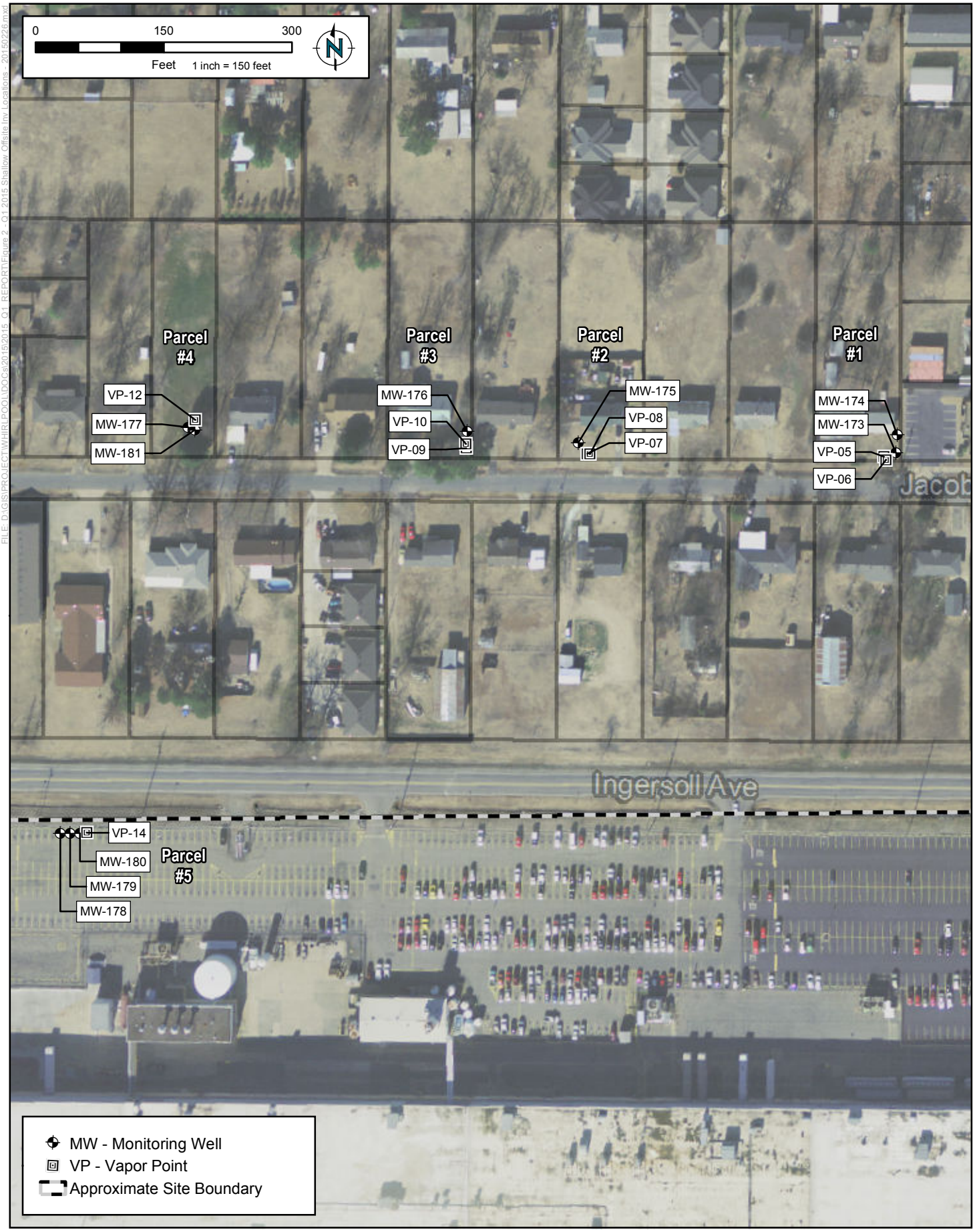
LOCATIONS OF FORMER VAPOR POINTS

(ABANDONED IN 2015)

Whirlpool Facility - Fort Smith, Arkansas

Figure 1

DRAFTED BY: KTS | DATE: 12/04/2014 | PROJECT: 3433253A



FILE: D:\GIS\PROJECT\WHIRLPOOL\DOCS\2015\2015_Q1_REPORT\Figure 2 - Q1 2015 Shallow Offsite Inv Locations - 20150226.mxd

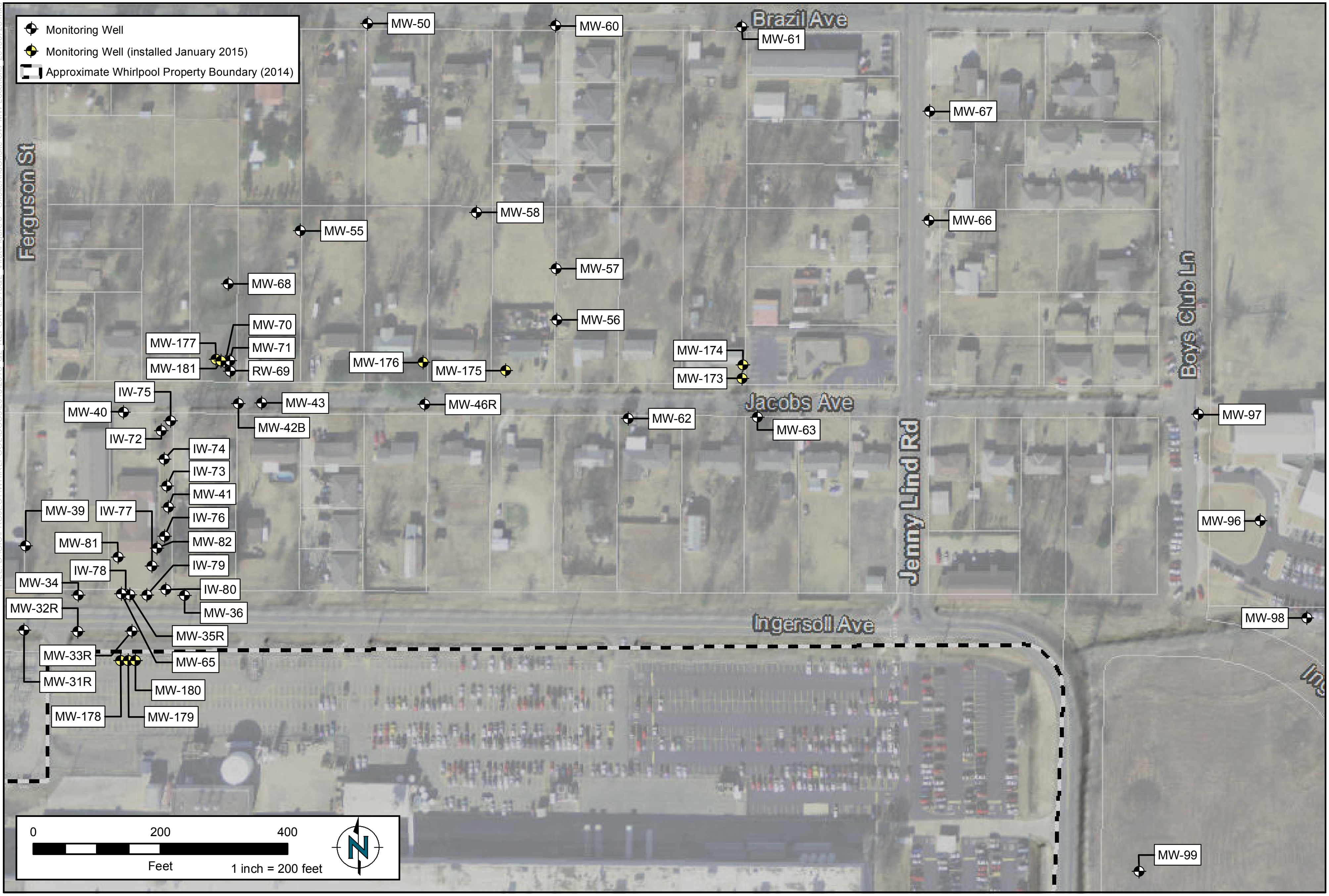
RAMBOLL ENVIRON

SHALLOW MONITORING WELL AND VAPOR POINT LOCATIONS (INSTALLED IN 2015)

Whirlpool Facility - Fort Smith, Arkansas

Figure 2

DRAFTED BY: KTS	DATE: 03/06/2015	PROJECT: 3436269



RAMBOLL ENVIRON

DRAFTED BY: KTS

DATE: 07/23/2015

OFF-SITE AND SELECT ON-SITE GROUNDWATER MONITORING WELL LOCATIONS

Whirlpool Facility - Fort Smith, Arkansas

Figure 3

PROJECT: 3437470A

Appendix A
Laboratory Analytical Data

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

April 24, 2015

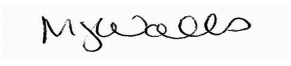
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH, AR
Pace Project No.: 60191895

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 15, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

Pace Analytical Services, Inc.
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CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60191895

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

Pace Analytical Services, Inc.
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SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60191895

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60191895001	**MW-177-201504**	Water	04/14/15 10:15	04/15/15 08:35
60191895002	**MW-181-201504**	Water	04/14/15 15:40	04/15/15 08:35
60191895003	**MW-23-201504**	Water	04/14/15 17:09	04/15/15 08:35

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60191895

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60191895001	**MW-177-201504**	EPA 5030B/8260	PGH	38
60191895002	**MW-181-201504**	EPA 5030B/8260	PGH	38
60191895003	**MW-23-201504**	EPA 5030B/8260	PGH	38

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60191895

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 24, 2015

General Information:
3 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/68990

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60191895

Sample: MW-177-201504 **Lab ID: 60191895001** Collected: 04/14/15 10:15 Received: 04/15/15 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	5.0	1		04/22/15 16:43	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 16:43	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 16:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 16:43	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 16:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 16:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	75-00-3	
Chloroform	**0.61J**	ug/L	1.0	0.50	1		04/22/15 16:43	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 16:43	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 16:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 16:43	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:43	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 16:43	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 16:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		04/22/15 16:43	460-00-4	
1,2-Dichloroethane-d4 (S)	105	%	80-120		1		04/22/15 16:43	17060-07-0	
Toluene-d8 (S)	115	%	80-120		1		04/22/15 16:43	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 16:43		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60191895

Sample: MW-181-201504 **Lab ID: 60191895002** Collected: 04/14/15 15:40 Received: 04/15/15 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	5.0	1		04/22/15 16:58	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 16:58	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 16:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 16:58	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 16:58	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 16:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 16:58	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 16:58	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 16:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 16:58	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 16:58	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 16:58	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 16:58	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 16:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		04/22/15 16:58	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		04/22/15 16:58	17060-07-0	
Toluene-d8 (S)	113	%	80-120		1		04/22/15 16:58	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 16:58		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60191895

Sample: MW-23-201504 **Lab ID: 60191895003** Collected: 04/14/15 17:09 Received: 04/15/15 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**35.9**	ug/L	10.0	5.0	1		04/22/15 17:13	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 17:13	75-27-4	
Bromoform	**2.3**	ug/L	1.0	0.50	1		04/22/15 17:13	75-25-2	
Bromomethane	**6.6**	ug/L	5.0	2.5	1		04/22/15 17:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 17:13	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 17:13	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 17:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 17:13	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 17:13	67-66-3	
Chloromethane	**7.2**	ug/L	1.0	0.50	1		04/22/15 17:13	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 17:13	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 17:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 17:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	75-35-4	
cis-1,2-Dichloroethene	**1.1**	ug/L	1.0	0.50	1		04/22/15 17:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 17:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 17:13	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 17:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 17:13	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 17:13	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 17:13	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 17:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 17:13	79-00-5	
Trichloroethene	**57.5**	ug/L	1.0	0.50	1		04/22/15 17:13	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 17:13	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 17:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%	80-120		1		04/22/15 17:13	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		04/22/15 17:13	17060-07-0	
Toluene-d8 (S)	114	%	80-120		1		04/22/15 17:13	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 17:13		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60191895

QC Batch: MSV/68990 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60191895001, 60191895002, 60191895003

METHOD BLANK: 1554233 Matrix: Water
Associated Lab Samples: 60191895001, 60191895002, 60191895003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/22/15 12:30	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/22/15 12:30	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/22/15 12:30	
1,1-Dichloroethane	ug/L	ND	1.0	04/22/15 12:30	
1,1-Dichloroethene	ug/L	ND	1.0	04/22/15 12:30	
1,2-Dichloroethane	ug/L	ND	1.0	04/22/15 12:30	
1,2-Dichloropropane	ug/L	ND	1.0	04/22/15 12:30	
2-Butanone (MEK)	ug/L	ND	10.0	04/22/15 12:30	
2-Hexanone	ug/L	ND	10.0	04/22/15 12:30	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/22/15 12:30	
Acetone	ug/L	ND	10.0	04/22/15 12:30	
Benzene	ug/L	ND	1.0	04/22/15 12:30	
Bromodichloromethane	ug/L	ND	1.0	04/22/15 12:30	
Bromoform	ug/L	ND	1.0	04/22/15 12:30	
Bromomethane	ug/L	ND	5.0	04/22/15 12:30	
Carbon disulfide	ug/L	ND	5.0	04/22/15 12:30	
Carbon tetrachloride	ug/L	ND	1.0	04/22/15 12:30	
Chlorobenzene	ug/L	ND	1.0	04/22/15 12:30	
Chloroethane	ug/L	ND	1.0	04/22/15 12:30	
Chloroform	ug/L	ND	1.0	04/22/15 12:30	
Chloromethane	ug/L	ND	1.0	04/22/15 12:30	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 12:30	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 12:30	
Dibromochloromethane	ug/L	ND	1.0	04/22/15 12:30	
Ethylbenzene	ug/L	ND	1.0	04/22/15 12:30	
Methylene chloride	ug/L	ND	1.0	04/22/15 12:30	
Styrene	ug/L	ND	1.0	04/22/15 12:30	
Tetrachloroethene	ug/L	ND	1.0	04/22/15 12:30	
Toluene	ug/L	ND	1.0	04/22/15 12:30	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 12:30	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 12:30	
Trichloroethene	ug/L	ND	1.0	04/22/15 12:30	
Vinyl chloride	ug/L	ND	1.0	04/22/15 12:30	
Xylene (Total)	ug/L	ND	3.0	04/22/15 12:30	
1,2-Dichloroethane-d4 (S)	%	106	80-120	04/22/15 12:30	
4-Bromofluorobenzene (S)	%	99	80-120	04/22/15 12:30	
Toluene-d8 (S)	%	102	80-120	04/22/15 12:30	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60191895

LABORATORY CONTROL SAMPLE: 1554234

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.7	103	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.2	96	73-121	
1,1,2-Trichloroethane	ug/L	20	20.7	104	80-120	
1,1-Dichloroethane	ug/L	20	20.3	101	80-120	
1,1-Dichloroethene	ug/L	20	20.7	104	80-120	
1,2-Dichloroethane	ug/L	20	20.4	102	81-120	
1,2-Dichloropropane	ug/L	20	20.8	104	80-120	
2-Butanone (MEK)	ug/L	100	99.2	99	67-122	
2-Hexanone	ug/L	100	102	102	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	108	108	76-120	
Acetone	ug/L	100	98.8	99	72-120	
Benzene	ug/L	20	21.5	108	80-120	
Bromodichloromethane	ug/L	20	20.5	102	80-120	
Bromoform	ug/L	20	20.3	101	73-138	
Bromomethane	ug/L	20	21.0	105	38-137	
Carbon disulfide	ug/L	20	20.3	101	71-129	
Carbon tetrachloride	ug/L	20	19.9	100	67-146	
Chlorobenzene	ug/L	20	21.4	107	80-120	
Chloroethane	ug/L	20	20.5	103	76-120	
Chloroform	ug/L	20	20.2	101	80-120	
Chloromethane	ug/L	20	16.4	82	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.1	101	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.2	106	80-120	
Dibromochloromethane	ug/L	20	20.2	101	80-126	
Ethylbenzene	ug/L	20	20.6	103	80-120	
Methylene chloride	ug/L	20	21.1	105	80-120	
Styrene	ug/L	20	20.7	103	80-123	
Tetrachloroethene	ug/L	20	20.1	101	80-123	
Toluene	ug/L	20	20.7	104	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.2	101	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.1	106	80-129	
Trichloroethene	ug/L	20	21.0	105	80-120	
Vinyl chloride	ug/L	20	22.5	112	62-125	
Xylene (Total)	ug/L	60	64.0	107	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			100	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60191895

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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/68990

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60191895

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191895001	**MW-177-201504**	EPA 5030B/8260	MSV/68990		
60191895002	**MW-181-201504**	EPA 5030B/8260	MSV/68990		
60191895003	**MW-23-201504**	EPA 5030B/8260	MSV/68990		

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Sample Condition Upon Receipt

WO#: 60191895

60191895

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☒ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☐

Tracking #: 6262 7065 4472 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: CF -0.1 T-239 / CF -1.8 T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 4.1

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JB 4/15

Chain of Custody present:	☒Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	6.
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	7.
Sufficient volume:	☑Yes ☐No ☐N/A	8.
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	9.
Containers intact:	☑Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	12.
Sample labels match COC:	☑Yes ☐No ☐N/A	
Includes date/time/ID/analyses Matrix: WT		13.
All containers needing preservation have been checked.	☐Yes ☐No ☑N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☑N/A	14.
Exceptions: VOA, Coliform, O&G, WI-DRO (water)	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes ☑No ☐N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☒N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MJ Walls Date: 4/16/15

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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Microseeps

Page: 1 of 1

003200

Section A Required Client Information:

Company: Environ
Address: 7500 College Blvd, Ste 925
Oakland Park, KS 66210
Email To: wstonestreet@environcorp.com
Phone: 913-553-5926 Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Wendy Stonestreet
Copy To: Tammy Gleason
Purchase Order No.: NA
Project Name: Fort Smith, AR
Project Number:

Section C Invoice Information:

Attention: Tammy Gleason
Company Name: Environ
Address: 250 Monroe Ave. NW Grand Rapids Michigan, 49503
Pace Quote Reference:
Pace Project Manager: MJ Walls
Pace Profile #: 7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE)

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zink Acetate & NaOH	Other	Analysis Test Y/N	Requested Analysis Filtered (Y/N): 8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 60191895
1	MW-177-201504	WT	G	4/14/15	1015				3				X						X	N	(3)DCAH a01
2	MW-181-201504	WT	G	4/14/15	1540				3				X						X	N	(2)DCAH a02
3	MW-23-201504	WT	G	4/14/15	1709				3				X						X	N	(3)DCAH a03
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Lucy Cross/Environ	4/14/15	1900		4/15	0835	4.1	Y	X	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lucy Cross
SIGNATURE of SAMPLER: Lucy Cross
DATE Signed (MM/DD/YY): 4/14/2015

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

April 28, 2015

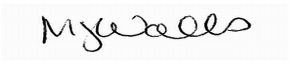
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH, AR
Pace Project No.: 60191896

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 15, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60191896

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

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SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60191896

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60191896001	**MW-176-201504**	Water	04/14/15 14:45	04/15/15 08:35

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60191896

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60191896001	**MW-176-201504**	EPA 5030B/8260	PGH	38

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60191896

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 28, 2015

General Information:
1 sample was analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: MSV/69103

B: Analyte was detected in the associated method blank.
- BLANK for HBN 382792 [MSV/6910 (Lab ID: 1557447)
  - Bromomethane
  - Chloromethane

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/68990

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/69103

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60191896

Sample: MW-176-201504 **Lab ID: 60191896001** Collected: 04/14/15 14:45 Received: 04/15/15 08:35 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**7.5J**	ug/L	10.0	1.9	1		04/27/15 13:34	67-64-1	
Benzene	ND	ug/L	1.0	0.060	1		04/27/15 13:34	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 13:34	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 13:34	75-25-2	
Bromomethane	**0.44J**	ug/L	5.0	0.16	1		04/27/15 13:34	74-83-9	B
2-Butanone (MEK)	**10.0**	ug/L	10.0	0.59	1		04/27/15 13:34	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/27/15 13:34	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 13:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 13:34	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 13:34	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/27/15 13:34	67-66-3	
Chloromethane	**0.13J**	ug/L	1.0	0.080	1		04/27/15 13:34	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 13:34	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.050	1		04/27/15 13:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 13:34	107-06-2	
1,1-Dichloroethene	**2.7**	ug/L	1.0	0.20	1		04/27/15 13:34	75-35-4	
cis-1,2-Dichloroethene	**16.7**	ug/L	1.0	0.080	1		04/27/15 13:34	156-59-2	
trans-1,2-Dichloroethene	**0.87J**	ug/L	1.0	0.20	1		04/27/15 13:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 13:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 13:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 13:34	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 13:34	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 13:34	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.15	1		04/27/15 13:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 13:34	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 13:34	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 13:34	79-34-5	
Tetrachloroethene	**0.14J**	ug/L	1.0	0.10	1		04/27/15 13:34	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/27/15 13:34	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 13:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/27/15 13:34	79-00-5	
Trichloroethene	**528**	ug/L	10.0	1.7	10		04/22/15 17:28	79-01-6	
Vinyl chloride	**0.69J**	ug/L	1.0	0.13	1		04/27/15 13:34	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 13:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/27/15 13:34	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		04/27/15 13:34	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/27/15 13:34	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 13:34		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60191896

QC Batch: MSV/68990
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60191896001

METHOD BLANK: 1554233
Matrix: Water
Associated Lab Samples: 60191896001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Trichloroethene	ug/L	ND	1.0	04/22/15 12:30	
1,2-Dichloroethane-d4 (S)	%	106	80-120	04/22/15 12:30	
4-Bromofluorobenzene (S)	%	99	80-120	04/22/15 12:30	
Toluene-d8 (S)	%	102	80-120	04/22/15 12:30	

LABORATORY CONTROL SAMPLE: 1554234

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	20	21.0	105	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			100	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60191896

QC Batch: MSV/69103
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60191896001

METHOD BLANK: 1557447
Matrix: Water
Associated Lab Samples: 60191896001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1-Dichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
1,2-Dichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,2-Dichloropropane	ug/L	ND	1.0	04/27/15 10:45	
2-Butanone (MEK)	ug/L	ND	10.0	04/27/15 10:45	
2-Hexanone	ug/L	ND	10.0	04/27/15 10:45	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/27/15 10:45	
Acetone	ug/L	ND	10.0	04/27/15 10:45	
Benzene	ug/L	ND	1.0	04/27/15 10:45	
Bromodichloromethane	ug/L	ND	1.0	04/27/15 10:45	
Bromoform	ug/L	ND	1.0	04/27/15 10:45	
Bromomethane	ug/L	0.52J	5.0	04/27/15 10:45	
Carbon disulfide	ug/L	ND	5.0	04/27/15 10:45	
Carbon tetrachloride	ug/L	ND	1.0	04/27/15 10:45	
Chlorobenzene	ug/L	ND	1.0	04/27/15 10:45	
Chloroethane	ug/L	ND	1.0	04/27/15 10:45	
Chloroform	ug/L	ND	1.0	04/27/15 10:45	
Chloromethane	ug/L	0.14J	1.0	04/27/15 10:45	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/27/15 10:45	
Dibromochloromethane	ug/L	ND	1.0	04/27/15 10:45	
Ethylbenzene	ug/L	ND	1.0	04/27/15 10:45	
Methylene chloride	ug/L	ND	1.0	04/27/15 10:45	
Styrene	ug/L	ND	1.0	04/27/15 10:45	
Tetrachloroethene	ug/L	ND	1.0	04/27/15 10:45	
Toluene	ug/L	ND	1.0	04/27/15 10:45	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/27/15 10:45	
Vinyl chloride	ug/L	ND	1.0	04/27/15 10:45	
Xylene (Total)	ug/L	ND	3.0	04/27/15 10:45	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/27/15 10:45	
4-Bromofluorobenzene (S)	%	100	80-120	04/27/15 10:45	
Toluene-d8 (S)	%	103	80-120	04/27/15 10:45	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60191896

LABORATORY CONTROL SAMPLE: 1557448

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	22.7	113	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	21.8	109	73-121	
1,1,2-Trichloroethane	ug/L	20	22.3	111	80-120	
1,1-Dichloroethane	ug/L	20	23.1	116	80-120	
1,1-Dichloroethene	ug/L	20	21.3	107	80-120	
1,2-Dichloroethane	ug/L	20	21.5	107	81-120	
1,2-Dichloropropane	ug/L	20	21.6	108	80-120	
2-Butanone (MEK)	ug/L	100	99.4	99	67-122	
2-Hexanone	ug/L	100	104	104	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	76-120	
Acetone	ug/L	100	105	105	72-120	
Benzene	ug/L	20	22.2	111	80-120	
Bromodichloromethane	ug/L	20	21.9	109	80-120	
Bromoform	ug/L	20	21.1	105	73-138	
Bromomethane	ug/L	20	24.5	122	38-137	
Carbon disulfide	ug/L	20	21.9	109	71-129	
Carbon tetrachloride	ug/L	20	22.4	112	67-146	
Chlorobenzene	ug/L	20	22.7	113	80-120	
Chloroethane	ug/L	20	22.0	110	76-120	
Chloroform	ug/L	20	22.3	111	80-120	
Chloromethane	ug/L	20	19.2	96	34-165	
cis-1,2-Dichloroethene	ug/L	20	22.5	113	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.6	108	80-120	
Dibromochloromethane	ug/L	20	21.9	110	80-126	
Ethylbenzene	ug/L	20	22.4	112	80-120	
Methylene chloride	ug/L	20	21.3	106	80-120	
Styrene	ug/L	20	22.4	112	80-123	
Tetrachloroethene	ug/L	20	23.7	119	80-123	
Toluene	ug/L	20	22.0	110	80-120	
trans-1,2-Dichloroethene	ug/L	20	22.1	111	80-120	
trans-1,3-Dichloropropene	ug/L	20	22.3	111	80-129	
Vinyl chloride	ug/L	20	24.6	123	62-125	
Xylene (Total)	ug/L	60	68.3	114	80-120	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			99	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60191896

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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/68990

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/69103

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

B Analyte was detected in the associated method blank.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60191896

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60191896001	**MW-176-201504**	EPA 5030B/8260	MSV/68990		
60191896001	**MW-176-201504**	EPA 5030B/8260	MSV/69103		

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Sample Condition Upon Receipt

WO# : 60191896

60191896

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☒ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☐

Tracking #: 6262 7065 4472 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: CF -0.1 T-239 / CF -1.8 T-194

Type of Ice: (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 4.1

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JB 4/15

Chain of Custody present:	☒Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☒Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☒Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☒Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☒Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☒No ☐N/A	6.
Rush Turn Around Time requested:	☐Yes ☒No ☐N/A	7.
Sufficient volume:	☒Yes ☐No ☐N/A	8.
Correct containers used:	☒Yes ☐No ☐N/A	
Pace containers used:	☒Yes ☐No ☐N/A	9.
Containers intact:	☒Yes ☐No ☐N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☒N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☐No ☒N/A	12.
Sample labels match COC:	☒Yes ☐No ☐N/A	
Includes date/time/ID/analyses Matrix: WT		13.
All containers needing preservation have been checked.	☐Yes ☐No ☒N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☒N/A	14.
Exceptions: VOA, Coliform, O&G, WI-DRO (water)	☒Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes ☒No ☐N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	☐Yes ☒No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☒N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MJ Walls Date: 4/16/15

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

003199

Section A — **Required** Client Information:

- Company: Environ
- Address: 7500 College Blvd. Ste 925, Oakland Park, KS 66210
- Email To: wstoncstreet@environcorp.com
- Phone: 913.553.5926
- Fax:
- Requested Due Date/TAT:

Section B — **Required** Project Information:

- Report To: Wendy Stone Street
- Copy To: Tammy Gleason
- Purchase Order No.: NA
- Project Name: Fort Smith, AR
- Project Number:

Section C — Invoice Information:

- Attention: Tammy Gleason
- Company Name: ENVIRON
- Address: 250 Monroe Ave. NW Grand Rapids Michigan, 49503
- Pace Quote Reference:
- Pace Project Manager: MJ Walls
- Pace Profile #: 7444, line 1

REGULATORY AGENCY

- NPDES
- GROUND WATER
- DRINKING WATER
- UST
- RCRA
- X OTHER ADEQ

Site Location STATE: AR

Section D — **Required** Client Information

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Requested Analysis Filtered (Y/N): N

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	TIME	COMPOSITE END/GRAB DATE	TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zink Acetate & NaOH	Other	Analysis Test Y/N	8260 VOCs												Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 60191896
1	MW-176-201504	WT	G	4/14/15	1445				3				X						X												N	(3) DG4H 001
2																																
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Lucy Cross / Environ	4/14/15	1900	[signature] Pace	4/15	0835	4.1	Y	Y	Y

SAMPLE CONDITIONS

ORIGINAL

SAMPLER NAME AND SIGNATURE

- PRINT Name of SAMPLER: Lucy Cross
- SIGNATURE of SAMPLER: Lucy Cross
- DATE Signed (MM/DD/YY): 4/14/2015

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

April 24, 2015

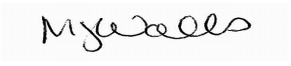
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH, AR
Pace Project No.: 60192014

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 16, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60192014

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60192014

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60192014001	**MW-175-201504**	Water	04/15/15 08:57	04/16/15 01:47

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60192014

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60192014001	**MW-175-201504**	EPA 5030B/8260	PGH	38

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60192014

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 24, 2015

General Information:
1 sample was analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/68954

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1552987)
  - Vinyl chloride

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/68954

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60192014

Sample: MW-175-201504 **Lab ID: 60192014001** Collected: 04/15/15 08:57 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**26.0**	ug/L	10.0	5.0	1		04/21/15 00:05	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 00:05	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 00:05	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 00:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 00:05	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 00:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 00:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:05	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 00:05	67-66-3	
Chloromethane	**0.68J**	ug/L	1.0	0.50	1		04/21/15 00:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 00:05	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	75-35-4	
cis-1,2-Dichloroethene	**1.5**	ug/L	1.0	0.50	1		04/21/15 00:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 00:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 00:05	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 00:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 00:05	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 00:05	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:05	79-00-5	
Trichloroethene	**98.8**	ug/L	1.0	0.50	1		04/21/15 00:05	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 00:05	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 00:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		04/21/15 00:05	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/21/15 00:05	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		04/21/15 00:05	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 00:05		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60192014

QC Batch: MSV/68954
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192014001

METHOD BLANK: 1552986
Matrix: Water
Associated Lab Samples: 60192014001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1-Dichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1-Dichloroethene	ug/L	ND	1.0	04/20/15 21:06	
1,2-Dichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,2-Dichloropropane	ug/L	ND	1.0	04/20/15 21:06	
2-Butanone (MEK)	ug/L	ND	10.0	04/20/15 21:06	
2-Hexanone	ug/L	ND	10.0	04/20/15 21:06	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/20/15 21:06	
Acetone	ug/L	ND	10.0	04/20/15 21:06	
Benzene	ug/L	ND	1.0	04/20/15 21:06	
Bromodichloromethane	ug/L	ND	1.0	04/20/15 21:06	
Bromoform	ug/L	ND	1.0	04/20/15 21:06	
Bromomethane	ug/L	ND	5.0	04/20/15 21:06	
Carbon disulfide	ug/L	ND	5.0	04/20/15 21:06	
Carbon tetrachloride	ug/L	ND	1.0	04/20/15 21:06	
Chlorobenzene	ug/L	ND	1.0	04/20/15 21:06	
Chloroethane	ug/L	ND	1.0	04/20/15 21:06	
Chloroform	ug/L	ND	1.0	04/20/15 21:06	
Chloromethane	ug/L	ND	1.0	04/20/15 21:06	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/20/15 21:06	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/20/15 21:06	
Dibromochloromethane	ug/L	ND	1.0	04/20/15 21:06	
Ethylbenzene	ug/L	ND	1.0	04/20/15 21:06	
Methylene chloride	ug/L	ND	1.0	04/20/15 21:06	
Styrene	ug/L	ND	1.0	04/20/15 21:06	
Tetrachloroethene	ug/L	ND	1.0	04/20/15 21:06	
Toluene	ug/L	ND	1.0	04/20/15 21:06	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/20/15 21:06	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/20/15 21:06	
Trichloroethene	ug/L	ND	1.0	04/20/15 21:06	
Vinyl chloride	ug/L	ND	1.0	04/20/15 21:06	
Xylene (Total)	ug/L	ND	3.0	04/20/15 21:06	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/20/15 21:06	
4-Bromofluorobenzene (S)	%	96	80-120	04/20/15 21:06	
Toluene-d8 (S)	%	96	80-120	04/20/15 21:06	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60192014

LABORATORY CONTROL SAMPLE: 1552987

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	23.1	115	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	18.8	94	73-121	
1,1,2-Trichloroethane	ug/L	20	21.0	105	80-120	
1,1-Dichloroethane	ug/L	20	22.9	114	80-120	
1,1-Dichloroethene	ug/L	20	22.7	114	80-120	
1,2-Dichloroethane	ug/L	20	22.7	114	81-120	
1,2-Dichloropropane	ug/L	20	22.6	113	80-120	
2-Butanone (MEK)	ug/L	100	109	109	67-122	
2-Hexanone	ug/L	100	98.7	99	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	111	111	76-120	
Acetone	ug/L	100	115	115	72-120	
Benzene	ug/L	20	22.8	114	80-120	
Bromodichloromethane	ug/L	20	22.7	114	80-120	
Bromoform	ug/L	20	20.4	102	73-138	
Bromomethane	ug/L	20	21.9	110	38-137	
Carbon disulfide	ug/L	20	21.2	106	71-129	
Carbon tetrachloride	ug/L	20	24.1	120	67-146	
Chlorobenzene	ug/L	20	21.3	107	80-120	
Chloroethane	ug/L	20	21.6	108	76-120	
Chloroform	ug/L	20	21.8	109	80-120	
Chloromethane	ug/L	20	24.4	122	34-165	
cis-1,2-Dichloroethene	ug/L	20	23.0	115	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.8	109	80-120	
Dibromochloromethane	ug/L	20	21.0	105	80-126	
Ethylbenzene	ug/L	20	20.8	104	80-120	
Methylene chloride	ug/L	20	23.0	115	80-120	
Styrene	ug/L	20	20.7	103	80-123	
Tetrachloroethene	ug/L	20	21.2	106	80-123	
Toluene	ug/L	20	20.7	103	80-120	
trans-1,2-Dichloroethene	ug/L	20	22.7	113	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.8	99	80-129	
Trichloroethene	ug/L	20	22.5	113	80-120	
Vinyl chloride	ug/L	20	25.7	129	62-125	L0
Xylene (Total)	ug/L	60	63.2	105	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			96	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
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(913)599-5665

QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60192014

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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/68954

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60192014

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60192014001	**MW-175-201504**	EPA 5030B/8260	MSV/68954		

Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60192014

60192014

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☐ UPS ☐ VIA ☑ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☐

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: CF -0.1 T-239 / CF -1.8 T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 6.3

Temperature should be above freezing to 6°C

Date and initials of person examining contents: AA 4/16/15

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	6.
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, O&G, WI-DRO (water)	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes ☑No ☐N/A	
Pace Trip Blank lot # (if purchased): _____		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

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: 4/16/15

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Pace Analytical®
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Microseeps

Page: 1 of 1

002953

Section A — **Required** Client Information:

Company: ENVIRON
Address: 1500 College Blvd Ste 925
Oakland Park, KS 66210
Email To: wstonestreet@environcorp.com
Phone: 913-553-5926 Fax:
Requested Due Date/TAT:

Section B — **Required** Project Information:

Report To: Wendy Stonestreet
Copy To: Tammy Gleason
Purchase Order No.: NA
Project Name: Fort Smith, AR
Project Number:

Section C — Invoice Information:

Attention: Tammy Gleason
Company Name: ENVIRON
Address: 250 monroe ave. NW Grand Rapids Michigan, 49503
Pace Quote Reference:
Pace Project Manager: MJ Walls
Pace Profile #: 7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Section D — **Required** Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE)

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	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	Preservatives: H_2SO_4	Preservatives: HNO_3	Preservatives: HCl	Preservatives: TSP	Preservatives: BAK	Preservatives: Zink Acetate & NaOH	Preservatives: Other	Analysis Test Y/N	Analysis Test	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N	N		60192014
1	MW-175-201504	WT	G	4/15/15	0857				3				X						X 8260 VOCs	N	30694
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Lucy Cross / ENVIRON	4/15/15	1900	[signature] PACE	4/16/15	0147	0.3	X	X	X

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lucy Cross

SIGNATURE of SAMPLER: Lucy Cross

DATE Signed (MM/DD/YY): 4/15/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

April 24, 2015

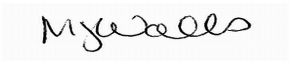
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH, AR
Pace Project No.: 60192016

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 16, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60192016

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
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SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60192016

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60192016001	**MW-174-201504**	Water	04/14/15 12:12	04/16/15 01:47
60192016002	**MW-173-201504**	Water	04/15/15 09:43	04/16/15 01:47

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60192016

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60192016001	**MW-174-201504**	EPA 5030B/8260	PGH	38
60192016002	**MW-173-201504**	EPA 5030B/8260	PGH	38

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PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60192016

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 24, 2015

General Information:
2 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/68954

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

- LCS (Lab ID: 1552987)
  - Vinyl chloride

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/68954

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60192016

Sample: MW-174-201504 **Lab ID: 60192016001** Collected: 04/14/15 12:12 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**36.2**	ug/L	10.0	5.0	1		04/21/15 00:19	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 00:19	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 00:19	74-83-9	
2-Butanone (MEK)	**12.0**	ug/L	10.0	5.0	1		04/21/15 00:19	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 00:19	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 00:19	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 00:19	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 00:19	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 00:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 00:19	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 00:19	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:19	79-00-5	
Trichloroethene	**0.68J**	ug/L	1.0	0.50	1		04/21/15 00:19	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 00:19	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 00:19	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		04/21/15 00:19	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		04/21/15 00:19	17060-07-0	
Toluene-d8 (S)	95	%	80-120		1		04/21/15 00:19	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 00:19		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60192016

Sample: MW-173-201504 **Lab ID: 60192016002** Collected: 04/15/15 09:43 Received: 04/16/15 01:47 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**474**	ug/L	10.0	5.0	1		04/21/15 00:34	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/21/15 00:34	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 00:34	74-83-9	
2-Butanone (MEK)	**83.6**	ug/L	10.0	5.0	1		04/21/15 00:34	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 00:34	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 00:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	75-00-3	
Chloroform	**0.71J**	ug/L	1.0	0.50	1		04/21/15 00:34	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 00:34	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 00:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	**2.5J**	ug/L	10.0	2.5	1		04/21/15 00:34	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 00:34	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 00:34	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 00:34	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 00:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/21/15 00:34	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/21/15 00:34	17060-07-0	
Toluene-d8 (S)	101	%	80-120		1		04/21/15 00:34	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/21/15 00:34		

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60192016

QC Batch: MSV/68954
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192016001, 60192016002

METHOD BLANK: 1552986
Matrix: Water
Associated Lab Samples: 60192016001, 60192016002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1-Dichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,1-Dichloroethene	ug/L	ND	1.0	04/20/15 21:06	
1,2-Dichloroethane	ug/L	ND	1.0	04/20/15 21:06	
1,2-Dichloropropane	ug/L	ND	1.0	04/20/15 21:06	
2-Butanone (MEK)	ug/L	ND	10.0	04/20/15 21:06	
2-Hexanone	ug/L	ND	10.0	04/20/15 21:06	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/20/15 21:06	
Acetone	ug/L	ND	10.0	04/20/15 21:06	
Benzene	ug/L	ND	1.0	04/20/15 21:06	
Bromodichloromethane	ug/L	ND	1.0	04/20/15 21:06	
Bromoform	ug/L	ND	1.0	04/20/15 21:06	
Bromomethane	ug/L	ND	5.0	04/20/15 21:06	
Carbon disulfide	ug/L	ND	5.0	04/20/15 21:06	
Carbon tetrachloride	ug/L	ND	1.0	04/20/15 21:06	
Chlorobenzene	ug/L	ND	1.0	04/20/15 21:06	
Chloroethane	ug/L	ND	1.0	04/20/15 21:06	
Chloroform	ug/L	ND	1.0	04/20/15 21:06	
Chloromethane	ug/L	ND	1.0	04/20/15 21:06	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/20/15 21:06	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/20/15 21:06	
Dibromochloromethane	ug/L	ND	1.0	04/20/15 21:06	
Ethylbenzene	ug/L	ND	1.0	04/20/15 21:06	
Methylene chloride	ug/L	ND	1.0	04/20/15 21:06	
Styrene	ug/L	ND	1.0	04/20/15 21:06	
Tetrachloroethene	ug/L	ND	1.0	04/20/15 21:06	
Toluene	ug/L	ND	1.0	04/20/15 21:06	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/20/15 21:06	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/20/15 21:06	
Trichloroethene	ug/L	ND	1.0	04/20/15 21:06	
Vinyl chloride	ug/L	ND	1.0	04/20/15 21:06	
Xylene (Total)	ug/L	ND	3.0	04/20/15 21:06	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/20/15 21:06	
4-Bromofluorobenzene (S)	%	96	80-120	04/20/15 21:06	
Toluene-d8 (S)	%	96	80-120	04/20/15 21:06	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60192016

LABORATORY CONTROL SAMPLE: 1552987

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	23.1	115	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	18.8	94	73-121	
1,1,2-Trichloroethane	ug/L	20	21.0	105	80-120	
1,1-Dichloroethane	ug/L	20	22.9	114	80-120	
1,1-Dichloroethene	ug/L	20	22.7	114	80-120	
1,2-Dichloroethane	ug/L	20	22.7	114	81-120	
1,2-Dichloropropane	ug/L	20	22.6	113	80-120	
2-Butanone (MEK)	ug/L	100	109	109	67-122	
2-Hexanone	ug/L	100	98.7	99	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	111	111	76-120	
Acetone	ug/L	100	115	115	72-120	
Benzene	ug/L	20	22.8	114	80-120	
Bromodichloromethane	ug/L	20	22.7	114	80-120	
Bromoform	ug/L	20	20.4	102	73-138	
Bromomethane	ug/L	20	21.9	110	38-137	
Carbon disulfide	ug/L	20	21.2	106	71-129	
Carbon tetrachloride	ug/L	20	24.1	120	67-146	
Chlorobenzene	ug/L	20	21.3	107	80-120	
Chloroethane	ug/L	20	21.6	108	76-120	
Chloroform	ug/L	20	21.8	109	80-120	
Chloromethane	ug/L	20	24.4	122	34-165	
cis-1,2-Dichloroethene	ug/L	20	23.0	115	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.8	109	80-120	
Dibromochloromethane	ug/L	20	21.0	105	80-126	
Ethylbenzene	ug/L	20	20.8	104	80-120	
Methylene chloride	ug/L	20	23.0	115	80-120	
Styrene	ug/L	20	20.7	103	80-123	
Tetrachloroethene	ug/L	20	21.2	106	80-123	
Toluene	ug/L	20	20.7	103	80-120	
trans-1,2-Dichloroethene	ug/L	20	22.7	113	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.8	99	80-129	
Trichloroethene	ug/L	20	22.5	113	80-120	
Vinyl chloride	ug/L	20	25.7	129	62-125	L0
Xylene (Total)	ug/L	60	63.2	105	80-120	
1,2-Dichloroethane-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			96	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60192016

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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/68954

[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

L0 Analyte recovery in the laboratory control sample (LCS) was outside QC limits.

L3 Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60192016

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60192016001	**MW-174-201504**	EPA 5030B/8260	MSV/68954		
60192016002	**MW-173-201504**	EPA 5030B/8260	MSV/68954		

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Sample Condition Upon Receipt

WO# : 60192016

60192016

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☐ UPS ☐ VIA ☑ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☐

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: CF -1.1 T-239 / CF -1.8 T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 0.3

Temperature should be above freezing to 6°C

Date and initials of person examining contents: RA 4/16/15

Chain of Custody present:	☑Yes ☐No ☐N/A	1.
Chain of Custody filled out:	☑Yes ☐No ☐N/A	2.
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	3.
Sampler name & signature on COC:	☑Yes ☐No ☐N/A	4.
Samples arrived within holding time:	☑Yes ☐No ☐N/A	5.
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	6.
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, O&G, WI-DRO (water)	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes ☑No ☐N/A	
Pace Trip Blank lot # (if purchased): _____		15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

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: 4/16/15

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Pace Analytical
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Microseeps

Page: 1 of 1

002950

Section A Required Client Information:

Company: Environ
Address: 7500 College Blvd. Ste 925
Oakland Park, KS 66210
Email To: wstonestreet@environcorp.com
Phone: 913-553-5926 Fax:
Requested Due Date/TAT:

Section B Required Project Information:

Report To: Wendy Stonestreet
Copy To: Tammy Gleason
Purchase Order No.: NA
Project Name: Fort Smith, AR
Project Number:

Section C Invoice Information:

Attention: Tammy Gleason
Company Name: Environ
Address: 250 Monroe Ave NW Grand Rapids Michigan, 49503
Pace Quote Reference:
Pace Project Manager: MJ Walls
Pace Profile #: 7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID
(A-Z, 0-9 / ,-)
Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zinc Acetate & NaOH	Other	Analysis Test Y/N	Requested Analysis Filtered (Y/N): 8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
																		Y/N	N		60192016
1	MW-174-201504	WT	G	4/14/15	1212				3				X						X	N	30696H AJ
2	MW-173-201504	WT	G	4/15/15	0943				3				X						X	N	↓ WE
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Lucy Cross / Environ	4/15/15	1900	[signature]	4/16/15	0147	0.3	X	X	Y

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Lucy Cross
SIGNATURE of SAMPLER: Lucy Cross
DATE Signed (MM/DD/YY): 4/15/2015

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical Services, Inc.
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Lenexa, KS 66219
(913)599-5665

May 01, 2015

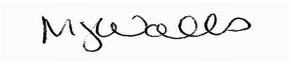
Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 17, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,



Mary Jane Walls
maryjane.walls@pacelabs.com
PM Lab Management

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

Pace Analytical Services, Inc.
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CERTIFICATIONS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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SAMPLE SUMMARY

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60192139001	**MW-83-201504**	Water	04/16/15 13:50	04/17/15 10:21
60192139002	**MW-84-201504**	Water	04/16/15 08:45	04/17/15 10:21
60192139003	**MW-179-201504**	Water	04/16/15 14:30	04/17/15 10:21
60192139004	**MW-95-201504**	Water	04/16/15 15:01	04/17/15 10:21
60192139005	**MW-94-201504**	Water	04/16/15 13:10	04/17/15 10:21
60192139006	**MW-180-201504**	Water	04/16/15 14:45	04/17/15 10:21
60192139007	**MW-24-201504**	Water	04/16/15 11:30	04/17/15 10:21
60192139008	**MW-178-201504**	Water	04/16/15 14:15	04/17/15 10:21
60192139009	**MW-85-201504**	Water	04/16/15 14:58	04/17/15 10:21
60192139010	**MW-86-201504**	Water	04/16/15 13:40	04/17/15 10:21
60192139011	**MW-92-201504**	Water	04/16/15 12:05	04/17/15 10:21
60192139012	**MW-172-201504**	Water	04/16/15 09:52	04/17/15 10:21
60192139013	**MW-93-201504**	Water	04/16/15 14:05	04/17/15 10:21
60192139014	**MW-88-201504**	Water	04/16/15 09:00	04/17/15 10:21
60192139015	**MW-89-201504**	Water	04/16/15 10:05	04/17/15 10:21
60192139016	**MW-91-201504**	Water	04/16/15 11:15	04/17/15 10:21
60192139017	**MW-87-201504**	Water	04/16/15 12:25	04/17/15 10:21

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SAMPLE ANALYTE COUNT

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60192139001	**MW-83-201504**	EPA 5030B/8260	PGH	38
60192139002	**MW-84-201504**	EPA 5030B/8260	PGH	38
60192139003	**MW-179-201504**	EPA 5030B/8260	PGH	38
60192139004	**MW-95-201504**	EPA 5030B/8260	PGH	38
60192139005	**MW-94-201504**	EPA 5030B/8260	PGH	38
60192139006	**MW-180-201504**	EPA 5030B/8260	PGH	38
60192139007	**MW-24-201504**	EPA 5030B/8260	PGH	38
60192139008	**MW-178-201504**	EPA 5030B/8260	PGH	38
60192139009	**MW-85-201504**	EPA 5030B/8260	JTK	38
60192139010	**MW-86-201504**	EPA 5030B/8260	JTK, PGH	38
60192139011	**MW-92-201504**	EPA 5030B/8260	JTK, PGH	38
60192139012	**MW-172-201504**	EPA 5030B/8260	JTK, PGH	38
60192139013	**MW-93-201504**	EPA 5030B/8260	PGH	38
60192139014	**MW-88-201504**	EPA 5030B/8260	PGH	38
60192139015	**MW-89-201504**	EPA 5030B/8260	PGH	38
60192139016	**MW-91-201504**	EPA 5030B/8260	PGH	38
60192139017	**MW-87-201504**	EPA 5030B/8260	PGH	38

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PROJECT NARRATIVE

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: May 01, 2015

General Information:
17 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: MSV/69011

B: Analyte was detected in the associated method blank.
- BLANK for HBN 382200 [MSV/6901 (Lab ID: 1554703)
  - Bromomethane

QC Batch: MSV/69103

B: Analyte was detected in the associated method blank.
- BLANK for HBN 382792 [MSV/6910 (Lab ID: 1557447)
  - Bromomethane
  - Chloromethane

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/68979

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- LCS (Lab ID: 1553780)
  - Vinyl chloride

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/68932

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
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PROJECT NARRATIVE

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: May 01, 2015

QC Batch: MSV/68946
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/68968
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/68979
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/69011
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

QC Batch: MSV/69103
A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-83-201504 **Lab ID: 60192139001** Collected: 04/16/15 13:50 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**17.1**	ug/L	10.0	5.0	1		04/21/15 12:06	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/21/15 12:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/21/15 12:06	75-27-4	
Bromoform	**0.54J**	ug/L	1.0	0.50	1		04/21/15 12:06	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/21/15 12:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/21/15 12:06	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/21/15 12:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/21/15 12:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/21/15 12:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/21/15 12:06	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/21/15 12:06	67-66-3	
Chloromethane	**2.5**	ug/L	1.0	0.50	1		04/21/15 12:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/21/15 12:06	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 12:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 12:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/21/15 12:06	75-35-4	
cis-1,2-Dichloroethene	**2.8**	ug/L	1.0	0.50	1		04/21/15 12:06	156-59-2	
trans-1,2-Dichloroethene	**0.59J**	ug/L	1.0	0.50	1		04/21/15 12:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/21/15 12:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 12:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/21/15 12:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/21/15 12:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/21/15 12:06	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/21/15 12:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/21/15 12:06	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/21/15 12:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/21/15 12:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/21/15 12:06	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/21/15 12:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 12:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/21/15 12:06	79-00-5	
Trichloroethene	**151**	ug/L	1.0	0.50	1		04/21/15 12:06	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/21/15 12:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/21/15 12:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		04/21/15 12:06	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/21/15 12:06	17060-07-0	
Toluene-d8 (S)	94	%	80-120		1		04/21/15 12:06	2037-26-5	
Preservation pH	**7.0**		0.10	0.10	1		04/21/15 12:06		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-84-201504 **Lab ID: 60192139002** Collected: 04/16/15 08:45 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**89.1**	ug/L	10.0	5.0	1		04/20/15 13:56	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/20/15 13:56	75-27-4	
Bromoform	**1.9**	ug/L	1.0	0.50	1		04/20/15 13:56	75-25-2	
Bromomethane	**8.5**	ug/L	5.0	2.5	1		04/20/15 13:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/20/15 13:56	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/20/15 13:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/20/15 13:56	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/20/15 13:56	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/20/15 13:56	67-66-3	
Chloromethane	**14.5**	ug/L	1.0	0.50	1		04/20/15 13:56	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/20/15 13:56	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 13:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 13:56	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/20/15 13:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/20/15 13:56	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/20/15 13:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/20/15 13:56	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/20/15 13:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 13:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/20/15 13:56	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.50	1		04/20/15 13:56	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/20/15 13:56	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/20/15 13:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/20/15 13:56	460-00-4	
1,2-Dichloroethane-d4 (S)	104	%	80-120		1		04/20/15 13:56	17060-07-0	
Toluene-d8 (S)	94	%	80-120		1		04/20/15 13:56	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		04/20/15 13:56		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-179-201504 **Lab ID: 60192139003** Collected: 04/16/15 14:30 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**5.7J**	ug/L	10.0	5.0	1		04/22/15 05:55	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 05:55	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 05:55	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 05:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 05:55	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 05:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 05:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 05:55	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 05:55	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	107-06-2	
1,1-Dichloroethene	**0.62J**	ug/L	1.0	0.50	1		04/22/15 05:55	75-35-4	
cis-1,2-Dichloroethene	**1.6**	ug/L	1.0	0.50	1		04/22/15 05:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 05:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 05:55	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 05:55	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 05:55	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 05:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 05:55	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 05:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 05:55	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 05:55	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 05:55	79-00-5	
Trichloroethene	**41.2**	ug/L	1.0	0.50	1		04/22/15 05:55	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 05:55	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 05:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	94	%	80-120		1		04/22/15 05:55	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/22/15 05:55	17060-07-0	
Toluene-d8 (S)	89	%	80-120		1		04/22/15 05:55	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 05:55		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-95-201504 **Lab ID: 60192139004** Collected: 04/16/15 15:01 Received: 04/17/15 10:21 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		04/27/15 15:53	67-64-1	
Benzene	ND	ug/L	1.0	0.060	1		04/27/15 15:53	71-43-2	
Bromodichloromethane	**0.39J**	ug/L	1.0	0.19	1		04/27/15 15:53	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 15:53	75-25-2	
Bromomethane	**0.43J**	ug/L	5.0	0.16	1		04/27/15 15:53	74-83-9	B
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 15:53	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/27/15 15:53	75-15-0	
Carbon tetrachloride	**0.38J**	ug/L	1.0	0.18	1		04/27/15 15:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 15:53	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 15:53	75-00-3	
Chloroform	**6.8**	ug/L	1.0	0.14	1		04/27/15 15:53	67-66-3	
Chloromethane	**0.32J**	ug/L	1.0	0.080	1		04/27/15 15:53	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 15:53	124-48-1	
1,1-Dichloroethane	**0.50J**	ug/L	1.0	0.050	1		04/27/15 15:53	75-34-3	
1,2-Dichloroethane	**0.21J**	ug/L	1.0	0.12	1		04/27/15 15:53	107-06-2	
1,1-Dichloroethene	**41.9**	ug/L	1.0	0.20	1		04/27/15 15:53	75-35-4	
cis-1,2-Dichloroethene	**184**	ug/L	1.0	0.080	1		04/27/15 15:53	156-59-2	
trans-1,2-Dichloroethene	**1.4**	ug/L	1.0	0.20	1		04/27/15 15:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 15:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 15:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 15:53	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 15:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 15:53	591-78-6	
Methylene chloride	**4.1**	ug/L	1.0	0.15	1		04/27/15 15:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 15:53	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 15:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 15:53	79-34-5	
Tetrachloroethene	**7.6**	ug/L	1.0	0.10	1		04/27/15 15:53	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/27/15 15:53	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 15:53	71-55-6	
1,1,2-Trichloroethane	**2.3**	ug/L	1.0	0.20	1		04/27/15 15:53	79-00-5	
Trichloroethene	**26700**	ug/L	200	100	200		04/22/15 07:10	79-01-6	
Vinyl chloride	**14.9**	ug/L	1.0	0.13	1		04/27/15 15:53	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 15:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/27/15 15:53	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-120		1		04/27/15 15:53	17060-07-0	
Toluene-d8 (S)	97	%	80-120		1		04/27/15 15:53	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 15:53		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-94-201504 **Lab ID: 60192139005** Collected: 04/16/15 13:10 Received: 04/17/15 10:21 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		04/27/15 16:09	67-64-1	
Benzene	**0.37J**	ug/L	1.0	0.060	1		04/27/15 16:09	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 16:09	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 16:09	75-25-2	
Bromomethane	ND	ug/L	5.0	0.16	1		04/27/15 16:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 16:09	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/27/15 16:09	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 16:09	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 16:09	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 16:09	75-00-3	
Chloroform	**3.2**	ug/L	1.0	0.14	1		04/27/15 16:09	67-66-3	
Chloromethane	**0.21J**	ug/L	1.0	0.080	1		04/27/15 16:09	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 16:09	124-48-1	
1,1-Dichloroethane	**2.6**	ug/L	1.0	0.050	1		04/27/15 16:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 16:09	107-06-2	
1,1-Dichloroethene	**120**	ug/L	1.0	0.20	1		04/27/15 16:09	75-35-4	
cis-1,2-Dichloroethene	**325**	ug/L	200	16.0	200		04/22/15 07:24	156-59-2	
trans-1,2-Dichloroethene	**8.8**	ug/L	1.0	0.20	1		04/27/15 16:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 16:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 16:09	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 16:09	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 16:09	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 16:09	591-78-6	
Methylene chloride	**0.76J**	ug/L	1.0	0.15	1		04/27/15 16:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 16:09	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 16:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 16:09	79-34-5	
Tetrachloroethene	**2.8**	ug/L	1.0	0.10	1		04/27/15 16:09	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/27/15 16:09	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 16:09	71-55-6	
1,1,2-Trichloroethane	**0.71J**	ug/L	1.0	0.20	1		04/27/15 16:09	79-00-5	
Trichloroethene	**11800**	ug/L	200	34.0	200		04/22/15 07:24	79-01-6	
Vinyl chloride	**1.3**	ug/L	1.0	0.13	1		04/27/15 16:09	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 16:09	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/27/15 16:09	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-120		1		04/27/15 16:09	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		04/27/15 16:09	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 16:09		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-180-201504 **Lab ID: 60192139006** Collected: 04/16/15 14:45 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/22/15 06:10	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 06:10	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 06:10	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 06:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 06:10	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 06:10	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 06:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 06:10	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 06:10	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:10	75-35-4	
cis-1,2-Dichloroethene	**3.8**	ug/L	1.0	0.50	1		04/22/15 06:10	156-59-2	
trans-1,2-Dichloroethene	**0.88J**	ug/L	1.0	0.50	1		04/22/15 06:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 06:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 06:10	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 06:10	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 06:10	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 06:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 06:10	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 06:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:10	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 06:10	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:10	79-00-5	
Trichloroethene	**21.4**	ug/L	1.0	0.50	1		04/22/15 06:10	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 06:10	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 06:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		04/22/15 06:10	460-00-4	
1,2-Dichloroethane-d4 (S)	106	%	80-120		1		04/22/15 06:10	17060-07-0	
Toluene-d8 (S)	90	%	80-120		1		04/22/15 06:10	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 06:10		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-24-201504 **Lab ID: 60192139007** Collected: 04/16/15 11:30 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**71.2**	ug/L	10.0	5.0	1		04/19/15 16:55	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 16:55	75-27-4	
Bromoform	**8.7**	ug/L	1.0	0.50	1		04/19/15 16:55	75-25-2	
Bromomethane	**42.6**	ug/L	5.0	2.5	1		04/19/15 16:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 16:55	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 16:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 16:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	108-90-7	
Chloroethane	**0.64J**	ug/L	1.0	0.50	1		04/19/15 16:55	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 16:55	67-66-3	
Chloromethane	**22.6**	ug/L	1.0	0.50	1		04/19/15 16:55	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 16:55	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 16:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 16:55	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 16:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 16:55	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:55	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 16:55	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:55	79-00-5	
Trichloroethene	**18.8**	ug/L	1.0	0.50	1		04/19/15 16:55	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 16:55	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 16:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/19/15 16:55	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/19/15 16:55	17060-07-0	
Toluene-d8 (S)	98	%	80-120		1		04/19/15 16:55	2037-26-5	
Preservation pH	**3.0**		0.10	0.10	1		04/19/15 16:55		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-178-201504 **Lab ID: 60192139008** Collected: 04/16/15 14:15 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**7.1J**	ug/L	10.0	5.0	1		04/19/15 16:40	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/19/15 16:40	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/19/15 16:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/19/15 16:40	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/19/15 16:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/19/15 16:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/19/15 16:40	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	75-35-4	
cis-1,2-Dichloroethene	**1.3**	ug/L	1.0	0.50	1		04/19/15 16:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/19/15 16:40	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/19/15 16:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/19/15 16:40	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/19/15 16:40	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/19/15 16:40	79-00-5	
Trichloroethene	**5.0**	ug/L	1.0	0.50	1		04/19/15 16:40	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/19/15 16:40	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/19/15 16:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		04/19/15 16:40	460-00-4	
1,2-Dichloroethane-d4 (S)	102	%	80-120		1		04/19/15 16:40	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/19/15 16:40	2037-26-5	
Preservation pH	**6.0**		0.10	0.10	1		04/19/15 16:40		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-85-201504 **Lab ID: 60192139009** Collected: 04/16/15 14:58 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**104**	ug/L	10.0	5.0	1		04/22/15 18:53	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 18:53	71-43-2	
Bromodichloromethane	**0.68J**	ug/L	1.0	0.50	1		04/22/15 18:53	75-27-4	
Bromoform	**10.5**	ug/L	1.0	0.50	1		04/22/15 18:53	75-25-2	
Bromomethane	**24.4**	ug/L	5.0	2.5	1		04/22/15 18:53	74-83-9	B
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 18:53	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 18:53	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 18:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 18:53	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 18:53	75-00-3	
Chloroform	**2.2**	ug/L	1.0	0.50	1		04/22/15 18:53	67-66-3	
Chloromethane	**8.2**	ug/L	1.0	0.50	1		04/22/15 18:53	74-87-3	
Dibromochloromethane	**2.8**	ug/L	1.0	0.50	1		04/22/15 18:53	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 18:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 18:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 18:53	75-35-4	
cis-1,2-Dichloroethene	**16.8**	ug/L	1.0	0.50	1		04/22/15 18:53	156-59-2	
trans-1,2-Dichloroethene	**2.9**	ug/L	1.0	0.50	1		04/22/15 18:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 18:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 18:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 18:53	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 18:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 18:53	591-78-6	
Methylene chloride	**5.7**	ug/L	1.0	0.50	1		04/22/15 18:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 18:53	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 18:53	100-42-5	
1,1,2,2-Tetrachloroethane	**4.6**	ug/L	1.0	0.50	1		04/22/15 18:53	79-34-5	
Tetrachloroethene	**1.5**	ug/L	1.0	0.50	1		04/22/15 18:53	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 18:53	108-88-3	
1,1,1-Trichloroethane	**9.0**	ug/L	1.0	0.50	1		04/22/15 18:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 18:53	79-00-5	
Trichloroethene	**256**	ug/L	5.0	2.5	5		04/22/15 19:08	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 18:53	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 18:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/22/15 18:53	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/22/15 18:53	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/22/15 18:53	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 18:53		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-86-201504 **Lab ID: 60192139010** Collected: 04/16/15 13:40 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**186**	ug/L	10.0	1.9	1		04/22/15 20:07	67-64-1	
Benzene	**0.29J**	ug/L	1.0	0.060	1		04/22/15 20:07	71-43-2	
Bromodichloromethane	**2.4**	ug/L	1.0	0.19	1		04/22/15 20:07	75-27-4	
Bromoform	**7.8**	ug/L	1.0	0.070	1		04/22/15 20:07	75-25-2	
Bromomethane	**6.7**	ug/L	5.0	0.16	1		04/22/15 20:07	74-83-9	B
2-Butanone (MEK)	**33.2**	ug/L	10.0	0.59	1		04/22/15 20:07	78-93-3	
Carbon disulfide	**1.5J**	ug/L	5.0	0.12	1		04/22/15 20:07	75-15-0	
Carbon tetrachloride	**5.3**	ug/L	1.0	0.18	1		04/22/15 20:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/22/15 20:07	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/22/15 20:07	75-00-3	
Chloroform	**47.5**	ug/L	1.0	0.14	1		04/22/15 20:07	67-66-3	
Chloromethane	**4.6**	ug/L	1.0	0.080	1		04/22/15 20:07	74-87-3	
Dibromochloromethane	**2.8**	ug/L	1.0	0.21	1		04/22/15 20:07	124-48-1	
1,1-Dichloroethane	**7.8**	ug/L	1.0	0.050	1		04/22/15 20:07	75-34-3	
1,2-Dichloroethane	**0.46J**	ug/L	1.0	0.12	1		04/22/15 20:07	107-06-2	
1,1-Dichloroethene	**9.1**	ug/L	1.0	0.20	1		04/22/15 20:07	75-35-4	
cis-1,2-Dichloroethene	**128**	ug/L	1.0	0.080	1		04/22/15 20:07	156-59-2	
trans-1,2-Dichloroethene	**20.6**	ug/L	1.0	0.20	1		04/22/15 20:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/22/15 20:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/22/15 20:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/22/15 20:07	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/22/15 20:07	100-41-4	
2-Hexanone	**3.0J**	ug/L	10.0	1.2	1		04/22/15 20:07	591-78-6	
Methylene chloride	**21.0**	ug/L	1.0	0.15	1		04/22/15 20:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/22/15 20:07	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/22/15 20:07	100-42-5	
1,1,2,2-Tetrachloroethane	**518J**	ug/L	2000	300	2000		04/19/15 18:24	79-34-5	
Tetrachloroethene	**27.9**	ug/L	1.0	0.10	1		04/22/15 20:07	127-18-4	
Toluene	**2.1**	ug/L	1.0	0.17	1		04/22/15 20:07	108-88-3	
1,1,1-Trichloroethane	**612J**	ug/L	2000	220	2000		04/19/15 18:24	71-55-6	
1,1,2-Trichloroethane	**5.1**	ug/L	1.0	0.20	1		04/22/15 20:07	79-00-5	
Trichloroethene	**46700**	ug/L	2000	340	2000		04/19/15 18:24	79-01-6	
Vinyl chloride	**5.8**	ug/L	1.0	0.13	1		04/22/15 20:07	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/22/15 20:07	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		04/22/15 20:07	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		04/22/15 20:07	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/22/15 20:07	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 20:07		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-92-201504 **Lab ID: 60192139011** Collected: 04/16/15 12:05 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**14.2**	ug/L	10.0	5.0	1		04/22/15 19:23	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 19:23	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 19:23	75-27-4	
Bromoform	**6.3**	ug/L	1.0	0.50	1		04/22/15 19:23	75-25-2	
Bromomethane	**8.9**	ug/L	5.0	2.5	1		04/22/15 19:23	74-83-9	B
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 19:23	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 19:23	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 19:23	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 19:23	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:23	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 19:23	67-66-3	
Chloromethane	**12.9**	ug/L	1.0	0.50	1		04/22/15 19:23	74-87-3	
Dibromochloromethane	**2.6**	ug/L	1.0	0.50	1		04/22/15 19:23	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:23	107-06-2	
1,1-Dichloroethene	**0.92J**	ug/L	1.0	0.50	1		04/22/15 19:23	75-35-4	
cis-1,2-Dichloroethene	**5.4**	ug/L	1.0	0.50	1		04/22/15 19:23	156-59-2	
trans-1,2-Dichloroethene	**0.61J**	ug/L	1.0	0.50	1		04/22/15 19:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 19:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 19:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 19:23	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 19:23	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 19:23	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 19:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 19:23	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 19:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:23	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 19:23	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 19:23	108-88-3	
1,1,1-Trichloroethane	**0.81J**	ug/L	1.0	0.50	1		04/22/15 19:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:23	79-00-5	
Trichloroethene	**736**	ug/L	25.0	12.5	25		04/19/15 18:39	79-01-6	
Vinyl chloride	**2.1**	ug/L	1.0	0.50	1		04/22/15 19:23	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 19:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/22/15 19:23	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/22/15 19:23	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/22/15 19:23	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 19:23		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-172-201504 **Lab ID: 60192139012** Collected: 04/16/15 09:52 Received: 04/17/15 10:21 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	5.0	1		04/22/15 19:37	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 19:37	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 19:37	75-27-4	
Bromoform	**5.8**	ug/L	1.0	0.50	1		04/22/15 19:37	75-25-2	
Bromomethane	**5.9**	ug/L	5.0	2.5	1		04/22/15 19:37	74-83-9	B
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 19:37	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 19:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 19:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 19:37	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:37	75-00-3	
Chloroform	**1.4**	ug/L	1.0	0.50	1		04/22/15 19:37	67-66-3	
Chloromethane	**2.7**	ug/L	1.0	0.50	1		04/22/15 19:37	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 19:37	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:37	107-06-2	
1,1-Dichloroethene	**0.64J**	ug/L	1.0	0.50	1		04/22/15 19:37	75-35-4	
cis-1,2-Dichloroethene	**11.9**	ug/L	1.0	0.50	1		04/22/15 19:37	156-59-2	
trans-1,2-Dichloroethene	**1.4**	ug/L	1.0	0.50	1		04/22/15 19:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 19:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 19:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 19:37	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 19:37	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 19:37	591-78-6	
Methylene chloride	**0.72J**	ug/L	1.0	0.50	1		04/22/15 19:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 19:37	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 19:37	100-42-5	
1,1,2,2-Tetrachloroethane	**0.95J**	ug/L	1.0	0.50	1		04/22/15 19:37	79-34-5	
Tetrachloroethene	**0.85J**	ug/L	1.0	0.50	1		04/22/15 19:37	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 19:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 19:37	79-00-5	
Trichloroethene	**1740**	ug/L	25.0	12.5	25		04/19/15 18:54	79-01-6	
Vinyl chloride	**0.92J**	ug/L	1.0	0.50	1		04/22/15 19:37	75-01-4	
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 19:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/22/15 19:37	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/22/15 19:37	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/22/15 19:37	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 19:37		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-93-201504 **Lab ID: 60192139013** Collected: 04/16/15 14:05 Received: 04/17/15 10:21 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		04/27/15 16:24	67-64-1	
Benzene	**0.16J**	ug/L	1.0	0.060	1		04/27/15 16:24	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 16:24	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 16:24	75-25-2	
Bromomethane	ND	ug/L	5.0	0.16	1		04/27/15 16:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 16:24	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/27/15 16:24	75-15-0	
Carbon tetrachloride	**0.49J**	ug/L	1.0	0.18	1		04/27/15 16:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 16:24	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 16:24	75-00-3	
Chloroform	**5.6**	ug/L	1.0	0.14	1		04/27/15 16:24	67-66-3	
Chloromethane	**0.19J**	ug/L	1.0	0.080	1		04/27/15 16:24	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 16:24	124-48-1	
1,1-Dichloroethane	**0.52J**	ug/L	1.0	0.050	1		04/27/15 16:24	75-34-3	
1,2-Dichloroethane	**0.21J**	ug/L	1.0	0.12	1		04/27/15 16:24	107-06-2	
1,1-Dichloroethene	**32.9**	ug/L	1.0	0.20	1		04/27/15 16:24	75-35-4	
cis-1,2-Dichloroethene	**160**	ug/L	1.0	0.080	1		04/27/15 16:24	156-59-2	
trans-1,2-Dichloroethene	**1.5**	ug/L	1.0	0.20	1		04/27/15 16:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 16:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 16:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 16:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 16:24	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 16:24	591-78-6	
Methylene chloride	**3.8**	ug/L	1.0	0.15	1		04/27/15 16:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 16:24	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 16:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 16:24	79-34-5	
Tetrachloroethene	**5.9**	ug/L	1.0	0.10	1		04/27/15 16:24	127-18-4	
Toluene	**0.18J**	ug/L	1.0	0.17	1		04/27/15 16:24	108-88-3	
1,1,1-Trichloroethane	**0.73J**	ug/L	1.0	0.11	1		04/27/15 16:24	71-55-6	
1,1,2-Trichloroethane	**1.9**	ug/L	1.0	0.20	1		04/27/15 16:24	79-00-5	
Trichloroethene	**21500**	ug/L	200	100	200		04/22/15 07:39	79-01-6	
Vinyl chloride	**3.9**	ug/L	1.0	0.13	1		04/27/15 16:24	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 16:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		04/27/15 16:24	460-00-4	
1,2-Dichloroethane-d4 (S)	96	%	80-120		1		04/27/15 16:24	17060-07-0	
Toluene-d8 (S)	96	%	80-120		1		04/27/15 16:24	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 16:24		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-88-201504 **Lab ID: 60192139014** Collected: 04/16/15 09:00 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/22/15 06:25	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 06:25	75-25-2	
Bromomethane	ND	ug/L	5.0	2.5	1		04/22/15 06:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 06:25	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 06:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 06:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 06:25	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 06:25	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 06:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 06:25	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 06:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:25	79-00-5	
Trichloroethene	**0.58J**	ug/L	1.0	0.50	1		04/22/15 06:25	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 06:25	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 06:25	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		04/22/15 06:25	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		04/22/15 06:25	17060-07-0	
Toluene-d8 (S)	91	%	80-120		1		04/22/15 06:25	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 06:25		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-89-201504 **Lab ID: 60192139015** Collected: 04/16/15 10:05 Received: 04/17/15 10:21 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	ND	ug/L	10.0	5.0	1		04/22/15 06:40	67-64-1	
Benzene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	75-27-4	
Bromoform	ND	ug/L	1.0	0.50	1		04/22/15 06:40	75-25-2	
Bromomethane	**3.2J**	ug/L	5.0	2.5	1		04/22/15 06:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	5.0	1		04/22/15 06:40	78-93-3	
Carbon disulfide	ND	ug/L	5.0	2.5	1		04/22/15 06:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.50	1		04/22/15 06:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	108-90-7	
Chloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	75-00-3	
Chloroform	ND	ug/L	1.0	0.50	1		04/22/15 06:40	67-66-3	
Chloromethane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	100-41-4	
2-Hexanone	ND	ug/L	10.0	5.0	1		04/22/15 06:40	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.50	1		04/22/15 06:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	2.5	1		04/22/15 06:40	108-10-1	
Styrene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	127-18-4	
Toluene	ND	ug/L	1.0	0.50	1		04/22/15 06:40	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.50	1		04/22/15 06:40	79-00-5	
Trichloroethene	**15.9**	ug/L	1.0	0.50	1		04/22/15 06:40	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.50	1		04/22/15 06:40	75-01-4	L3
Xylene (Total)	ND	ug/L	3.0	1.5	1		04/22/15 06:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	93	%	80-120		1		04/22/15 06:40	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/22/15 06:40	17060-07-0	
Toluene-d8 (S)	88	%	80-120		1		04/22/15 06:40	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/22/15 06:40		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-91-201504 **Lab ID: 60192139016** Collected: 04/16/15 11:15 Received: 04/17/15 10:21 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		04/27/15 12:02	67-64-1	
Benzene	ND	ug/L	1.0	0.060	1		04/27/15 12:02	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 12:02	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 12:02	75-25-2	
Bromomethane	**0.40J**	ug/L	5.0	0.16	1		04/27/15 12:02	74-83-9	B
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 12:02	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/27/15 12:02	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 12:02	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 12:02	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 12:02	75-00-3	
Chloroform	**0.16J**	ug/L	1.0	0.14	1		04/27/15 12:02	67-66-3	
Chloromethane	**0.20J**	ug/L	1.0	0.080	1		04/27/15 12:02	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 12:02	124-48-1	
1,1-Dichloroethane	**1.5**	ug/L	1.0	0.050	1		04/27/15 12:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 12:02	107-06-2	
1,1-Dichloroethene	**4.0**	ug/L	1.0	0.20	1		04/27/15 12:02	75-35-4	
cis-1,2-Dichloroethene	**36.6**	ug/L	1.0	0.080	1		04/27/15 12:02	156-59-2	
trans-1,2-Dichloroethene	**0.42J**	ug/L	1.0	0.20	1		04/27/15 12:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 12:02	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 12:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 12:02	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 12:02	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 12:02	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.15	1		04/27/15 12:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 12:02	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 12:02	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 12:02	79-34-5	
Tetrachloroethene	**1.8**	ug/L	1.0	0.10	1		04/27/15 12:02	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/27/15 12:02	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 12:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/27/15 12:02	79-00-5	
Trichloroethene	**438**	ug/L	5.0	2.5	5		04/22/15 07:54	79-01-6	
Vinyl chloride	**0.18J**	ug/L	1.0	0.13	1		04/27/15 12:02	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 12:02	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		04/27/15 12:02	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		04/27/15 12:02	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/27/15 12:02	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 12:02		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

ANALYTICAL RESULTS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Sample: MW-87-201504 **Lab ID: 60192139017** Collected: 04/16/15 12:25 Received: 04/17/15 10:21 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		04/27/15 14:06	67-64-1	
Benzene	**0.12J**	ug/L	1.0	0.060	1		04/27/15 14:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/27/15 14:06	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/27/15 14:06	75-25-2	
Bromomethane	**0.50J**	ug/L	5.0	0.16	1		04/27/15 14:06	74-83-9	B
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/27/15 14:06	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/27/15 14:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/27/15 14:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/27/15 14:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/27/15 14:06	75-00-3	
Chloroform	**0.25J**	ug/L	1.0	0.14	1		04/27/15 14:06	67-66-3	
Chloromethane	**0.13J**	ug/L	1.0	0.080	1		04/27/15 14:06	74-87-3	B
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/27/15 14:06	124-48-1	
1,1-Dichloroethane	**2.5**	ug/L	1.0	0.050	1		04/27/15 14:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/27/15 14:06	107-06-2	
1,1-Dichloroethene	**7.3**	ug/L	1.0	0.20	1		04/27/15 14:06	75-35-4	
cis-1,2-Dichloroethene	**58.6**	ug/L	1.0	0.080	1		04/27/15 14:06	156-59-2	
trans-1,2-Dichloroethene	**0.66J**	ug/L	1.0	0.20	1		04/27/15 14:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/27/15 14:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/27/15 14:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/27/15 14:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/27/15 14:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/27/15 14:06	591-78-6	
Methylene chloride	**0.20J**	ug/L	1.0	0.15	1		04/27/15 14:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/27/15 14:06	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/27/15 14:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/27/15 14:06	79-34-5	
Tetrachloroethene	**4.1**	ug/L	1.0	0.10	1		04/27/15 14:06	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/27/15 14:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/27/15 14:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/27/15 14:06	79-00-5	
Trichloroethene	**758**	ug/L	10.0	5.0	10		04/22/15 08:09	79-01-6	
Vinyl chloride	**0.33J**	ug/L	1.0	0.13	1		04/27/15 14:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/27/15 14:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/27/15 14:06	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/27/15 14:06	17060-07-0	
Toluene-d8 (S)	99	%	80-120		1		04/27/15 14:06	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/27/15 14:06		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

QC Batch: MSV/68979 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192139003, 60192139004, 60192139005, 60192139006, 60192139013, 60192139014, 60192139015, 60192139016, 60192139017

METHOD BLANK: 1553779 Matrix: Water
Associated Lab Samples: 60192139003, 60192139004, 60192139005, 60192139006, 60192139013, 60192139014, 60192139015, 60192139016, 60192139017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,1-Dichloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,1-Dichloroethene	ug/L	ND	1.0	04/22/15 03:26	
1,2-Dichloroethane	ug/L	ND	1.0	04/22/15 03:26	
1,2-Dichloropropane	ug/L	ND	1.0	04/22/15 03:26	
2-Butanone (MEK)	ug/L	ND	10.0	04/22/15 03:26	
2-Hexanone	ug/L	ND	10.0	04/22/15 03:26	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/22/15 03:26	
Acetone	ug/L	ND	10.0	04/22/15 03:26	
Benzene	ug/L	ND	1.0	04/22/15 03:26	
Bromodichloromethane	ug/L	ND	1.0	04/22/15 03:26	
Bromoform	ug/L	ND	1.0	04/22/15 03:26	
Bromomethane	ug/L	ND	5.0	04/22/15 03:26	
Carbon disulfide	ug/L	ND	5.0	04/22/15 03:26	
Carbon tetrachloride	ug/L	ND	1.0	04/22/15 03:26	
Chlorobenzene	ug/L	ND	1.0	04/22/15 03:26	
Chloroethane	ug/L	ND	1.0	04/22/15 03:26	
Chloroform	ug/L	ND	1.0	04/22/15 03:26	
Chloromethane	ug/L	0.15J	1.0	04/22/15 03:26	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 03:26	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 03:26	
Dibromochloromethane	ug/L	ND	1.0	04/22/15 03:26	
Ethylbenzene	ug/L	ND	1.0	04/22/15 03:26	
Methylene chloride	ug/L	ND	1.0	04/22/15 03:26	
Styrene	ug/L	ND	1.0	04/22/15 03:26	
Tetrachloroethene	ug/L	ND	1.0	04/22/15 03:26	
Toluene	ug/L	ND	1.0	04/22/15 03:26	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 03:26	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 03:26	
Trichloroethene	ug/L	ND	1.0	04/22/15 03:26	
Vinyl chloride	ug/L	ND	1.0	04/22/15 03:26	
Xylene (Total)	ug/L	ND	3.0	04/22/15 03:26	
1,2-Dichloroethane-d4 (S)	%	99	80-120	04/22/15 03:26	
4-Bromofluorobenzene (S)	%	96	80-120	04/22/15 03:26	
Toluene-d8 (S)	%	90	80-120	04/22/15 03:26	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

LABORATORY CONTROL SAMPLE: 1553780

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	23.3	116	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	15.9	79	73-121	
1,1,2-Trichloroethane	ug/L	20	19.0	95	80-120	
1,1-Dichloroethane	ug/L	20	22.3	112	80-120	
1,1-Dichloroethene	ug/L	20	23.1	116	80-120	
1,2-Dichloroethane	ug/L	20	22.9	115	81-120	
1,2-Dichloropropane	ug/L	20	22.2	111	80-120	
2-Butanone (MEK)	ug/L	100	109	109	67-122	
2-Hexanone	ug/L	100	94.1	94	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	114	114	76-120	
Acetone	ug/L	100	109	109	72-120	
Benzene	ug/L	20	23.0	115	80-120	
Bromodichloromethane	ug/L	20	23.5	117	80-120	
Bromoform	ug/L	20	20.4	102	73-138	
Bromomethane	ug/L	20	18.2	91	38-137	
Carbon disulfide	ug/L	20	20.1	101	71-129	
Carbon tetrachloride	ug/L	20	23.9	120	67-146	
Chlorobenzene	ug/L	20	20.1	101	80-120	
Chloroethane	ug/L	20	20.4	102	76-120	
Chloroform	ug/L	20	21.9	110	80-120	
Chloromethane	ug/L	20	19.6	98	34-165	
cis-1,2-Dichloroethene	ug/L	20	22.4	112	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.7	108	80-120	
Dibromochloromethane	ug/L	20	19.4	97	80-126	
Ethylbenzene	ug/L	20	18.6	93	80-120	
Methylene chloride	ug/L	20	23.3	117	80-120	
Styrene	ug/L	20	19.1	95	80-123	
Tetrachloroethene	ug/L	20	19.2	96	80-123	
Toluene	ug/L	20	19.3	96	80-120	
trans-1,2-Dichloroethene	ug/L	20	21.6	108	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.0	90	80-129	
Trichloroethene	ug/L	20	23.5	118	80-120	
Vinyl chloride	ug/L	20	25.3	126	62-125	L0
Xylene (Total)	ug/L	60	57.7	96	80-120	
1,2-Dichloroethane-d4 (S)	%			105	80-120	
4-Bromofluorobenzene (S)	%			92	80-120	
Toluene-d8 (S)	%			91	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

QC Batch: MSV/69103 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192139004, 60192139005, 60192139013, 60192139016, 60192139017

METHOD BLANK: 1557447 Matrix: Water
Associated Lab Samples: 60192139004, 60192139005, 60192139013, 60192139016, 60192139017

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1-Dichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,1-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
1,2-Dichloroethane	ug/L	ND	1.0	04/27/15 10:45	
1,2-Dichloropropane	ug/L	ND	1.0	04/27/15 10:45	
2-Butanone (MEK)	ug/L	ND	10.0	04/27/15 10:45	
2-Hexanone	ug/L	ND	10.0	04/27/15 10:45	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/27/15 10:45	
Acetone	ug/L	ND	10.0	04/27/15 10:45	
Benzene	ug/L	ND	1.0	04/27/15 10:45	
Bromodichloromethane	ug/L	ND	1.0	04/27/15 10:45	
Bromoform	ug/L	ND	1.0	04/27/15 10:45	
Bromomethane	ug/L	0.52J	5.0	04/27/15 10:45	
Carbon disulfide	ug/L	ND	5.0	04/27/15 10:45	
Carbon tetrachloride	ug/L	ND	1.0	04/27/15 10:45	
Chlorobenzene	ug/L	ND	1.0	04/27/15 10:45	
Chloroethane	ug/L	ND	1.0	04/27/15 10:45	
Chloroform	ug/L	ND	1.0	04/27/15 10:45	
Chloromethane	ug/L	0.14J	1.0	04/27/15 10:45	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/27/15 10:45	
Dibromochloromethane	ug/L	ND	1.0	04/27/15 10:45	
Ethylbenzene	ug/L	ND	1.0	04/27/15 10:45	
Methylene chloride	ug/L	ND	1.0	04/27/15 10:45	
Styrene	ug/L	ND	1.0	04/27/15 10:45	
Tetrachloroethene	ug/L	ND	1.0	04/27/15 10:45	
Toluene	ug/L	ND	1.0	04/27/15 10:45	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/27/15 10:45	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/27/15 10:45	
Vinyl chloride	ug/L	ND	1.0	04/27/15 10:45	
Xylene (Total)	ug/L	ND	3.0	04/27/15 10:45	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/27/15 10:45	
4-Bromofluorobenzene (S)	%	100	80-120	04/27/15 10:45	
Toluene-d8 (S)	%	103	80-120	04/27/15 10:45	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

LABORATORY CONTROL SAMPLE: 1557448

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	22.7	113	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	21.8	109	73-121	
1,1,2-Trichloroethane	ug/L	20	22.3	111	80-120	
1,1-Dichloroethane	ug/L	20	23.1	116	80-120	
1,1-Dichloroethene	ug/L	20	21.3	107	80-120	
1,2-Dichloroethane	ug/L	20	21.5	107	81-120	
1,2-Dichloropropane	ug/L	20	21.6	108	80-120	
2-Butanone (MEK)	ug/L	100	99.4	99	67-122	
2-Hexanone	ug/L	100	104	104	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	76-120	
Acetone	ug/L	100	105	105	72-120	
Benzene	ug/L	20	22.2	111	80-120	
Bromodichloromethane	ug/L	20	21.9	109	80-120	
Bromoform	ug/L	20	21.1	105	73-138	
Bromomethane	ug/L	20	24.5	122	38-137	
Carbon disulfide	ug/L	20	21.9	109	71-129	
Carbon tetrachloride	ug/L	20	22.4	112	67-146	
Chlorobenzene	ug/L	20	22.7	113	80-120	
Chloroethane	ug/L	20	22.0	110	76-120	
Chloroform	ug/L	20	22.3	111	80-120	
Chloromethane	ug/L	20	19.2	96	34-165	
cis-1,2-Dichloroethene	ug/L	20	22.5	113	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.6	108	80-120	
Dibromochloromethane	ug/L	20	21.9	110	80-126	
Ethylbenzene	ug/L	20	22.4	112	80-120	
Methylene chloride	ug/L	20	21.3	106	80-120	
Styrene	ug/L	20	22.4	112	80-123	
Tetrachloroethene	ug/L	20	23.7	119	80-123	
Toluene	ug/L	20	22.0	110	80-120	
trans-1,2-Dichloroethene	ug/L	20	22.1	111	80-120	
trans-1,3-Dichloropropene	ug/L	20	22.3	111	80-129	
Vinyl chloride	ug/L	20	24.6	123	62-125	
Xylene (Total)	ug/L	60	68.3	114	80-120	
1,2-Dichloroethane-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			99	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

QC Batch: MSV/68932 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60192139007, 60192139008, 60192139010, 60192139011, 60192139012

METHOD BLANK: 1552695 Matrix: Water
Associated Lab Samples: 60192139007, 60192139008, 60192139010, 60192139011, 60192139012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1-Dichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,1-Dichloroethene	ug/L	ND	1.0	04/19/15 14:26	
1,2-Dichloroethane	ug/L	ND	1.0	04/19/15 14:26	
1,2-Dichloropropane	ug/L	ND	1.0	04/19/15 14:26	
2-Butanone (MEK)	ug/L	ND	10.0	04/19/15 14:26	
2-Hexanone	ug/L	ND	10.0	04/19/15 14:26	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/19/15 14:26	
Acetone	ug/L	ND	10.0	04/19/15 14:26	
Benzene	ug/L	ND	1.0	04/19/15 14:26	
Bromodichloromethane	ug/L	ND	1.0	04/19/15 14:26	
Bromoform	ug/L	ND	1.0	04/19/15 14:26	
Bromomethane	ug/L	ND	5.0	04/19/15 14:26	
Carbon disulfide	ug/L	ND	5.0	04/19/15 14:26	
Carbon tetrachloride	ug/L	ND	1.0	04/19/15 14:26	
Chlorobenzene	ug/L	ND	1.0	04/19/15 14:26	
Chloroethane	ug/L	ND	1.0	04/19/15 14:26	
Chloroform	ug/L	ND	1.0	04/19/15 14:26	
Chloromethane	ug/L	0.16J	1.0	04/19/15 14:26	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/19/15 14:26	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/19/15 14:26	
Dibromochloromethane	ug/L	ND	1.0	04/19/15 14:26	
Ethylbenzene	ug/L	ND	1.0	04/19/15 14:26	
Methylene chloride	ug/L	ND	1.0	04/19/15 14:26	
Styrene	ug/L	ND	1.0	04/19/15 14:26	
Tetrachloroethene	ug/L	ND	1.0	04/19/15 14:26	
Toluene	ug/L	ND	1.0	04/19/15 14:26	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/19/15 14:26	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/19/15 14:26	
Trichloroethene	ug/L	ND	1.0	04/19/15 14:26	
Vinyl chloride	ug/L	ND	1.0	04/19/15 14:26	
Xylene (Total)	ug/L	ND	3.0	04/19/15 14:26	
1,2-Dichloroethane-d4 (S)	%	98	80-120	04/19/15 14:26	
4-Bromofluorobenzene (S)	%	101	80-120	04/19/15 14:26	
Toluene-d8 (S)	%	97	80-120	04/19/15 14:26	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

LABORATORY CONTROL SAMPLE: 1552696

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.5	103	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	17.6	88	73-121	
1,1,2-Trichloroethane	ug/L	20	20.0	100	80-120	
1,1-Dichloroethane	ug/L	20	21.0	105	80-120	
1,1-Dichloroethene	ug/L	20	20.7	104	80-120	
1,2-Dichloroethane	ug/L	20	21.1	106	81-120	
1,2-Dichloropropane	ug/L	20	20.2	101	80-120	
2-Butanone (MEK)	ug/L	100	98.7	99	67-122	
2-Hexanone	ug/L	100	96.2	96	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	76-120	
Acetone	ug/L	100	99.8	100	72-120	
Benzene	ug/L	20	20.9	104	80-120	
Bromodichloromethane	ug/L	20	20.6	103	80-120	
Bromoform	ug/L	20	19.5	97	73-138	
Bromomethane	ug/L	20	17.8	89	38-137	
Carbon disulfide	ug/L	20	19.1	95	71-129	
Carbon tetrachloride	ug/L	20	21.1	106	67-146	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	20.2	101	76-120	
Chloroform	ug/L	20	20.3	101	80-120	
Chloromethane	ug/L	20	21.1	106	34-165	
cis-1,2-Dichloroethene	ug/L	20	21.0	105	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.0	100	80-120	
Dibromochloromethane	ug/L	20	19.4	97	80-126	
Ethylbenzene	ug/L	20	19.5	97	80-120	
Methylene chloride	ug/L	20	20.7	103	80-120	
Styrene	ug/L	20	19.9	99	80-123	
Tetrachloroethene	ug/L	20	19.4	97	80-123	
Toluene	ug/L	20	19.7	98	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.9	99	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.9	94	80-129	
Trichloroethene	ug/L	20	21.1	105	80-120	
Vinyl chloride	ug/L	20	22.3	112	62-125	
Xylene (Total)	ug/L	60	60.0	100	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			97	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

QC Batch: MSV/68946
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60192139002

METHOD BLANK: 1552948
Matrix: Water
Associated Lab Samples: 60192139002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/20/15 08:59	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/20/15 08:59	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/20/15 08:59	
1,1-Dichloroethane	ug/L	ND	1.0	04/20/15 08:59	
1,1-Dichloroethene	ug/L	ND	1.0	04/20/15 08:59	
1,2-Dichloroethane	ug/L	ND	1.0	04/20/15 08:59	
1,2-Dichloropropane	ug/L	ND	1.0	04/20/15 08:59	
2-Butanone (MEK)	ug/L	ND	10.0	04/20/15 08:59	
2-Hexanone	ug/L	ND	10.0	04/20/15 08:59	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/20/15 08:59	
Acetone	ug/L	ND	10.0	04/20/15 08:59	
Benzene	ug/L	ND	1.0	04/20/15 08:59	
Bromodichloromethane	ug/L	ND	1.0	04/20/15 08:59	
Bromoform	ug/L	ND	1.0	04/20/15 08:59	
Bromomethane	ug/L	ND	5.0	04/20/15 08:59	
Carbon disulfide	ug/L	ND	5.0	04/20/15 08:59	
Carbon tetrachloride	ug/L	ND	1.0	04/20/15 08:59	
Chlorobenzene	ug/L	ND	1.0	04/20/15 08:59	
Chloroethane	ug/L	ND	1.0	04/20/15 08:59	
Chloroform	ug/L	ND	1.0	04/20/15 08:59	
Chloromethane	ug/L	0.12J	1.0	04/20/15 08:59	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/20/15 08:59	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/20/15 08:59	
Dibromochloromethane	ug/L	ND	1.0	04/20/15 08:59	
Ethylbenzene	ug/L	ND	1.0	04/20/15 08:59	
Methylene chloride	ug/L	ND	1.0	04/20/15 08:59	
Styrene	ug/L	ND	1.0	04/20/15 08:59	
Tetrachloroethene	ug/L	ND	1.0	04/20/15 08:59	
Toluene	ug/L	ND	1.0	04/20/15 08:59	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/20/15 08:59	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/20/15 08:59	
Trichloroethene	ug/L	ND	1.0	04/20/15 08:59	
Vinyl chloride	ug/L	ND	1.0	04/20/15 08:59	
Xylene (Total)	ug/L	ND	3.0	04/20/15 08:59	
1,2-Dichloroethane-d4 (S)	%	104	80-120	04/20/15 08:59	
4-Bromofluorobenzene (S)	%	98	80-120	04/20/15 08:59	
Toluene-d8 (S)	%	94	80-120	04/20/15 08:59	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

LABORATORY CONTROL SAMPLE: 1552949

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.5	103	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	18.8	94	73-121	
1,1,2-Trichloroethane	ug/L	20	20.9	104	80-120	
1,1-Dichloroethane	ug/L	20	20.6	103	80-120	
1,1-Dichloroethene	ug/L	20	20.0	100	80-120	
1,2-Dichloroethane	ug/L	20	21.2	106	81-120	
1,2-Dichloropropane	ug/L	20	20.4	102	80-120	
2-Butanone (MEK)	ug/L	100	103	103	67-122	
2-Hexanone	ug/L	100	101	101	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	106	106	76-120	
Acetone	ug/L	100	111	111	72-120	
Benzene	ug/L	20	20.7	103	80-120	
Bromodichloromethane	ug/L	20	20.8	104	80-120	
Bromoform	ug/L	20	20.7	103	73-138	
Bromomethane	ug/L	20	22.1	110	38-137	
Carbon disulfide	ug/L	20	18.4	92	71-129	
Carbon tetrachloride	ug/L	20	20.2	101	67-146	
Chlorobenzene	ug/L	20	20.6	103	80-120	
Chloroethane	ug/L	20	18.9	94	76-120	
Chloroform	ug/L	20	20.0	100	80-120	
Chloromethane	ug/L	20	18.3	91	34-165	
cis-1,2-Dichloroethene	ug/L	20	21.3	106	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.8	104	80-120	
Dibromochloromethane	ug/L	20	20.2	101	80-126	
Ethylbenzene	ug/L	20	19.9	99	80-120	
Methylene chloride	ug/L	20	21.4	107	80-120	
Styrene	ug/L	20	20.5	102	80-123	
Tetrachloroethene	ug/L	20	19.6	98	80-123	
Toluene	ug/L	20	19.5	98	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.9	99	80-120	
trans-1,3-Dichloropropene	ug/L	20	19.8	99	80-129	
Trichloroethene	ug/L	20	19.5	97	80-120	
Vinyl chloride	ug/L	20	22.4	112	62-125	
Xylene (Total)	ug/L	60	60.2	100	80-120	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			96	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

QC Batch: MSV/68968
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60192139001

METHOD BLANK: 1553436
Matrix: Water
Associated Lab Samples: 60192139001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/21/15 09:22	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/21/15 09:22	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/21/15 09:22	
1,1-Dichloroethane	ug/L	ND	1.0	04/21/15 09:22	
1,1-Dichloroethene	ug/L	ND	1.0	04/21/15 09:22	
1,2-Dichloroethane	ug/L	ND	1.0	04/21/15 09:22	
1,2-Dichloropropane	ug/L	ND	1.0	04/21/15 09:22	
2-Butanone (MEK)	ug/L	ND	10.0	04/21/15 09:22	
2-Hexanone	ug/L	ND	10.0	04/21/15 09:22	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/21/15 09:22	
Acetone	ug/L	ND	10.0	04/21/15 09:22	
Benzene	ug/L	ND	1.0	04/21/15 09:22	
Bromodichloromethane	ug/L	ND	1.0	04/21/15 09:22	
Bromoform	ug/L	ND	1.0	04/21/15 09:22	
Bromomethane	ug/L	ND	5.0	04/21/15 09:22	
Carbon disulfide	ug/L	ND	5.0	04/21/15 09:22	
Carbon tetrachloride	ug/L	ND	1.0	04/21/15 09:22	
Chlorobenzene	ug/L	ND	1.0	04/21/15 09:22	
Chloroethane	ug/L	ND	1.0	04/21/15 09:22	
Chloroform	ug/L	ND	1.0	04/21/15 09:22	
Chloromethane	ug/L	ND	1.0	04/21/15 09:22	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/21/15 09:22	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/21/15 09:22	
Dibromochloromethane	ug/L	ND	1.0	04/21/15 09:22	
Ethylbenzene	ug/L	ND	1.0	04/21/15 09:22	
Methylene chloride	ug/L	ND	1.0	04/21/15 09:22	
Styrene	ug/L	ND	1.0	04/21/15 09:22	
Tetrachloroethene	ug/L	ND	1.0	04/21/15 09:22	
Toluene	ug/L	ND	1.0	04/21/15 09:22	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/21/15 09:22	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/21/15 09:22	
Trichloroethene	ug/L	ND	1.0	04/21/15 09:22	
Vinyl chloride	ug/L	ND	1.0	04/21/15 09:22	
Xylene (Total)	ug/L	ND	3.0	04/21/15 09:22	
1,2-Dichloroethane-d4 (S)	%	105	80-120	04/21/15 09:22	
4-Bromofluorobenzene (S)	%	99	80-120	04/21/15 09:22	
Toluene-d8 (S)	%	92	80-120	04/21/15 09:22	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

LABORATORY CONTROL SAMPLE: 1553437

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	22.9	115	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	19.5	98	73-121	
1,1,2-Trichloroethane	ug/L	20	20.8	104	80-120	
1,1-Dichloroethane	ug/L	20	22.5	112	80-120	
1,1-Dichloroethene	ug/L	20	21.2	106	80-120	
1,2-Dichloroethane	ug/L	20	23.6	118	81-120	
1,2-Dichloropropane	ug/L	20	22.8	114	80-120	
2-Butanone (MEK)	ug/L	100	114	114	67-122	
2-Hexanone	ug/L	100	103	103	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	114	114	76-120	
Acetone	ug/L	100	114	114	72-120	
Benzene	ug/L	20	22.2	111	80-120	
Bromodichloromethane	ug/L	20	23.6	118	80-120	
Bromoform	ug/L	20	20.8	104	73-138	
Bromomethane	ug/L	20	20.0	100	38-137	
Carbon disulfide	ug/L	20	20.5	103	71-129	
Carbon tetrachloride	ug/L	20	23.1	116	67-146	
Chlorobenzene	ug/L	20	21.0	105	80-120	
Chloroethane	ug/L	20	21.4	107	76-120	
Chloroform	ug/L	20	21.2	106	80-120	
Chloromethane	ug/L	20	18.1	91	34-165	
cis-1,2-Dichloroethene	ug/L	20	22.9	115	80-120	
cis-1,3-Dichloropropene	ug/L	20	22.3	112	80-120	
Dibromochloromethane	ug/L	20	21.0	105	80-126	
Ethylbenzene	ug/L	20	19.4	97	80-120	
Methylene chloride	ug/L	20	22.8	114	80-120	
Styrene	ug/L	20	20.0	100	80-123	
Tetrachloroethene	ug/L	20	19.8	99	80-123	
Toluene	ug/L	20	19.7	98	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.5	102	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.5	103	80-129	
Trichloroethene	ug/L	20	21.8	109	80-120	
Vinyl chloride	ug/L	20	24.4	122	62-125	
Xylene (Total)	ug/L	60	60.5	101	80-120	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			91	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

QC Batch: MSV/69011 Analysis Method: EPA 5030B/8260
QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 MSV Water 7 day
Associated Lab Samples: 60192139009, 60192139010, 60192139011, 60192139012

METHOD BLANK: 1554703 Matrix: Water
Associated Lab Samples: 60192139009, 60192139010, 60192139011, 60192139012

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/22/15 18:38	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/22/15 18:38	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/22/15 18:38	
1,1-Dichloroethane	ug/L	ND	1.0	04/22/15 18:38	
1,1-Dichloroethene	ug/L	ND	1.0	04/22/15 18:38	
1,2-Dichloroethane	ug/L	ND	1.0	04/22/15 18:38	
1,2-Dichloropropane	ug/L	ND	1.0	04/22/15 18:38	
2-Butanone (MEK)	ug/L	ND	10.0	04/22/15 18:38	
2-Hexanone	ug/L	ND	10.0	04/22/15 18:38	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/22/15 18:38	
Acetone	ug/L	ND	10.0	04/22/15 18:38	
Benzene	ug/L	ND	1.0	04/22/15 18:38	
Bromodichloromethane	ug/L	ND	1.0	04/22/15 18:38	
Bromoform	ug/L	ND	1.0	04/22/15 18:38	
Bromomethane	ug/L	3.4J	5.0	04/22/15 18:38	
Carbon disulfide	ug/L	ND	5.0	04/22/15 18:38	
Carbon tetrachloride	ug/L	ND	1.0	04/22/15 18:38	
Chlorobenzene	ug/L	ND	1.0	04/22/15 18:38	
Chloroethane	ug/L	ND	1.0	04/22/15 18:38	
Chloroform	ug/L	ND	1.0	04/22/15 18:38	
Chloromethane	ug/L	ND	1.0	04/22/15 18:38	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 18:38	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 18:38	
Dibromochloromethane	ug/L	ND	1.0	04/22/15 18:38	
Ethylbenzene	ug/L	ND	1.0	04/22/15 18:38	
Methylene chloride	ug/L	0.22J	1.0	04/22/15 18:38	
Styrene	ug/L	ND	1.0	04/22/15 18:38	
Tetrachloroethene	ug/L	ND	1.0	04/22/15 18:38	
Toluene	ug/L	ND	1.0	04/22/15 18:38	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/22/15 18:38	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/22/15 18:38	
Trichloroethene	ug/L	ND	1.0	04/22/15 18:38	
Vinyl chloride	ug/L	ND	1.0	04/22/15 18:38	
Xylene (Total)	ug/L	ND	3.0	04/22/15 18:38	
1,2-Dichloroethane-d4 (S)	%	100	80-120	04/22/15 18:38	
4-Bromofluorobenzene (S)	%	100	80-120	04/22/15 18:38	
Toluene-d8 (S)	%	100	80-120	04/22/15 18:38	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

LABORATORY CONTROL SAMPLE: 1554704

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.0	100	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.2	101	73-121	
1,1,2-Trichloroethane	ug/L	20	19.9	99	80-120	
1,1-Dichloroethane	ug/L	20	19.5	98	80-120	
1,1-Dichloroethene	ug/L	20	18.4	92	80-120	
1,2-Dichloroethane	ug/L	20	20.0	100	81-120	
1,2-Dichloropropane	ug/L	20	19.6	98	80-120	
2-Butanone (MEK)	ug/L	100	103	103	67-122	
2-Hexanone	ug/L	100	106	106	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	100	100	76-120	
Acetone	ug/L	100	103	103	72-120	
Benzene	ug/L	20	19.2	96	80-120	
Bromodichloromethane	ug/L	20	21.3	106	80-120	
Bromoform	ug/L	20	19.2	96	73-138	
Bromomethane	ug/L	20	20.2	101	38-137	
Carbon disulfide	ug/L	20	17.0	85	71-129	
Carbon tetrachloride	ug/L	20	18.2	91	67-146	
Chlorobenzene	ug/L	20	19.7	99	80-120	
Chloroethane	ug/L	20	18.9	95	76-120	
Chloroform	ug/L	20	19.3	97	80-120	
Chloromethane	ug/L	20	17.6	88	34-165	
cis-1,2-Dichloroethene	ug/L	20	19.4	97	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.7	104	80-120	
Dibromochloromethane	ug/L	20	19.0	95	80-126	
Ethylbenzene	ug/L	20	19.2	96	80-120	
Methylene chloride	ug/L	20	20.1	101	80-120	
Styrene	ug/L	20	21.0	105	80-123	
Tetrachloroethene	ug/L	20	19.3	97	80-123	
Toluene	ug/L	20	19.7	99	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.3	96	80-120	
trans-1,3-Dichloropropene	ug/L	20	21.1	106	80-129	
Trichloroethene	ug/L	20	19.5	97	80-120	
Vinyl chloride	ug/L	20	19.9	100	62-125	
Xylene (Total)	ug/L	60	59.4	99	80-120	
1,2-Dichloroethane-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			100	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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/68932
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/68946
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/68968
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/68979
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/69011
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

Batch: MSV/69103
[M5] A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60192139003	**MW-179-201504**	EPA 5030B/8260	MSV/68979		
60192139004	**MW-95-201504**	EPA 5030B/8260	MSV/68979		
60192139004	**MW-95-201504**	EPA 5030B/8260	MSV/69103		
60192139005	**MW-94-201504**	EPA 5030B/8260	MSV/68979		
60192139005	**MW-94-201504**	EPA 5030B/8260	MSV/69103		
60192139006	**MW-180-201504**	EPA 5030B/8260	MSV/68979		
60192139013	**MW-93-201504**	EPA 5030B/8260	MSV/68979		
60192139013	**MW-93-201504**	EPA 5030B/8260	MSV/69103		
60192139014	**MW-88-201504**	EPA 5030B/8260	MSV/68979		
60192139015	**MW-89-201504**	EPA 5030B/8260	MSV/68979		
60192139016	**MW-91-201504**	EPA 5030B/8260	MSV/68979		
60192139016	**MW-91-201504**	EPA 5030B/8260	MSV/69103		
60192139017	**MW-87-201504**	EPA 5030B/8260	MSV/68979		
60192139017	**MW-87-201504**	EPA 5030B/8260	MSV/69103		
60192139001	**MW-83-201504**	EPA 5030B/8260	MSV/68968		
60192139002	**MW-84-201504**	EPA 5030B/8260	MSV/68946		
60192139007	**MW-24-201504**	EPA 5030B/8260	MSV/68932		
60192139008	**MW-178-201504**	EPA 5030B/8260	MSV/68932		
60192139009	**MW-85-201504**	EPA 5030B/8260	MSV/69011		
60192139010	**MW-86-201504**	EPA 5030B/8260	MSV/68932		
60192139010	**MW-86-201504**	EPA 5030B/8260	MSV/69011		
60192139011	**MW-92-201504**	EPA 5030B/8260	MSV/68932		
60192139011	**MW-92-201504**	EPA 5030B/8260	MSV/69011		
60192139012	**MW-172-201504**	EPA 5030B/8260	MSV/68932		
60192139012	**MW-172-201504**	EPA 5030B/8260	MSV/69011		

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Sample Condition Upon Receipt

WO# : 60192139

60192139

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☑

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: CF -0.1 T-239 / CF -1.8 T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 5.7 / 5.5

Temperature should be above freezing to 6°C

Date and initials of person examining contents:

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	sample label say mw-87 but COC
Pace containers used:	☑Yes ☐No ☐N/A	9. read mw-85 collection date+time match
Containers intact:	☑Yes ☐No ☐N/A	10. (4/14/15 1225)
Unpreserved 5035A soils frozen w/in 48hrs?	☐Yes ☐No ☑N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	12.
Sample labels match COC: Includes date/time/ID/analyses Matrix: WL	☑Yes ☐No ☐N/A	13.
All containers needing preservation have been checked.	☐Yes ☑No ☐N/A	14.
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☑No ☐N/A	
Exceptions: (VOA), Coliform, O&G, WI-DRO (water)	☑Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present: Pace Trip Blank lot # (if purchased): _____	☐Yes ☑No ☐N/A	15.
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☑N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MJ Walls Date: 4/17/15

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CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Section A Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	

Section B Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other Ascorbic acid	Analysis Test Y/N	8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 6019239
1	MW-83-201504 3(other)	WT	G			4/16/15	1350		3				X				X		X										7 day hold	001
2	MW-84-201504	WT	G			4/16/15	0845		3				X				X		X										7 day hold	002
3	MW-179-201504 3(DG9H)	WT	G			4/16/15	1430		3				X						X											003
4	MW-95-201504	WT	G			4/16/15	1501		3				X						X											004
5	MW-94-201504	WT	G			4/16/15	1310		3				X						X											005
6	MW-180-201504	WT	G			4/16/15	1445		3				X						X											006
7	MW-24-201504 3(other)	WT	G			4/16/15	1130		3				X						X										7 day hold	007
8	MW-178-201504	WT	G			4/16/15	1415		3				X						X										7 day hold	008
9	MW-85-201504	WT	G			4/16/15	1455		3				X						X										7 day hold	009
10	MW-86-201504	WT	G			4/16/15	1340		3				X						X										7 day hold	010
11	MW-92-201504	WT	G			4/16/15	1205		3				X						X										7 day hold	011
12	MW-172-201504	WT	G			4/16/15	0952		3				X						X										7 day hold	012

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
Level IV data package required	Victoria Siegler	4/16/15	1800	Sam B. Pace	4/17/15	1021	5.7	Y	N	Y
	Environ						5.5	Y	N	Y
	Wendy Stonestreet	4/17/15	1020							

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Siegler

SIGNATURE of SAMPLER: Victoria Siegler DATE Signed (MM/DD/YY): 4/16/15

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

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Page: 2 of 2

Section A — Required Client Information:

Company:	Environ
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone:	913-553-5926 — Fax:
Requested Due Date/TAT:	

Section B — Required Project Information:

Report To:	Wendy Stonestreet
Copy To:	Tammy Gleason
Purchase Order No.:	NA
Project Name:	Fort Smith, AR
Project Number:	

Section C — Invoice Information:

Attention:	Tammy Gleason
Company Name:	Environ
Address:	250 Monroe Ave. NW Grand Rapids
Pace Quote Reference:	Michigan, 49503
Pace Project Manager:	MJ Walls
Pace Profile #:	7444, line 1

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☑ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

Requested Analysis Filtered (Y/N)

Pace Project No./ Lab I.D.: 60192139

ITEM #	SAMPLE ID	MATRIX CODE	SAMPLE TYPE (G=GRAB C=COMP)	Composite Start DATE	Composite Start TIME	Composite End/Grab DATE	Composite End/Grab TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	8260 VOCs	Alkalinity	TOC	Chloride, Sulfate	8015 Chloroethanol (Pace Dallas)	6010-Iron/Mn	Ferric Iron calc. (send field Ferrous)	Ammonia	Nitrate+Nitrite	Total Phosphate (Pace Dallas)	Sulfide	CO2 Calc (Alkalinity +pH)	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-93-~~201505~~ 201504	WT	G			4/16/15	1405		3				X					X													3(Da 9#) 013
2	MW-88-~~201505~~ 201504	WT	G			4/16/15	0900		3				X					X													↓ 014
3	MW-89-~~201505~~ 201504	WT	G			4/16/15	1005		3				X					X													↓ 015
4	MW-91-201504	WT	G			4/16/15	1115		3				X					X													↓ 016
5	MW-85-201504	WT	G			4/16/15	1225		3				X					X													↓ 017
6																															
7																															
8																															
9																															
10																															
11																															
12																															

VS

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
Level IV data package required	Victoria Siegler / Environ	4/16/15	1800	[signature] Pace	4/17/15	1021	5.7
							5.5
	Wendy Stonestreet	4/17/15	1020				

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Victoria Siegler

SIGNATURE of SAMPLER: Victoria Siegler — DATE Signed (MM/DD/YY): 4/16/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-Feb-2007

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

April 29, 2015

Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: WP Vapor Sampling
Pace Project No.: 60192706

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 24, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Colleen Clyne
colleen.clyne@pacelabs.com
Project Manager

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: WP Vapor Sampling
Pace Project No.: 60192706

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: WP Vapor Sampling
Pace Project No.: 60192706

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60192706001	**VP-08-20150422**	Water	04/22/15 15:02	04/24/15 10:40

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SAMPLE ANALYTE COUNT

Project: WP Vapor Sampling
Pace Project No.: 60192706

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60192706001	**VP-08-20150422**	EPA 5030B/8260	PGH	38

Pace Analytical Services, Inc.
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Lenexa, KS 66219
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PROJECT NARRATIVE

Project: WP Vapor Sampling
Pace Project No.: 60192706

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 29, 2015

General Information:
1 sample was analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: MSV/69145

B: Analyte was detected in the associated method blank.
- BLANK for HBN 382983 [MSV/6914 (Lab ID: 1558029)
  - Methylene chloride

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/69145

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- LCS (Lab ID: 1558030)
  - Chloroethane

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/69145

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, Inc.
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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: WP Vapor Sampling
Pace Project No.: 60192706

Sample: VP-08-20150422 **Lab ID: 60192706001** Collected: 04/22/15 15:02 Received: 04/24/15 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**140**	ug/L	10.0	1.9	1		04/28/15 16:57	67-64-1	
Benzene	**0.33J**	ug/L	1.0	0.060	1		04/28/15 16:57	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/28/15 16:57	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/28/15 16:57	75-25-2	
Bromomethane	ND	ug/L	5.0	0.16	1		04/28/15 16:57	74-83-9	
2-Butanone (MEK)	**26.4**	ug/L	10.0	0.59	1		04/28/15 16:57	78-93-3	
Carbon disulfide	**0.12J**	ug/L	5.0	0.12	1		04/28/15 16:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/28/15 16:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/28/15 16:57	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/28/15 16:57	75-00-3	L3
Chloroform	**0.62J**	ug/L	1.0	0.14	1		04/28/15 16:57	67-66-3	
Chloromethane	**0.88J**	ug/L	1.0	0.080	1		04/28/15 16:57	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/28/15 16:57	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.050	1		04/28/15 16:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/15 16:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.20	1		04/28/15 16:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.080	1		04/28/15 16:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.20	1		04/28/15 16:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/15 16:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/15 16:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/28/15 16:57	10061-02-6	
Ethylbenzene	**0.27J**	ug/L	1.0	0.18	1		04/28/15 16:57	100-41-4	
2-Hexanone	**6.5J**	ug/L	10.0	1.2	1		04/28/15 16:57	591-78-6	
Methylene chloride	**0.59J**	ug/L	1.0	0.15	1		04/28/15 16:57	75-09-2	B
4-Methyl-2-pentanone (MIBK)	**0.70J**	ug/L	10.0	0.42	1		04/28/15 16:57	108-10-1	
Styrene	**0.16J**	ug/L	1.0	0.12	1		04/28/15 16:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/15 16:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.10	1		04/28/15 16:57	127-18-4	
Toluene	**0.50J**	ug/L	1.0	0.17	1		04/28/15 16:57	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/15 16:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/28/15 16:57	79-00-5	
Trichloroethene	**1.2**	ug/L	1.0	0.17	1		04/28/15 16:57	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.13	1		04/28/15 16:57	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/28/15 16:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		1		04/28/15 16:57	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/28/15 16:57	17060-07-0	
Toluene-d8 (S)	100	%	80-120		1		04/28/15 16:57	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/28/15 16:57		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: WP Vapor Sampling
Pace Project No.: 60192706

QC Batch: MSV/69145
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192706001

METHOD BLANK: 1558029
Matrix: Water
Associated Lab Samples: 60192706001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,1-Dichloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,1-Dichloroethene	ug/L	ND	1.0	04/28/15 14:43	
1,2-Dichloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,2-Dichloropropane	ug/L	ND	1.0	04/28/15 14:43	
2-Butanone (MEK)	ug/L	ND	10.0	04/28/15 14:43	
2-Hexanone	ug/L	ND	10.0	04/28/15 14:43	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/28/15 14:43	
Acetone	ug/L	ND	10.0	04/28/15 14:43	
Benzene	ug/L	ND	1.0	04/28/15 14:43	
Bromodichloromethane	ug/L	ND	1.0	04/28/15 14:43	
Bromoform	ug/L	ND	1.0	04/28/15 14:43	
Bromomethane	ug/L	ND	5.0	04/28/15 14:43	
Carbon disulfide	ug/L	ND	5.0	04/28/15 14:43	
Carbon tetrachloride	ug/L	ND	1.0	04/28/15 14:43	
Chlorobenzene	ug/L	ND	1.0	04/28/15 14:43	
Chloroethane	ug/L	ND	1.0	04/28/15 14:43	
Chloroform	ug/L	ND	1.0	04/28/15 14:43	
Chloromethane	ug/L	ND	1.0	04/28/15 14:43	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/28/15 14:43	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/28/15 14:43	
Dibromochloromethane	ug/L	ND	1.0	04/28/15 14:43	
Ethylbenzene	ug/L	ND	1.0	04/28/15 14:43	
Methylene chloride	ug/L	0.33J	1.0	04/28/15 14:43	
Styrene	ug/L	ND	1.0	04/28/15 14:43	
Tetrachloroethene	ug/L	ND	1.0	04/28/15 14:43	
Toluene	ug/L	ND	1.0	04/28/15 14:43	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/28/15 14:43	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/28/15 14:43	
Trichloroethene	ug/L	ND	1.0	04/28/15 14:43	
Vinyl chloride	ug/L	ND	1.0	04/28/15 14:43	
Xylene (Total)	ug/L	ND	3.0	04/28/15 14:43	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/28/15 14:43	
4-Bromofluorobenzene (S)	%	96	80-120	04/28/15 14:43	
Toluene-d8 (S)	%	100	80-120	04/28/15 14:43	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: WP Vapor Sampling
Pace Project No.: 60192706

LABORATORY CONTROL SAMPLE: 1558030

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.2	101	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.8	104	73-121	
1,1,2-Trichloroethane	ug/L	20	20.8	104	80-120	
1,1-Dichloroethane	ug/L	20	21.2	106	80-120	
1,1-Dichloroethene	ug/L	20	21.2	106	80-120	
1,2-Dichloroethane	ug/L	20	20.4	102	81-120	
1,2-Dichloropropane	ug/L	20	20.3	101	80-120	
2-Butanone (MEK)	ug/L	100	106	106	67-122	
2-Hexanone	ug/L	100	104	104	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	112	112	76-120	
Acetone	ug/L	100	98.1	98	72-120	
Benzene	ug/L	20	21.3	106	80-120	
Bromodichloromethane	ug/L	20	20.3	102	80-120	
Bromoform	ug/L	20	19.6	98	73-138	
Bromomethane	ug/L	20	22.3	112	38-137	
Carbon disulfide	ug/L	20	20.4	102	71-129	
Carbon tetrachloride	ug/L	20	19.4	97	67-146	
Chlorobenzene	ug/L	20	20.2	101	80-120	
Chloroethane	ug/L	20	24.1	121	76-120	L0
Chloroform	ug/L	20	20.5	102	80-120	
Chloromethane	ug/L	20	26.6	133	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.9	105	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.9	104	80-120	
Dibromochloromethane	ug/L	20	19.7	99	80-126	
Ethylbenzene	ug/L	20	19.8	99	80-120	
Methylene chloride	ug/L	20	21.1	106	80-120	
Styrene	ug/L	20	20.5	103	80-123	
Tetrachloroethene	ug/L	20	19.6	98	80-123	
Toluene	ug/L	20	20.6	103	80-120	
trans-1,2-Dichloroethene	ug/L	20	21.2	106	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.5	103	80-129	
Trichloroethene	ug/L	20	20.7	104	80-120	
Vinyl chloride	ug/L	20	23.2	116	62-125	
Xylene (Total)	ug/L	60	62.2	104	80-120	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			99	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: WP Vapor Sampling
Pace Project No.: 60192706

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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/69145

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WP Vapor Sampling
Pace Project No.: 60192706

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60192706001	**VP-08-20150422**	EPA 5030B/8260	MSV/69145		

Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60192706

60192706

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☒

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: CF -0.1 T-239 / CF -1.8 T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 4.5

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JB 4/24

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, O&G, WI-DRO (water)	☒Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes ☒No ☐N/A	
Pace Trip Blank lot # (if purchased): _____		15.
Headspace in VOA vials (>6mm):	☐Yes ☒No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☒N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Rev for (CPK) Date: 4/27/15

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Pace Analytical
www.pacelabs.com

Microseeps

Page: 1 of 1

003193

Section A Required Client Information:

Company:	ENVIRON
Address:	7500 College Blvd 925 Overland Park, KS 66210
Email To:	Wstonestreet@environcorp.com
Phone:	8167181491 Fax:
Requested Due Date/TAT:	Standard

Section B Required Project Information:

Report To:	Tammy Gleason
Copy To:	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	WP Vapor Sampling
Project Number:	

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zink Acetate & NaOH	Other	Y/N	Analysis Test: VOCs 8260	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	VP-08-20150422	WT	G	4/22/15	1502				3				X					Y	X	N	60192706 (3)DCHH 001
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Wendy Stonestreet	4/24/15	1040	[illegible]	4/24	1040	4.5	Y	N	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Wendy Stonestreet

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 4/22/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

April 29, 2015

Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: WP Vapor Sampling
Pace Project No.: 60192707

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 24, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Colleen Clyne
colleen.clyne@pacelabs.com
Project Manager

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: WP Vapor Sampling
Pace Project No.: 60192707

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: WP Vapor Sampling
Pace Project No.: 60192707

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60192707001	**VP-05-20150422**	Water	04/22/15 14:22	04/24/15 10:40
60192707002	**VP-06-20150422**	Water	04/22/15 14:01	04/24/15 10:40

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: WP Vapor Sampling
Pace Project No.: 60192707

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60192707001	**VP-05-20150422**	EPA 5030B/8260	PGH	38
60192707002	**VP-06-20150422**	EPA 5030B/8260	PGH	38

Pace Analytical Services, Inc.
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PROJECT NARRATIVE

Project: WP Vapor Sampling
Pace Project No.: 60192707

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 29, 2015

General Information:
2 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: MSV/69145

B: Analyte was detected in the associated method blank.
- BLANK for HBN 382983 [MSV/6914 (Lab ID: 1558029)
  - Methylene chloride

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/69145

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- LCS (Lab ID: 1558030)
  - Chloroethane

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/69145

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, Inc.
9608 Loiret Blvd.
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(913)599-5665

ANALYTICAL RESULTS

Project: WP Vapor Sampling
Pace Project No.: 60192707

Sample: VP-05-20150422 **Lab ID: 60192707001** Collected: 04/22/15 14:22 Received: 04/24/15 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**160**	ug/L	10.0	1.9	1		04/28/15 17:12	67-64-1	
Benzene	**0.44J**	ug/L	1.0	0.060	1		04/28/15 17:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/28/15 17:12	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/28/15 17:12	75-25-2	
Bromomethane	**2.4J**	ug/L	5.0	0.16	1		04/28/15 17:12	74-83-9	
2-Butanone (MEK)	**29.0**	ug/L	10.0	0.59	1		04/28/15 17:12	78-93-3	
Carbon disulfide	**0.19J**	ug/L	5.0	0.12	1		04/28/15 17:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/28/15 17:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/28/15 17:12	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/28/15 17:12	75-00-3	L3
Chloroform	**1.9**	ug/L	1.0	0.14	1		04/28/15 17:12	67-66-3	
Chloromethane	ND	ug/L	1.0	0.080	1		04/28/15 17:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/28/15 17:12	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.050	1		04/28/15 17:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/15 17:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.20	1		04/28/15 17:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.080	1		04/28/15 17:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.20	1		04/28/15 17:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/15 17:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/15 17:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/28/15 17:12	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/28/15 17:12	100-41-4	
2-Hexanone	**10.9**	ug/L	10.0	1.2	1		04/28/15 17:12	591-78-6	
Methylene chloride	**1.5**	ug/L	1.0	0.15	1		04/28/15 17:12	75-09-2	B
4-Methyl-2-pentanone (MIBK)	**2.5J**	ug/L	10.0	0.42	1		04/28/15 17:12	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/15 17:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/15 17:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.10	1		04/28/15 17:12	127-18-4	
Toluene	**0.23J**	ug/L	1.0	0.17	1		04/28/15 17:12	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/15 17:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/28/15 17:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.17	1		04/28/15 17:12	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.13	1		04/28/15 17:12	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/28/15 17:12	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		04/28/15 17:12	460-00-4	
1,2-Dichloroethane-d4 (S)	100	%	80-120		1		04/28/15 17:12	17060-07-0	
Toluene-d8 (S)	104	%	80-120		1		04/28/15 17:12	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/28/15 17:12		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: WP Vapor Sampling
Pace Project No.: 60192707

Sample: VP-06-20150422 **Lab ID: 60192707002** Collected: 04/22/15 14:01 Received: 04/24/15 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**24.5**	ug/L	10.0	1.9	1		04/28/15 17:27	67-64-1	
Benzene	**0.22J**	ug/L	1.0	0.060	1		04/28/15 17:27	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/28/15 17:27	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/28/15 17:27	75-25-2	
Bromomethane	**0.99J**	ug/L	5.0	0.16	1		04/28/15 17:27	74-83-9	
2-Butanone (MEK)	**4.6J**	ug/L	10.0	0.59	1		04/28/15 17:27	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/28/15 17:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/28/15 17:27	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/28/15 17:27	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/28/15 17:27	75-00-3	L3
Chloroform	ND	ug/L	1.0	0.14	1		04/28/15 17:27	67-66-3	
Chloromethane	**1.5**	ug/L	1.0	0.080	1		04/28/15 17:27	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/28/15 17:27	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.050	1		04/28/15 17:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/15 17:27	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.20	1		04/28/15 17:27	75-35-4	
cis-1,2-Dichloroethene	**0.30J**	ug/L	1.0	0.080	1		04/28/15 17:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.20	1		04/28/15 17:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/15 17:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/15 17:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/28/15 17:27	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/28/15 17:27	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/28/15 17:27	591-78-6	
Methylene chloride	**0.59J**	ug/L	1.0	0.15	1		04/28/15 17:27	75-09-2	B
4-Methyl-2-pentanone (MIBK)	**0.50J**	ug/L	10.0	0.42	1		04/28/15 17:27	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/15 17:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/15 17:27	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.10	1		04/28/15 17:27	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/28/15 17:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/15 17:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/28/15 17:27	79-00-5	
Trichloroethene	**2.3**	ug/L	1.0	0.17	1		04/28/15 17:27	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.13	1		04/28/15 17:27	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/28/15 17:27	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/28/15 17:27	460-00-4	
1,2-Dichloroethane-d4 (S)	101	%	80-120		1		04/28/15 17:27	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		04/28/15 17:27	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/28/15 17:27		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: WP Vapor Sampling
Pace Project No.: 60192707

QC Batch: MSV/69145
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192707001, 60192707002

METHOD BLANK: 1558029
Matrix: Water
Associated Lab Samples: 60192707001, 60192707002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,1-Dichloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,1-Dichloroethene	ug/L	ND	1.0	04/28/15 14:43	
1,2-Dichloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,2-Dichloropropane	ug/L	ND	1.0	04/28/15 14:43	
2-Butanone (MEK)	ug/L	ND	10.0	04/28/15 14:43	
2-Hexanone	ug/L	ND	10.0	04/28/15 14:43	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/28/15 14:43	
Acetone	ug/L	ND	10.0	04/28/15 14:43	
Benzene	ug/L	ND	1.0	04/28/15 14:43	
Bromodichloromethane	ug/L	ND	1.0	04/28/15 14:43	
Bromoform	ug/L	ND	1.0	04/28/15 14:43	
Bromomethane	ug/L	ND	5.0	04/28/15 14:43	
Carbon disulfide	ug/L	ND	5.0	04/28/15 14:43	
Carbon tetrachloride	ug/L	ND	1.0	04/28/15 14:43	
Chlorobenzene	ug/L	ND	1.0	04/28/15 14:43	
Chloroethane	ug/L	ND	1.0	04/28/15 14:43	
Chloroform	ug/L	ND	1.0	04/28/15 14:43	
Chloromethane	ug/L	ND	1.0	04/28/15 14:43	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/28/15 14:43	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/28/15 14:43	
Dibromochloromethane	ug/L	ND	1.0	04/28/15 14:43	
Ethylbenzene	ug/L	ND	1.0	04/28/15 14:43	
Methylene chloride	ug/L	0.33J	1.0	04/28/15 14:43	
Styrene	ug/L	ND	1.0	04/28/15 14:43	
Tetrachloroethene	ug/L	ND	1.0	04/28/15 14:43	
Toluene	ug/L	ND	1.0	04/28/15 14:43	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/28/15 14:43	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/28/15 14:43	
Trichloroethene	ug/L	ND	1.0	04/28/15 14:43	
Vinyl chloride	ug/L	ND	1.0	04/28/15 14:43	
Xylene (Total)	ug/L	ND	3.0	04/28/15 14:43	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/28/15 14:43	
4-Bromofluorobenzene (S)	%	96	80-120	04/28/15 14:43	
Toluene-d8 (S)	%	100	80-120	04/28/15 14:43	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: WP Vapor Sampling
Pace Project No.: 60192707

LABORATORY CONTROL SAMPLE: 1558030

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.2	101	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.8	104	73-121	
1,1,2-Trichloroethane	ug/L	20	20.8	104	80-120	
1,1-Dichloroethane	ug/L	20	21.2	106	80-120	
1,1-Dichloroethene	ug/L	20	21.2	106	80-120	
1,2-Dichloroethane	ug/L	20	20.4	102	81-120	
1,2-Dichloropropane	ug/L	20	20.3	101	80-120	
2-Butanone (MEK)	ug/L	100	106	106	67-122	
2-Hexanone	ug/L	100	104	104	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	112	112	76-120	
Acetone	ug/L	100	98.1	98	72-120	
Benzene	ug/L	20	21.3	106	80-120	
Bromodichloromethane	ug/L	20	20.3	102	80-120	
Bromoform	ug/L	20	19.6	98	73-138	
Bromomethane	ug/L	20	22.3	112	38-137	
Carbon disulfide	ug/L	20	20.4	102	71-129	
Carbon tetrachloride	ug/L	20	19.4	97	67-146	
Chlorobenzene	ug/L	20	20.2	101	80-120	
Chloroethane	ug/L	20	24.1	121	76-120	L0
Chloroform	ug/L	20	20.5	102	80-120	
Chloromethane	ug/L	20	26.6	133	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.9	105	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.9	104	80-120	
Dibromochloromethane	ug/L	20	19.7	99	80-126	
Ethylbenzene	ug/L	20	19.8	99	80-120	
Methylene chloride	ug/L	20	21.1	106	80-120	
Styrene	ug/L	20	20.5	103	80-123	
Tetrachloroethene	ug/L	20	19.6	98	80-123	
Toluene	ug/L	20	20.6	103	80-120	
trans-1,2-Dichloroethene	ug/L	20	21.2	106	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.5	103	80-129	
Trichloroethene	ug/L	20	20.7	104	80-120	
Vinyl chloride	ug/L	20	23.2	116	62-125	
Xylene (Total)	ug/L	60	62.2	104	80-120	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			99	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: WP Vapor Sampling
Pace Project No.: 60192707

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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/69145

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

Pace Analytical Services, Inc.
9608 Loiret Blvd.
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(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WP Vapor Sampling
Pace Project No.: 60192707

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60192707001	**VP-05-20150422**	EPA 5030B/8260	MSV/69145		
60192707002	**VP-06-20150422**	EPA 5030B/8260	MSV/69145		

Pace Analytical® www.pacelabs.com

Sample Condition Upon Receipt

WO#: 60192707

60192707

Client Name: Environ

Optional
Proj Due Date: 5/6/15
Proj Name:

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☒

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: CF -0.1 T-239 / CF -1.8 T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 4.5

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JB 4/24

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, O&G, WI-DRO (water)	☒Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes ☒No ☐N/A	
Pace Trip Blank lot # (if purchased): _____		15.
Headspace in VOA vials (>6mm):	☐Yes ☒No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☒N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / (N) Field Data Required? Y / (N)

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: CBC Date: 04/27/15

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Pace Analytical
www.pacelabs.com

Microseeps

Page: of 003191

Section A Required Client Information:

Company:	ENVIRON
Address:	1500 College Blvd 925 Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 816 718 1491	Fax:
Requested Due Date/TAT:	Standard

Section B Required Project Information:

Report To:	Tammy Gleason
Copy To:	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	WP Vapor Sampling
Project Number:	

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes (MATRIX / CODE): Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zink Acetate & NaOH	Other	Analysis Test Y/N: IV	Analysis Test: 8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	VP-05-20150422	WT	G	4/22/15	1422				3				X					X		N	(3) DCAH 1 001
2	VP-06-20150422	WT	G	4/22/15	1401																002
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

60192707

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Wendy Stonestreet	4/24/15 1040	1040		4/24/15	1040	4.5	Y	N	Y

Page 13 of 13

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Wendy Stonestreet

SIGNATURE of SAMPLER: Wendy Stonestreet DATE Signed (MM/DD/YY): 4/22/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

April 29, 2015

Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: WP Vapor Sampling
Pace Project No.: 60192708

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 24, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Colleen Clyne
colleen.clyne@pacelabs.com
Project Manager

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: WP Vapor Sampling
Pace Project No.: 60192708

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: WP Vapor Sampling
Pace Project No.: 60192708

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60192708001	**VP-12-20150422**	Water	04/22/15 16:01	04/24/15 10:40

Pace Analytical Services, Inc.
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Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: WP Vapor Sampling
Pace Project No.: 60192708

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60192708001	**VP-12-20150422**	EPA 5030B/8260	PGH	38

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project: WP Vapor Sampling
Pace Project No.: 60192708

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 29, 2015

General Information:
1 sample was analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: MSV/69145

B: Analyte was detected in the associated method blank.
- BLANK for HBN 382983 [MSV/6914 (Lab ID: 1558029)
  - Methylene chloride

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/69145

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- LCS (Lab ID: 1558030)
  - Chloroethane

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/69145

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: WP Vapor Sampling
Pace Project No.: 60192708

Sample: VP-12-20150422 **Lab ID: 60192708001** Collected: 04/22/15 16:01 Received: 04/24/15 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**3.2J**	ug/L	10.0	1.9	1		04/28/15 17:42	67-64-1	
Benzene	ND	ug/L	1.0	0.060	1		04/28/15 17:42	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/28/15 17:42	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/28/15 17:42	75-25-2	
Bromomethane	ND	ug/L	5.0	0.16	1		04/28/15 17:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/28/15 17:42	78-93-3	
Carbon disulfide	**0.27J**	ug/L	5.0	0.12	1		04/28/15 17:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/28/15 17:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/28/15 17:42	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/28/15 17:42	75-00-3	L3
Chloroform	**0.45J**	ug/L	1.0	0.14	1		04/28/15 17:42	67-66-3	
Chloromethane	**1.7**	ug/L	1.0	0.080	1		04/28/15 17:42	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/28/15 17:42	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.050	1		04/28/15 17:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/15 17:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.20	1		04/28/15 17:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.080	1		04/28/15 17:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.20	1		04/28/15 17:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/15 17:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/15 17:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/28/15 17:42	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/28/15 17:42	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/28/15 17:42	591-78-6	
Methylene chloride	**0.46J**	ug/L	1.0	0.15	1		04/28/15 17:42	75-09-2	B
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/28/15 17:42	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/15 17:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/15 17:42	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.10	1		04/28/15 17:42	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/28/15 17:42	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/15 17:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/28/15 17:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.17	1		04/28/15 17:42	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.13	1		04/28/15 17:42	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/28/15 17:42	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		04/28/15 17:42	460-00-4	
1,2-Dichloroethane-d4 (S)	99	%	80-120		1		04/28/15 17:42	17060-07-0	
Toluene-d8 (S)	106	%	80-120		1		04/28/15 17:42	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/28/15 17:42		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: WP Vapor Sampling
Pace Project No.: 60192708

QC Batch: MSV/69145
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192708001

METHOD BLANK: 1558029
Matrix: Water
Associated Lab Samples: 60192708001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,1-Dichloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,1-Dichloroethene	ug/L	ND	1.0	04/28/15 14:43	
1,2-Dichloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,2-Dichloropropane	ug/L	ND	1.0	04/28/15 14:43	
2-Butanone (MEK)	ug/L	ND	10.0	04/28/15 14:43	
2-Hexanone	ug/L	ND	10.0	04/28/15 14:43	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/28/15 14:43	
Acetone	ug/L	ND	10.0	04/28/15 14:43	
Benzene	ug/L	ND	1.0	04/28/15 14:43	
Bromodichloromethane	ug/L	ND	1.0	04/28/15 14:43	
Bromoform	ug/L	ND	1.0	04/28/15 14:43	
Bromomethane	ug/L	ND	5.0	04/28/15 14:43	
Carbon disulfide	ug/L	ND	5.0	04/28/15 14:43	
Carbon tetrachloride	ug/L	ND	1.0	04/28/15 14:43	
Chlorobenzene	ug/L	ND	1.0	04/28/15 14:43	
Chloroethane	ug/L	ND	1.0	04/28/15 14:43	
Chloroform	ug/L	ND	1.0	04/28/15 14:43	
Chloromethane	ug/L	ND	1.0	04/28/15 14:43	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/28/15 14:43	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/28/15 14:43	
Dibromochloromethane	ug/L	ND	1.0	04/28/15 14:43	
Ethylbenzene	ug/L	ND	1.0	04/28/15 14:43	
Methylene chloride	ug/L	0.33J	1.0	04/28/15 14:43	
Styrene	ug/L	ND	1.0	04/28/15 14:43	
Tetrachloroethene	ug/L	ND	1.0	04/28/15 14:43	
Toluene	ug/L	ND	1.0	04/28/15 14:43	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/28/15 14:43	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/28/15 14:43	
Trichloroethene	ug/L	ND	1.0	04/28/15 14:43	
Vinyl chloride	ug/L	ND	1.0	04/28/15 14:43	
Xylene (Total)	ug/L	ND	3.0	04/28/15 14:43	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/28/15 14:43	
4-Bromofluorobenzene (S)	%	96	80-120	04/28/15 14:43	
Toluene-d8 (S)	%	100	80-120	04/28/15 14:43	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: WP Vapor Sampling
Pace Project No.: 60192708

LABORATORY CONTROL SAMPLE: 1558030

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.2	101	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.8	104	73-121	
1,1,2-Trichloroethane	ug/L	20	20.8	104	80-120	
1,1-Dichloroethane	ug/L	20	21.2	106	80-120	
1,1-Dichloroethene	ug/L	20	21.2	106	80-120	
1,2-Dichloroethane	ug/L	20	20.4	102	81-120	
1,2-Dichloropropane	ug/L	20	20.3	101	80-120	
2-Butanone (MEK)	ug/L	100	106	106	67-122	
2-Hexanone	ug/L	100	104	104	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	112	112	76-120	
Acetone	ug/L	100	98.1	98	72-120	
Benzene	ug/L	20	21.3	106	80-120	
Bromodichloromethane	ug/L	20	20.3	102	80-120	
Bromoform	ug/L	20	19.6	98	73-138	
Bromomethane	ug/L	20	22.3	112	38-137	
Carbon disulfide	ug/L	20	20.4	102	71-129	
Carbon tetrachloride	ug/L	20	19.4	97	67-146	
Chlorobenzene	ug/L	20	20.2	101	80-120	
Chloroethane	ug/L	20	24.1	121	76-120	L0
Chloroform	ug/L	20	20.5	102	80-120	
Chloromethane	ug/L	20	26.6	133	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.9	105	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.9	104	80-120	
Dibromochloromethane	ug/L	20	19.7	99	80-126	
Ethylbenzene	ug/L	20	19.8	99	80-120	
Methylene chloride	ug/L	20	21.1	106	80-120	
Styrene	ug/L	20	20.5	103	80-123	
Tetrachloroethene	ug/L	20	19.6	98	80-123	
Toluene	ug/L	20	20.6	103	80-120	
trans-1,2-Dichloroethene	ug/L	20	21.2	106	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.5	103	80-129	
Trichloroethene	ug/L	20	20.7	104	80-120	
Vinyl chloride	ug/L	20	23.2	116	62-125	
Xylene (Total)	ug/L	60	62.2	104	80-120	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			99	80-120	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: WP Vapor Sampling
Pace Project No.: 60192708

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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/69145

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WP Vapor Sampling
Pace Project No.: 60192708

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60192708001	**VP-12-20150422**	EPA 5030B/8260	MSV/69145		

REPORT OF LABORATORY ANALYSIS

Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO#: 60192708

60192708

Client Name: Environ

Optional
Proj Due Date: 5/6/15
Proj Name:

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☒

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: CF -0.1 T-239 / CF -1.8 T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 4.5

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JB 4/24

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, O&G, WI-DRO (water)	☒Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☐Yes ☒No ☐N/A	
Pace Trip Blank lot # (if purchased): _____		15.
Headspace in VOA vials (>6mm):	☐Yes ☒No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☒N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / (N) Field Data Required? Y / (N)

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: CMC Date: 04/27/15

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Microseeps

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

003194

Section A Required Client Information:

Company:	ENVIRON
Address:	1500 College Blvd 925 Overland Park, KS 66210
Email To:	wstonestreet@environcorp.com
Phone: 8167181491	Fax:
Requested Due Date/TAT:	Standard

Section B Required Project Information:

Report To:	Tammy Gleason
Copy To:	tgleason@environcorp.com
Purchase Order No.:	
Project Name:	WP Vapor Sampling
Project Number:	

Section C Invoice Information:

Attention:	
Company Name:	
Address:	
Pace Quote Reference:	
Pace Project Manager:	
Pace Profile #:	

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes MATRIX / CODE

Drinking Water	DW
Water	WT
Waste Water	WW
Product	P
Soil/Solid	SL
Oil	OL
Wipe	WP
Air	AR
Tissue	TS
Other	OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zink Acetate & NaOH	Other	Analysis Test Y/N	Analysis Test: 8260D VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	VP-12-20150422	WT	G	4/22/15	1601			#	3				X					X	X	N	(3)1X4# 001
2																					
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

Requested Analysis Filtered (Y/N)

6=192708

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Wendy Stonestreet	4/24/15	1040	[illegible]	4/24	1040	4.5	Y	N	Y

ORIGINAL

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Wendy Stonestreet

SIGNATURE of SAMPLER: Wendy Stonestreet

DATE Signed (MM/DD/YY): 4/22/15

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

F-ALL-Q-020rev.07, 15-May-2007

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

April 30, 2015

Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: WP Vapor Sampling
Pace Project No.: 60192709

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on April 24, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Colleen Clyne
colleen.clyne@pacelabs.com
Project Manager

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: WP Vapor Sampling
Pace Project No.: 60192709

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: WP Vapor Sampling
Pace Project No.: 60192709

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60192709001	**VP-10-20150422**	Water	04/22/15 15:42	04/24/15 10:40
60192709002	**TB-01-20150422**	Water	04/22/15 00:00	04/24/15 10:40

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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SAMPLE ANALYTE COUNT

Project: WP Vapor Sampling
Pace Project No.: 60192709

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60192709001	**VP-10-20150422**	EPA 5030B/8260	PGH	38
60192709002	**TB-01-20150422**	EPA 5030B/8260	PGH	38

Pace Analytical Services, Inc.
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PROJECT NARRATIVE

Project: WP Vapor Sampling
Pace Project No.: 60192709

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Environ_AR
Date: April 30, 2015

General Information:
2 samples were analyzed for EPA 5030B/8260. All samples were received in acceptable condition with any exceptions noted below.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

QC Batch: MSV/69145

B: Analyte was detected in the associated method blank.
- BLANK for HBN 382983 [MSV/6914 (Lab ID: 1558029)
  - Methylene chloride

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

QC Batch: MSV/69145

L0: Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
- LCS (Lab ID: 1558030)
  - Chloroethane

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/69145

A matrix spike/matrix spike duplicate was not performed due to insufficient sample volume.

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: WP Vapor Sampling
Pace Project No.: 60192709

Sample: VP-10-20150422 **Lab ID: 60192709001** Collected: 04/22/15 15:42 Received: 04/24/15 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**16.4**	ug/L	10.0	1.9	1		04/28/15 17:57	67-64-1	
Benzene	**0.15J**	ug/L	1.0	0.060	1		04/28/15 17:57	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/28/15 17:57	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/28/15 17:57	75-25-2	
Bromomethane	ND	ug/L	5.0	0.16	1		04/28/15 17:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/28/15 17:57	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/28/15 17:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/28/15 17:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/28/15 17:57	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/28/15 17:57	75-00-3	L3
Chloroform	**0.55J**	ug/L	1.0	0.14	1		04/28/15 17:57	67-66-3	
Chloromethane	ND	ug/L	1.0	0.080	1		04/28/15 17:57	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/28/15 17:57	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.050	1		04/28/15 17:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/28/15 17:57	107-06-2	
1,1-Dichloroethene	**1.7**	ug/L	1.0	0.20	1		04/28/15 17:57	75-35-4	
cis-1,2-Dichloroethene	**11.2**	ug/L	1.0	0.080	1		04/28/15 17:57	156-59-2	
trans-1,2-Dichloroethene	**0.92J**	ug/L	1.0	0.20	1		04/28/15 17:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/28/15 17:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/28/15 17:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/28/15 17:57	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/28/15 17:57	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/28/15 17:57	591-78-6	
Methylene chloride	**0.74J**	ug/L	1.0	0.15	1		04/28/15 17:57	75-09-2	B
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/28/15 17:57	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/28/15 17:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/28/15 17:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.10	1		04/28/15 17:57	127-18-4	
Toluene	**0.36J**	ug/L	1.0	0.17	1		04/28/15 17:57	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/28/15 17:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/28/15 17:57	79-00-5	
Trichloroethene	**395**	ug/L	10.0	1.7	10		04/30/15 05:24	79-01-6	
Vinyl chloride	**0.35J**	ug/L	1.0	0.13	1		04/28/15 17:57	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/28/15 17:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		04/28/15 17:57	460-00-4	
1,2-Dichloroethane-d4 (S)	98	%	80-120		1		04/28/15 17:57	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		04/28/15 17:57	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/28/15 17:57		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: WP Vapor Sampling
Pace Project No.: 60192709

Sample: TB-01-20150422 **Lab ID: 60192709002** Collected: 04/22/15 00:00 Received: 04/24/15 10:40 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
Acetone	**19.1**	ug/L	10.0	1.9	1		04/30/15 00:13	67-64-1	
Benzene	ND	ug/L	1.0	0.060	1		04/30/15 00:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.19	1		04/30/15 00:13	75-27-4	
Bromoform	ND	ug/L	1.0	0.070	1		04/30/15 00:13	75-25-2	
Bromomethane	ND	ug/L	5.0	0.16	1		04/30/15 00:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.59	1		04/30/15 00:13	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.12	1		04/30/15 00:13	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.18	1		04/30/15 00:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.21	1		04/30/15 00:13	108-90-7	
Chloroethane	ND	ug/L	1.0	0.15	1		04/30/15 00:13	75-00-3	
Chloroform	ND	ug/L	1.0	0.14	1		04/30/15 00:13	67-66-3	
Chloromethane	ND	ug/L	1.0	0.080	1		04/30/15 00:13	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.21	1		04/30/15 00:13	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.050	1		04/30/15 00:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.12	1		04/30/15 00:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.20	1		04/30/15 00:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.080	1		04/30/15 00:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.20	1		04/30/15 00:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.16	1		04/30/15 00:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.14	1		04/30/15 00:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.12	1		04/30/15 00:13	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.18	1		04/30/15 00:13	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.2	1		04/30/15 00:13	591-78-6	
Methylene chloride	ND	ug/L	1.0	0.15	1		04/30/15 00:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.42	1		04/30/15 00:13	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		04/30/15 00:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		04/30/15 00:13	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.10	1		04/30/15 00:13	127-18-4	
Toluene	ND	ug/L	1.0	0.17	1		04/30/15 00:13	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		04/30/15 00:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.20	1		04/30/15 00:13	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.17	1		04/30/15 00:13	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.13	1		04/30/15 00:13	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.42	1		04/30/15 00:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		04/30/15 00:13	460-00-4	
1,2-Dichloroethane-d4 (S)	103	%	80-120		1		04/30/15 00:13	17060-07-0	
Toluene-d8 (S)	102	%	80-120		1		04/30/15 00:13	2037-26-5	
Preservation pH	**1.0**		0.10	0.10	1		04/30/15 00:13		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: WP Vapor Sampling
Pace Project No.: 60192709

QC Batch: MSV/69145
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192709001

METHOD BLANK: 1558029
Matrix: Water
Associated Lab Samples: 60192709001

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,1-Dichloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,1-Dichloroethene	ug/L	ND	1.0	04/28/15 14:43	
1,2-Dichloroethane	ug/L	ND	1.0	04/28/15 14:43	
1,2-Dichloropropane	ug/L	ND	1.0	04/28/15 14:43	
2-Butanone (MEK)	ug/L	ND	10.0	04/28/15 14:43	
2-Hexanone	ug/L	ND	10.0	04/28/15 14:43	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/28/15 14:43	
Acetone	ug/L	ND	10.0	04/28/15 14:43	
Benzene	ug/L	ND	1.0	04/28/15 14:43	
Bromodichloromethane	ug/L	ND	1.0	04/28/15 14:43	
Bromoform	ug/L	ND	1.0	04/28/15 14:43	
Bromomethane	ug/L	ND	5.0	04/28/15 14:43	
Carbon disulfide	ug/L	ND	5.0	04/28/15 14:43	
Carbon tetrachloride	ug/L	ND	1.0	04/28/15 14:43	
Chlorobenzene	ug/L	ND	1.0	04/28/15 14:43	
Chloroethane	ug/L	ND	1.0	04/28/15 14:43	
Chloroform	ug/L	ND	1.0	04/28/15 14:43	
Chloromethane	ug/L	ND	1.0	04/28/15 14:43	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/28/15 14:43	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/28/15 14:43	
Dibromochloromethane	ug/L	ND	1.0	04/28/15 14:43	
Ethylbenzene	ug/L	ND	1.0	04/28/15 14:43	
Methylene chloride	ug/L	0.33J	1.0	04/28/15 14:43	
Styrene	ug/L	ND	1.0	04/28/15 14:43	
Tetrachloroethene	ug/L	ND	1.0	04/28/15 14:43	
Toluene	ug/L	ND	1.0	04/28/15 14:43	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/28/15 14:43	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/28/15 14:43	
Vinyl chloride	ug/L	ND	1.0	04/28/15 14:43	
Xylene (Total)	ug/L	ND	3.0	04/28/15 14:43	
1,2-Dichloroethane-d4 (S)	%	101	80-120	04/28/15 14:43	
4-Bromofluorobenzene (S)	%	96	80-120	04/28/15 14:43	
Toluene-d8 (S)	%	100	80-120	04/28/15 14:43	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
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(913)599-5665

QUALITY CONTROL DATA

Project: WP Vapor Sampling
Pace Project No.: 60192709

LABORATORY CONTROL SAMPLE: 1558030

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.2	101	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	20.8	104	73-121	
1,1,2-Trichloroethane	ug/L	20	20.8	104	80-120	
1,1-Dichloroethane	ug/L	20	21.2	106	80-120	
1,1-Dichloroethene	ug/L	20	21.2	106	80-120	
1,2-Dichloroethane	ug/L	20	20.4	102	81-120	
1,2-Dichloropropane	ug/L	20	20.3	101	80-120	
2-Butanone (MEK)	ug/L	100	106	106	67-122	
2-Hexanone	ug/L	100	104	104	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	112	112	76-120	
Acetone	ug/L	100	98.1	98	72-120	
Benzene	ug/L	20	21.3	106	80-120	
Bromodichloromethane	ug/L	20	20.3	102	80-120	
Bromoform	ug/L	20	19.6	98	73-138	
Bromomethane	ug/L	20	22.3	112	38-137	
Carbon disulfide	ug/L	20	20.4	102	71-129	
Carbon tetrachloride	ug/L	20	19.4	97	67-146	
Chlorobenzene	ug/L	20	20.2	101	80-120	
Chloroethane	ug/L	20	24.1	121	76-120	L0
Chloroform	ug/L	20	20.5	102	80-120	
Chloromethane	ug/L	20	26.6	133	34-165	
cis-1,2-Dichloroethene	ug/L	20	20.9	105	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.9	104	80-120	
Dibromochloromethane	ug/L	20	19.7	99	80-126	
Ethylbenzene	ug/L	20	19.8	99	80-120	
Methylene chloride	ug/L	20	21.1	106	80-120	
Styrene	ug/L	20	20.5	103	80-123	
Tetrachloroethene	ug/L	20	19.6	98	80-123	
Toluene	ug/L	20	20.6	103	80-120	
trans-1,2-Dichloroethene	ug/L	20	21.2	106	80-120	
trans-1,3-Dichloropropene	ug/L	20	20.5	103	80-129	
Vinyl chloride	ug/L	20	23.2	116	62-125	
Xylene (Total)	ug/L	60	62.2	104	80-120	
1,2-Dichloroethane-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			99	80-120	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: WP Vapor Sampling
Pace Project No.: 60192709

QC Batch: MSV/69175
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Associated Lab Samples: 60192709001, 60192709002

METHOD BLANK: 1558989
Matrix: Water
Associated Lab Samples: 60192709001, 60192709002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	04/29/15 23:59	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	04/29/15 23:59	
1,1,2-Trichloroethane	ug/L	ND	1.0	04/29/15 23:59	
1,1-Dichloroethane	ug/L	ND	1.0	04/29/15 23:59	
1,1-Dichloroethene	ug/L	ND	1.0	04/29/15 23:59	
1,2-Dichloroethane	ug/L	ND	1.0	04/29/15 23:59	
1,2-Dichloropropane	ug/L	ND	1.0	04/29/15 23:59	
2-Butanone (MEK)	ug/L	ND	10.0	04/29/15 23:59	
2-Hexanone	ug/L	ND	10.0	04/29/15 23:59	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	04/29/15 23:59	
Acetone	ug/L	ND	10.0	04/29/15 23:59	
Benzene	ug/L	ND	1.0	04/29/15 23:59	
Bromodichloromethane	ug/L	ND	1.0	04/29/15 23:59	
Bromoform	ug/L	ND	1.0	04/29/15 23:59	
Bromomethane	ug/L	ND	5.0	04/29/15 23:59	
Carbon disulfide	ug/L	ND	5.0	04/29/15 23:59	
Carbon tetrachloride	ug/L	ND	1.0	04/29/15 23:59	
Chlorobenzene	ug/L	ND	1.0	04/29/15 23:59	
Chloroethane	ug/L	ND	1.0	04/29/15 23:59	
Chloroform	ug/L	ND	1.0	04/29/15 23:59	
Chloromethane	ug/L	ND	1.0	04/29/15 23:59	
cis-1,2-Dichloroethene	ug/L	ND	1.0	04/29/15 23:59	
cis-1,3-Dichloropropene	ug/L	ND	1.0	04/29/15 23:59	
Dibromochloromethane	ug/L	ND	1.0	04/29/15 23:59	
Ethylbenzene	ug/L	ND	1.0	04/29/15 23:59	
Methylene chloride	ug/L	ND	1.0	04/29/15 23:59	
Styrene	ug/L	ND	1.0	04/29/15 23:59	
Tetrachloroethene	ug/L	ND	1.0	04/29/15 23:59	
Toluene	ug/L	ND	1.0	04/29/15 23:59	
trans-1,2-Dichloroethene	ug/L	ND	1.0	04/29/15 23:59	
trans-1,3-Dichloropropene	ug/L	ND	1.0	04/29/15 23:59	
Trichloroethene	ug/L	ND	1.0	04/29/15 23:59	
Vinyl chloride	ug/L	ND	1.0	04/29/15 23:59	
Xylene (Total)	ug/L	ND	3.0	04/29/15 23:59	
1,2-Dichloroethane-d4 (S)	%	102	80-120	04/29/15 23:59	
4-Bromofluorobenzene (S)	%	96	80-120	04/29/15 23:59	
Toluene-d8 (S)	%	100	80-120	04/29/15 23:59	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: WP Vapor Sampling
Pace Project No.: 60192709

LABORATORY CONTROL SAMPLE: 1558990

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.1	105	80-120	
1,1,2,2-Tetrachloroethane	ug/L	20	16.2	81	73-121	
1,1,2-Trichloroethane	ug/L	20	19.9	99	80-120	
1,1-Dichloroethane	ug/L	20	21.4	107	80-120	
1,1-Dichloroethene	ug/L	20	20.7	104	80-120	
1,2-Dichloroethane	ug/L	20	20.8	104	81-120	
1,2-Dichloropropane	ug/L	20	20.4	102	80-120	
2-Butanone (MEK)	ug/L	100	97.2	97	67-122	
2-Hexanone	ug/L	100	96.7	97	75-121	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	76-120	
Acetone	ug/L	100	103	103	72-120	
Benzene	ug/L	20	21.6	108	80-120	
Bromodichloromethane	ug/L	20	21.2	106	80-120	
Bromoform	ug/L	20	20.1	101	73-138	
Bromomethane	ug/L	20	20.8	104	38-137	
Carbon disulfide	ug/L	20	20.3	102	71-129	
Carbon tetrachloride	ug/L	20	19.7	99	67-146	
Chlorobenzene	ug/L	20	20.5	102	80-120	
Chloroethane	ug/L	20	23.5	118	76-120	
Chloroform	ug/L	20	20.9	104	80-120	
Chloromethane	ug/L	20	20.6	103	34-165	
cis-1,2-Dichloroethene	ug/L	20	21.4	107	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.5	97	80-120	
Dibromochloromethane	ug/L	20	19.2	96	80-126	
Ethylbenzene	ug/L	20	19.7	98	80-120	
Methylene chloride	ug/L	20	19.7	99	80-120	
Styrene	ug/L	20	20.6	103	80-123	
Tetrachloroethene	ug/L	20	20.9	104	80-123	
Toluene	ug/L	20	21.0	105	80-120	
trans-1,2-Dichloroethene	ug/L	20	20.5	103	80-120	
trans-1,3-Dichloropropene	ug/L	20	18.7	94	80-129	
Trichloroethene	ug/L	20	22.6	113	80-120	
Vinyl chloride	ug/L	20	22.6	113	62-125	
Xylene (Total)	ug/L	60	62.5	104	80-120	
1,2-Dichloroethane-d4 (S)	%			101	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1558991 1558992

Parameter	Units	60192725001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	21.6	21.3	108	106	88-124	1	9	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	17.4	17.0	87	85	78-116	2	13	
1,1,2-Trichloroethane	ug/L	ND	20	20	18.8	18.1	94	90	84-112	4	10	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: WP Vapor Sampling
Pace Project No.: 60192709

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1558991 1558992

Parameter	Units	60192725001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	ND	20	20	21.1	20.6	103	101	82-121	2	9	
1,1-Dichloroethene	ug/L	ND	20	20	20.4	20.3	102	102	78-124	1	12	
1,2-Dichloroethane	ug/L	4.5	20	20	24.0	23.7	98	96	79-121	2	12	
1,2-Dichloropropane	ug/L	ND	20	20	19.9	19.9	99	100	82-119	0	10	
2-Butanone (MEK)	ug/L	ND	100	100	82.5	84.4	82	84	66-114	2	13	
2-Hexanone	ug/L	ND	100	100	85.5	86.6	85	87	71-116	1	13	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	92.8	90.8	93	91	72-122	2	12	
Acetone	ug/L	ND	100	100	78.9	90.4	77	89	65-113	14	27	
Benzene	ug/L	ND	20	20	21.3	20.8	106	104	46-155	2	13	
Bromodichloromethane	ug/L	ND	20	20	19.8	19.4	99	97	77-127	2	10	
Bromoform	ug/L	ND	20	20	17.6	19.3	88	96	70-125	9	11	
Bromomethane	ug/L	ND	20	20	16.6	19.5	83	97	41-140	16	30	
Carbon disulfide	ug/L	ND	20	20	21.0	20.9	105	105	68-140	0	10	
Carbon tetrachloride	ug/L	ND	20	20	21.2	20.8	106	104	68-147	2	11	
Chlorobenzene	ug/L	ND	20	20	19.4	19.4	97	97	83-121	0	9	
Chloroethane	ug/L	ND	20	20	22.2	21.4	111	107	69-126	4	19	
Chloroform	ug/L	ND	20	20	19.9	19.3	98	95	86-119	3	9	
Chloromethane	ug/L	ND	20	20	13.2	16.1	66	81	23-168	20	49	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.4	19.9	102	100	85-117	2	10	
cis-1,3-Dichloropropene	ug/L	ND	20	20	18.2	17.5	91	88	74-115	4	12	
Dibromochloromethane	ug/L	ND	20	20	17.9	17.5	89	87	65-134	2	11	
Ethylbenzene	ug/L	ND	20	20	19.7	19.4	99	97	51-148	1	14	
Methylene chloride	ug/L	ND	20	20	18.8	17.9	94	90	75-118	5	11	
Styrene	ug/L	ND	20	20	19.1	19.5	95	98	17-174	2	10	
Tetrachloroethene	ug/L	ND	20	20	20.9	20.5	102	100	78-127	2	9	
Toluene	ug/L	ND	20	20	20.8	20.8	104	104	47-149	0	16	
trans-1,2-Dichloroethene	ug/L	ND	20	20	20.3	20.4	101	102	84-119	0	12	
trans-1,3-Dichloropropene	ug/L	ND	20	20	17.4	17.7	87	88	71-120	2	10	
Trichloroethene	ug/L	ND	20	20	19.9	19.8	100	99	70-135	0	10	
Vinyl chloride	ug/L	ND	20	20	21.3	21.5	106	107	58-130	1	11	
Xylene (Total)	ug/L	ND	60	60	61.2	60.6	102	101	39-158	1	15	
1,2-Dichloroethane-d4 (S)	%						101	100	80-120			
4-Bromofluorobenzene (S)	%						101	99	80-120			
Toluene-d8 (S)	%						101	101	80-120			
Preservation pH		1.0			1.0	1.0				0		

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: WP Vapor Sampling
Pace Project No.: 60192709

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

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/69145

[M5]	A matrix spike/matrix spike duplicate was not performed for this batch due to insufficient sample volume.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
L0	Analyte recovery in the laboratory control sample (LCS) was outside QC limits.
L3	Analyte recovery in the laboratory control sample (LCS) exceeded QC limits. Analyte presence below reporting limits in associated samples. Results unaffected by high bias.

Pace Analytical Services, Inc.
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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WP Vapor Sampling
Pace Project No.: 60192709

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60192709001	**VP-10-20150422**	EPA 5030B/8260	MSV/69145		
60192709001	**VP-10-20150422**	EPA 5030B/8260	MSV/69175		
60192709002	**TB-01-20150422**	EPA 5030B/8260	MSV/69175		

Pace Analytical
www.pacelabs.com

Sample Condition Upon Receipt

WO# : 60192709

60192709

Client Name: Environ

Optional
Proj Due Date: 5/6/15
Proj Name:

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☒

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: CF -0.1 T-239 / CF -1.8 T-194 **Type of Ice:** (Wet) Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 4.5

Temperature should be above freezing to 6°C

Date and initials of person examining contents: JB 4/24

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, O&G, WI-DRO (water)	☒Yes ☐No	Initial when completed / Lot # of added preservative
Trip Blank present:	☒Yes ☐No ☐N/A	
Pace Trip Blank lot # (if purchased): 4/8/15		15.
Headspace in VOA vials (>6mm):	☐Yes ☒No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☐No ☒N/A	17. List State:

Client Notification/ Resolution: Copy COC to Client? Y / (N) Field Data Required? Y / (N)

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: CBC Date: 04/27/15

Pace Analytical
www.pacelabs.com

Microseeps

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

003195

Section A Required Client Information:

Company: ENVIRON
Address: 7500 College Blvd 925
Overland Park, KS 66210
Email To: wstonestreet@environcorp.com
Phone: (816)718-1491 Fax:
Requested Due Date/TAT: Standard

Section B Required Project Information:

Report To: Tammy Gleason
Copy To: tgleason@environcorp.com
Purchase Order No.:
Project Name: WP Vapor Sampling
Project Number:

Section C Invoice Information:

Attention:
Company Name:
Address:
Pace Quote Reference:
Pace Project Manager:
Pace Profile #:

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☒ OTHER ADEQ

Site Location STATE: AR

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Matrix Codes — MATRIX / CODE: Drinking Water DW; Water WT; Waste Water WW; Product P; Soil/Solid SL; Oil OL; Wipe WP; Air AR; Tissue TS; Other OT

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED: COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	TSP	BAK	Zink Acetate & NaOH	Other	Requested Analysis Filtered (Y/N) Y/N	Analysis Test: 8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	VP-10-20150422	WT	G	4/22/15	1542				3				X						X	N	60192709 001
2	TB-01-20150422	WT	G	4/22/15	-				3				X						X		002
3																					
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Wendy Stonestreet	4/24/15	1040	[signature] PACE	4/24	1040	4.5	Y	N	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Wendy Stonestreet
SIGNATURE of SAMPLER: Wendy Stonestreet
DATE Signed (MM/DD/YY): 4/22/15

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

ORIGINAL

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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

May 11, 2015

Wendy Stonestreet
Environ International Corporation
7500 College Boulevard, Suite 925
Overland Park, KS 66210

RE: WP. KING Property AA Sampling / 3437470A

Dear Wendy:

Enclosed are the results of the samples submitted to our laboratory on April 28, 2015. For your reference, these analyses have been assigned our service request number P1501720.

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 12:18 pm, May 11, 2015

Kelly Horiuchi
Laboratory Director

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

Client: Environ International Corporation
Project: WP. KING Property AA Sampling / 3437470A

Service Request No: P1501720

CASE NARRATIVE

The samples were received intact under chain of custody on April 28, 2015 and were stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the 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. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is not included on the laboratory's AIHA-LAP scope of accreditation.

The Summa 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.

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www.alsglobal.com

ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L14-2
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	876241
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	4068-001
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-14-5
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA016272014-4
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Environ International Corporation Service Request: P1501720

Project ID: WP. KING Property AA Sampling / 3437470A

Date Received: 4/28/2015

Time Received: 09:45

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-15 - VOC SIM
Crawl Space-AA-20150422	P1501720-001	Air	4/22/2015	17:14	AC01300	-0.56	3.74	X
Indoor-AA-20150423	P1501720-002	Air	4/23/2015	10:24	AS00877	-2.60	3.88	X
Outdoor-AA-20150422	P1501720-003	Air	4/22/2015	17:27	SC01703	-1.95	3.88	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: 1501720

Company Name & Address (Reporting Information)
ENVIRON
7500 College Blvd Ste 925
Overland Park, KS 66210

Project Name: WP- KING Property AA sampling

Project Number: 343747.0A

ALS Contact: Kelly H.

Project Manager: Tammy Gleason

P.O. # / Billing Information

Phone: 816 718 1491

Fax:

Email Address for Result Reporting: wstonestreet@environcorp.com; tgleason@environcorp.com

Sampler (Print & Sign): Wendy Stonestreet / WendyStonestreet

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: TO-15 SATE SPECIFIC LIST		Comments e.g. Actual Preservative or specific instructions
Crawl Space-AA-20152422	1	4/22/2015	1714	AC01300	OA00613	-29" Hg	-2.5" Hg	6L	X		
Indoor-AA-20150423	2	4/23/2015	1024	AS00877	FCA00854	-28" Hg	-5.0" Hg	6L	X		
Outdoor-AA-20150422	3	4/22/2015	1727	AS[illegible]C01703	OA01856	-29" Hg	-5.0" Hg	6L	X		

5 of 12

Report Tier Levels - please select

Tier I - Results (Default if not specified) ____
Tier II (Results + QC Summaries X
Tier III (Results + QC & Calibration Summaries) ____
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: 4/24/15	Time: 1200	Received by: (Signature) FedEx	Date:	Time:	
Relinquished by: (Signature) FedEx	Date:	Time:	Received by: (Signature)	Date: 4/24/15	Time: 0945	Cooler / Blank Temperature ____ °C

ALS Environmental
Sample Acceptance Check Form

Client: Environ International Corporation Work order: P1501720

Project: WP. KING Property AA Sampling / 3437470A

Sample(s) received on: 4/28/15 Date opened: 4/28/15 by: ADAVID

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by ALS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☒	☐	☐
	Were signature and date included?	☒	☐	☐
	Were seals intact?	☒	☐	☐
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1501720-001.01	6.0 L Ambient Can					
P1501720-002.01	6.0 L Silonite Can					
P1501720-003.01	6.0 L Source Can					
P1501720-004.02	6.0 L Source Can					
P1501720-005.02	6.0 L Source Can					
P1501720-006.02	6.0 L Source Can					
P1501720-007.02	6.0 L Source Can					
P1501720-008.02	6.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environ International Corporation**
Client Sample ID: **Crawl Space-AA-20150422** ALS Project ID: P1501720
Client Project ID: **WP. KING Property AA Sampling / 3437470A** ALS Sample ID: P1501720-001

Test Code: EPA TO-15 SIM Date Collected: 4/22/15
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 4/28/15
Analyst: Wida Ang Date Analyzed: 5/6/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AC01300

Initial Pressure (psig): -0.56 Final Pressure (psig): 3.74

Canister Dilution Factor: 1.30

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.033	ND	0.013	
75-35-4	1,1-Dichloroethene	ND	0.033	ND	0.0082	
156-60-5	trans-1,2-Dichloroethene	ND	0.033	ND	0.0082	
75-34-3	1,1-Dichloroethane	ND	0.033	ND	0.0080	
156-59-2	cis-1,2-Dichloroethene	ND	0.033	ND	0.0082	
107-06-2	1,2-Dichloroethane	**0.058**	0.033	**0.014**	0.0080	
71-55-6	1,1,1-Trichloroethane	ND	0.033	ND	0.0060	
79-01-6	Trichloroethene	ND	0.033	ND	0.0060	
127-18-4	Tetrachloroethene	**0.077**	0.033	**0.011**	0.0048	

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: **Indoor-AA-20150423** ALS Project ID: P1501720
Client Project ID: **WP. KING Property AA Sampling / 3437470A** ALS Sample ID: P1501720-002

Test Code: EPA TO-15 SIM Date Collected: 4/23/15
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 4/28/15
Analyst: Wida Ang Date Analyzed: 5/6/15
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: AS00877

Initial Pressure (psig): -2.60 Final Pressure (psig): 3.88

Canister Dilution Factor: 1.54

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.039	ND	0.015	
75-35-4	1,1-Dichloroethene	ND	0.039	ND	0.0097	
156-60-5	trans-1,2-Dichloroethene	ND	0.039	ND	0.0097	
75-34-3	1,1-Dichloroethane	ND	0.039	ND	0.0095	
156-59-2	cis-1,2-Dichloroethene	ND	0.039	ND	0.0097	
107-06-2	1,2-Dichloroethane	**1.2**	0.039	**0.29**	0.0095	
71-55-6	1,1,1-Trichloroethane	ND	0.039	ND	0.0071	
79-01-6	Trichloroethene	ND	0.039	ND	0.0072	
127-18-4	Tetrachloroethene	**0.081**	0.039	**0.012**	0.0057	

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: **Outdoor-AA-20150422** ALS Project ID: P1501720
Client Project ID: **WP. KING Property AA Sampling / 3437470A** ALS Sample ID: P1501720-003

Test Code: EPA TO-15 SIM Date Collected: 4/22/15
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 4/28/15
Analyst: Wida Ang Date Analyzed: 5/6/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SC01703

Initial Pressure (psig): -1.95 Final Pressure (psig): 3.88

Canister Dilution Factor: 1.46

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.037	ND	0.014	
75-35-4	1,1-Dichloroethene	ND	0.037	ND	0.0092	
156-60-5	trans-1,2-Dichloroethene	ND	0.037	ND	0.0092	
75-34-3	1,1-Dichloroethane	ND	0.037	ND	0.0090	
156-59-2	cis-1,2-Dichloroethene	ND	0.037	ND	0.0092	
107-06-2	1,2-Dichloroethane	**0.059**	0.037	**0.015**	0.0090	
71-55-6	1,1,1-Trichloroethane	ND	0.037	ND	0.0067	
79-01-6	Trichloroethene	ND	0.037	ND	0.0068	
127-18-4	Tetrachloroethene	**0.080**	0.037	**0.012**	0.0054	

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: P1501720
Client Project ID: **WP. KING Property AA Sampling / 3437470A** ALS Sample ID: P150505-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: 5/5/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.025	ND	0.0098	
75-35-4	1,1-Dichloroethene	ND	0.025	ND	0.0063	
156-60-5	trans-1,2-Dichloroethene	ND	0.025	ND	0.0063	
75-34-3	1,1-Dichloroethane	ND	0.025	ND	0.0062	
156-59-2	cis-1,2-Dichloroethene	ND	0.025	ND	0.0063	
107-06-2	1,2-Dichloroethane	ND	0.025	ND	0.0062	
71-55-6	1,1,1-Trichloroethane	ND	0.025	ND	0.0046	
79-01-6	Trichloroethene	ND	0.025	ND	0.0047	
127-18-4	Tetrachloroethene	ND	0.025	ND	0.0037	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Environ International Corporation**
Client Project ID: **WP. KING Property AA Sampling / 3437470A** ALS Project ID: P1501720

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date(s) Collected: 4/22 - 4/23/15
Analyst: Wida Ang Date(s) Received: 4/28/15
Sample Type: 6.0 L Summa Canister(s) Date(s) Analyzed: 5/5 - 5/6/15
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 % Recovered	Toluene-d8 % Recovered	Bromofluorobenzene % Recovered	Acceptance Limits	Data Qualifier
Method Blank	P150505-MB	**88**	**98**	**115**	70-130	
Lab Control Sample	P150505-LCS	**89**	**97**	**116**	70-130	
Crawl Space-AA-20150422	P1501720-001	**89**	**101**	**104**	70-130	
Indoor-AA-20150423	P1501720-002	**90**	**100**	**102**	70-130	
Outdoor-AA-20150422	P1501720-003	**90**	**101**	**110**	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: P1501720
Client Project ID: **WP. KING Property AA Sampling / 3437470A** ALS Sample ID: P150505-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: 5/5/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	Result µg/m³	% Recovery	ALS Acceptance Limits	Data Qualifier
75-01-4	Vinyl Chloride	4.04	**3.60**	**89**	64-118	
75-35-4	1,1-Dichloroethene	4.28	**3.64**	**85**	72-113	
156-60-5	trans-1,2-Dichloroethene	4.24	**3.71**	**88**	70-115	
75-34-3	1,1-Dichloroethane	4.16	**3.54**	**85**	66-117	
156-59-2	cis-1,2-Dichloroethene	4.28	**3.59**	**84**	72-115	
107-06-2	1,2-Dichloroethane	4.20	**3.27**	**78**	64-116	
71-55-6	1,1,1-Trichloroethane	4.16	**3.34**	**80**	69-113	
79-01-6	Trichloroethene	4.16	**3.65**	**88**	70-112	
127-18-4	Tetrachloroethene	3.96	**3.47**	**88**	67-114	

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

May 11, 2015

Wendy Stonestreet
Environ International Corporation
7500 College Boulevard, Suite 925
Overland Park, KS 66210

RE: WP SG Sampling, Fort Smith 2nd Quarter / 3437470A

Dear Wendy:

Enclosed are the results of the sample submitted to our laboratory on April 28, 2015. For your reference, these analyses have been assigned our service request number P1501723.

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 12:16 pm, May 11, 2015

Kelly Horiuchi
Laboratory Director

2655 Park Center Dr., Suite A
Simi Valley, CA 93065
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Client: Environ International Corporation Service Request No: P1501723
Project: WP SG Sampling, Fort Smith 2nd Quarter / 3437470A

CASE NARRATIVE

The sample was received intact under chain of custody on April 28, 2015 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Volatile Organic Compound Analysis

The sample was analyzed in SIM mode for selected volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is not included on the laboratory's AIHA-LAP scope of accreditation.

The Summa 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.

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ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L14-2
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	876241
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	4068-001
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-14-5
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA016272014-4
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Environ International Corporation Service Request: P1501723

Project ID: WP SG Sampling, Fort Smith 2nd Quarter / 3437470A

Date Received: 4/28/2015

Time Received: 09:45

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-15 - VOC SIM
VP-07-20150423	P1501723-001	Air	4/23/2015	16:05	SC00301	-1.27	3.70	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. P1501723

ALS Contact:

Company Name & Address (Reporting Information)
ENVIRON
7500 College Blvd Ste 925
Overland Park, KS 66210

Project Name: WP SG Sampling, Fort Smith 2nd Quarter

Project Number: 343747.0A

P.O. # / Billing Information

Project Manager: Tamara Gleason

Phone: 816.718.1491

Fax:

Email Address for Result Reporting: wstonestreet@environcorp.com tgleason@environcorp.com

Sampler (Print & Sign): Wendy Stonestreet Wendy Stonestreet

Analysis Method

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	TO-15 Site Specific List		Comments e.g. Actual Preservative or specific instructions
VP-07-20150423		4/23/15	1605	SC00301	0A00281	-30.0"Hg	-3.5"Hg	6L	X		

5 of 10

Report Tier Levels - please select

Tier I - Results (Default if not specified) ____
Tier II (Results + QC Summaries) X
Tier III (Results + QC & Calibration Summaries) ____
Tier IV (Data Validation Package) 10% Surcharge ____

EDD required (Yes) / No
Type: EQuIS
Units: ppbv / ug/m3

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
Wendy Stonestreet For X	4/23/15	1200	For X		
Relinquished by: (Signature)	Date:	Time:	Received by: (Signature)	Date:	Time:
For X				4/24/15	0945

Cooler / Blank Temperature ____ °C

ALS Environmental
Sample Acceptance Check Form

Client: Environ International Corporation Work order: P1501723

Project: WP SG Sampling, Fort Smith 2nd Quarter / 3437470A

Sample(s) received on: 4/28/15 Date opened: 4/28/15 by: KKELPE

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by ALS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☒	☐	☐
	Location of seal(s)? sealing box, signature only NO date 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
P1501723-001.01	6.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers):

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environ International Corporation**
Client Sample ID: **VP-07-20150423** ALS Project ID: P1501723
Client Project ID: **WP SG Sampling, Fort Smith 2nd Quarter / 3437470A** ALS Sample ID: P1501723-001

Test Code: EPA TO-15 SIM Date Collected: 4/23/15
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 4/28/15
Analyst: Wida Ang Date Analyzed: 5/6/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SC00301
Initial Pressure (psig): -1.27 Final Pressure (psig): 3.70

Canister Dilution Factor: 1.37

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	**3.2**	0.034	**1.3**	0.013	
75-35-4	1,1-Dichloroethene	**0.77**	0.034	**0.19**	0.0086	
156-60-5	trans-1,2-Dichloroethene	ND	0.034	ND	0.0086	
75-34-3	1,1-Dichloroethane	**0.54**	0.034	**0.13**	0.0085	
156-59-2	cis-1,2-Dichloroethene	ND	0.034	ND	0.0086	
107-06-2	1,2-Dichloroethane	**0.082**	0.034	**0.020**	0.0085	
71-55-6	1,1,1-Trichloroethane	ND	0.034	ND	0.0063	
79-01-6	Trichloroethene	**0.15**	0.034	**0.029**	0.0064	
127-18-4	Tetrachloroethene	**0.051**	0.034	**0.0075**	0.0051	

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: P1501723
Client Project ID: **WP SG Sampling, Fort Smith 2nd Quarter / 3437470A** ALS Sample ID: P150505-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: 5/5/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.025	ND	0.0098	
75-35-4	1,1-Dichloroethene	ND	0.025	ND	0.0063	
156-60-5	trans-1,2-Dichloroethene	ND	0.025	ND	0.0063	
75-34-3	1,1-Dichloroethane	ND	0.025	ND	0.0062	
156-59-2	cis-1,2-Dichloroethene	ND	0.025	ND	0.0063	
107-06-2	1,2-Dichloroethane	ND	0.025	ND	0.0062	
71-55-6	1,1,1-Trichloroethane	ND	0.025	ND	0.0046	
79-01-6	Trichloroethene	ND	0.025	ND	0.0047	
127-18-4	Tetrachloroethene	ND	0.025	ND	0.0037	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Environ International Corporation**
Client Project ID: **WP SG Sampling, Fort Smith 2nd Quarter / 3437470A** ALS Project ID: P1501723

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date(s) Collected: 4/23/15
Analyst: Wida Ang Date(s) Received: 4/28/15
Sample Type: 6.0 L Summa Canister(s) Date(s) Analyzed: 5/5 - 5/6/15
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 % Recovered	Toluene-d8 % Recovered	Bromofluorobenzene % Recovered	Acceptance Limits	Data Qualifier
Method Blank	P150505-MB	**88**	**98**	**115**	70-130	
Lab Control Sample	P150505-LCS	**89**	**97**	**116**	70-130	
VP-07-20150423	P1501723-001	**89**	**100**	**93**	70-130	

Surrogate percent recovery is verified and accepted based on the on-column result.
Reported results are shown in concentration units and as a result of the calculation, may vary slightly from the on-column percent recovery.

ALS ENVIRONMENTAL

LABORATORY CONTROL SAMPLE SUMMARY

Client: **Environ International Corporation**
Client Sample ID: **Lab Control Sample** ALS Project ID: P1501723
Client Project ID: **WP SG Sampling, Fort Smith 2nd Quarter / 3437470A** ALS Sample ID: P150505-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: 5/5/15
Sample Type: 6.0 L Summa Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	Result µg/m³	% Recovery	ALS Acceptance Limits	Data Qualifier
75-01-4	Vinyl Chloride	4.04	**3.60**	**89**	64-118	
75-35-4	1,1-Dichloroethene	4.28	**3.64**	**85**	72-113	
156-60-5	trans-1,2-Dichloroethene	4.24	**3.71**	**88**	70-115	
75-34-3	1,1-Dichloroethane	4.16	**3.54**	**85**	66-117	
156-59-2	cis-1,2-Dichloroethene	4.28	**3.59**	**84**	72-115	
107-06-2	1,2-Dichloroethane	4.20	**3.27**	**78**	64-116	
71-55-6	1,1,1-Trichloroethane	4.16	**3.34**	**80**	69-113	
79-01-6	Trichloroethene	4.16	**3.65**	**88**	70-112	
127-18-4	Tetrachloroethene	3.96	**3.47**	**88**	67-114	

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

May 11, 2015

Wendy Stonestreet
Environ International Corporation
7500 College Boulevard, Suite 925
Overland Park, KS 66210

RE: WP SG Sampling, Fort Smith 2nd Quarter / 3437470A

Dear Wendy:

Enclosed are the results of the sample submitted to our laboratory on April 28, 2015. For your reference, these analyses have been assigned our service request number P1501724.

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

Kelly Horiuchi
Laboratory Director

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Simi Valley, CA 93065
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Client: Environ International Corporation Service Request No: P1501724
Project: WP SG Sampling, Fort Smith 2nd Quarter / 3437470A

CASE NARRATIVE

The sample was received intact under chain of custody on April 28, 2015 and was stored in accordance with the analytical method requirements. Please refer to the sample acceptance check form for additional information. The results reported herein are applicable only to the condition of the sample at the time of sample receipt.

Volatile Organic Compound Analysis

The sample was analyzed in SIM mode for selected volatile organic compounds in accordance with EPA Method TO-15 from the Compendium of Methods for the Determination of Toxic Organic Compounds in Ambient Air, Second Edition (EPA/625/R-96/010b), January, 1999. This procedure is described in laboratory SOP VOA-TO15. The analytical system was comprised of a gas chromatograph / mass spectrometer (GC/MS) interfaced to a whole-air preconcentrator. This method is not included on the laboratory's AIHA-LAP scope of accreditation.

The Summa 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.

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ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L14-2
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	876241
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	4068-001
Pennsylvania DEP	http://www.depweb.state.pa.us/labs	68-03307 (Registration)
Texas CEQ (NELAP)	http://www.tceq.texas.gov/field/qa/env_lab_accreditation.html	T104704413-14-5
Utah DOH (NELAP)	http://www.health.utah.gov/lab/labimp/certification/index.html	CA016272014-4
Washington DOE	http://www.ecy.wa.gov/programs/eap/labs/lab-accreditation.html	C946

Analyses were performed according to our laboratory's NELAP and DoD-ELAP approved quality assurance program. A complete listing of specific NELAP and DoD-ELAP certified analytes can be found in the certifications section at www.alsglobal.com, or at the accreditation body's website.

Each of the certifications listed above have an explicit Scope of Accreditation that applies to specific matrices/methods/analytes; therefore, please contact the laboratory for information corresponding to a particular certification.

ALS ENVIRONMENTAL

DETAIL SUMMARY REPORT

Client: Environ International Corporation Service Request: P1501724

Project ID: WP SG Sampling, Fort Smith 2nd Quarter / 3437470A

Date Received: 4/28/2015

Time Received: 09:45

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	TO-15 - VOC SIM
VP-09-20150423	P1501724-001	Air	4/23/2015	17:10	SSC00298	-1.42	3.91	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. P1501724

Company Name & Address (Reporting Information)	ENVIRON 7500 College Blvd Ste 925 Overland Park, KS 66210
Project Name	WP SG Sampling, Fort Smith 2nd Quarter
Project Number	34137470A
P.O. # / Billing Information	
ALS Contact:	Kelly H.
Project Manager	Tamara Gleason
Phone	816.718.1491
Fax	
Email Address for Result Reporting	wstorestreet@environcorp.com tgleason@environcorp.com
Sampler (Print & Sign)	Wendy Storestreet / Wendy Storestreet

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: TO-15 Site Specific List	Comments e.g. Actual Preservative or specific instruction
I/P-09-20150423	(1)	4/23/15	1710	SSC00298	~~SSC00~~ 0P01620	-28.5" Hg	-5.0" Hg	6L	X	

5 of 10

Report Tier Levels - please select

Tier I - Results (Default if not specified) ____
Tier II (Results + QC Summaries) X
Tier III (Results + QC & Calibration Summaries) ____
Tier IV (Data Validation Package) 10% Surcharge ____

EDD required (Yes) / No
Type: EQUIS
Units: ppbv ug/m3

Chain of Custody Seal: (Circle) INTACT BROKEN ABSENT

Project Requirements (MRLs, QAPP)

Relinquished by: (Signature) Wendy Storestreet	Date: 4/23/15	Time: 1200	Received by: (Signature) FEDEX	Date:	Time:	
Relinquished by: (Signature) FEDEX	Date:	Time:	Received by: (Signature)	Date: 4/28/15	Time: 0941	Cooler / Blank Temperature ____ °C

ALS Environmental
Sample Acceptance Check Form

Client: Environ International Corporation Work order: P1501724

Project: WP SG Sampling, Fort Smith 2nd Quarter / 3437470A

Sample(s) received on: 4/28/15 Date opened: 4/28/15 by: ADAVID

Note: This form is used for all samples received by ALS. The use of this form for custody seals is strictly meant to indicate presence/absence and not as an indication of compliance or nonconformity. Thermal preservation and pH will only be evaluated either at the request of the client and/or as required by the method/SOP.

		Yes	No	N/A
1	Were **sample containers** properly marked with client sample ID?	☒	☐	☐
2	Container(s) **supplied by ALS**?	☒	☐	☐
3	Did **sample containers** arrive in good condition?	☒	☐	☐
4	Were **chain-of-custody** papers used and filled out?	☒	☐	☐
5	Did **sample container labels** and/or tags agree with custody papers?	☒	☐	☐
6	Was **sample volume** received adequate for analysis?	☒	☐	☐
7	Are samples within specified holding times?	☒	☐	☐
8	Was proper **temperature** (thermal preservation) of cooler at receipt adhered to?	☐	☐	☒
9	Was a **trip blank** received?	☐	☒	☐
10	Were **custody seals** on outside of cooler/Box?	☒	☐	☐
	Location of seal(s)? _____ Sealing Lid?	☒	☐	☐
	Were signature and date included?	☒	☐	☐
	Were seals intact?	☒	☐	☐
	Were custody seals on outside of sample container?	☐	☒	☐
	Location of seal(s)? _____ Sealing Lid?	☐	☐	☒
	Were signature and date included?	☐	☐	☒
	Were seals intact?	☐	☐	☒
11	Do containers have appropriate **preservation**, according to method/SOP or Client specified information?	☐	☐	☒
	Is there a client indication that the submitted samples are **pH** preserved?	☐	☐	☒
	Were **VOA vials** checked for presence/absence of air bubbles?	☐	☐	☒
	Does the client/method/SOP require that the analyst check the sample pH and if necessary alter it?	☐	☐	☒
12	**Tubes:** Are the tubes capped and intact?	☐	☐	☒
	Do they contain moisture?	☐	☐	☒
13	**Badges:** Are the badges properly capped and intact?	☐	☐	☒
	Are dual bed badges separated and individually capped and intact?	☐	☐	☒

Lab Sample ID	Container Description	Required pH *	Received pH	Adjusted pH	VOA Headspace (Presence/Absence)	Receipt / Preservation Comments
P1501724-001.01	6.0 L Silonite Can					
P1501724-002.01	6.0 L Source Can					

Explain any discrepancies: (include lab sample ID numbers): _____

RSK - MEEPP, HCL (pH<2); RSK - CO2, (pH 5-8); Sulfur (pH>4)

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Client: **Environ International Corporation**
Client Sample ID: **VP-09-20150423** ALS Project ID: P1501724
Client Project ID: **WP SG Sampling, Fort Smith 2nd Quarter / 3437470A** ALS Sample ID: P1501724-001

Test Code: EPA TO-15 SIM Date Collected: 4/23/15
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date Received: 4/28/15
Analyst: Wida Ang Date Analyzed: 5/6/15
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:
Container ID: SSC00298
Initial Pressure (psig): -1.42 Final Pressure (psig): 3.91

Canister Dilution Factor: 1.40

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	**16**	0.035	**6.2**	0.014	
75-35-4	1,1-Dichloroethene	**10**	0.035	**2.6**	0.0088	
156-60-5	trans-1,2-Dichloroethene	**0.060**	0.035	**0.015**	0.0088	
75-34-3	1,1-Dichloroethane	**2.5**	0.035	**0.61**	0.0087	
156-59-2	cis-1,2-Dichloroethene	**0.066**	0.035	**0.017**	0.0088	
107-06-2	1,2-Dichloroethane	**0.088**	0.035	**0.022**	0.0087	
71-55-6	1,1,1-Trichloroethane	ND	0.035	ND	0.0064	
79-01-6	Trichloroethene	**0.25**	0.035	**0.046**	0.0065	
127-18-4	Tetrachloroethene	**0.050**	0.035	**0.0074**	0.0052	

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: P1501724
Client Project ID: **WP SG Sampling, Fort Smith 2nd Quarter / 3437470A** ALS Sample ID: P150505-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: 5/5/15
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 1.00 Liter(s)
Test Notes:

Canister Dilution Factor: 1.00

CAS #	Compound	Result µg/m³	MRL µg/m³	Result ppbV	MRL ppbV	Data Qualifier
75-01-4	Vinyl Chloride	ND	0.025	ND	0.0098	
75-35-4	1,1-Dichloroethene	ND	0.025	ND	0.0063	
156-60-5	trans-1,2-Dichloroethene	ND	0.025	ND	0.0063	
75-34-3	1,1-Dichloroethane	ND	0.025	ND	0.0062	
156-59-2	cis-1,2-Dichloroethene	ND	0.025	ND	0.0063	
107-06-2	1,2-Dichloroethane	ND	0.025	ND	0.0062	
71-55-6	1,1,1-Trichloroethane	ND	0.025	ND	0.0046	
79-01-6	Trichloroethene	ND	0.025	ND	0.0047	
127-18-4	Tetrachloroethene	ND	0.025	ND	0.0037	

ND = Compound was analyzed for, but not detected above the laboratory reporting limit.
MRL = Method Reporting Limit - The minimum quantity of a target analyte that can be confidently determined by the referenced method.

ALS ENVIRONMENTAL

SURROGATE SPIKE RECOVERY RESULTS

Client: **Environ International Corporation**
Client Project ID: **WP SG Sampling, Fort Smith 2nd Quarter / 3437470A** ALS Project ID: P1501724

Test Code: EPA TO-15 SIM
Instrument ID: Tekmar AUTOCAN/Agilent 5973N/HP6890A/MS19 Date(s) Collected: 4/23/15
Analyst: Wida Ang Date(s) Received: 4/28/15
Sample Type: 6.0 L Summa Canister(s) Date(s) Analyzed: 5/5 - 5/6/15
Test Notes:

Client Sample ID	ALS Sample ID	1,2-Dichloroethane-d4 % Recovered	Toluene-d8 % Recovered	Bromofluorobenzene % Recovered	Acceptance Limits	Data Qualifier
Method Blank	P150505-MB	**88**	**98**	**115**	70-130	
Lab Control Sample	P150505-LCS	**89**	**97**	**116**	70-130	
VP-09-20150423	P1501724-001	**91**	**99**	**86**	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: P1501724
Client Project ID: **WP SG Sampling, Fort Smith 2nd Quarter / 3437470A** ALS Sample ID: P150505-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: 5/5/15
Sample Type: 6.0 L Silonite Canister Volume(s) Analyzed: 0.125 Liter(s)
Test Notes:

CAS #	Compound	Spike Amount µg/m³	Result µg/m³	% Recovery	ALS Acceptance Limits	Data Qualifier
75-01-4	Vinyl Chloride	4.04	**3.60**	**89**	64-118	
75-35-4	1,1-Dichloroethene	4.28	**3.64**	**85**	72-113	
156-60-5	trans-1,2-Dichloroethene	4.24	**3.71**	**88**	70-115	
75-34-3	1,1-Dichloroethane	4.16	**3.54**	**85**	66-117	
156-59-2	cis-1,2-Dichloroethene	4.28	**3.59**	**84**	72-115	
107-06-2	1,2-Dichloroethane	4.20	**3.27**	**78**	64-116	
71-55-6	1,1,1-Trichloroethane	4.16	**3.34**	**80**	69-113	
79-01-6	Trichloroethene	4.16	**3.65**	**88**	70-112	
127-18-4	Tetrachloroethene	3.96	**3.47**	**88**	67-114	

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
Field Notes and Weather Data for April 2015

Whirlpool (2nd Quarter)
Ft Smith, AR 4/13/15

~60°F cloudy/RAIN

0630 - Arrived On-site. Had H&S meeting.

0700 - Paired up with Justine S & took J-plugs off of all on-site wells (except for the North-East & far North parking lot.

0800 - After all J-plugs were off we went back & took DTW & TD on each well. We also took PID readings. See data log per Wendy S.

1100 - Went off-site to wal-mart to get neon green, then changed at Hotel & got lunch.

1330 - Got back On-site & calibrated YSI & other sampling equipment.

1415 - Loaded equipment & mob to [MW-22]

1452 - Began taking parameter readings. Ran pump @ 175 mL/m- in because it would turn off if I tried to slow it down any lower.

1600

1640 - Reached stabilization & got sample bottles ready.

Lucy Cox

65°F RAIN/Cloudy

Whirlpool (2nd Quarter)
Ft Smith, AR 4-13-15

1645 - Took samples.
1715 - Completed sampling, packed up equipment & mob back to boiler room.
1730 - Helped pack samples & unloaded equipment.
1800 - Left site for the day.

Lucy Closs

60°F Cloudy

Whirlpool (2nd Quarter)
Ft. Smith, AR 4.14.15

630 - Arrived on-site. Calibrated YSI. See calibration sheet per Wendy Stonestreet.
700 - ~~Had~~ H & S meeting. Discussed speeding club, ticks & making sure people in neighborhood don't get upset about being on their property.
800 - Mobilized to first off-site well, MW-177. Wendy had me sample all VOCs off-site today.
0826 - Set up equipment & started taking readings.
0856 - Well ran dry after 20 mins of purging. Moved to next well, MW-181 while waiting for current well to recharge.
0924 - Set up equipment & began taking readings.
0952 - Well ran dry after purging for 20 mins.
1000 - Went back to MW-177 to get samples. ~~& was still dry. Decided to start on another w~~
Got samples at 10:15. Decided to start on the Sinoggins residence.

62°F Cloudy — Whirlpool, Fort Smith, AR — 4-14-15

1120- Arrived at Scroggins residence. Unloaded equipment
1125- Got set up on well MW-174
1128- Started purging.
1203- Stabilized after 35 mins of purging. Removed iron sample turned reddish color (0.490).
1212- Took samples.
1222- moved to other well on Scroggin's property, MW-173. When I took the cover off the well, the encasing was filled to top with storm water. Scooped water out of well casing.
1230- I took J-plug off of well & noticed that water was up to the rim of the well. Storm-water had gotten into the well. I purged well dry & would come back later in day to check recharge.
1245- left site to get lunch.
1330- Came back to well MW-173. No water had recharged at this time. Broke down equipment & moved back to MW-181 on

62°F Cloudy — Whirlpool, Fort Smith, AR — 4/14/15

Whirlpool property.
1500- Set up equipment on MW-181.
1540- Was finally able to get samples, but not enough water to take any more readings.
1600- Was recommended by Wendy S. to get VOCs from well on-site & let MW-177 recharge over-night. Moved to boiler to get sample bottles.
1620- Arrived at MW-23. Set up equipment.
1626- Began purging.
1702- Parameters stabilized & I got bottles ready.
1709- Took samples.
1715- Loaded equipment & headed to boiler room.
1730- helped back up coolers & filled out COCs for VOCs from residential property.
1830- left site for the day.

1835- Sampled MW-176 @ 1445. Took hour to stabilize.

Amy Cress

56°F
Cloudy

Whirlpool
Ft. Smith, AR

4/15/15

0630- Arrived on-site. Began calibrating YSI. See calibration sheet per Wendy S.

0700- Had Health & Safety meeting & loaded equipment. Mob to first well for VOCs, MW-175.

0815- Arrived on-site & set up equipment.

0819- Began purging. During purge, I got Persulfate kit & Ascorbic acid bottles from Lucy M. because my specific conductivity was in the 7,000s & pH in upper 12s.

0850- Tested for persulfate, 4 drops of purge water. Reading was negative

0857- Took VOC samples.

* Note: owners of house stood on porch & watched me the entire time!

0915- Loaded car & mob back to purged well MW-173 to try & get samples.

Lucy Cross

66°F
Cloudy

Whirlpool
Ft. Smith, AR

4/15/15

0940- Arrived at MW-173. Took DTW reading & well had only recharged 10' of water. Called Wendy S & she recommended not purging but try & only get samples.

0943- Was able to get VOC samples. Was not able to get ferrous iron sample.

1000- Headed to boiler room to drop off samples & get bottles for IT MW-1.

1034- Arrived at IT MW-1, set up equipment. Added tubing

1102- Began taking readings.

1132- Stabilized by the 30 mins.

1145- Took samples.

1200- Finished getting samples, loaded vehicle with equipment to dump purge water & drop off samples.

1230- Asked Lucy M. to get me lunch off site & I mob to next well, IT MW-13.

Lucy Cross

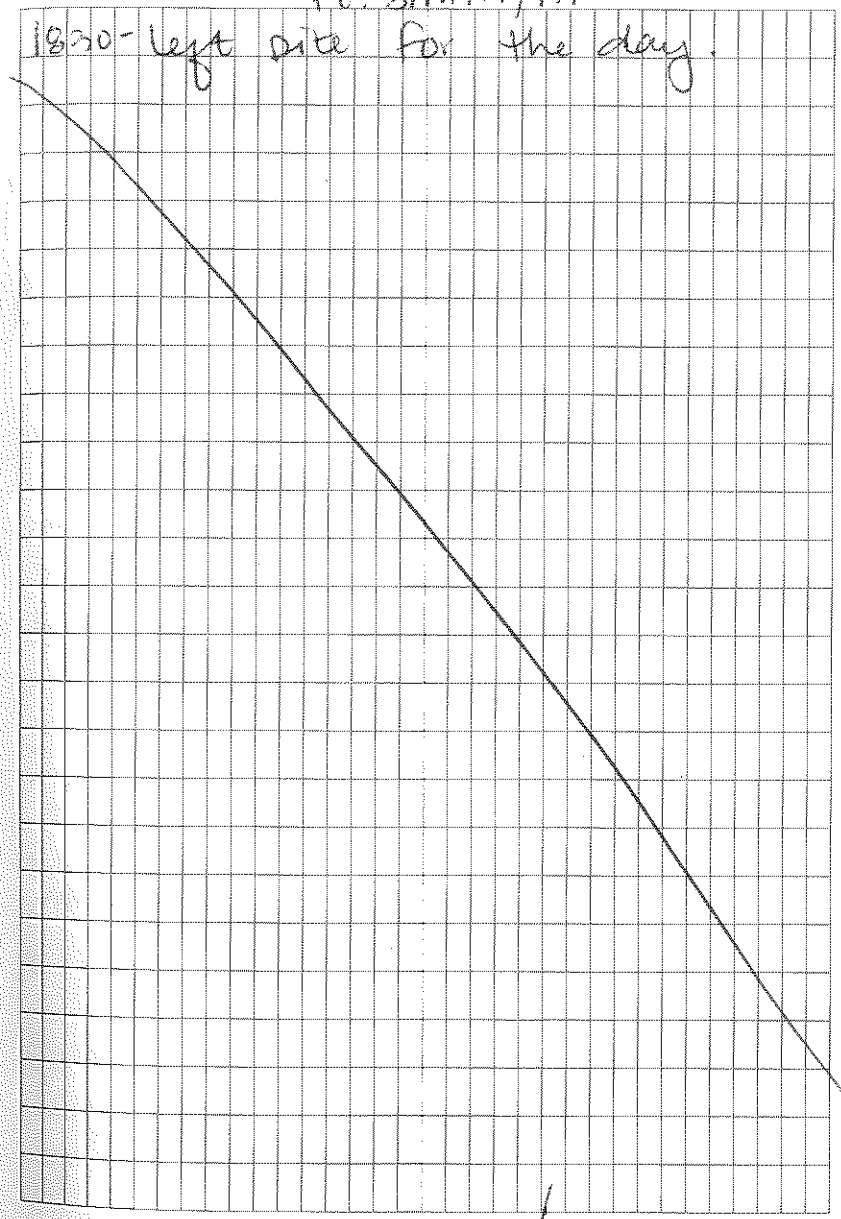
62°F Whirlpool 4/15/15
Ft. Smith, AR

1305- Arrived at ITMW-13. Added tubing, needed tube weight.
1320- Began taking reading.
1400- Well stabilized. Well is known to be "hot". Took persulfate reading. Added 5 drops of purge water w/ 25 ml of DI water = Negative for persulfate.
1430- Took samples.
1500- Dumped Purge water & dropped off samples in boiler room.
1533- Arrived at last well for the day, ITMW-17. This well is also known to be "hot".
1548- Began taking readings.
1614- Stabilized after 25 minutes. Took persulfate test: 4 drops purge water + 25 ml DI Water: D.T [40]
Did not take Ascorbic Acid samples.
1630- Took samples.
1700- Packed up equipment & headed to boiler room.
Helped load coolers & fill out COC.

Lucy Cross

63°F Whirlpool 4/15/15
Ft. Smith, AR

1830- Left site for the day.



Lucy Cross

60°F Partly Cloudy — Whirlpool, Ft. Smith, AR — 4/16/15

0630 - Arrived on-site & began calibrating YSI. See calibration sheet per Wendy S.

0700 - Held ~~HASP~~ Health & Safety meeting. Discussed heat & cold stress. High of 80°F today.

0730 - Loading car with equipment & mob to first well, MW-172.

0819 - Arrived at well, added tubing with tub weight. Well had very soft bottom & became extremely turbid after adding tubing.

0844 - Began taking readings.

0944 - Had to purge for 1 hour due to ↑ turbidity. Took persulfate test: 4 drops (200) x 25 mL DI water = 4.2 = 840 PPM. Took asorbic acid samples.

0952 - Took Samples.

1000 - Loaded equipment & mob to MW-92.

1044 - Arrived at well. Added tubing & weight.

Lucy Crose

72°F Sunny — Whirlpool, Ft. Smith, AR — 4/16/15

Cont. Very soft bottom. Well became very turbid at beginning of purging.

1058 - Began taking readings.

1156 - Had to purge for 1 hour due to high turbidity.

Tested for persulfate: 30 drops (30x) x 4.2 = 1,260 PPM - Took asorbic acid samples.

1205 - Took samples.

1220 - Loaded vehicle & mob to next well.

1234 - Arrived at well MW-86. Added tubing with weight.

1300 - Began taking readings.

1350 - Stabilized after ~~30~~ mins. Tested for persulfate: 5 drops (100) = 2,800 PPM - Took asorbic acid samples.

1340 - Took samples.

~~48~~ 1400 - Walked equipment to last well, MW-85.

1405 - Left site to get gas & soda from gas station. Had Lucy M set up my well.

1426 - Took first readings.

Lucy Crose

80°F Whirlpool 4/16/15
Ft Smith, AR

1451 - Well Stabilized after 25 minutes Tested for peroxyacetic: 4,200 PPM - Took ascorbic acid samples.
1458 - Took samples.
1520 - Loaded vehicle & mob to boiler room.
1545 ~~tt~~ Cleaned & unloaded all equipment from car. Turned in a data logs.
1605 - Helped pack coolers.
1630 - Rachel & I took all trash & ~~bot~~ empty boxes to dumpster.
1645 - Left site to check out of hotel & head home.

Lucy Voss

20

Location Ft. Smith, AR Date 4/15/15

Project / Client Whirlpool

Scope: 2nd Quarter Groundwater Sampling

1650 At boiler room to pack up
1830 ENVIRON Offsite

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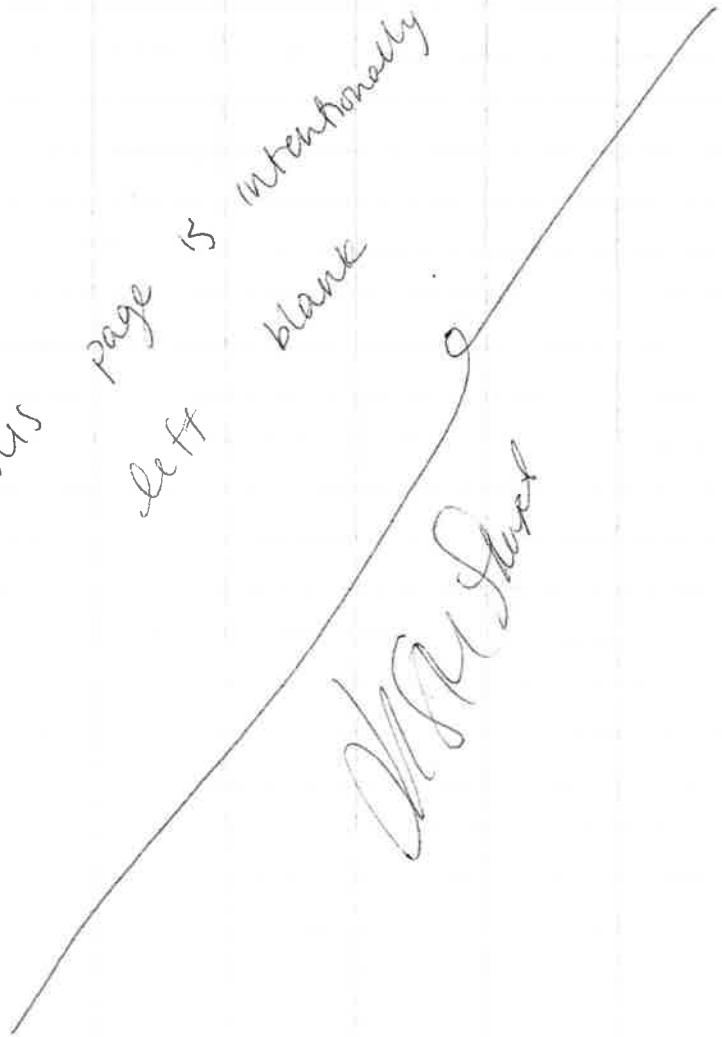

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Location Ft. Smith, AR Date 4/16/15

Project / Client Whirlpool

Scope: 2nd Quarter Groundwater Sampling

0630 ENVIRON onsite
Personnel: J. Stumpf, J. Myers, L. Cross, L. Marton, W. Stonestreet, T-House-Knight, R. LaFiore, V. Seglen
Weather: foggy, 60s-70s,
TASKS:
1. complete 2nd Quarter sampling
0645 Calibrate YSI
0700 H&S mtg
0725 Arrive at MW-84
DTW = 11.52
0734 Start purge, set purge rate to 100 mL/min (see log for Stabilization readings)
0844 end purge, about 6.8L purged
0845 Collect [MW-84-201504] for VOCs
Persulfate = 7000 - switched VOAs to be preserved w/ ascorbic acid
0905 Arrive at MW-178
DTW = 3.11'
0918 Start purge, set purge rate to 100 mL/min (see log for Stabilization readings)

JJ

Location Ft. Smith, AR Date 4/16/15

Project / Client Whirlpool

Scope: 2nd Quarter Groundwater Sampling

0946 well purged dry, about 2.8L purged. Will return later to collect sample.

0955 Arrive at MW-180
DTW = 3.14

1001 Start purge, set purge rate to 100 mL/min. (see log for stabilization readings)

1021 well is dry, about 2L purged. Will return later to collect the sample.

1025 Arrive at MW-24
DTW = 12.28

1032 Start purge, set purge rate ~~to~~ to 100 mL/min (see log for purge readings)

1129 End purge, about 5.2L purged

1130 Collected MW-24-201504 for VOCs. Persulfate = 1,400 - switch VOAs for preservative ascorbic acid

1200 At boiler room to dump purge water

1205 offsite to get lunch

1330 Arrive at MW-83
DTW = 11.43'

Location Ft. Smith, AR Date 4/16/15

Project / Client Whirlpool

Scope: 2nd Quarter Groundwater Sampling

1338 Start purge. Set purge rate to 100 mL/min (see log for stabilization readings)

1349 end purge, about 6.8L purged

1350 Collected MW-83-201504
Persulfate = 280 → switch VOAs for preservative ~~asc~~ ascorbic acid

1405 arrive at MW-178
DTW = 4.09'

1415 Collect MW-178-201504
persulfate = 210 - switched VOAs for pres. ascorbic acid

1425 Arrive at MW-179
DTW = 12.68'

1430 Collect MW-179-201504

1440 Arrive at MW-180
DTW = 4.95'

1445 Collect MW-180-201504

1500 At boiler room to pack up

1710 ENVIRON offsite

9/13/15

0827 opened plug on MW180
Some water in well

0828 opened MW178
Some water in well

0839 opened plug on ~~MW116~~ RL
ITMW-16

0844 MW-99 DTW 8.10'
TD 22.55'

0856 MW-98 DTW 12.46'
TD 19.52'

0901 MW-96 DTW 8.24'
TD 14.32'

0913 MW87 DTW 11.12 water in well
TD 26.7

0916 MW91 DTW 9.87
TD 25.55

4/13/15

1018
MW 84 DTW 11.6'
TD 23.96'

1023 MW83 DTW 11.46'
TD 24.53'

1028 MW180 DTW 3.56'
TD 6.78'
some wtr in well

1031 MW178 DTW ~~7~~ 3.96'
TD ~~30~~ 7.77'
~~little~~ wtr in well

1038 MW16 DTW 14.72'
TD ~~34~~ RL
34.06'

1042 MW24 DTW 12.27'
TD 32.31'
little wtr in well

1056 leaving site for lunch
to pick up rental

Rite in the Rain

4/16/15

0643 Arrived onsite

0648 Started calibrating YSI
See YSI calibration
sheet for details

0731 opened MW-37 to stabilize
TD 29.03'
DTW 10.27'

0744 Opened MW179 for
stabilization

0745 Went back to boiler room
for sample bag

0758 Arrive back @ MW179
and started setting up
equipment, see log sample
sheet for DTW + TD

0819 Started pump at MW179
Calibrated turbidity
meter 025108

4/16/15

0822 water being pumped from MW179 is murky (green/brownish)

0832 water being pumped from MW179 is now colored

0857 water cleared up then started to get murky again, water meter no longer picking up water in well

0900 well dry, stopped pumping MW179

0911 checked MW179 for water level, no reading, left well to recharge, purged about 1.2 gallons

0930 Buildings where next assigned wells are is locked, could not

74° Sunny WES

Whirlpool, Ft Smith AR April 16, 2015

1520- Begin to pack coolers and prepare COCs. Most sampling crews are finishing up designated wells. EBs are being prepared for shipment.

1600 - Several people are leaving the site Including Tamara HK & Lucy Cross.

1630 - All samplers have left the site except Wendy Stonestreet & Victoria Siegien. Coolers shipped.

1640 - Clean & organize Boiler Room. Remove garbage to dumpster.

1800 - ENVIRON off site.

Wendy Stonestreet

100° Cloudy WES

Whirlpool, Ft Smith AR April 22, 2015

730 - Wendy Stonestreet on-site. Spoke to Tamara HK about activities via phone for day.

745 - Began to unpack Summa cannisters.
- Weather is cloudy, with chance of rain.

820 - Hardy dropped off sample pump.

825 - Summa canisters are labeled "Ambient".
- Assembled summa's and flow controller assembly
- Summa AS00877 has regulator FCA00854
- Summa AC01300 has regulator FCA00969.
- During assembly conducted the "Shut in" test for both units.

834 - AC01300/FCA00969 - Check initial pressure: -29" Hg - Flow controler failed cannot get tight seal. Changed Flow controller to 8 hour. Flow controller is OA00613
AS00877/FCA00854 - passed

910 - Lucy Cross on-site.

1000 - MOB to KING property

1010 - Opened 24 hour canister AS00877/FCA00854. -28" Hg.

Wendy Stonestreet

60° Raining

Whirlpool, Ft Smith AR WES. April 22, 2015

1020 - Check PID reading under hood. Opened Summa AC01300/DA00613. Initial Vacuum -29" Hg.

1025 - Did shut in test on Summa SC01703 Regulator DA01856. - PASSED

1031 - Opened Summa SC01703 at 103[illegible] -29" Hg. under bird bath due to rain.

1100 - Left site for lunch.

1230 - Went to hardware store to pick up bolts

1300 - MOB back to boiler room to pick up equipment.

1319 - MOB to VP-14. Checked vapor point for water. Vapor point is clear of water.

1330 - MOB to VP-06. Checked vapor point for water. Line is full of water. Purged well for 5 minutes. No break in water stream.

1401 - Collect Sample VP-06-20150422

1409 - Set up at well VP-05.

- Check well for water. Well has water in vapor line, although not continuous.

1422 - Collect sample VP-05-20150422. Very hard to purge.

1446 - MOB to VP-07. Checked line for water. Line is clear.

1450 - Checked VP-08 for Water in line. Line has water in line.

Wendy Stenett

61° Cloudy

Whirlpool Ft. Smith AR WES April 22, 2015

1502 - Since water in line is sporatic, collected sample VP-08-20150422

1510 - MOB to VP-09 & VP-10.

- Checked Summa canisters while on property.
- Outdoor AA is -12" Hg
- Crawl Space is -14" Hg
- Indoor AA is -23.5" Hg

1520 - VP-09 is clear of water

1540 - VP-10 has water. Very turbid - clay

1542 - Collected sample VP-10-20150422

1550 - MOB to VP-12 on Whirlpool property.

- Checked vapor point for water. Line has water.

1601 - Collected sample VP-12-20150422. Filled one VOA and line went dry. Waited for several minutes and started to fill bottles again after turning off pump.

1630 - MOB to Boiler room to pack coolers and fill out COC.

1700 - MOB to KING Property.

1710 - Checked Outdoor AA. -6" Hg. Diesel truck running nearby.

1714 - Closed Crawl Space Summa AC01300. -2.5" Hg.

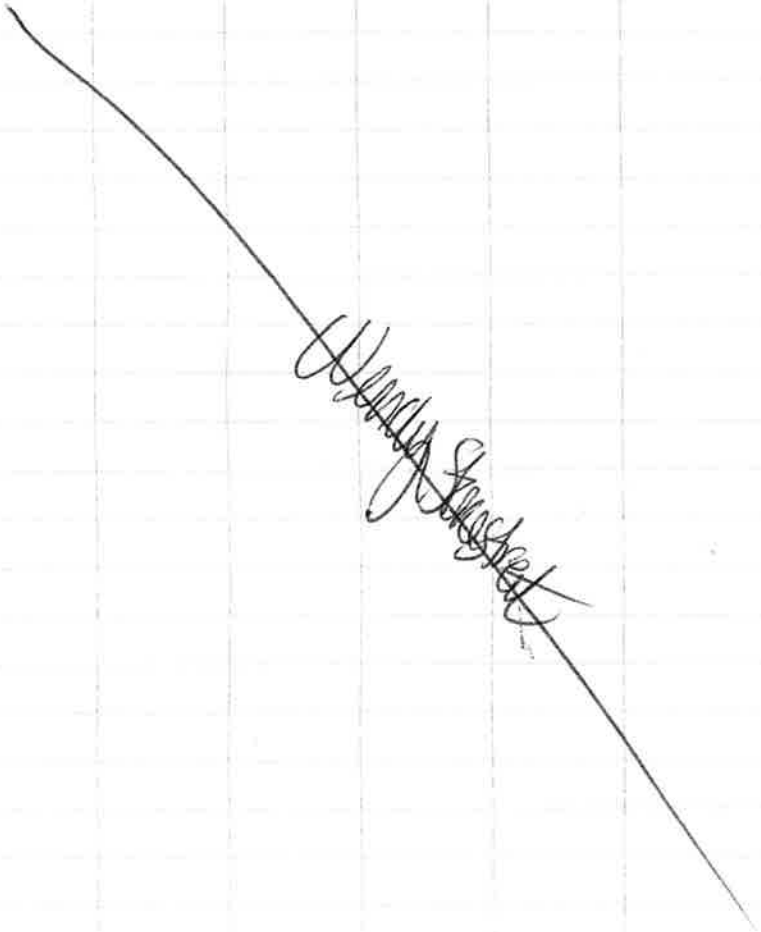
Wendy Stenett

68° Cloudy

Whirlpool, Fort Smith AR WES April 22, 2015

1730 - MOB to Boiler Room on-site to drop off Summa canisters. Pack Summa canisters.

1745 - ENVIRON off-site.



54° Cloudy

Whirlpool, Fort Smith AR WES April 23, 2015

610 - Wendy Stonestreet on-site

611 - Weather is light rain & cloudy.

615 - Load vehicle for vapor sampling.

620 - MOB to ~~XX~~ WES VP-14 to set up summa canister.

621 - Arrive at VP-14. Begin to assemble Sampling train.

- Performed shut in test on canister SC01062 and regulator OA01393
- Shut in test passed.
- Continue to assemble sampling train.
- Performed Helium leak test.
- 22% He in shroud.
- 0 ppm in sampling train.
- Removed 3 well volumes of air using vacuum pump. Well was very tight by the bend, tubing held a vacuum.

700 - Lucy Cross arrived on site.

700 - Opened summa. Initial Vacuum was -29" Hg.

705 - Cleaned up at well and MOB back to boiler room.

- Packed truck to sample wells in neighborhood.

800 - MOB to VP-09.

Wendy Stonestreet

59 °C Cloudy
Whirlpool, Fort Smith AR WES April 23, 2015

807 - Begin set up on VP-09
- Begin to assemble sampling train.
- Performed shut-in test. Passed.
- Canister: SSC00298
- Regulator: 0A01620
- Performed Helium leak test.
- He in shroud = 44.2%
- He in sampling train = 0 ppm.
- Removed three volumes of air ~20.0L. using vacuum pump.
- Once well was evacuated opened all valves.

826 - Opened summa canister.
- Initial Vacuum Read = -28.5" Hg.

830 - Checked on the 24 hour summa located inside the King residence. Vacuum read -6.5" Hg.

835 - MOB to VP-07. to begin set-up.
- Begin to assemble sampling train.
- Performed shut in test. Passed.
- Canister: SC00301.
- Regulator: 0A00281
- Performed Helium leak test.
- He in shroud 31.2%.

Wendy Stewart

60°C Cloudy
Whirlpool, Fort Smith AR WES April 23, 2015

835 (cont.) - He in sampling train = 0 ppm.
- Removed three volumes of air using vacuum pump.
- Once well was evacuated opend all valves.

911 - Opened summa canister.
- MOB to boiler room to get equipment.

1010 - MOB to King property to check on 24 hour summa.

1024 - Closed summa Indoor canister at the King property. Final Vacuum read is -5.0" Hg.

1045 - Return to boiler room to pack summas and fill out COCs.

1130 - Off-site for lunch.
- Picked up field supplies for boiler room.

1312 - MOB to boiler room to drop off supplies.
- MOB to vapor points to check on readings.

1350 - VP-14, Observed water in line. Vacuum holding at -26" Hg.
- MOB to VP-09. Vacuum reading - 15.4" Hg

Wendy Stewart

60° Cloudy
Whirlpool, Fort Smith AR WES April 23, 2015

1410 - MOB to VP-07, Vacuum reading = -12.9" Hg.
- MOB to Boiler room.

1425 - Cleaned Boiler room, checked sample bottle expirations, discarded expired sample bottles. Organized supplies. Took out garbage.

1550 - MOB to VP-14. No change in vacuum.
- MOB to VP-09 - Vacuum reading = -6.5" Hg.
- MOB to VP-07 - Vacuum reading is -3.5" Hg.

1605 - Closed VP-07. Final vacuum is -3.5" Hg.
- MOB to VP-14. Since vacuum had not changed over the course of the day and water was observed in the line, closed summa at 1610.
- Cleaned up at well and MOB to boiler room after checked water in line.

1620 - Packed summas for shipping and prepared COC.

1700 - MOB to VP-09

1710 - Closed summa. Final Vacuum reading -5.0" Hg. Cleaned up at well.

1120 - Returned to VP-14 to attempt to take water sample with pump. Water was dripwise. Could not fill VOA.

59° Cloudy
Whirlpool, Fort Smith WES April 23, 2015

1725 - MOB to Boiler Room.
- Finished packing summas for shipment. Filled out COCs.
- Removed the final amount of garbage to take to the on-site trash bin.
- Cleaned and covered shipping area. Packed vehicles.

1810 - ENVIRON off-site.

ENVIRON – VAPOR MONITORING PORT SAMPLING

PROJECT NUMBER:	Sampler	
PROJECT NAME: Whirlpool, Ft. Smith, Arkansas	INES	Wendi Stonestreet

FIELD PARAMETERS

Well Location King Prop.	Depth	Date	Canister ID	Regulator ID	Helium in Shroud during leak test	Start Time	Initial Vacuum Reading	Finish Time	Final Vacuum Reading	Notes
Indoor	—	4/22/15	A500877	FCA00854	NA*	1010	-29" Hg	4/23/15 1024	-5.0" Hg	Placed at breathing level in center of home.
Crawl Space	—	4/22/15	AC01300	OA00613	NA*	1020	-29" Hg	1714	-2.5" Hg	Placed in crawl space
Outdoor	—	4/22/15	ASC01703	OA01856	NA*	1031	-29" Hg	1727	-5.0" Hg	Placed under front yard bird bath due to rain.

WEATHER

Sunny Cloudy Partly (Cloudy) Light Rain

Wind Direction: East

Wind Speed (mph) 0-10 (10-25) 25

Temperature: 60°

COMMENTS

* Shut in test. All passed.

ENVIRON – VAPOR MONITORING PORT SAMPLING

PROJECT NUMBER:	Sampler	
PROJECT NAME: Whirlpool, Ft. Smith, Arkansas	WES	Wendy Stancstreet

FIELD PARAMETERS

Well Location	Depth	Date	Canister ID	Regulator ID	Helium in Shroud during leak test	Start Time	Initial Vacuum Reading	Finish Time	Final Vacuum Reading	Notes
VP-14		4/23/15	SC01062	0A01393	22%	700AM	-29"Hg	1610	-26"Hg	* Well held vacuum after purging 1L.
VP-09		4/23/15	SSC06298	0A01620	44.2%	826	-28.5"Hg	1710	-5.0"Hg	
VP-07		4/23/15	SC00301	0A00281	31.2%	911	-30.0"Hg	1605	-3.5"Hg	

WEATHER

Sunny Cloudy Partly (Cloudy)

Wind Direction: East

Wind Speed (mph) (0-10) 10-25 >25

Temperature: 58°C

COMMENTS

* VP-14 - Water in line. Also water in summa. Void sample.

Weather History for KFSM - April, 2015

Today | Forecast

April Precip Stats: Actual Month Total: **4.19 in** | Average Month Total: **4.30** in

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
			1 Actual: 79° | 61° 0.01 in Average: 70° | 45° 0.13 in	**2** Actual: 78° | 59° 0.00 in Average: 70° | 45° 0.13 in	**3** Actual: 75° | 50° T in Average: 70° | 46° 0.12 in	**4** Actual: 65° | 39° 0.00 in Average: 71° | 46° 0.12 in
5 Actual: 65° | 39° 0.00 in Average: 71° | 46° 0.12 in	**6** Actual: 77° | 55° 0.00 in Average: 71° | 47° 0.13 in	**7** Actual: 82° | 60° 0.00 in Average: 72° | 47° 0.13 in	**8** Actual: 84° | 61° 0.00 in Average: 72° | 47° 0.14 in	**9** Actual: 85° | 56° 0.03 in Average: 72° | 47° 0.14 in	**10** Actual: 71° | 47° 0.00 in Average: 72° | 48° 0.14 in	**11** Actual: 79° | 48° 0.00 in Average: 73° | 48° 0.14 in
12 Actual: 81° | 50° 0.00 in Average: 73° | 48° 0.14 in	**13** Actual: 67° | 59° 2.52 in Average: 73° | 49° 0.13 in	**14** Actual: 64° | 56° 0.02 in Average: 74° | 49° 0.14 in	**15** Actual: 70° | 57° 0.29 in Average: 74° | 49° 0.14 in	**16** Actual: 79° | 57° 0.00 in Average: 74° | 50° 0.14 in	**17** Actual: 82° | 62° T in Average: 74° | 50° 0.14 in	**18** Actual: 75° | 61° 0.38 in Average: 75° | 50° 0.15 in
19 Actual: 77° | 54° 0.17 in Average: 75° | 51° 0.14 in	**20** Actual: 67° | 46° 0.00 in Average: 75° | 51° 0.15 in	**21** Actual: 73° | 44° T in Average: 75° | 51° 0.15 in	**22** Actual: 69° | 50° 0.05 in Average: 75° | 52° 0.15 in	**23** Actual: 65° | 54° T in Average: 76° | 52° 0.16 in	**24** Actual: 64° | 55° 0.07 in Average: 76° | 52° 0.15 in	**25** Actual: 84° | 55° T in Average: 76° | 53° 0.16 in
26 Actual: 79° | 56° 0.00 in Average: 76° | 53° 0.16 in	**27** Actual: 68° | 53° 0.02 in Average: 77° | 53° 0.16 in	**28** Actual: 61° | 50° 0.63 in Average: 77° | 54° 0.16 in	**29** Actual: 79° | 45° 0.00 in Average: 77° | 54° 0.16 in	**30** Actual: 80° | 49° 0.00 in Average: 77° | 54° 0.17 in		

Calendar Legend

Sunny / Clear · Mostly Cloudy · Partly Cloudy · Cloudy · Rain · Snow

Hail Flurries · Thunderstorms · Hazy / Fog · Sleet · '?' denotes 'chance of' · Unknown

Appendix C
Risk Calculations and Input Parameters

Contents:

Attachment C.1: Toxicity Values
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	Cancer Classification		ADAF			URF ($mg/m^3)^{-1}$			RfC (mg/m^3)			
			Group	Ref	Y/N	f_{oral}	f_{inh}	Value	Ref	Notes	Value	UF	Ref	Notes
VOC	Acetone	67-64-1	ID	1	N						3.1E+01	100	129	111
VOC	Benzene	71-43-2	A	1	N			7.8E-03	1	60	3.0E-02	300	1	
VOC	Bromoform	75-25-2	B2	1	N			1.1E-03	1				126	90
VOC	Bromomethane	74-83-9	ID	126	N						5.0E-03	100	1	
VOC	2-Butanone	78-93-3	ID	1	N						5.0E+00	300	1	
VOC	Carbon Disulfide	75-15-0			N						7.0E-01	30	1	
VOC	Chloroform	67-66-3	B2	1	N			2.3E-02	1		5.0E-02	100	117	
VOC	Chloromethane	74-87-3	D	1	N						9.0E-02	1,000	1	
VOC	1,1-Dichloroethene	75-35-4	C	1	N						2.0E-01	30	1	
VOC	cis-1,2-Dichloroethene	156-59-2	ID	1	N								1	90
VOC	trans-1,2-Dichloroethene	156-60-5	ID	1	N								1	90
VOC	Ethyl Benzene	100-41-4	D	1	N						1.0E+00	300	1	
VOC	2-Hexanone	591-78-6	ID	1	N						3.0E-02	3,000	1	
VOC	4-Methyl-2-pentanone	108-10-1	ID	1	N						3.0E+00	300	1	
VOC	Methylene Chloride	75-09-2	LC	1	Y	1	1	1.0E-05	1	159	6.0E-01	30	1	
VOC	Styrene	100-42-5			N						1.0E+00	30	1	
VOC	Tetrachloroethene	127-18-4	LC	1	N			2.6E-04	1		4.0E-02	1,000	1	
VOC	Toluene	108-88-3	ID	1	N						5.0E+00	10	1	
VOC	Trichloroethene	79-01-6	HC	1	Y	0.202	0.244	4.1E-03	1	159	2.0E-03	100	1	
VOC	Vinyl Chloride	75-01-4	A	1	N			4.4E-03	1	79	1.0E-01	30	1	

References

	Toxicity values were selected following the hierarchy of sources defined by USEPA (Human Health Toxicity Values in Superfund Risk Assessment, 2003), as discussed in Appendix A, Section 4 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision. Values are current as of March 5, 2014.
1	USEPA. Integrated Risk Information System (IRIS). On-line database.
2	USEPA. 1997. Health Effects Assessment Summary Tables (HEAST). FY-1997 Update. EPA 540/R-97-036. July.
117	USEPA. NCEA. 2003. Risk Assessment Issue Paper for: Derivation of Provisional Subchronic and Chronic RfCs for Chloroform [CASRN 67-66-3]. January 23.
126	Provisional Peer Reviewed Toxicity Values for Superfund (PPRTV) Database.
129	ATSDR. 2013. Minimal Risk Levels. March.

Notes:

60	IRIS provides a range of 2.2E-6 to 7.8E-6 (ug/m3)-1 as the inhalation URF for Benzene.
79	For evaluating partial lifetime exposures that include early-life exposure, the unit risk factor is also used in risk calculations that do not prorate the early-life exposure, per USEPA's May 2000 Toxicological Review.
90	Inadequate data exist to derive a toxicity value, according to the indicated reference.
111	Value as published is an MRL in the indicated reference.
159	Because the chemical has a mutagenic mode of action according to USEPA, the SF and URF are adjusted by the following age-dependent adjustment factors (ADAFs) before use: 10 for ages 0 to 2; 3 for ages 2 to 16; and 1 for ages 16 and older (USEPA 2005).

Attachment C.2: Physical and Chemical Properties
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	H (unitless)				D_{air} (m^2/d)		D_{water} (m^2/d)		HENRY Ref Temp (°C)
			Value	Adjusted	Ref	Notes	Value	Ref	Value	Ref	Value
VOC	Acetone	67-64-1	1.6E-03	1.1E-03	44		1.1E+00	44	9.8E-05	44	2.5E+01
VOC	Benzene	71-43-2	2.3E-01	1.6E-01	44		7.6E-01	44	8.5E-05	44	2.5E+01
VOC	Bromoform	75-25-2	2.2E-02	1.3E-02	44		1.3E-01	44	8.9E-05	44	2.5E+01
VOC	Bromomethane	74-83-9	2.6E-01	2.0E-01	44		6.3E-01	44	1.0E-04	44	2.5E+01
VOC	2-Butanone	78-93-3	2.3E-03	2.0E-03	50.1	92, 123	7.0E-01	69	8.5E-05	69	2.0E+01
VOC	Carbon Disulfide	75-15-0	1.2E+00	9.3E-01	44		9.0E-01	44	8.6E-05	44	2.5E+01
VOC	Chloroform	67-66-3	1.5E-01	1.1E-01	44		9.0E-01	44	8.6E-05	44	2.5E+01
VOC	Chloromethane	74-87-3	3.6E-01	3.3E-01	50.1	92, 123	1.1E+00	69	5.6E-05	69	2.0E+01
VOC	1,1-Dichloroethene	75-35-4	1.1E+00	8.1E-01	44		7.8E-01	44	9.0E-05	44	2.5E+01
VOC	cis-1,2-Dichloroethene	156-59-2	1.7E-01	1.2E-01	44		6.4E-01	44	9.8E-05	44	2.5E+01
VOC	trans-1,2-Dichloroethene	156-60-5	3.9E-01	2.8E-01	44		6.1E-01	44	1.0E-04	44	2.5E+01
VOC	Ethyl Benzene	100-41-4	3.2E-01	2.0E-01	44		6.5E-01	44	6.7E-05	44	2.5E+01
VOC	2-Hexanone	591-78-6	3.8E-03	3.2E-03	68		7.4E-01	52	7.6E-05	52	2.5E+01
VOC	4-Methyl-2-pentanone	108-10-1	5.6E-03	4.7E-03	50.1	92, 123	6.5E-01	40	6.7E-05	40	2.0E+01
VOC	Methylene Chloride	75-09-2	9.0E-02	6.6E-02	44		8.7E-01	44	1.0E-04	44	2.5E+01
VOC	Styrene	100-42-5	1.1E-01	7.0E-02	44		6.1E-01	44	6.9E-05	44	2.5E+01
VOC	Tetrachloroethene	127-18-4	7.5E-01	4.9E-01	44		6.2E-01	44	7.1E-05	44	2.5E+01
VOC	Toluene	108-88-3	2.7E-01	1.8E-01	44		7.5E-01	44	7.4E-05	44	2.5E+01
VOC	Trichloroethene	79-01-6	4.2E-01	2.9E-01	44		6.8E-01	44	7.9E-05	44	2.5E+01
VOC	Vinyl Chloride	75-01-4	1.1E+00	9.0E-01	44		9.2E-01	44	1.1E-04	71	2.5E+01

References:

Physical and chemical parameters were selected following the hierarchy of sources used by USEPA (Soil Screening Guidance: Technical Background Document, 1996), as discussed in Appendix A, Section 54 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

44 USEPA. 1996. Soil Screening Guidance: Technical Background Document and User Guide. Office of Emergency and Remedial Response. EPA/540/R-95/128. May.

50.1 USEPA. 1997. Superfund Chemical Data Matrix (SCDM). Office of Emergency and Remedial Response. September 12.

52 USEPA. 1997. CHEM9 Compound Properties Estimation and Data. Version 1.00. Office of Air Quality Planning and Standards. July.

69 USEPA. 2004. WATER9. Version 2.0.0. Office of Air Quality Planning and Standards. July.

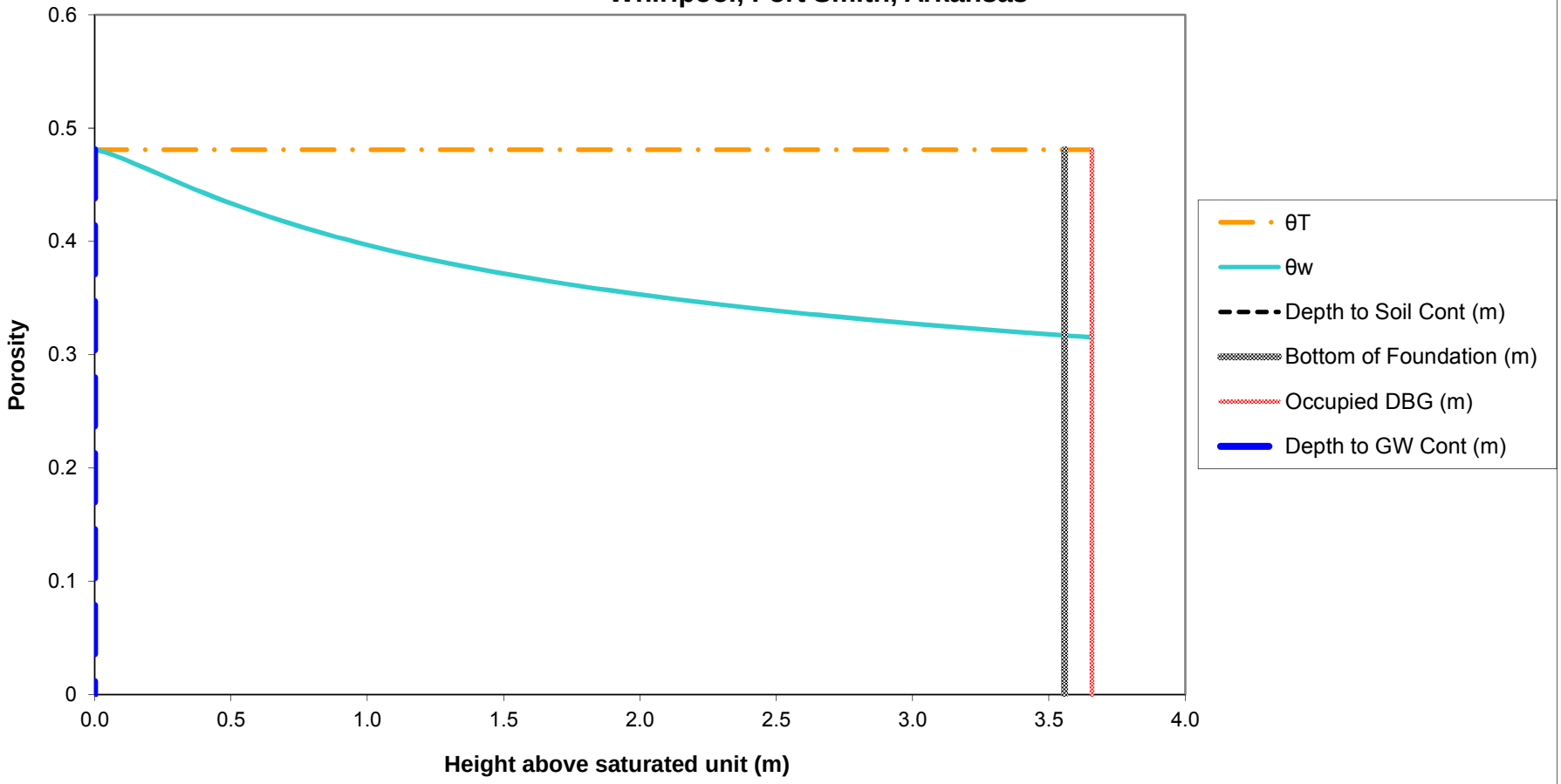
71 USEPA. 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. Office of Solid Waste and Emergency Response. OSWER 9355.4-24. December.

Notes:

92 Indicated source cites CHEMFATE.

123 Value has been assigned a default reference temperature.

Attachment C.3: Soil Moisture Profile for Residential Building (Slab-on-Grade) for Risk Calculations for Groundwater in Monitoring Wells Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

Attachment C.4: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater in Monitoring Wells
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	Acetone	67-64-1	1.07E+00	9.85E-05	1.14E-03	1.72E-01	1.87E-02	6.80E-02	2.73E-03	1.86E-04	2.12E-04
VOC	Bromoform	75-25-2	1.29E-01	8.90E-05	1.34E-02	2.07E-02	1.64E-03	6.37E-03	2.73E-03	1.74E-05	2.33E-04
VOC	Bromomethane	74-83-9	6.29E-01	1.05E-04	2.01E-01	1.01E-01	7.43E-04	2.89E-03	2.73E-03	7.90E-06	1.59E-03
VOC	2-Butanone	78-93-3	6.98E-01	8.47E-05	1.96E-03	1.12E-01	1.01E-02	3.78E-02	2.73E-03	1.03E-04	2.03E-04
VOC	Carbon Disulfide	75-15-0	8.99E-01	8.64E-05	9.26E-01	1.44E-01	2.93E-04	1.14E-03	2.73E-03	3.12E-06	2.89E-03
VOC	Chloroform	67-66-3	8.99E-01	8.64E-05	1.07E-01	1.44E-01	1.11E-03	4.32E-03	2.73E-03	1.18E-05	1.27E-03
VOC	Chloromethane	74-87-3	1.09E+00	5.62E-05	3.33E-01	1.75E-01	4.61E-04	1.80E-03	2.73E-03	4.90E-06	1.63E-03
VOC	1,1-Dichloroethene	75-35-4	7.78E-01	8.99E-05	8.10E-01	1.25E-01	3.12E-04	1.22E-03	2.73E-03	3.32E-06	2.69E-03
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	1.02E-01	9.72E-04	3.78E-03	2.73E-03	1.03E-05	1.22E-03
VOC	trans-1,2-Dichloroethene	156-60-5	6.11E-01	1.03E-04	2.81E-01	9.81E-02	5.96E-04	2.32E-03	2.73E-03	6.35E-06	1.79E-03
VOC	4-Methyl-2-pentanone	108-10-1	6.48E-01	6.74E-05	4.71E-03	1.04E-01	4.81E-03	1.84E-02	2.73E-03	5.03E-05	2.37E-04
VOC	Methylene Chloride	75-09-2	8.73E-01	1.01E-04	6.60E-02	1.40E-01	1.58E-03	6.14E-03	2.73E-03	1.68E-05	1.11E-03
VOC	Tetrachloroethene	127-18-4	6.22E-01	7.08E-05	4.90E-01	9.99E-02	3.40E-04	1.33E-03	2.73E-03	3.63E-06	1.78E-03
VOC	Toluene	108-88-3	7.52E-01	7.43E-05	1.80E-01	1.21E-01	6.97E-04	2.71E-03	2.73E-03	7.41E-06	1.34E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.10E-01	5.23E-04	2.04E-03	2.73E-03	5.57E-06	1.60E-03
VOC	Vinyl Chloride	75-01-4	9.16E-01	1.06E-04	9.00E-01	1.47E-01	3.44E-04	1.34E-03	2.73E-03	3.66E-06	3.30E-03

Notes:	Crack Soil and Building Characteristics			Crack Soil
	SCS Soil texture class			Sand
	Bulk density	kg/L	ρ_b	1.66
	Total porosity	L/L-soil	θ_T	0.375
	Water-filled porosity	L/L-soil	θ_w	0.054
	Air-filled porosity	L/L-soil	θ_a	0.321
	Residual saturation	L/L-soil	θ_r	0.053
	Hydraulic conductivity	cm/s	**K**	7.4E-03
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307
	Density of water	g/cm^3	ρ_w	1.0
	Gravitational acceleration	cm/s^2	**g**	980.7
	Intrinsic permeability	cm^2	**k**	9.9E-08
	Relative saturation	unitless	S_e	0.004
	van Genuchten N	unitless	**N**	3.177
	van Genuchten M	unitless	**M**	0.685
	Relative air permeability	unitless	k_{rg}	0.998
	Permeability to vapor	cm^2	k_v	9.89E-08
	Distance from building foundation to source	m	$L_{T\text{-}gw}$	3.56
	Bldg foundation thickness	m	L_{crack}	0.1
	Bldg foundation length	m		10.00
	Bldg foundation width	m		10.00
	Bldg occupied height	m		2.44
	Bldg occupied volume	m^3		244.00
	Occupied depth below ground	m		0.0
	Bldg area for vapor intrusion	m^2	A_B	100.0
	Ratio of A_{crack} to A_B		η	4E-04
	Area of cracks	m^2	A_{crack}	4E-02
	Air exchange rate	$hour^{-1}$	**ach**	0.45
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03
	Pressure difference between outdoors-indoors	$kg/m\text{-}s^2$	ΔP	1.0
	Viscosity of air	kg/m-s	μ_a	1.8E-05
	Crack length (bldg perimeter)	m	X_{crack}	40
	Crack depth below ground	m	Z_{crack}	0.10
	Crack radius	m	r_{crack}	1E-03
	Soil gas flow rate into bldg	m^3/day	Q_{soil}	7.20

Indoor air concentrations resulting from groundwater vapor intrusion into a building are estimated using the relationships described by Johnson and Ettinger (Heuristic model for predicting the intrusion rate of contaminant vapors into buildings, 1991), which USEPA recommends for screening level calculations, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.

Attachment C.5: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater in the Neighborhood Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw} (mg/L)**	**$C_{building}$ (mg/m^3)**	**URF (m^3/mg)**	**f_{inh}**	**Risk**		**RfC (mg/m^3)**	**HQ**
VOC	Acetone	67-64-1	ID	N	4.74E-01	1.00E-04					3.1E+01	3.1E-06
VOC	Bromoform	75-25-2	B2	N	4.50E-03	1.05E-06	1.1E-03		4.7E-10			
VOC	Bromomethane	74-83-9	ID	N	2.29E-02	3.64E-05					5.0E-03	7.0E-03
VOC	2-Butanone	78-93-3	ID	N	8.36E-02	1.70E-05					5.0E+00	3.3E-06
VOC	Carbon Disulfide	75-15-0		N	1.20E-04	3.47E-07					7.0E-01	4.8E-07
VOC	Chloroform	67-66-3	B2	N	7.10E-04	9.01E-07	2.3E-02		8.5E-09		5.0E-02	1.7E-05
VOC	Chloromethane	74-87-3	D	N	2.92E-02	4.77E-05					9.0E-02	5.1E-04
VOC	1,1-Dichloroethene	75-35-4	C	N	2.70E-03	7.27E-06					2.0E-01	3.5E-05
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	1.97E-02	2.41E-05						
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	8.80E-04	1.57E-06						
VOC	4-Methyl-2-pentanone	108-10-1	ID	N	2.50E-03	5.93E-07					3.0E+00	1.9E-07
VOC	Methylene Chloride	75-09-2	LC	Y	1.80E-04	1.99E-07	1.0E-05	1	2.1E-12		6.0E-01	3.2E-07
VOC	Tetrachloroethene	127-18-4	LC	N	1.40E-04	2.49E-07	2.6E-04		2.7E-11		4.0E-02	6.0E-06
VOC	Toluene	108-88-3	ID	N	1.80E-04	2.41E-07					5.0E+00	4.6E-08
VOC	Trichloroethene	79-01-6	HC	Y	5.28E-01	8.47E-04	4.1E-03	0.244	2.0E-06		2.0E-03	4.1E-01
VOC	Vinyl Chloride	75-01-4	A	N	1.50E-03	4.95E-06	4.4E-03		3.1E-08		1.0E-01	4.7E-05
							Cumulative Risk:		2E-06		**HI:**	4E-01

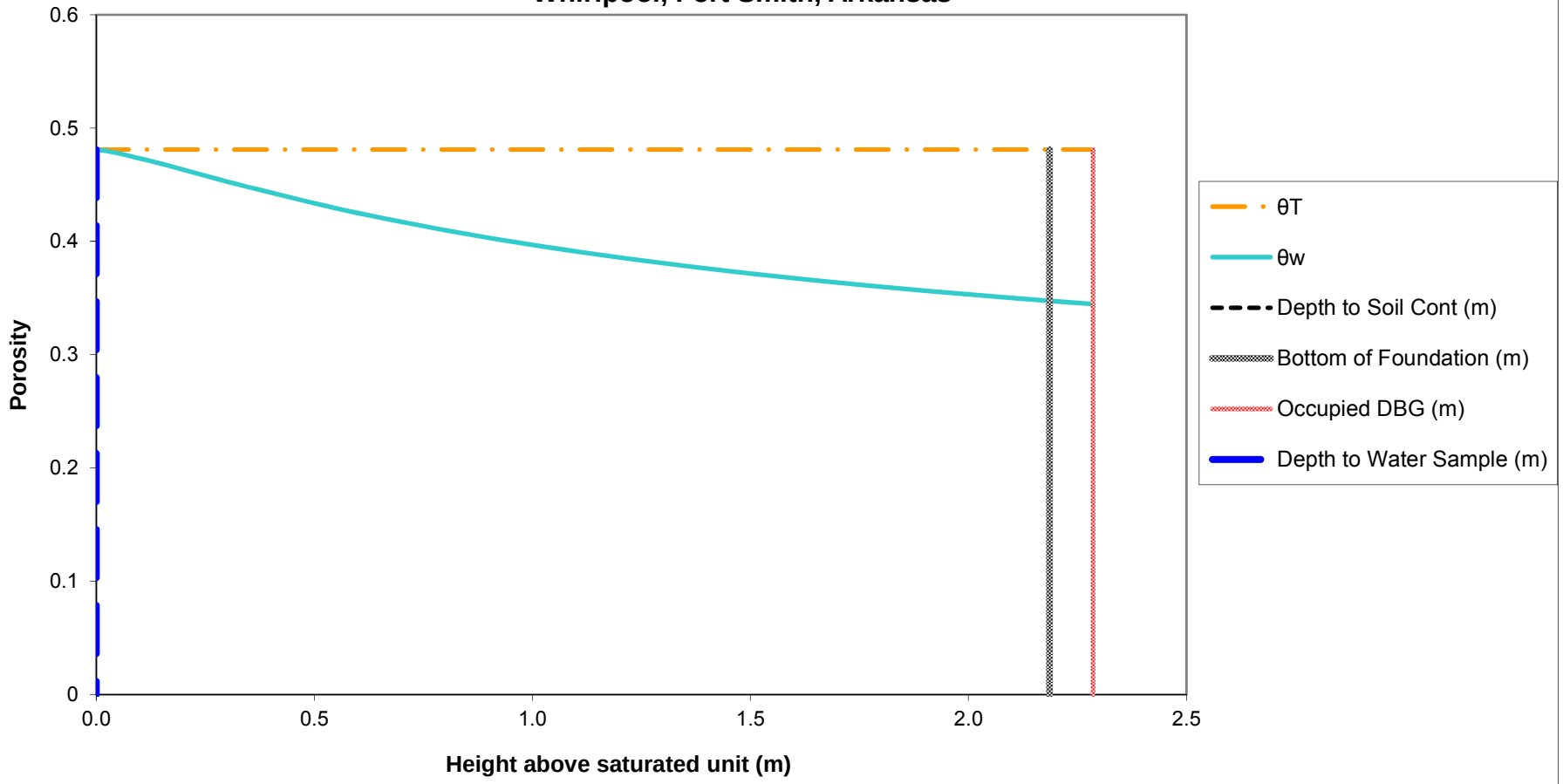
Note:

f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.

Only VOCs detected in the 2nd Quarter 2015 groundwater samples from wells in the neighborhood are shown.

Risks were calculated assuming residential exposure to groundwater-derived vapors in indoor air for 24 hours per day and 350 days per year for 30 years.

Attachment C.6: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Soil Vapor Monitoring Point VP-5 (Parcel 1) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

RAMBOLL ENVIRON

Attachment C.7: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Water at VP-5 (Parcel 1) Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	Acetone	67-64-1	1.07E+00	9.85E-05	1.14E-03	1.68E-01	1.93E-02	1.09E-01	2.73E-03	2.99E-04	3.41E-04
VOC	Benzene	71-43-2	7.60E-01	8.47E-05	1.59E-01	1.19E-01	5.27E-04	3.34E-03	2.73E-03	9.13E-06	1.45E-03
VOC	Bromomethane	74-83-9	6.29E-01	1.05E-04	2.01E-01	9.84E-02	4.84E-04	3.06E-03	2.73E-03	8.37E-06	1.68E-03
VOC	2-Butanone	78-93-3	6.98E-01	8.47E-05	1.96E-03	1.09E-01	1.00E-02	5.99E-02	2.73E-03	1.64E-04	3.21E-04
VOC	Carbon Disulfide	75-15-0	8.99E-01	8.64E-05	9.26E-01	1.41E-01	1.82E-04	1.15E-03	2.73E-03	3.15E-06	2.92E-03
VOC	Chloroform	67-66-3	8.99E-01	8.64E-05	1.07E-01	1.41E-01	7.25E-04	4.59E-03	2.73E-03	1.25E-05	1.35E-03
VOC	2-Hexanone	591-78-6	7.45E-01	7.57E-05	3.23E-03	1.17E-01	6.19E-03	3.78E-02	2.73E-03	1.03E-04	3.34E-04
VOC	4-Methyl-2-pentanone	108-10-1	6.48E-01	6.74E-05	4.71E-03	1.01E-01	4.12E-03	2.55E-02	2.73E-03	6.97E-05	3.29E-04
VOC	Methylene Chloride	75-09-2	8.73E-01	1.01E-04	6.60E-02	1.37E-01	1.07E-03	6.73E-03	2.73E-03	1.84E-05	1.21E-03
VOC	Toluene	108-88-3	7.52E-01	7.43E-05	1.80E-01	1.18E-01	4.47E-04	2.83E-03	2.73E-03	7.74E-06	1.40E-03

Notes:	Crack Soil and Building Characteristics			Crack Soil
	SCS Soil texture class			Sand
	Bulk density	kg/L	ρ_b	1.66
	Total porosity	L/L-soil	θ_T	0.375
	Water-filled porosity	L/L-soil	θ_w	0.057
	Air-filled porosity	L/L-soil	θ_a	0.318
	Residual saturation	L/L-soil	θ_r	0.053
	Hydraulic conductivity	cm/s	K	7.4E-03
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307
	Density of water	g/cm^3	ρ_w	1.0
	Gravitational acceleration	cm/s^2	g	980.7
	Intrinsic permeability	cm^2	k	9.9E-08
	Relative saturation	unitless	S_e	0.012
	van Genuchten N	unitless	N	3.177
	van Genuchten M	unitless	M	0.685
	Relative air permeability	unitless	k_{rg}	0.992
	Permeability to vapor	cm^2	k_v	9.84E-08
	Distance from building foundation to source	m	$L_{T\text{-}gw}$	2.19
	Bldg foundation thickness	m	L_{crack}	0.1
	Bldg foundation length	m		10.00
	Bldg foundation width	m		10.00
	Bldg occupied height	m		2.44
	Bldg occupied volume	m^3		244.00
	Occupied depth below ground	m		0.0
	Bldg area for vapor intrusion	m^2	A_B	100.0
	Ratio of A_{crack} to A_B		η	4E-04
	Area of cracks	m^2	A_{crack}	4E-02
	Air exchange rate	$hour^{-1}$	ach	0.45
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03
	Pressure difference between outdoors-indoors	$kg/m\text{-}s^2$	ΔP	1.0
	Viscosity of air	kg/m-s	μ_a	1.8E-05
	Crack length (bldg perimeter)	m	X_{crack}	40
	Crack depth below ground	m	Z_{crack}	0.10
	Crack radius	m	r_{crack}	1E-03
	Soil gas flow rate into bldg	m^3/day	Q_{soil}	7.20

Indoor air concentrations resulting from groundwater vapor intrusion into a building are estimated using the relationships described by Johnson and Ettinger (Heuristic model for predicting the intrusion rate of contaminant vapors into buildings, 1991), which USEPA recommends for screening level calculations, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.

Attachment C.8: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Water at VP-5 (Parcel 1) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	Acetone	67-64-1	ID	N	1.60E-01	5.45E-05					3.1E+01	1.7E-06
VOC	Benzene	71-43-2	A	N	4.40E-04	6.38E-07	7.8E-03		2.0E-09		3.0E-02	2.0E-05
VOC	Bromomethane	74-83-9	ID	N	2.40E-03	4.04E-06					5.0E-03	7.7E-04
VOC	2-Butanone	78-93-3	ID	N	2.90E-02	9.32E-06					5.0E+00	1.8E-06
VOC	Carbon Disulfide	75-15-0		N	1.90E-04	5.55E-07					7.0E-01	7.6E-07
VOC	Chloroform	67-66-3	B2	N	1.90E-03	2.56E-06	2.3E-02		2.4E-08		5.0E-02	4.9E-05
VOC	2-Hexanone	591-78-6	ID	N	1.09E-02	3.64E-06					3.0E-02	1.2E-04
VOC	4-Methyl-2-pentanone	108-10-1	ID	N	2.50E-03	8.22E-07					3.0E+00	2.6E-07
VOC	Methylene Chloride	75-09-2	LC	Y	1.50E-03	1.82E-06	1.0E-05	1	1.9E-11		6.0E-01	2.9E-06
VOC	Toluene	108-88-3	ID	N	2.30E-04	3.21E-07					5.0E+00	6.2E-08
							Cumulative Risk:		3E-08		**HI:**	1E-03

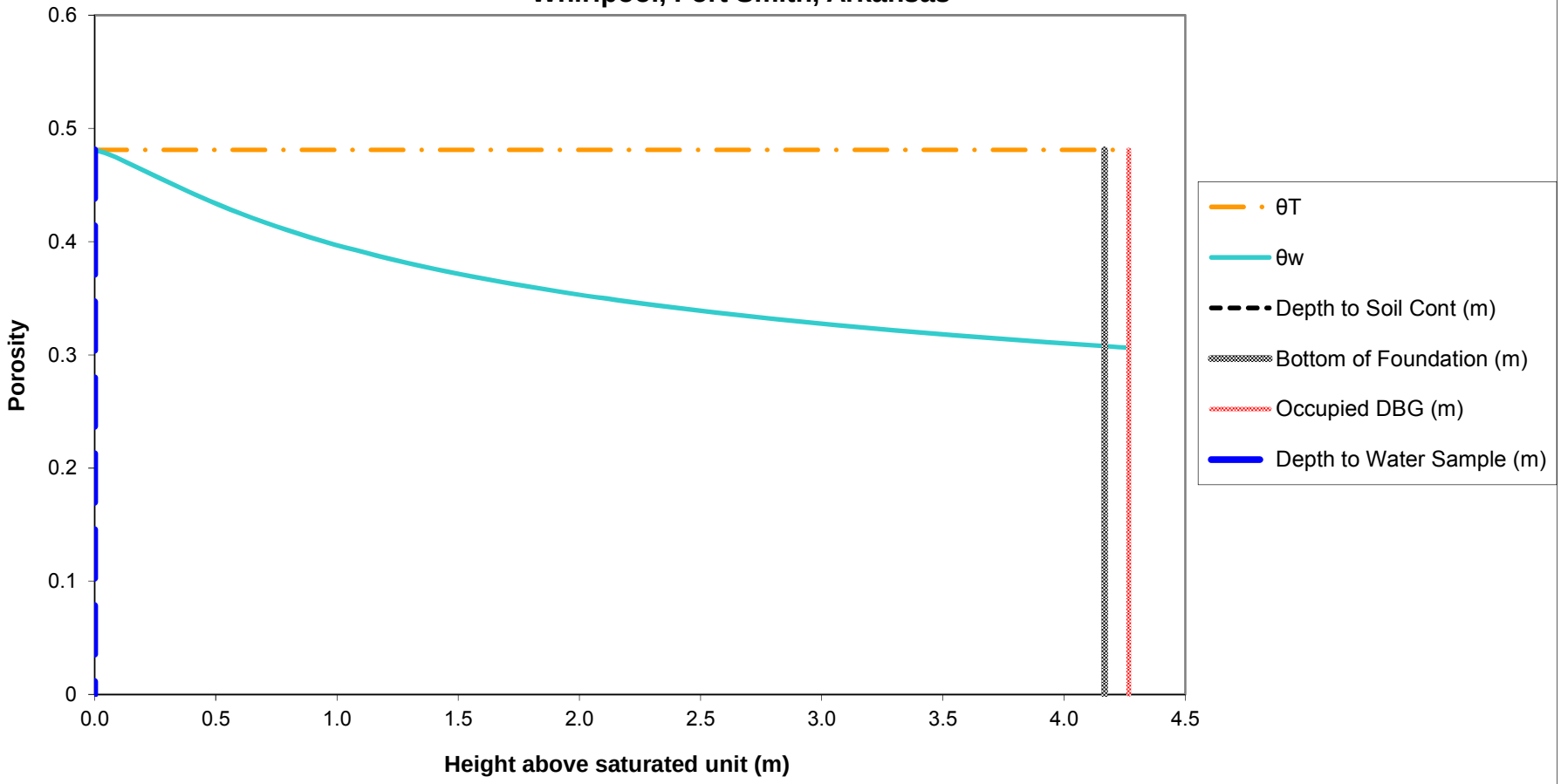
Note:

f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.

Only VOCs detected in the 2nd Quarter 2015 water sample at VP-5 (Parcel 1) are shown.

Risks were calculated assuming residential exposure to groundwater-derived vapors in indoor air for 24 hours per day and 350 days per year for 30 years.

Attachment C.9: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Soil Vapor Monitoring Point VP-6 (Parcel 1) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

RAMBOLL ENVIRON

Attachment C.10: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Water at VP-6 (Parcel 1) Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	Acetone	67-64-1	1.07E+00	9.85E-05	1.14E-03	1.73E-01	1.89E-02	5.92E-02	2.73E-03	1.62E-04	1.84E-04
VOC	Benzene	71-43-2	7.60E-01	8.47E-05	1.59E-01	1.23E-01	9.37E-04	3.11E-03	2.73E-03	8.50E-06	1.35E-03
VOC	Bromomethane	74-83-9	6.29E-01	1.05E-04	2.01E-01	1.01E-01	8.52E-04	2.83E-03	2.73E-03	7.74E-06	1.56E-03
VOC	2-Butanone	78-93-3	6.98E-01	8.47E-05	1.96E-03	1.13E-01	1.03E-02	3.31E-02	2.73E-03	9.05E-05	1.78E-04
VOC	Chloromethane	74-87-3	1.09E+00	5.62E-05	3.33E-01	1.75E-01	5.35E-04	1.78E-03	2.73E-03	4.86E-06	1.62E-03
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	1.02E-01	1.11E-03	3.68E-03	2.73E-03	1.01E-05	1.19E-03
VOC	4-Methyl-2-pentanone	108-10-1	6.48E-01	6.74E-05	4.71E-03	1.04E-01	5.14E-03	1.68E-02	2.73E-03	4.60E-05	2.17E-04
VOC	Methylene Chloride	75-09-2	8.73E-01	1.01E-04	6.60E-02	1.41E-01	1.80E-03	5.97E-03	2.73E-03	1.63E-05	1.08E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.10E-01	6.04E-04	2.01E-03	2.73E-03	5.49E-06	1.58E-03

Notes:	Crack Soil and Building Characteristics			Crack Soil
	SCS Soil texture class			Sand
	Bulk density	kg/L	ρ_b	1.66
	Total porosity	L/L-soil	θ_T	0.375
	Water-filled porosity	L/L-soil	θ_w	0.054
	Air-filled porosity	L/L-soil	θ_a	0.321
	Residual saturation	L/L-soil	θ_r	0.053
	Hydraulic conductivity	cm/s	K	7.4E-03
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307
	Density of water	g/cm^3	ρ_w	1.0
	Gravitational acceleration	cm/s^2	g	980.7
	Intrinsic permeability	cm^2	k	9.9E-08
	Relative saturation	unitless	S_e	0.003
	van Genuchten N	unitless	N	3.177
	van Genuchten M	unitless	M	0.685
	Relative air permeability	unitless	k_{rg}	0.998
	Permeability to vapor	cm^2	k_v	9.90E-08
	Distance from building foundation to source	m	$L_{T\text{-}gw}$	4.17
	Bldg foundation thickness	m	L_{crack}	0.1
	Bldg foundation length	m		10.00
	Bldg foundation width	m		10.00
	Bldg occupied height	m		2.44
	Bldg occupied volume	m^3		244.00
	Occupied depth below ground	m		0.0
	Bldg area for vapor intrusion	m^2	A_B	100.0
	Ratio of A_{crack} to A_B		η	4E-04
	Area of cracks	m^2	A_{crack}	4E-02
	Air exchange rate	$hour^{-1}$	ach	0.45
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03
	Pressure difference between outdoors-indoors	$kg/m\text{-}s^2$	ΔP	1.0
	Viscosity of air	kg/m-s	μ_a	1.8E-05
	Crack length (bldg perimeter)	m	X_{crack}	40
	Crack depth below ground	m	Z_{crack}	0.10
	Crack radius	m	r_{crack}	1E-03
	Soil gas flow rate into bldg	m^3/day	Q_{soil}	7.20

Indoor air concentrations resulting from groundwater vapor intrusion into a building are estimated using the relationships described by Johnson and Ettinger (Heuristic model for predicting the intrusion rate of contaminant vapors into buildings, 1991), which USEPA recommends for screening level calculations, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.

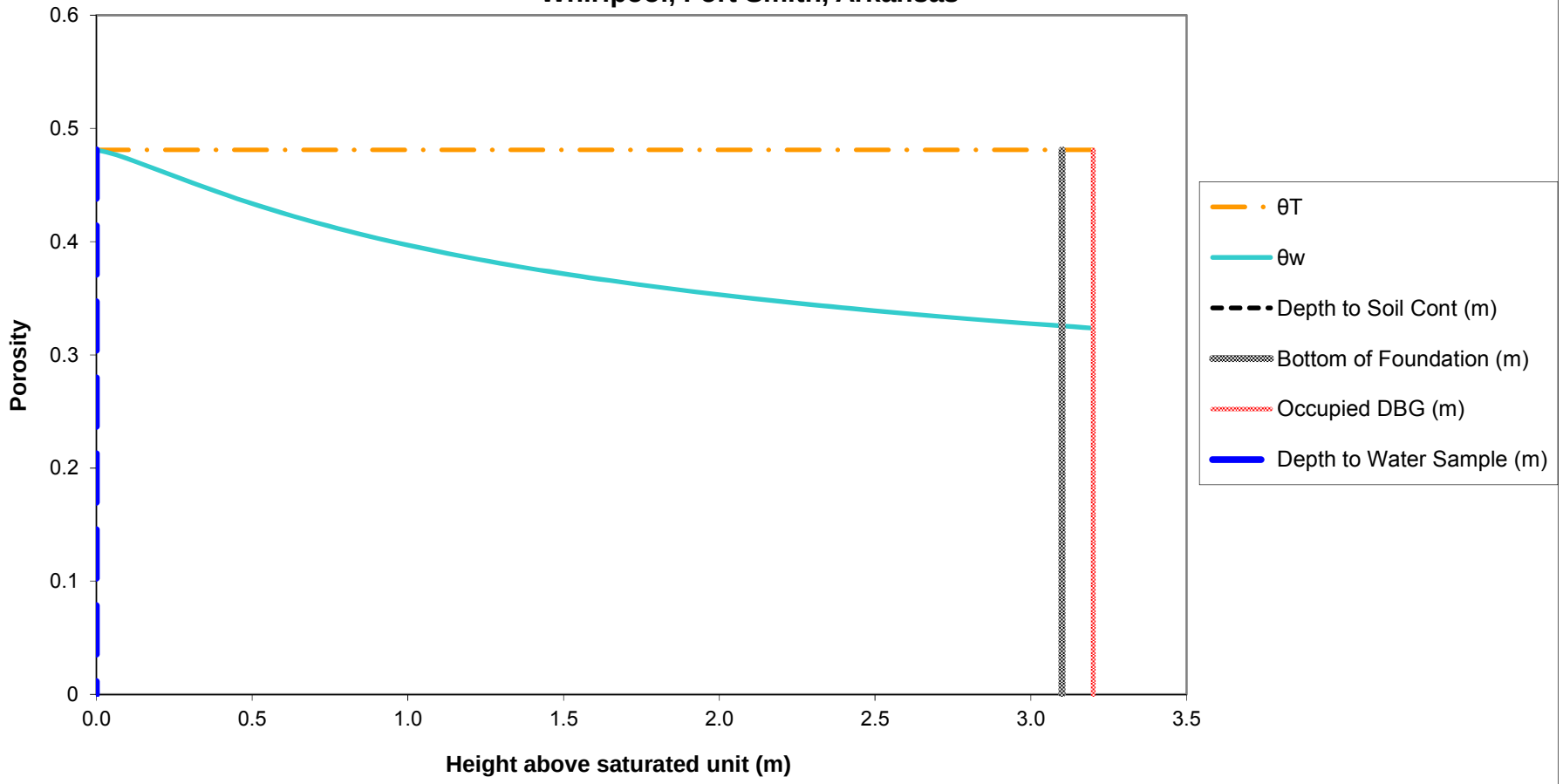
Attachment C.11: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Water at VP-6 (Parcel 1) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw} (mg/L)**	**$C_{building}$ (mg/m^3)**	**URF (m^3/mg)**	**f_{inh}**	**Risk**		**RfC (mg/m^3)**	**HQ**
VOC	Acetone	67-64-1	ID	N	2.45E-02	4.51E-06					3.1E+01	1.4E-07
VOC	Benzene	71-43-2	A	N	2.20E-04	2.97E-07	7.8E-03		9.5E-10		3.0E-02	9.5E-06
VOC	Bromomethane	74-83-9	ID	N	9.90E-04	1.54E-06					5.0E-03	3.0E-04
VOC	2-Butanone	78-93-3	ID	N	4.60E-03	8.18E-07					5.0E+00	1.6E-07
VOC	Chloromethane	74-87-3	D	N	1.50E-03	2.43E-06					9.0E-02	2.6E-05
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	3.00E-04	3.58E-07						
VOC	4-Methyl-2-pentanone	108-10-1	ID	N	5.00E-04	1.08E-07					3.0E+00	3.5E-08
VOC	Methylene Chloride	75-09-2	LC	Y	5.90E-04	6.34E-07	1.0E-05	1	6.6E-12		6.0E-01	1.0E-06
VOC	Trichloroethene	79-01-6	HC	Y	2.30E-03	3.64E-06	4.1E-03	0.244	8.4E-09		2.0E-03	1.7E-03
							Cumulative Risk:		9E-09		**HI:**	2E-03
Note:												
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the 2nd Quarter 2015 water sample at VP-6 (Parcel 1) are shown.												
Risks were calculated assuming residential exposure to groundwater-derived vapors in indoor air for 24 hours per day and 350 days per year for 30 years.												

Attachment C.12: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Soil Vapor at VP-7 (Parcel 2) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{sv}** (mg/m^3)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	1,1-Dichloroethane	75-34-3	SC	N	5.40E-04	1.62E-05					5.0E-01	3.1E-05
VOC	1,2-Dichloroethane	107-06-2	B2	N	8.20E-05	2.46E-06	2.6E-02		2.6E-08		7.0E-03	3.4E-04
VOC	1,1-Dichloroethene	75-35-4	C	N	7.70E-04	2.31E-05					2.0E-01	1.1E-04
VOC	Tetrachloroethene	127-18-4	LC	N	5.10E-05	1.53E-06	2.6E-04		1.6E-10		4.0E-02	3.7E-05
VOC	Trichloroethene	79-01-6	HC	Y	1.50E-04	4.50E-06	4.1E-03	0.244	1.0E-08		2.0E-03	2.2E-03
VOC	Vinyl Chloride	75-01-4	A	N	3.20E-03	9.60E-05	4.4E-03		6.0E-07		1.0E-01	9.2E-04
							Cumulative Risk:		6E-07		**HI:**	4E-03
Note:												
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the 2nd Quarter 2015 soil vapor sample at VP-7 (Parcel 2) are shown.												
Residential risks were calculated assuming residents could be exposed to soil vapor intrusion into indoor air for 24 hours per day and 350 days per year for 30 years.												
Indoor air concentrations due to intrusion of soil vapor were calculated using USEPA's 95th percentile subslab soil gas attenuaion factor of 0.03 (EPA's Vapor Intrusion Database: Evaluation and Characterization of Attenuation Factors for Chlorinated Volatile Organic Compounds and Residential Buildings, 2012), as discussed in Appendix A, Section 6.8.2 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.												

Attachment C.13: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Soil Vapor Monitoring Point VP-8 (Parcel 2) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

RAMBOLL ENVIRON

Attachment C.14: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Water at VP-8 (Parcel 2) Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	Acetone	67-64-1	1.07E+00	9.85E-05	1.14E-03	1.71E-01	1.87E-02	7.73E-02	2.73E-03	2.11E-04	2.41E-04
VOC	Benzene	71-43-2	7.60E-01	8.47E-05	1.59E-01	1.21E-01	7.17E-04	3.20E-03	2.73E-03	8.74E-06	1.39E-03
VOC	2-Butanone	78-93-3	6.98E-01	8.47E-05	1.96E-03	1.12E-01	9.95E-03	4.27E-02	2.73E-03	1.17E-04	2.29E-04
VOC	Carbon Disulfide	75-15-0	8.99E-01	8.64E-05	9.26E-01	1.44E-01	2.55E-04	1.14E-03	2.73E-03	3.11E-06	2.88E-03
VOC	Chloroform	67-66-3	8.99E-01	8.64E-05	1.07E-01	1.44E-01	9.79E-04	4.37E-03	2.73E-03	1.19E-05	1.28E-03
VOC	Chloromethane	74-87-3	1.09E+00	5.62E-05	3.33E-01	1.74E-01	4.01E-04	1.79E-03	2.73E-03	4.90E-06	1.63E-03
VOC	Ethyl Benzene	100-41-4	6.48E-01	6.74E-05	2.04E-01	1.04E-01	5.04E-04	2.25E-03	2.73E-03	6.15E-06	1.26E-03
VOC	2-Hexanone	591-78-6	7.45E-01	7.57E-05	3.23E-03	1.19E-01	6.59E-03	2.87E-02	2.73E-03	7.83E-05	2.53E-04
VOC	4-Methyl-2-pentanone	108-10-1	6.48E-01	6.74E-05	4.71E-03	1.04E-01	4.55E-03	2.00E-02	2.73E-03	5.46E-05	2.57E-04
VOC	Methylene Chloride	75-09-2	8.73E-01	1.01E-04	6.60E-02	1.39E-01	1.41E-03	6.26E-03	2.73E-03	1.71E-05	1.13E-03
VOC	Styrene	100-42-5	6.13E-01	6.91E-05	7.04E-02	9.80E-02	9.38E-04	4.18E-03	2.73E-03	1.14E-05	8.04E-04
VOC	Toluene	108-88-3	7.52E-01	7.43E-05	1.80E-01	1.20E-01	6.11E-04	2.73E-03	2.73E-03	7.46E-06	1.35E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.09E-01	4.58E-04	2.05E-03	2.73E-03	5.59E-06	1.61E-03

Notes:	Crack Soil and Building Characteristics			Crack Soil
	SCS Soil texture class			Sand
	Bulk density	kg/L	ρ_b	1.66
	Total porosity	L/L-soil	θ_T	0.375
	Water-filled porosity	L/L-soil	θ_w	0.055
	Air-filled porosity	L/L-soil	θ_a	0.320
	Residual saturation	L/L-soil	θ_r	0.053
	Hydraulic conductivity	cm/s	**K**	7.4E-03
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307
	Density of water	g/cm^3	ρ_w	1.0
	Gravitational acceleration	cm/s^2	**g**	980.7
	Intrinsic permeability	cm^2	**k**	9.9E-08
	Relative saturation	unitless	S_e	0.005
	van Genuchten N	unitless	**N**	3.177
	van Genuchten M	unitless	**M**	0.685
	Relative air permeability	unitless	k_{rg}	0.997
	Permeability to vapor	cm^2	k_v	9.88E-08
	Distance from building foundation to source	m	$L_{T\text{-}gw}$	3.10
	Bldg foundation thickness	m	L_{crack}	0.1
	Bldg foundation length	m		10.00
	Bldg foundation width	m		10.00
	Bldg occupied height	m		2.44
	Bldg occupied volume	m^3		244.00
	Occupied depth below ground	m		0.0
	Bldg area for vapor intrusion	m^2	A_B	100.0
	Ratio of A_{crack} to A_B		η	4E-04
	Area of cracks	m^2	A_{crack}	4E-02
	Air exchange rate	$hour^{-1}$	**ach**	0.45
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03
	Pressure difference between outdoors-indoors	$kg/m\text{-}s^2$	ΔP	1.0
	Viscosity of air	kg/m-s	μ_a	1.8E-05
	Crack length (bldg perimeter)	m	X_{crack}	40
	Crack depth below ground	m	Z_{crack}	0.10
	Crack radius	m	r_{crack}	1E-03
	Soil gas flow rate into bldg	m^3/day	Q_{soil}	7.20

Indoor air concentrations resulting from groundwater vapor intrusion into a building are estimated using the relationships described by Johnson and Ettinger (Heuristic model for predicting the intrusion rate of contaminant vapors into buildings, 1991), which USEPA recommends for screening level calculations, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.

Attachment C.15: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Water at VP-8 (Parcel 2) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	Acetone	67-64-1	ID	N	1.40E-01	3.37E-05					3.1E+01	1.0E-06
VOC	Benzene	71-43-2	A	N	3.30E-04	4.58E-07	7.8E-03		1.5E-09		3.0E-02	1.5E-05
VOC	2-Butanone	78-93-3	ID	N	2.64E-02	6.04E-06					5.0E+00	1.2E-06
VOC	Carbon Disulfide	75-15-0		N	1.20E-04	3.46E-07					7.0E-01	4.7E-07
VOC	Chloroform	67-66-3	B2	N	6.20E-04	7.95E-07	2.3E-02		7.5E-09		5.0E-02	1.5E-05
VOC	Chloromethane	74-87-3	D	N	8.80E-04	1.43E-06					9.0E-02	1.5E-05
VOC	Ethyl Benzene	100-41-4	D	N	2.70E-04	3.39E-07					1.0E+00	3.3E-07
VOC	2-Hexanone	591-78-6	ID	N	6.50E-03	1.65E-06					3.0E-02	5.3E-05
VOC	4-Methyl-2-pentanone	108-10-1	ID	N	7.00E-04	1.80E-07					3.0E+00	5.8E-08
VOC	Methylene Chloride	75-09-2	LC	Y	5.90E-04	6.66E-07	1.0E-05	1	6.9E-12		6.0E-01	1.1E-06
VOC	Styrene	100-42-5		N	1.60E-04	1.29E-07					1.0E+00	1.2E-07
VOC	Toluene	108-88-3	ID	N	5.00E-04	6.73E-07					5.0E+00	1.3E-07
VOC	Trichloroethene	79-01-6	HC	Y	1.20E-03	1.93E-06	4.1E-03	0.244	4.5E-09		2.0E-03	9.3E-04
							Cumulative Risk:		1E-08		**HI:**	1E-03
Note:												
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the 2nd Quarter 2015 water sample at VP-8 (Parcel 2) are shown.												
Risks were calculated assuming residential exposure to groundwater-derived vapors in indoor air for 24 hours per day and 350 days per year for 30 years.												

Attachment C.16: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Soil Vapor at VP-9 (Parcel 3) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{sv}** (mg/m^3)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	1,1-Dichloroethane	75-34-3	SC	N	2.50E-03	7.50E-05					5.0E-01	1.4E-04
VOC	1,2-Dichloroethane	107-06-2	B2	N	8.80E-05	2.64E-06	2.6E-02		2.8E-08		7.0E-03	3.6E-04
VOC	1,1-Dichloroethene	75-35-4	C	N	1.00E-02	3.00E-04					2.0E-01	1.4E-03
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	6.60E-05	1.98E-06						
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	6.00E-05	1.80E-06						
VOC	Tetrachloroethene	127-18-4	LC	N	5.00E-05	1.50E-06	2.6E-04		1.6E-10		4.0E-02	3.6E-05
VOC	Trichloroethene	79-01-6	HC	Y	2.50E-04	7.50E-06	4.1E-03	0.244	1.7E-08		2.0E-03	3.6E-03
VOC	Vinyl Chloride	75-01-4	A	N	1.60E-02	4.80E-04	4.4E-03		3.0E-06		1.0E-01	4.6E-03
							Cumulative Risk:		3E-06		**HI:**	1E-02

Note:

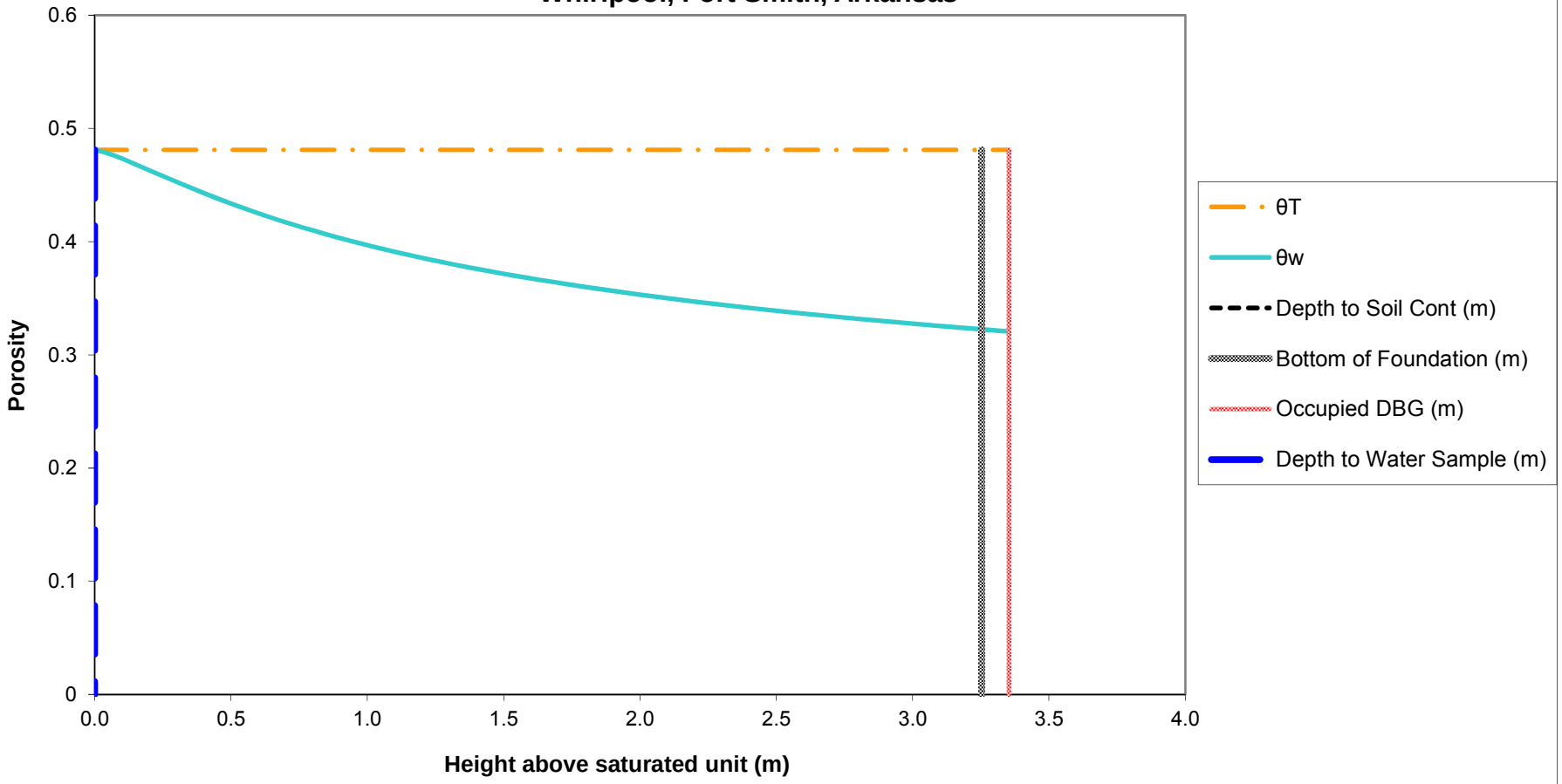
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.

Only VOCs detected in the 2nd Quarter 2015 soil vapor sample at VP-9 (Parcel 3) are shown.

Residential risks were calculated assuming residents could be exposed to soil vapor intrusion into indoor air for 24 hours per day and 350 days per year for 30 years.

Indoor air concentrations due to intrusion of soil vapor were calculated using USEPA's 95th percentile subslab soil gas attenuaion factor of 0.03 (EPA's Vapor Intrusion Database: Evaluation and Characterization of Attenuation Factors for Chlorinated Volatile Organic Compounds and Residential Buildings, 2012), as discussed in Appendix A, Section 6.8.2 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

Attachment C.17: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Soil Vapor Monitoring Point VP-10 (Parcel 3) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

Attachment C.18: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Water at VP-10 (Parcel 3) Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	Acetone	67-64-1	1.07E+00	9.85E-05	1.14E-03	1.72E-01	1.87E-02	7.39E-02	2.73E-03	2.02E-04	2.30E-04
VOC	Benzene	71-43-2	7.60E-01	8.47E-05	1.59E-01	1.22E-01	7.54E-04	3.21E-03	2.73E-03	8.77E-06	1.39E-03
VOC	Chloroform	67-66-3	8.99E-01	8.64E-05	1.07E-01	1.44E-01	1.03E-03	4.38E-03	2.73E-03	1.20E-05	1.28E-03
VOC	1,1-Dichloroethene	75-35-4	7.78E-01	8.99E-05	8.10E-01	1.25E-01	2.87E-04	1.22E-03	2.73E-03	3.34E-06	2.71E-03
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	1.02E-01	9.03E-04	3.84E-03	2.73E-03	1.05E-05	1.24E-03
VOC	trans-1,2-Dichloroethene	156-60-5	6.11E-01	1.03E-04	2.81E-01	9.78E-02	5.51E-04	2.35E-03	2.73E-03	6.41E-06	1.81E-03
VOC	Methylene Chloride	75-09-2	8.73E-01	1.01E-04	6.60E-02	1.40E-01	1.47E-03	6.25E-03	2.73E-03	1.71E-05	1.13E-03
VOC	Toluene	108-88-3	7.52E-01	7.43E-05	1.80E-01	1.20E-01	6.43E-04	2.74E-03	2.73E-03	7.49E-06	1.35E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.09E-01	4.82E-04	2.06E-03	2.73E-03	5.62E-06	1.62E-03
VOC	Vinyl Chloride	75-01-4	9.16E-01	1.06E-04	9.00E-01	1.47E-01	3.16E-04	1.35E-03	2.73E-03	3.68E-06	3.31E-03

Notes:	Crack Soil and Building Characteristics			Crack Soil
	SCS Soil texture class			Sand
	Bulk density	kg/L	ρ_b	1.66
	Total porosity	L/L-soil	θ_T	0.375
	Water-filled porosity	L/L-soil	θ_w	0.055
	Air-filled porosity	L/L-soil	θ_a	0.320
	Residual saturation	L/L-soil	θ_r	0.053
	Hydraulic conductivity	cm/s	**K**	7.4E-03
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307
	Density of water	g/cm^3	ρ_w	1.0
	Gravitational acceleration	cm/s^2	**g**	980.7
	Intrinsic permeability	cm^2	**k**	9.9E-08
	Relative saturation	unitless	S_e	0.005
	van Genuchten N	unitless	**N**	3.177
	van Genuchten M	unitless	**M**	0.685
	Relative air permeability	unitless	k_{rg}	0.997
	Permeability to vapor	cm^2	k_v	9.89E-08
	Distance from building foundation to source	m	$L_{T\text{-}gw}$	3.25
	Bldg foundation thickness	m	L_{crack}	0.1
	Bldg foundation length	m		10.00
	Bldg foundation width	m		10.00
	Bldg occupied height	m		2.44
	Bldg occupied volume	m^3		244.00
	Occupied depth below ground	m		0.0
	Bldg area for vapor intrusion	m^2	A_B	100.0
	Ratio of A_{crack} to A_B		η	4E-04
	Area of cracks	m^2	A_{crack}	4E-02
	Air exchange rate	$hour^{-1}$	**ach**	0.45
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03
	Pressure difference between outdoors-indoors	$kg/m\text{-}s^2$	ΔP	1.0
	Viscosity of air	kg/m-s	μ_a	1.8E-05
	Crack length (bldg perimeter)	m	X_{crack}	40
	Crack depth below ground	m	Z_{crack}	0.10
	Crack radius	m	r_{crack}	1E-03
	Soil gas flow rate into bldg	m^3/day	Q_{soil}	7.20

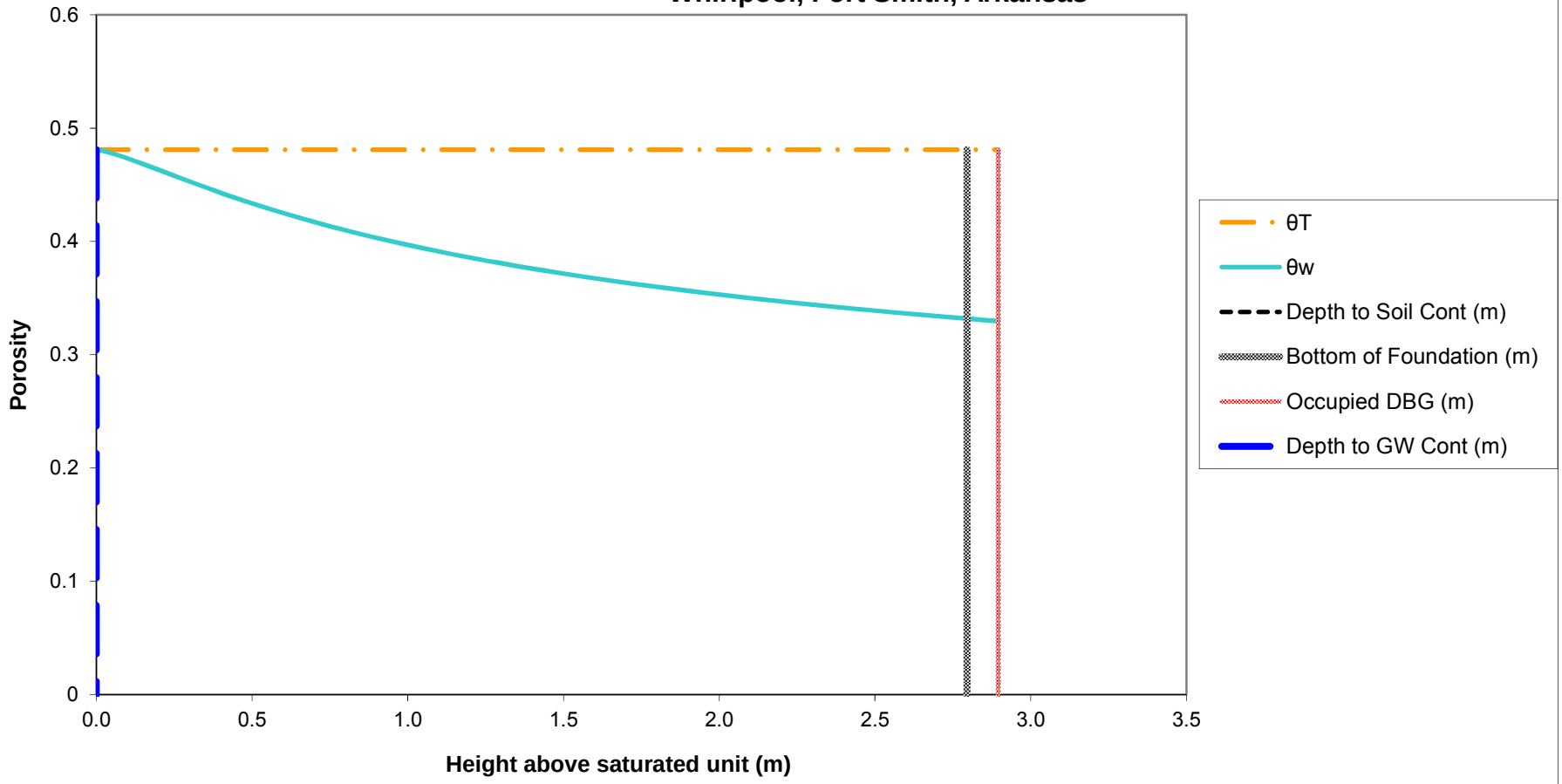
Indoor air concentrations resulting from groundwater vapor intrusion into a building are estimated using the relationships described by Johnson and Ettinger (Heuristic model for predicting the intrusion rate of contaminant vapors into buildings, 1991), which USEPA recommends for screening level calculations, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.

Attachment C.19: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Water at VP-10 (Parcel 3) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	C_{gw} (mg/L)	$C_{building}$ (mg/m^3)	**URF** (m^3/mg)	f_{inh}	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	Acetone	67-64-1	ID	N	1.64E-02	3.77E-06					3.1E+01	1.2E-07
VOC	Benzene	71-43-2	A	N	1.50E-04	2.09E-07	7.8E-03		6.7E-10		3.0E-02	6.7E-06
VOC	Chloroform	67-66-3	B2	N	5.50E-04	7.07E-07	2.3E-02		6.7E-09		5.0E-02	1.4E-05
VOC	1,1-Dichloroethene	75-35-4	C	N	1.70E-03	4.60E-06					2.0E-01	2.2E-05
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	1.12E-02	1.39E-05						
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	9.20E-04	1.66E-06						
VOC	Methylene Chloride	75-09-2	LC	Y	7.40E-04	8.34E-07	1.0E-05	1	8.7E-12		6.0E-01	1.3E-06
VOC	Toluene	108-88-3	ID	N	3.60E-04	4.86E-07					5.0E+00	9.3E-08
VOC	Trichloroethene	79-01-6	HC	Y	3.95E-01	6.39E-04	4.1E-03	0.2439	1.5E-06		2.0E-03	3.1E-01
VOC	Vinyl Chloride	75-01-4	A	N	3.50E-04	1.16E-06	4.4E-03		7.2E-09		1.0E-01	1.1E-05
							Cumulative Risk:		1E-06		**HI:**	3E-01
Note:												
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the 2nd Quarter 2015 water sample at VP-10 (Parcel 3) are shown.												
Risks were calculated assuming residential exposure to groundwater-derived vapors in indoor air for 24 hours per day and 350 days per year for 30 years.												

Attachment C.20: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-177 (Parcel 4) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

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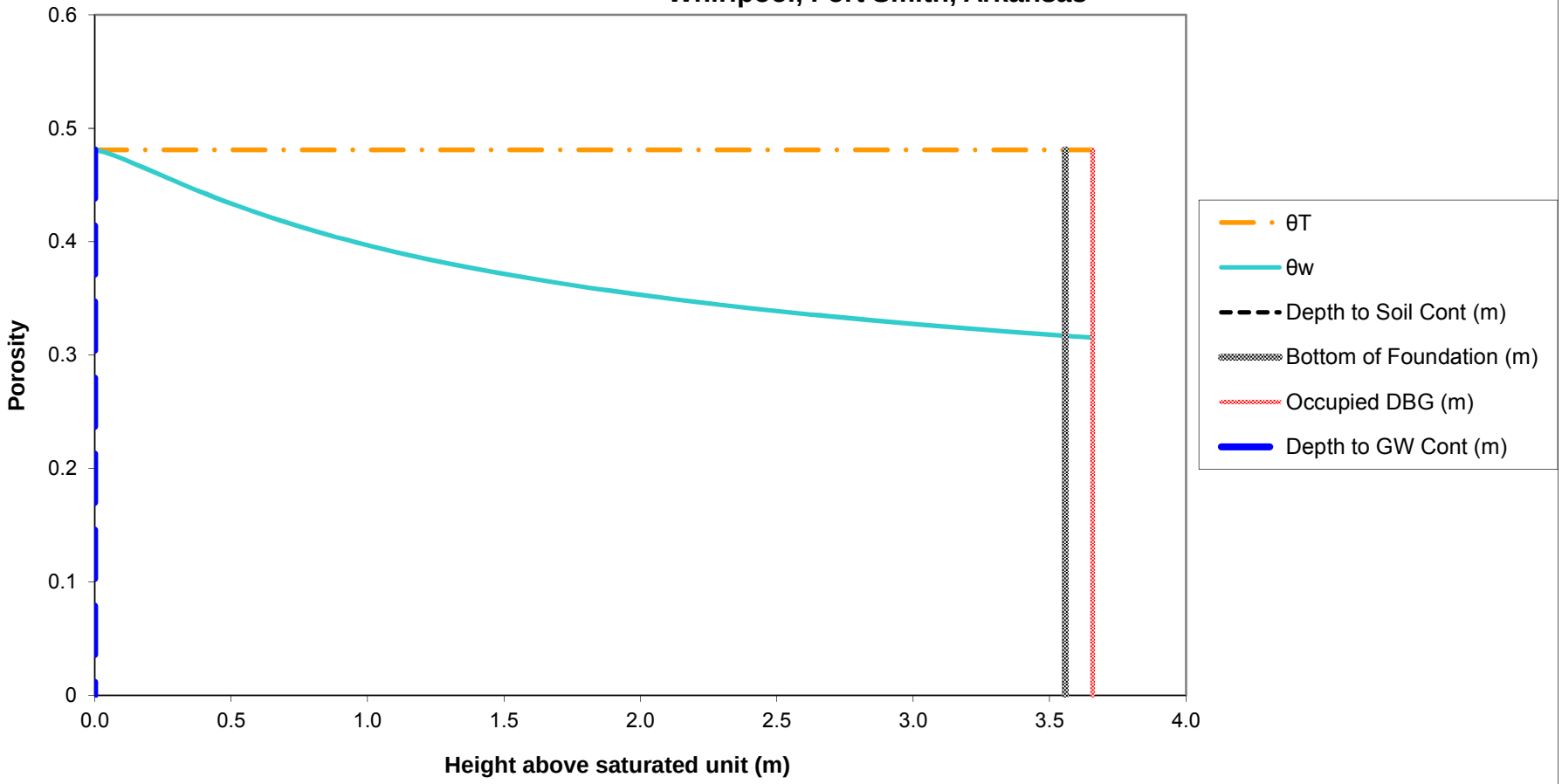
Attachment C.21: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-177 (Parcel 4) Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	Chloroform	67-66-3	8.99E-01	8.64E-05	1.07E-01	1.43E-01	8.97E-04	4.44E-03	2.73E-03	1.21E-05	1.30E-03
Notes:	**Crack Soil and Building Characteristics**			**Crack Soil**							
	SCS Soil texture class			Sand							
	Bulk density	kg/L	ρ_b	1.66							
	Total porosity	L/L-soil	θ_T	0.375							
	Water-filled porosity	L/L-soil	θ_w	0.055							
	Air-filled porosity	L/L-soil	θ_a	0.320							
	Residual saturation	L/L-soil	θ_r	0.053							
	Hydraulic conductivity	cm/s	K	7.4E-03							
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307							
	Density of water	g/cm^3	ρ_w	1.0							
	Gravitational acceleration	cm/s^2	g	980.7							
	Intrinsic permeability	cm^2	k	9.9E-08							
	Relative saturation	unitless	S_e	0.007							
	van Genuchten N	unitless	N	3.177							
	van Genuchten M	unitless	M	0.685							
	Relative air permeability	unitless	k_{rg}	0.996							
	Permeability to vapor	cm^2	k_v	9.87E-08							
	Distance from building foundation to source	m	L_{T-gw}	2.80							
	Bldg foundation thickness	m	L_{crack}	0.1							
	Bldg foundation length	m		10.00							
	Bldg foundation width	m		10.00							
	Bldg occupied height	m		2.44							
	Bldg occupied volume	m^3		244.00							
	Occupied depth below ground	m		0.0							
	Bldg area for vapor intrusion	m^2	A_B	100.0							
	Ratio of A_{crack} to A_B		η	4E-04							
	Area of cracks	m^2	A_{crack}	4E-02							
	Air exchange rate	$hour^{-1}$	ach	0.45							
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03							
	Pressure difference between outdoors-indoors	$kg/m\text{-}s^2$	ΔP	1.0							
	Viscosity of air	kg/m-s	μ_a	1.8E-05							
	Crack length (bldg perimeter)	m	X_{crack}	40							
	Crack depth below ground	m	Z_{crack}	0.10							
	Crack radius	m	r_{crack}	1E-03							
	Soil gas flow rate into bldg	m^3/day	Q_{soil}	7.20							
	Indoor air concentrations resulting from groundwater vapor intrusion into a building are estimated using the relationships described by Johnson and Ettinger (Heuristic model for predicting the intrusion rate of contaminant vapors into buildings, 1991), which USEPA recommends for screening level calculations, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.										
	The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.										

Attachment C.22: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-177 (Parcel 4) Whirlpool, Fort Smith, Arkansas

							Cancer			Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	Chloroform	67-66-3	B2	N	6.10E-04	7.95E-07	2.3E-02	7.5E-09		5.0E-02	1.5E-05
								8E-09		**HI:**	2E-05
Note:											
Only VOCs detected in the 2nd Quarter 2015 groundwater sample at MW-177 (Parcel 4) are shown.											
Risks were calculated assuming residential exposure to groundwater-derived vapors in indoor air for 24 hours per day and 350 days per year for 30 years.											

Attachment C.23: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-71 (Parcel 4) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

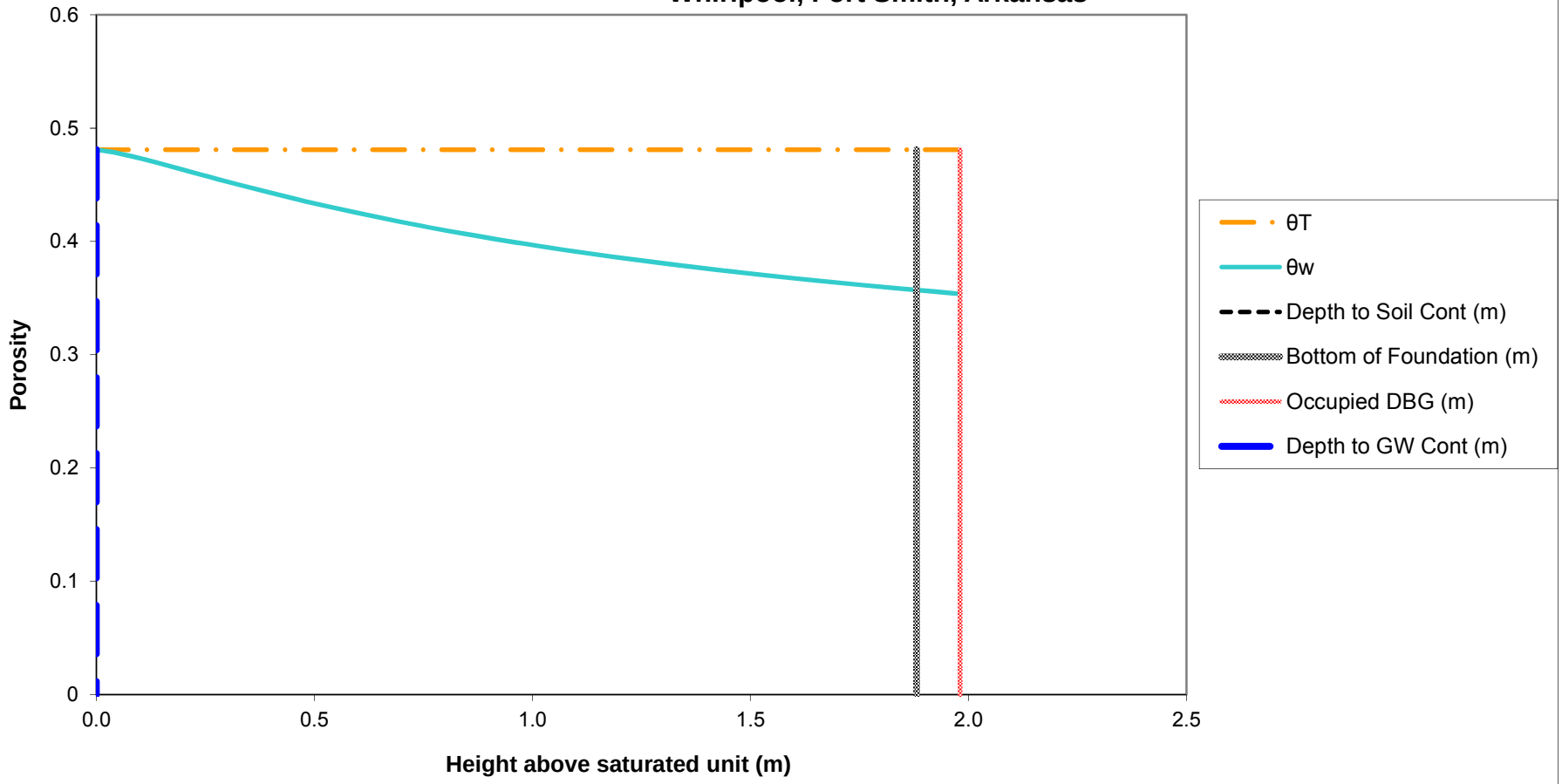
Attachment C.24: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-71 (Parcel 4)
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	1,1-Dichloroethene	75-35-4	7.78E-01	8.99E-05	8.10E-01	1.25E-01	3.12E-04	1.22E-03	2.73E-03	3.32E-06	2.69E-03
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	1.02E-01	9.72E-04	3.78E-03	2.73E-03	1.03E-05	1.22E-03
VOC	trans-1,2-Dichloroethene	156-60-5	6.11E-01	1.03E-04	2.81E-01	9.81E-02	5.96E-04	2.32E-03	2.73E-03	6.35E-06	1.79E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.10E-01	5.23E-04	2.04E-03	2.73E-03	5.57E-06	1.60E-03
Notes:	**Crack Soil and Building Characteristics**			**Crack Soil**							
	SCS Soil texture class			Sand							
	Bulk density	kg/L	ρ_b	1.66							
	Total porosity	L/L-soil	θ_T	0.375							
	Water-filled porosity	L/L-soil	θ_w	0.054							
	Air-filled porosity	L/L-soil	θ_a	0.321							
	Residual saturation	L/L-soil	θ_r	0.053							
	Hydraulic conductivity	cm/s	K	7.4E-03							
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307							
	Density of water	g/cm^3	ρ_w	1.0							
	Gravitational acceleration	cm/s^2	g	980.7							
	Intrinsic permeability	cm^2	k	9.9E-08							
	Relative saturation	unitless	S_e	0.004							
	van Genuchten N	unitless	N	3.177							
	van Genuchten M	unitless	M	0.685							
	Relative air permeability	unitless	k_{rg}	0.998							
	Permeability to vapor	cm^2	k_v	9.89E-08							
	Distance from building foundation to source	m	L_{T-gw}	3.56							
	Bldg foundation thickness	m	L_{crack}	0.1							
	Bldg foundation length	m		10.00							
	Bldg foundation width	m		10.00							
	Bldg occupied height	m		2.44							
	Bldg occupied volume	m^3		244.00							
	Occupied depth below ground	m		0.0							
	Bldg area for vapor intrusion	m^2	A_B	100.0							
	Ratio of A_{crack} to A_B		η	4E-04							
	Area of cracks	m^2	A_{crack}	4E-02							
	Air exchange rate	$hour^{-1}$	ach	0.45							
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03							
	Pressure difference between outdoors-indoors	$kg/m-s^2$	ΔP	1.0							
	Viscosity of air	kg/m-s	μ_a	1.8E-05							
	Crack length (bldg perimeter)	m	X_{crack}	40							
	Crack depth below ground	m	Z_{crack}	0.10							
	Crack radius	m	r_{crack}	1E-03							
	Soil gas flow rate into bldg	m^3/day	Q_{soil}	7.20							
	Indoor air concentrations resulting from groundwater vapor intrusion into a building are estimated using the relationships described by Johnson and Ettinger (Heuristic model for predicting the intrusion rate of contaminant vapors into buildings, 1991), which USEPA recommends for screening level calculations, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.										
	The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.										

Attachment C.25: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-71 (Parcel 4) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	1,1-Dichloroethene	75-35-4	C	N	1.70E-03	4.57E-06					2.0E-01	2.2E-05
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	5.70E-03	6.98E-06						
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	5.30E-04	9.47E-07						
VOC	Trichloroethene	79-01-6	HC	Y	1.56E-01	2.50E-04	4.1E-03	0.2439	5.8E-07		2.0E-03	1.2E-01
							Cumulative Risk:		6E-07		**HI:**	1E-01
Note:												
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the 2nd Quarter 2015 groundwater sample at MW-71 (Parcel 4) are shown.												
Risks were calculated assuming residential exposure to groundwater-derived vapors in indoor air for 24 hours per day and 350 days per year for 30 years.												

Attachment C.26: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-180 (Parcel 5) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

Attachment C.27: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-180 (Parcel 5) Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	9.81E-02	5.75E-04	4.22E-03	2.73E-03	1.15E-05	1.37E-03
VOC	trans-1,2-Dichloroethene	156-60-5	6.11E-01	1.03E-04	2.81E-01	9.42E-02	3.39E-04	2.49E-03	2.73E-03	6.81E-06	1.92E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.05E-01	2.92E-04	2.15E-03	2.73E-03	5.89E-06	1.70E-03

Notes:	Crack Soil and Building Characteristics			Crack Soil
	SCS Soil texture class			Sand
	Bulk density	kg/L	ρ_b	1.66
	Total porosity	L/L-soil	θ_T	0.375
	Water-filled porosity	L/L-soil	θ_w	0.058
	Air-filled porosity	L/L-soil	θ_a	0.317
	Residual saturation	L/L-soil	θ_r	0.053
	Hydraulic conductivity	cm/s	K	7.4E-03
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307
	Density of water	g/cm^3	ρ_w	1.0
	Gravitational acceleration	cm/s^2	g	980.7
	Intrinsic permeability	cm^2	k	9.9E-08
	Relative saturation	unitless	S_e	0.016
	van Genuchten N	unitless	N	3.177
	van Genuchten M	unitless	M	0.685
	Relative air permeability	unitless	k_{rg}	0.989
	Permeability to vapor	cm^2	k_v	9.80E-08
	Distance from building foundation to source	m	L_{T-gw}	1.88
	Bldg foundation thickness	m	L_{crack}	0.1
	Bldg foundation length	m		10.00
	Bldg foundation width	m		10.00
	Bldg occupied height	m		2.44
	Bldg occupied volume	m^3		244.00
	Occupied depth below ground	m		0.0
	Bldg area for vapor intrusion	m^2	A_B	100.0
	Ratio of A_{crack} to A_B		η	4E-04
	Area of cracks	m^2	A_{crack}	4E-02
	Air exchange rate	$hour^{-1}$	ach	0.45
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03
	Pressure difference between outdoors-indoors	$kg/m-s^2$	ΔP	1.0
	Viscosity of air	kg/m-s	μ_a	1.8E-05
	Crack length (bldg perimeter)	m	X_{crack}	40
	Crack depth below ground	m	Z_{crack}	0.10
	Crack radius	m	r_{crack}	1E-03
	Soil gas flow rate into bldg	m^3/day	Q_{soil}	7.20

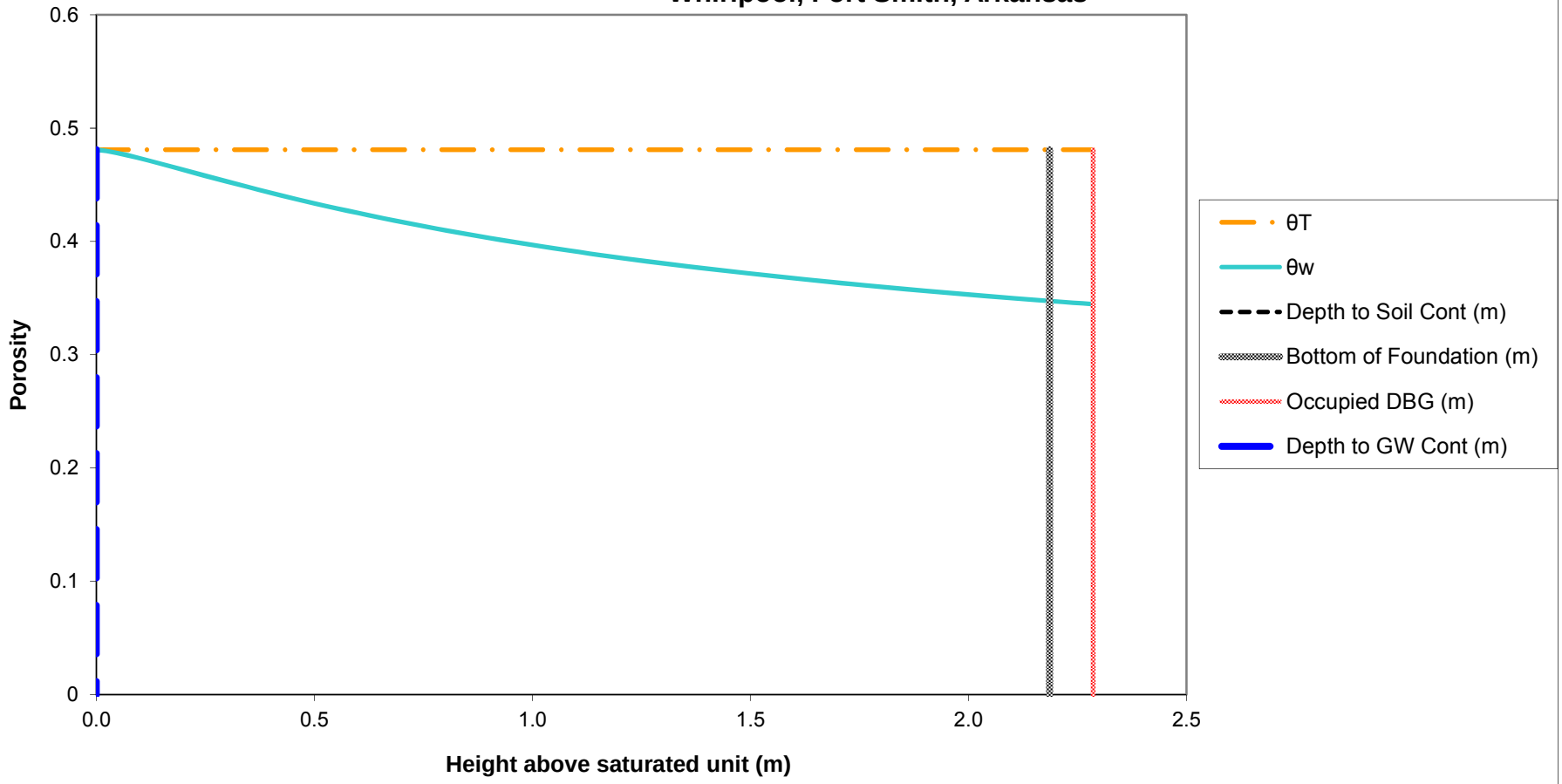
Indoor air concentrations resulting from groundwater vapor intrusion into a building are estimated using the relationships described by Johnson and Ettinger (Heuristic model for predicting the intrusion rate of contaminant vapors into buildings, 1991), which USEPA recommends for screening level calculations, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.

Attachment C.28: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-180 (Parcel 5) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	3.80E-03	5.20E-06						
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	8.80E-04	1.69E-06						
VOC	Trichloroethene	79-01-6	HC	Y	2.14E-02	3.63E-05	4.1E-03	0.2439	8.4E-08		2.0E-03	1.7E-02
							Cumulative Risk:		8E-08		**HI:**	2E-02
Note:												
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the 2nd Quarter 2015 groundwater sample at MW-180 (Parcel 5) are shown.												
Risks were calculated assuming residential exposure to groundwater-derived vapors in indoor air for 24 hours per day and 350 days per year for 30 years.												

Attachment C.29: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-178 (Parcel 5) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

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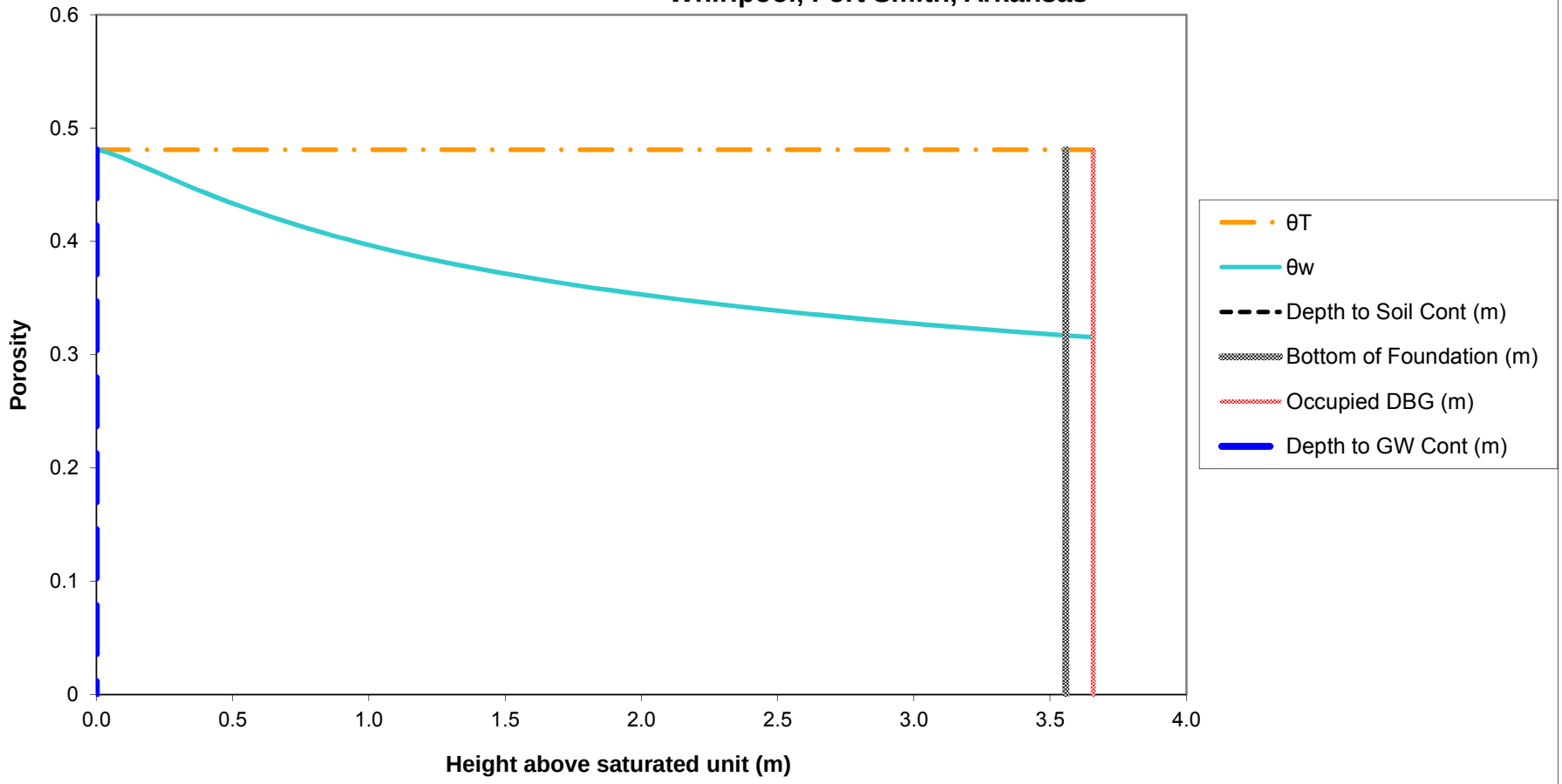
Attachment C.30: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-178 (Parcel 5) Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	Acetone	67-64-1	1.07E+00	9.85E-05	1.14E-03	1.68E-01	1.93E-02	1.09E-01	2.73E-03	2.99E-04	3.41E-04
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	9.95E-02	6.44E-04	4.08E-03	2.73E-03	1.11E-05	1.32E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.07E-01	3.33E-04	2.11E-03	2.73E-03	5.76E-06	1.66E-03
Notes:	**Crack Soil and Building Characteristics**			**Crack Soil**							
	SCS Soil texture class			Sand							
	Bulk density	kg/L	ρ_b	1.66							
	Total porosity	L/L-soil	θ_T	0.375							
	Water-filled porosity	L/L-soil	θ_w	0.057							
	Air-filled porosity	L/L-soil	θ_a	0.318							
	Residual saturation	L/L-soil	θ_r	0.053							
	Hydraulic conductivity	cm/s	K	7.4E-03							
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307							
	Density of water	g/cm^3	ρ_w	1.0							
	Gravitational acceleration	cm/s^2	g	980.7							
	Intrinsic permeability	cm^2	k	9.9E-08							
	Relative saturation	unitless	S_e	0.012							
	van Genuchten N	unitless	N	3.177							
	van Genuchten M	unitless	M	0.685							
	Relative air permeability	unitless	k_{rg}	0.992							
	Permeability to vapor	cm^2	k_v	9.84E-08							
	Distance from building foundation to source	m	L_{T-gw}	2.19							
	Bldg foundation thickness	m	L_{crack}	0.1							
	Bldg foundation length	m		10.00							
	Bldg foundation width	m		10.00							
	Bldg occupied height	m		2.44							
	Bldg occupied volume	m^3		244.00							
	Occupied depth below ground	m		0.0							
	Bldg area for vapor intrusion	m^2	A_B	100.0							
	Ratio of A_{crack} to A_B		η	4E-04							
	Area of cracks	m^2	A_{crack}	4E-02							
	Air exchange rate	$hour^{-1}$	ach	0.45							
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03							
	Pressure difference between outdoors-indoors	$kg/m\text{-}s^2$	ΔP	1.0							
	Viscosity of air	kg/m-s	μ_a	1.8E-05							
	Crack length (bldg perimeter)	m	X_{crack}	40							
	Crack depth below ground	m	Z_{crack}	0.10							
	Crack radius	m	r_{crack}	1E-03							
	Soil gas flow rate into bldg	m^3/day	Q_{soil}	7.20							
	Indoor air concentrations resulting from groundwater vapor intrusion into a building are estimated using the relationships described by Johnson and Ettinger (Heuristic model for predicting the intrusion rate of contaminant vapors into buildings, 1991), which USEPA recommends for screening level calculations, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.										
	The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.										

Attachment C.31: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-178 (Parcel 5) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	Acetone	67-64-1	ID	N	7.10E-03	2.42E-06					3.1E+01	7.5E-08
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	1.30E-03	1.72E-06						
VOC	Trichloroethene	79-01-6	HC	Y	5.00E-03	8.31E-06	4.1E-03	0.2439	1.9E-08		2.0E-03	4.0E-03
							Cumulative Risk:		2E-08		**HI:**	4E-03
Note:												
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the 2nd Quarter 2015 groundwater sample at MW-178 (Parcel 5) are shown.												
Risks were calculated assuming residential exposure to groundwater-derived vapors in indoor air for 24 hours per day and 350 days per year for 30 years.												

Attachment C.32: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-33R (Parcel 5) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

RAMBOLL ENVIRON

Attachment C.33: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-33R (Parcel 5)
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	Benzene	71-43-2	7.60E-01	8.47E-05	1.59E-01	1.22E-01	8.15E-04	3.17E-03	2.73E-03	8.67E-06	1.38E-03
VOC	2-Butanone	78-93-3	6.98E-01	8.47E-05	1.96E-03	1.12E-01	1.01E-02	3.78E-02	2.73E-03	1.03E-04	2.03E-04
VOC	Carbon Disulfide	75-15-0	8.99E-01	8.64E-05	9.26E-01	1.44E-01	2.93E-04	1.14E-03	2.73E-03	3.12E-06	2.89E-03
VOC	Chloroform	67-66-3	8.99E-01	8.64E-05	1.07E-01	1.44E-01	1.11E-03	4.32E-03	2.73E-03	1.18E-05	1.27E-03
VOC	1,1-Dichloroethene	75-35-4	7.78E-01	8.99E-05	8.10E-01	1.25E-01	3.12E-04	1.22E-03	2.73E-03	3.32E-06	2.69E-03
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	1.02E-01	9.72E-04	3.78E-03	2.73E-03	1.03E-05	1.22E-03
VOC	trans-1,2-Dichloroethene	156-60-5	6.11E-01	1.03E-04	2.81E-01	9.81E-02	5.96E-04	2.32E-03	2.73E-03	6.35E-06	1.79E-03
VOC	Methylene Chloride	75-09-2	8.73E-01	1.01E-04	6.60E-02	1.40E-01	1.58E-03	6.14E-03	2.73E-03	1.68E-05	1.11E-03
VOC	Tetrachloroethene	127-18-4	6.22E-01	7.08E-05	4.90E-01	9.99E-02	3.40E-04	1.33E-03	2.73E-03	3.63E-06	1.78E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.10E-01	5.23E-04	2.04E-03	2.73E-03	5.57E-06	1.60E-03
VOC	Vinyl Chloride	75-01-4	9.16E-01	1.06E-04	9.00E-01	1.47E-01	3.44E-04	1.34E-03	2.73E-03	3.66E-06	3.30E-03

Notes:	Crack Soil and Building Characteristics			Crack Soil
	SCS Soil texture class			Sand
	Bulk density	kg/L	ρ_b	1.66
	Total porosity	L/L-soil	θ_T	0.375
	Water-filled porosity	L/L-soil	θ_w	0.054
	Air-filled porosity	L/L-soil	θ_a	0.321
	Residual saturation	L/L-soil	θ_r	0.053
	Hydraulic conductivity	cm/s	**K**	7.4E-03
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307
	Density of water	g/cm^3	ρ_w	1.0
	Gravitational acceleration	cm/s^2	**g**	980.7
	Intrinsic permeability	cm^2	**k**	9.9E-08
	Relative saturation	unitless	S_e	0.004
	van Genuchten N	unitless	**N**	3.177
	van Genuchten M	unitless	**M**	0.685
	Relative air permeability	unitless	k_{rg}	0.998
	Permeability to vapor	cm^2	k_v	9.89E-08
	Distance from building foundation to source	m	$L_{T\text{-}gw}$	3.56
	Bldg foundation thickness	m	L_{crack}	0.1
	Bldg foundation length	m		10.00
	Bldg foundation width	m		10.00
	Bldg occupied height	m		2.44
	Bldg occupied volume	m^3		244.00
	Occupied depth below ground	m		0.0
	Bldg area for vapor intrusion	m^2	A_B	100.0
	Ratio of A_{crack} to A_B		η	4E-04
	Area of cracks	m^2	A_{crack}	4E-02
	Air exchange rate	$hour^{-1}$	**ach**	0.45
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03
	Pressure difference between outdoors-indoors	$kg/m\text{-}s^2$	ΔP	1.0
	Viscosity of air	kg/m-s	μ_a	1.8E-05
	Crack length (bldg perimeter)	m	X_{crack}	40
	Crack depth below ground	m	Z_{crack}	0.10
	Crack radius	m	r_{crack}	1E-03
	Soil gas flow rate into bldg	m^3/day	Q_{soil}	7.20

Indoor air concentrations resulting from groundwater vapor intrusion into a building are estimated using the relationships described by Johnson and Ettinger (Heuristic model for predicting the intrusion rate of contaminant vapors into buildings, 1991), which USEPA recommends for screening level calculations, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.

Attachment C.34: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-33R (Parcel 5) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	C_{gw} (mg/L)	$C_{building}$ (mg/m^3)	**URF** (m^3/mg)	f_{inh}	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	Benzene	71-43-2	A	N	3.00E-04	4.13E-07	7.8E-03		1.3E-09		3.0E-02	1.3E-05
VOC	2-Butanone	78-93-3	ID	N	1.30E-03	2.64E-07					5.0E+00	5.1E-08
VOC	Carbon Disulfide	75-15-0		N	1.40E-03	4.05E-06					7.0E-01	5.5E-06
VOC	Chloroform	67-66-3	B2	N	2.00E-04	2.54E-07	2.3E-02		2.4E-09		5.0E-02	4.9E-06
VOC	1,1-Dichloroethene	75-35-4	C	N	5.50E-04	1.48E-06					2.0E-01	7.1E-06
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	1.22E-02	1.49E-05						
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	1.40E-03	2.50E-06						
VOC	Methylene Chloride	75-09-2	LC	Y	3.90E-04	4.32E-07	1.0E-05	1	4.5E-12		6.0E-01	6.9E-07
VOC	Tetrachloroethene	127-18-4	LC	N	1.30E-04	2.31E-07	2.6E-04		2.5E-11		4.0E-02	5.5E-06
VOC	Trichloroethene	79-01-6	HC	Y	6.24E-01	1.00E-03	4.1E-03	0.2439	2.3E-06		2.0E-03	4.8E-01
VOC	Vinyl Chloride	75-01-4	A	N	3.70E-04	1.22E-06	4.4E-03		7.6E-09		1.0E-01	1.2E-05
							Cumulative Risk:		2E-06		**HI:**	5E-01

Note:

f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.

Only VOCs detected in the 2nd Quarter 2015 groundwater sample at MW-33R (Parcel 5) are shown.

Risks were calculated assuming residential exposure to groundwater-derived vapors in indoor air for 24 hours per day and 350 days per year for 30 years.

Appendix D
Verification of Vapor Intrusion Calculations

Verification of Vapor Intrusion Calculations
Whirlpool Facility, Fort Smith, Arkansas

Introduction

The purpose of this document is to demonstrate that the groundwater vapor intrusion calculations presented in Appendix A, Attachment 5 of the Revised Risk Management Plan (RRMP) for the Fort Smith Whirlpool Facility (ENVIRON 2013) are consistent with the modeling approach described by Johnson and Ettinger's 1991 article (J&E 1991). The demonstration discussed below uses USEPA's current version of the J&E model for groundwater (GW-ADV) to replicate the trichloroethene (TCE) indoor air concentration calculated for the residential slab-on-grade building and site assumptions presented in the RRMP. The cancer risk and hazard quotient (HQ) for this TCE concentration were then replicated using USEPA's Regional Screening Level (RSL) for TCE in residential air.

Methods

Screen shots of the calculation worksheets from the GW-ADV workbook used for the demonstration are shown in Figures 1 to 3, and described below:

- Figure 1 shows the DATENTER worksheet, which was filled in using the inputs presented in Appendix A, Attachment 5 to the RRMP. The site-specific inputs are shaded in yellow.
- Figure 2 shows the CHEMPROPS worksheet, which shows the values that were calculated by the workbook based on the values on the DATENTER worksheet.
- Figure 3 shows the INTERCALCS worksheet, which shows the values that were calculated by the workbook based on the values on the DATENTER and CHEMPROPS worksheets.

The RESULTS worksheet was not used because the toxicity values for TCE in GW-ADV are out of date. Instead, the cancer risk and HQ for the indoor air TCE concentration from the INTERCALCS worksheet were calculated by scaling from the June 2015 RSLs, as described in Section 5.15.2 of the RSL User's Guide.

Results

From cell H31 on the INTERCALCS worksheet, it can be seen that the attenuation coefficient (α) is 5.54×10^{-6}, which is essentially the same as the value of 5.57×10^{-6} for TCE that was presented in Attachment 5 (included in Attachment A to this document). Similarly, the building concentration ($C_{building}$) of 2.54 ug/m^3 in cell I31 is essentially the same as the value of 2.57 ug/m^3 (2.57×10^{-3} mg/m^3) in Attachment 5 (included in Attachment A to this document), for a TCE groundwater concentration of 1,600 ug/L.

The results on Figure 3 demonstrate that the indoor air concentrations presented in the RRMP can be replicated by the USEPA spreadsheets using the building and site assumptions from the RRMP.

The cancer risk and HQ for the $C_{building}$ of 2.54 ug/m^3 were calculated from the cancer and noncancer RSLs for residential air of 0.48 and 2.1 ug/m^3, respectively, by using the method described in Section 5.15.2 of the June 2015 RSL User's Guide (included as Attachment B to this document). The resulting cancer risk and HQ estimates are 5.3 x 10^{-6} and 1.2, respectively, which are the same or essentially the same as the values of 5.9 x 10^{-6} and 1.2, respectively, in Attachment 5 of the RRMP.

References

ENVIRON International Corporation (2013) *Revised Risk Management Plan, Ft. Smith, Arkansas.*

Johnson, P. and R. Ettinger (1991) Heuristic Model for Predicting the Intrusion Rate of Contaminant Vapors into Buildings. *Environ. Sci. Technol.* 25, 1445 - 1452.

United States Environmental Protection Agency (2004) *User's Guide for Evaluating Subsurface Vapor Intrusion into Buildings.* Feb. 22.

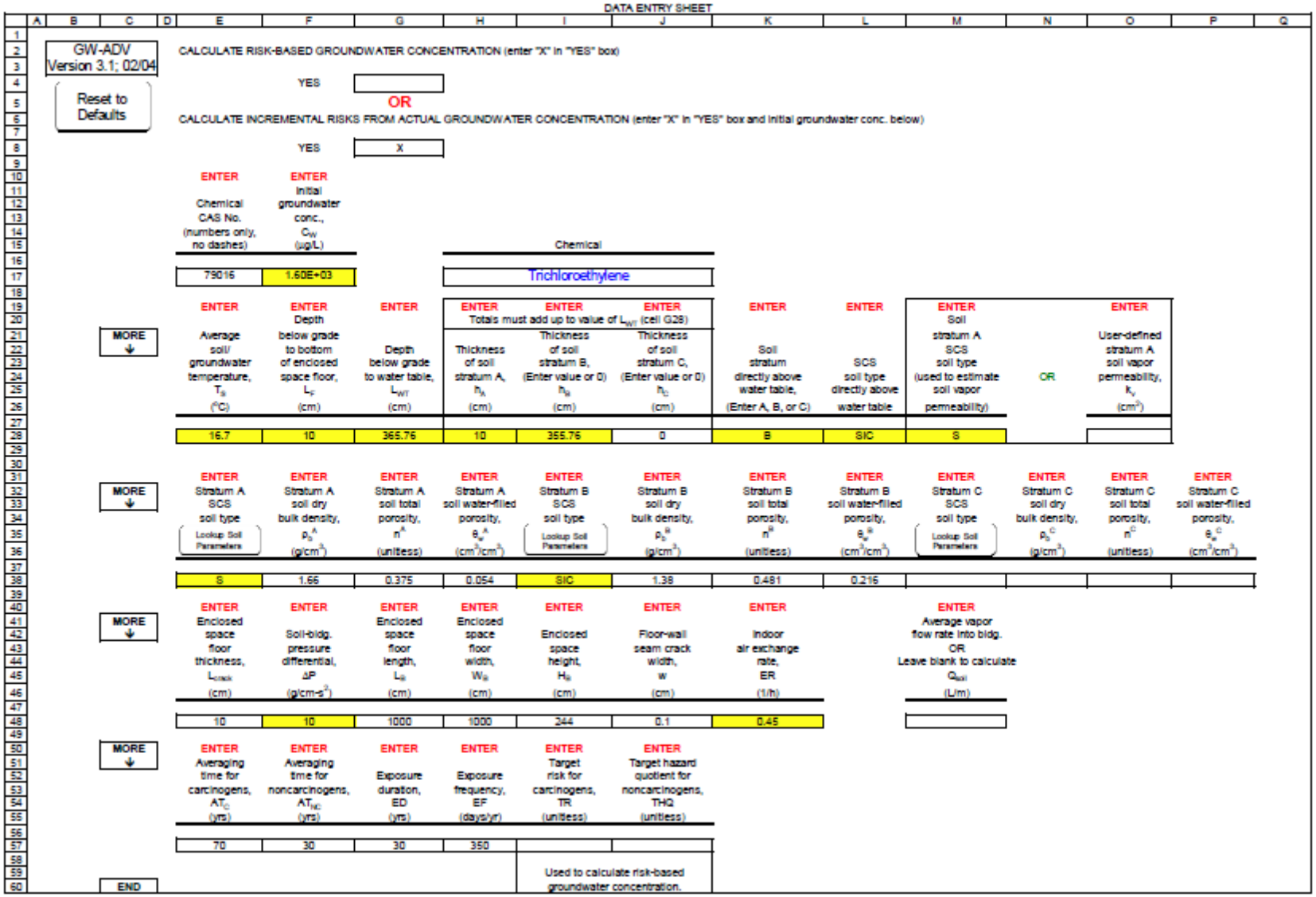
United States Environmental Protection Agency (2015) *Regional Screening Table* and *User's Guide.* June.

Attachments

Attachment A – Pages from Attachment 5 of Appendix A – Human Health Risk Assessment – to the April 2013 RRMP

Attachment B – Section 5.15 of USEPA's June 2015 User's Guide for the Regional Screening Levels

Figure 1: DATENTER



DATA ENTRY SHEET

GW-ADV Version 3.1; 02/04

Reset to Defaults

CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" in "YES" box)

YES

OR

CALCULATE INCREMENTAL RISKS FROM ACTUAL GROUNDWATER CONCENTRATION (enter "X" in "YES" box and initial groundwater conc. below)

YES X

ENTER Chemical CAS No. (numbers only, no dashes)	ENTER Initial groundwater conc., C_W (µg/L)	Chemical
79016	1.60E+03	Trichloroethylene

MORE

ENTER Average soil/ groundwater temperature, T_S (°C)	ENTER Depth below grade to bottom of enclosed space floor, L_F (cm)	ENTER Depth below grade to water table, L_{WT} (cm)	ENTER Totals must add up to value of L_{WT} (cell G28) Thickness of soil stratum A, h_A (cm)	ENTER Thickness of soil stratum B, (Enter value or 0) h_B (cm)	ENTER Thickness of soil stratum C, (Enter value or 0) h_C (cm)	ENTER Soil stratum directly above water table, (Enter A, B, or C)	ENTER SCS soil type directly above water table	ENTER Soil stratum A SCS soil type (used to estimate soil vapor permeability)	OR	ENTER User-defined stratum A soil vapor permeability, k_v (cm^2)
16.7	10	365.76	10	355.76	0	B	SIC	S		

MORE

ENTER Stratum A SCS soil type (Lookup Soil Parameters)	ENTER Stratum A soil dry bulk density, ρ_b^A (g/cm^3)	ENTER Stratum A soil total porosity, n^A (unitless)	ENTER Stratum A soil water-filled porosity, θ_w^A (cm^3/cm^3)	ENTER Stratum B SCS soil type (Lookup Soil Parameters)	ENTER Stratum B soil dry bulk density, ρ_b^B (g/cm^3)	ENTER Stratum B soil total porosity, n^B (unitless)	ENTER Stratum B soil water-filled porosity, θ_w^B (cm^3/cm^3)	ENTER Stratum C SCS soil type (Lookup Soil Parameters)	ENTER Stratum C soil dry bulk density, ρ_b^C (g/cm^3)	ENTER Stratum C soil total porosity, n^C (unitless)	ENTER Stratum C soil water-filled porosity, θ_w^C (cm^3/cm^3)
S	1.66	0.375	0.054	SIC	1.38	0.481	0.216				

MORE

ENTER Enclosed space floor thickness, L_{crack} (cm)	ENTER Soil-bldg. pressure differential, ΔP ($g/cm-s^2$)	ENTER Enclosed space floor length, L_B (cm)	ENTER Enclosed space floor width, W_B (cm)	ENTER Enclosed space height, H_B (cm)	ENTER Floor-wall seam crack width, w (cm)	ENTER Indoor air exchange rate, ER (1/h)	ENTER Average vapor flow rate into bldg. OR Leave blank to calculate Q_{soil} (L/m)
10	10	1000	1000	244	0.1	0.45	

MORE

ENTER Averaging time for carcinogens, AT_C (yrs)	ENTER Averaging time for noncarcinogens, AT_{NC} (yrs)	ENTER Exposure duration, ED (yrs)	ENTER Exposure frequency, EF (days/yr)	ENTER Target risk for carcinogens, TR (unitless)	ENTER Target hazard quotient for noncarcinogens, THQ (unitless)
70	30	30	350		

Used to calculate risk-based groundwater concentration.

END

Figure 2: CHEMPROPS

CHEMICAL PROPERTIES SHEET

	A	B	C	D	E	F	G	H	I	J	K	L
1												
2												
3												
4	Diffusivity in air,	Diffusivity in water,	Henry's law constant at reference temperature,	Henry's law constant reference temperature,	Enthalpy of vaporization at the normal boiling point,	Normal boiling point,	Critical temperature,	Organic carbon partition coefficient,	Pure component water solubility,	Unit risk factor,	Reference conc.,	
5												
6	D_a	D_w	H	T_R	$\Delta H_{v,b}$	T_B	T_C	K_{oc}	S	URF	RfC	
7	(cm^2/s)	(cm^2/s)	(atm-m^3/mol)	(°C)	(cal/mol)	(°K)	(°K)	(cm^3/g)	(mg/L)	$(\mu g/m^3)^{-1}$	(mg/m^3)	
8												
9	7.90E-02	9.10E-06	1.03E-02	25	7,505	360.36	544.20	1.66E+02	1.47E+03	1.1E-04	4.0E-02	
10												
11	END											

Figure 3: INTERCALCS

INTERMEDIATE CALCULATIONS SHEET

	A	B	C	D	E	F	G	H	I	J	K	L	M	N
1														
2														
3			Stratum A	Stratum B	Stratum C	Stratum A	Stratum A	Stratum A	Stratum A		Total	Air-filled	Water-filled	Floor-
4		Source-	soil	soil	soil	effective	soil	soil	soil	Thickness of	porosity in	porosity in	porosity in	wall
5	Exposure	building	air-filled	air-filled	air-filled	total fluid	intrinsic	relative air	effective vapor	capillary	capillary	capillary	capillary	seam
6	duration,	separation,	porosity,	porosity,	porosity,	saturation,	permeability,	permeability,	permeability,	zone,	zone,	zone,	zone,	perimeter,
7	τ	L_T	θ_a^A	θ_a^B	θ_a^C	S_{te}	k_i	k_{rg}	k_v	L_{cz}	n_{cz}	$\theta_{a,cz}$	$\theta_{w,cz}$	X_{crack}
8	(sec)	(cm)	(cm^3/cm^3)	(cm^3/cm^3)	(cm^3/cm^3)	(cm^3/cm^3)	(cm^2)	(cm^2)	(cm^2)	(cm)	(cm^3/cm^3)	(cm^3/cm^3)	(cm^3/cm^3)	(cm)
9														
10	9.46E+08	356	0.321	0.265	ERROR	0.003	1.00E-07	0.998	1.00E-07	192.31	0.481	0.057	0.424	4,000
11														
12														
13		Area of							Stratum	Stratum	Stratum	Capillary	Total	
14		enclosed	Crack-	Crack					A	B	C	zone	overall	
15	Bldg.	space	to-total	depth	Enthalpy of	Henry's law	Henry's law		effective	effective	effective	effective	effective	Diffusion
16	ventilation	below	area	below	vaporization at	constant at	constant at	Vapor	diffusion	diffusion	diffusion	diffusion	diffusion	path
17	rate,	grade,	ratio,	grade,	ave. groundwater	ave. groundwater	ave. groundwater	viscosity at	coefficient,	coefficient,	coefficient,	coefficient,	coefficient,	length,
18	$Q_{building}$	A_B	η	Z_{crack}	temperature, $\Delta H_{v,TS}$	temperature, H_{TS}	temperature, H'_{TS}	ave. soil temperature, μ_{TS}	D^{eff}_A	D^{eff}_B	D^{eff}_C	D^{eff}_{cz}	D^{eff}_T	L_d
19	(cm^3/s)	(cm^2)	(unitless)	(cm)	(cal/mol)	(atm-m^3/mol)	(unitless)	(g/cm-s)	(cm^2/s)	(cm^2/s)	(cm^2/s)	(cm^2/s)	(cm^2/s)	(cm)
20														
21	3.05E+04	1.00E+06	4.00E-04	10	8,474	6.82E-03	2.87E-01	1.77E-04	1.28E-02	4.10E-03	0.00E+00	3.29E-05	6.05E-05	356
22														
23							Exponent of	Infinite	Infinite					
24				Average	Crack		equivalent	source	source					
25	Convection	Source	Crack	vapor	effective	Area of	foundation	indoor	bldg.	Unit	Reference			
26	path	vapor	radius,	flow rate	diffusion	crack,	Peclet	attenuation	conc.,	risk	conc.,			
27	length,	conc.,		into bldg.,	coefficient,		number,	coefficient,		factor,				
28	L_p	C_{source}	r_{crack}	Q_{soil}	D^{crack}	A_{crack}	exp(Pe')	a	$C_{building}$	URF	RfC			
29	(cm)	($\mu g/m^3$)	(cm)	(cm^3/s)	(cm^2/s)	(cm^2)	(unitless)	(unitless)	($\mu g/m^3$)	$(\mu g/m^3)^{-1}$	(mg/m^3)			
30														
31	10	4.59E+05	0.10	2.68E+01	1.28E-02	4.00E+02	5.93E+22	5.54E-06	2.54E+00	1.1E-04	4.0E-02			
32														
33	END													

Attachment 5: Normalized Indoor Air Concentration in a Residential Building (Slab on Grade) due to Vapor Intrusion from Groundwater
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	Acetone	67-64-1	1.07E+00	9.85E-05	1.14E-03	1.72E-01	1.87E-02	6.80E-02	2.73E-03	1.86E-04	2.12E-04
VOC	Benzene	71-43-2	7.60E-01	8.47E-05	1.59E-01	1.22E-01	8.15E-04	3.17E-03	2.73E-03	8.67E-06	1.38E-03
VOC	Bromodichloromethane	75-27-4	2.57E-01	9.16E-05	4.45E-02	4.13E-02	1.07E-03	4.17E-03	2.73E-03	1.14E-05	5.07E-04
VOC	Bromoform	75-25-2	1.29E-01	8.90E-05	1.34E-02	2.07E-02	1.64E-03	6.37E-03	2.73E-03	1.74E-05	2.33E-04
VOC	Bromomethane	74-83-9	6.29E-01	1.05E-04	2.01E-01	1.01E-01	7.43E-04	2.89E-03	2.73E-03	7.90E-06	1.59E-03
VOC	2-Butanone	78-93-3	6.98E-01	8.47E-05	1.96E-03	1.12E-01	1.01E-02	3.78E-02	2.73E-03	1.03E-04	2.03E-04
VOC	Carbon Disulfide	75-15-0	8.99E-01	8.64E-05	9.26E-01	1.44E-01	2.93E-04	1.14E-03	2.73E-03	3.12E-06	2.89E-03
VOC	Carbon Tetrachloride	56-23-5	6.74E-01	7.60E-05	8.82E-01	1.08E-01	2.52E-04	9.82E-04	2.73E-03	2.68E-06	2.37E-03
VOC	Chlorobenzene	108-90-7	6.31E-01	7.52E-05	9.77E-02	1.01E-01	9.32E-04	3.63E-03	2.73E-03	9.91E-06	9.68E-04
VOC	Chloroethane	75-00-3	2.34E+00	9.94E-05	3.25E-01	3.76E-01	8.86E-04	3.45E-03	2.73E-03	9.42E-06	3.06E-03
VOC	Chloroform	67-66-3	8.99E-01	8.64E-05	1.07E-01	1.44E-01	1.11E-03	4.32E-03	2.73E-03	1.18E-05	1.27E-03
VOC	Chloromethane	74-87-3	1.09E+00	5.62E-05	3.33E-01	1.75E-01	4.61E-04	1.80E-03	2.73E-03	4.90E-06	1.63E-03
VOC	Dibromochloromethane	124-48-1	1.69E-01	9.07E-05	2.38E-02	2.72E-02	1.27E-03	4.94E-03	2.73E-03	1.35E-05	3.21E-04
VOC	1,1-Dichloroethane	75-34-3	6.41E-01	9.07E-05	1.66E-01	1.03E-01	7.72E-04	3.00E-03	2.73E-03	8.21E-06	1.36E-03
VOC	1,2-Dichloroethane	107-06-2	8.99E-01	8.55E-05	2.74E-02	1.44E-01	2.37E-03	9.19E-03	2.73E-03	2.51E-05	6.88E-04
VOC	1,1-Dichloroethene	75-35-4	7.78E-01	8.99E-05	8.10E-01	1.25E-01	3.12E-04	1.22E-03	2.73E-03	3.32E-06	2.69E-03
VOC	1,2-Dichloroethene (total)	540-59-0	6.36E-01	9.76E-05	1.19E-01	1.02E-01	9.72E-04	3.78E-03	2.73E-03	1.03E-05	1.22E-03
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	1.02E-01	9.72E-04	3.78E-03	2.73E-03	1.03E-05	1.22E-03
VOC	trans-1,2-Dichloroethene	156-60-5	6.11E-01	1.03E-04	2.81E-01	9.81E-02	5.96E-04	2.32E-03	2.73E-03	6.35E-06	1.79E-03
VOC	1,2-Dichloropropane	78-87-5	6.76E-01	7.54E-05	7.82E-02	1.08E-01	1.09E-03	4.24E-03	2.73E-03	1.16E-05	9.07E-04
VOC	1,3-Dichloropropene (total)	542-75-6	5.41E-01	8.64E-05	4.83E-01	8.68E-02	3.69E-04	1.44E-03	2.73E-03	3.93E-06	1.90E-03
VOC	Ethyl Benzene	100-41-4	6.48E-01	6.74E-05	2.04E-01	1.04E-01	5.75E-04	2.24E-03	2.73E-03	6.12E-06	1.25E-03
VOC	2-Hexanone	591-78-6	7.45E-01	7.57E-05	3.23E-03	1.20E-01	6.86E-03	2.61E-02	2.73E-03	7.13E-05	2.31E-04
VOC	4-Methyl-2-pentanone	108-10-1	6.48E-01	6.74E-05	4.71E-03	1.04E-01	4.81E-03	1.84E-02	2.73E-03	5.03E-05	2.37E-04
VOC	Methylene Chloride	75-09-2	8.73E-01	1.01E-04	6.60E-02	1.40E-01	1.58E-03	6.14E-03	2.73E-03	1.68E-05	1.11E-03
VOC	Styrene	100-42-5	6.13E-01	6.91E-05	7.04E-02	9.85E-02	1.06E-03	4.11E-03	2.73E-03	1.12E-05	7.90E-04
VOC	1,1,2,2-Tetrachloroethane	79-34-5	6.13E-01	6.83E-05	8.74E-03	9.85E-02	3.31E-03	1.28E-02	2.73E-03	3.48E-05	3.05E-04
VOC	Tetrachloroethene	127-18-4	6.22E-01	7.08E-05	4.90E-01	9.99E-02	3.40E-04	1.33E-03	2.73E-03	3.63E-06	1.78E-03
VOC	Toluene	108-88-3	7.52E-01	7.43E-05	1.80E-01	1.21E-01	6.97E-04	2.71E-03	2.73E-03	7.41E-06	1.34E-03
VOC	1,1,1-Trichloroethane	71-55-6	6.74E-01	7.60E-05	4.97E-01	1.08E-01	3.64E-04	1.42E-03	2.73E-03	3.87E-06	1.92E-03
VOC	1,1,2-Trichloroethane	79-00-5	6.74E-01	7.60E-05	2.43E-02	1.08E-01	2.09E-03	8.08E-03	2.73E-03	2.21E-05	5.37E-04
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.10E-01	5.23E-04	2.04E-03	2.73E-03	5.57E-06	1.60E-03
VOC	Vinyl Chloride	75-01-4	9.16E-01	1.06E-04	9.00E-01	1.47E-01	3.44E-04	1.34E-03	2.73E-03	3.66E-06	3.30E-03

Attachment 5: Normalized Indoor Air Concentration in a Residential Building (Slab on Grade) due to Vapor Intrusion from Groundwater
Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	Xylenes (total)	1330-20-7	6.74E-01	7.56E-05	1.73E-01	1.08E-01	6.90E-04	2.68E-03	2.73E-03	7.34E-06	1.27E-03
Notes:	**Crack Soil and Building Characteristics**			**Crack Soil**							
	SCS Soil texture class			Sand							
	Bulk density	kg/L	ρ_b	1.66							
	Total porosity	L/L-soil	θ_T	0.375							
	Water-filled porosity	L/L-soil	θ_w	0.054							
	Air-filled porosity	L/L-soil	θ_a	0.321							
	Residual saturation	L/L-soil	θ_r	0.053							
	Hydraulic conductivity	cm/s	K	7.4E-03							
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307							
	Density of water	g/cm^3	ρ_w	1.0							
	Gravitational acceleration	cm/s^2	g	980.7							
	Intrinsic permeability	cm^2	k	9.9E-08							
	Relative saturation	unitless	S_e	0.004							
	van Genuchten N	unitless	N	3.177							
	van Genuchten M	unitless	M	0.685							
	Relative air permeability	unitless	k_{rg}	0.998							
	Permeability to vapor	cm^2	k_v	9.89E-08							
	Distance from building foundation	m	L_{T-gw}	3.56							
	Bldg foundation thickness	m	L_{crack}	0.1							
	Bldg foundation length	m		10.00							
	Bldg foundation width	m		10.00							
	Bldg occupied height	m		2.44							
	Bldg occupied volume	m^3		244.00							
	Occupied depth below ground	m		0.0							
	Bldg area for vapor intrusion	m^2	A_B	100.0							
	Ratio of A_{crack} to A_B		η	4E-04							
	Area of cracks	m^2	A_{crack}	4E-02							
	Air exchange rate	$hour^{-1}$	ach	0.45							
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03							
	Pressure difference between	kg/m-s^2	ΔP	1.0							
	Viscosity of air	kg/m-s	μ_a	1.8E-05							
	Crack length (bldg perimeter)	m	X_{crack}	40							
	Crack depth below ground	m	Z_{crack}	0.10							
	Crack radius	m	r_{crack}	1E-03							
	Soil gas flow rate into bldg	m^3/day	Q_{soil}	7.20							

Attachment 5: Cancer Risk and Hazard Index Calculations for Residents due to Groundwater Vapor Intrusion into a Residential Building (Slab-on-Grade)
Whirlpool, Fort Smith, Arkansas

							Cancer			Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**C_{gw}** (mg/L)	**C_{bldg}** (L-water/m^3)	**C_{air}** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**	**RfC** (mg/m^3)	**HQ**
VOC	Acetone	67-64-1	ID	8.50E-02	2.12E-04	1.80E-05				3.1E+01	5.6E-07
VOC	Benzene	71-43-2	A		1.38E-03		7.8E-03			3.0E-02	
VOC	Bromodichloromethane	75-27-4	B2		5.07E-04						
VOC	Bromoform	75-25-2	B2	2.40E-02	2.33E-04	5.58E-06	1.1E-03		2.5E-09		
VOC	Bromomethane	74-83-9	ID		1.59E-03					5.0E-03	
VOC	2-Butanone	78-93-3	ID	9.50E-02	2.03E-04	1.93E-05				5.0E+00	3.7E-06
VOC	Carbon Disulfide	75-15-0			2.89E-03					7.0E-01	
VOC	Carbon Tetrachloride	56-23-5	LC		2.37E-03		6.0E-03			1.0E-01	
VOC	Chlorobenzene	108-90-7	D		9.68E-04					5.0E-02	
VOC	Chloroethane	75-00-3	LC		3.06E-03					1.0E+01	
VOC	Chloroform	67-66-3	B2		1.27E-03		2.3E-02			5.0E-02	
VOC	Chloromethane	74-87-3	D		1.63E-03					9.0E-02	
VOC	Dibromochloromethane	124-48-1	C		3.21E-04						
VOC	1,1-Dichloroethane	75-34-3	SC		1.36E-03					5.0E-01	
VOC	1,2-Dichloroethane	107-06-2	B2	3.00E-03	6.88E-04	2.06E-06	2.6E-02		2.2E-08	7.0E-03	2.8E-04
VOC	1,1-Dichloroethene	75-35-4	C	4.20E-03	2.69E-03	1.13E-05				2.0E-01	5.4E-05
VOC	1,2-Dichloroethene (total)	540-59-0		4.10E-02	1.22E-03	5.02E-05					
VOC	cis-1,2-Dichloroethene	156-59-2	ID	4.10E-02	1.22E-03	5.02E-05					
VOC	trans-1,2-Dichloroethene	156-60-5	ID		1.79E-03						
VOC	1,2-Dichloropropane	78-87-5	B2		9.07E-04					4.0E-03	
VOC	1,3-Dichloropropene (total)	542-75-6	B2		1.90E-03		4.0E-03			2.0E-02	
VOC	Ethyl Benzene	100-41-4	D		1.25E-03					1.0E+00	
VOC	2-Hexanone	591-78-6	ID		2.31E-04					3.0E-02	
VOC	4-Methyl-2-pentanone	108-10-1	ID	4.00E-03	2.37E-04	9.49E-07				3.0E+00	3.0E-07
VOC	Methylene Chloride	75-09-2	LC		1.11E-03		1.0E-05	1		6.0E-01	
VOC	Styrene	100-42-5			7.90E-04					1.0E+00	
VOC	1,1,2,2-Tetrachloroethane	79-34-5	LC		3.05E-04						
VOC	Tetrachloroethene	127-18-4	LC		1.78E-03		2.6E-04			4.0E-02	
VOC	Toluene	108-88-3	ID		1.34E-03					5.0E+00	
VOC	1,1,1-Trichloroethane	71-55-6	ID		1.92E-03					5.0E+00	
VOC	1,1,2-Trichloroethane	79-00-5	C		5.37E-04		1.6E-02			2.0E-04	
VOC	Trichloroethene	79-01-6	HC	1.60E+00	1.60E-03	2.57E-03	4.1E-03	0.244	5.9E-06	2.0E-03	1.2E+00
VOC	Vinyl Chloride	75-01-4	A	3.00E-03	3.30E-03	9.89E-06	4.4E-03		6.1E-08	1.0E-01	9.5E-05
VOC	Xylenes (total)	1330-20-7	ID		1.27E-03					1.0E-01	
							Cumulative Risk:		6E-06	**HI:**	1E+00
Note:											
f_{inh} is the fraction of the inhalation toxicity value that USEPA identified as having a mutagenic mode of action.											

Mid-Atlantic Risk Assessment

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For assistance/questions please use the rsl table contact us page

Disclaimer

This guidance sets forth a recommended, but not mandatory, approach based upon currently available information with respect to risk assessment for response actions at CERCLA sites. This document does not establish binding rules. Alternative approaches for risk assessment may be found to be more appropriate at specific sites (e.g., where site circumstances do not match the underlying assumptions, conditions and models of the guidance). The decision whether to use an alternative approach and a description of any such approach should be documented for such sites. Accordingly, when comments are received at individual CERCLA sites questioning the use of the approaches recommended in this guidance, the comments should be considered and an explanation provided for the selected approach.

It should also be noted that the screening levels (SLs) in these tables are based upon human health risk and do not address potential ecological risk. Some sites in sensitive ecological settings may also need to be evaluated for potential ecological risk. EPA's guidance "Ecological Risk Assessment Guidance for Superfund: Process for Designing and Conducting Ecological Risk Assessment" http://www.epa.gov/oswer/riskassessment/ecorisk/ecorisk.htm contains an eight step process for using benchmarks for ecological effects in the remedy selection process.

1. Introduction

The purpose of this website is to provide default screening tables and a calculator to assist Remedial Project Managers (RPMs), On Scene Coordinators (OSC's), risk assessors and others involved in decision-making concerning CERCLA hazardous waste sites and to determine whether levels of contamination found at the site may warrant further investigation or site cleanup, or whether no further investigation or action may be required.

Users within and outside the CERCLA program should use the tables or calculator results at their own discretion and they should take care to understand the assumptions incorporated in these results and to apply the SLs appropriately.

The SLs presented in the Generic Tables are chemical-specific concentrations for individual contaminants in air, drinking water and soil that may warrant further investigation or site cleanup. The SLs generated from the calculator may be site-specifc concentrations for individual chemicals in soil, air, water and fish. **It should be emphasized that SLs are not cleanup standards**. We also do not recommend that the RSLs be used as cleanup levels for Superfund Sites until the recommendations in EPA's Supplemental Guidance to Risk Assessment Guidance for Superfund, Volume I, Part A ("Community Involvement in Superfund Risk Assessments" http://www.epa.gov/oswer/riskassessment/ragsa/pdf/ci_ra.pdf) have been addressed. SLs should not be used as cleanup levels for a CERCLA site until the other remedy selections identified in the relevant portions of the National Contingency Plan (NCP), 40 CFR Part 300, have been evaluated and considered. PRGs (Preliminary Remediation Goals) is a term used to describe a project team's early and evolving identification of possible remedial goals. PRGs may be initially identified early in the Remedial Investigation/ Feasibility Study (RI/FS) process (e.g., at RI scoping) to select appropriate detection limits for RI sampling. Typically, it is necessary for PRGs to be more generic early in the process and to become more refined and site-specific as data collection and assessment progress. The SLs identified on this website are likely to serve as PRGs early in the process--e.g., at RI scoping and at screening of chemicals of potential concern (COPCs) for the baseline risk assessment. However, once the baseline risk assessment has been performed, PRGs can be derived from the calculator using site-specific risks, and the SLs in the Generic Tables are less likely to apply. PRGs developed in the FS will usually be based on site-specific risks and Applicable or Relevant and Appropriate Requirements (ARARs) and not on generic SLs.

2. Understanding the Screening Tables

2.1 General Considerations

Risk-based SLs are derived from equations combining exposure assumptions with chemical-specific toxicity values.

2.2 Exposure Assumptions

Generic SLs are based on default exposure parameters and factors that represent Reasonable Maximum Exposure (RME) conditions for long-term/chronic exposures and are based on the methods outlined in EPA's Risk Assessment Guidance for Superfund, Part B Manual (1991) and Soil Screening Guidance documents (1996 and 2002).

- The ceiling limit of 10^{+5} mg/kg is equivalent to a chemical representing 10% by weight of the soil sample. At this contaminant concentration (and higher), the assumptions for soil contact may be violated (for example, soil adherence and wind-borne dispersion assumptions) due to the presence of the foreign substance itself.

- SLs currently do not address short-term exposures (e.g., pica children and construction workers). Although extremely high soil SLs are likely to represent relatively non-toxic chemicals, such high values may not be justified if in fact more toxicological data were available for evaluating short-term and/or acute exposures.

5.15 Screening Sites with Multiple Contaminants

The screening levels in the tables are calculated under the assumption that only one contaminant is present. Users needing to screen sites with multiple contaminants should consult with their regional risk assessors. The following sections describe how target risks can be changed to screen against multiple contaminants and how the ratio of concentration to RSL can be used to estimate total risk.

5.15.1 Adjusting Target Risk and Target Hazard Quotient

When multiple contaminants are present at a site the target hazard quotient (THQ) may be modified. The following options are among the commonly used methods to modify the THQ:

1. The calculator on this website can be used to generate SLs based on any THQ or target cancer risk (TR) deemed appropriate by the user. The THQ input to the calculator can be modified from the default of 1. How much it should be modified is a user decision, but it could be based upon the number of contaminants being screened together. For example, if one is screening two contaminants together, then the THQ could be modified to 0.5. If ten contaminants are being screened together, then the THQ could be modified to 0.1. The above example weights each chemical equally; it is also possible to weight the chemicals unequally, as long as the total risk meets the desired goal. The decision of how to weight the chemicals is likely to be site-specific, and it is recommended that this decision be made in consultation with the regional risk assessor.

   Note that when the TR or THQ is altered, the relationship between cancer-based and noncancer-based SLs may change. At certain risk levels, the cancer-based number may be more conservative; at different risk levels, the noncancer-based number may be more conservative. The data user needs to consider both cancer and noncancer endpoints.

2. Similar to the above approach of using the calculator to recalculate SLs based on non-default target levels, the values in the screening tables themselves can be addressed directly. Consistent with the above logic, although the EPA Superfund Program has not developed guidance on this, it is not uncommon that Superfund sites are screened at a THQ of 0.1. (The cancer-based SLs are already at a target risk of 1E-6 and are usually not adjusted further in this scenario.) SLs based on a THQ of 0.1 can be derived by dividing a default SL by 10. Again, note that altering the target HQ can change the relationship between cancer-based and noncancer-based screening levels; the data user needs to consider both endpoints. Additional approaches or alternatives may exist. When screening actual or potential Superfund sites, users are encouraged to consult with risk assessors in that EPA Regional Office when evaluating or screening contamination at a site with multiple contaminants to see if they may know of another approach or if they have a preference.

5.15.2 Using RSLs to Sum Risk from Multiple Contaminants

RSLs can be used to estimate the total risk from multiple contaminants at a site as part of a screening procedure used by some regions. This methodology, which does not substitute for a baseline risk assessment, is often called the "sum of the ratios" approach. A step-wise approach follows:

1. Perform an extensive records search and compile existing data.

2. Identify site contaminants in the SL Table. Record the SL concentrations for various media and note whether SL is based on cancer risk (indicated by 'c') or noncancer hazard (indicated by 'n'). Segregate cancer SLs from non-cancer SLs and exclude (but don't eliminate) non-risk based SLs 's' or 'm'.

3. For cancer risk estimates, take the site-specific concentration (maximum or 95th percent of the upper confidence limit on the mean (UCL)) and divide by the SL concentrations that are designated for cancer evaluation 'c'. Multiply this ratio by 10^{-6} to estimate chemical-specific risk for a reasonable maximum exposure (RME). For multiple pollutants, simply add the risk for each chemical. See equation below.

$$\text{Risk} = \left[\left(\frac{\text{conc}_x}{\text{SL}_x}\right) + \left(\frac{\text{conc}_y}{\text{SL}_y}\right) + \left(\frac{\text{conc}_z}{\text{SL}_z}\right)\right] \times 10^{-6}$$

4. For non-cancer hazard estimates, divide the concentration term by its respective non-cancer SL designated as 'n' and sum the ratios for multiple contaminants. The cumulative ratio represents a non-carcinogenic hazard index (HI). A hazard index of 1 or less is generally considered 'safe'. A ratio greater than 1 suggests further evaluation. Note that carcinogens may also have an associated non-cancer SL that is not listed in the SL Table. To obtain these values, the user should view the Supporting Tables. See equation below.

$$\text{Hazard Index} = \left[\left(\frac{\text{conc}_x}{SL_x}\right) + \left(\frac{\text{conc}_y}{SL_y}\right) + \left(\frac{\text{conc}_z}{SL_z}\right)\right]$$

5.16 Deriving Soil Gas SLs

The air SLs could apply to indoor air from, e.g., a vapor intrusion scenario. To model indoor air concentrations from other media (e.g., soil gas, groundwater), consult with regional experts in vapor intrusion.

For more information on EPA's current understanding of this emerging exposure pathway, please refer to EPA's recent draft guidance Evaluating the Vapor Intrusion to Indoor Air Pathway from Groundwater and Soils (Subsurface Vapor Intrusion Guidance) (USEPA 2002) available on the web at: http://www.epa.gov/osw/hazard/correctiveaction/eis/vapor.htm.

5.17 Mutagens

Some of the cancer causing analytes in this tool operate by a mutagenic mode of action for carcinogenesis. There is reason to surmise that some chemicals with a mutagenic mode of action, which would be expected to cause irreversible changes to DNA, would exhibit a greater effect in early-life versus later-life exposure. Cancer risk to children in the context of the U.S. Environmental Protection Agency's cancer guidelines (U.S. EPA, 2005) includes both early-life exposures that may result in the occurrence of cancer during childhood and early-life exposures that may contribute to cancers later in life. In keeping with this guidance, separate cancer risk equations are presented for mutagens. The mutagen vinyl chloride has a unique set of equations. Consult Supplemental Guidance for Assessing Susceptibility from Early-Life Exposure to Carcinogens, EPA/630/R-03/003F, March 2005 for further information.

http://www.epa.gov/oswer/riskassessment/sghandbook/chemicals.htm provides more detailed information about which contaminants are considered carcinogenic by a mutagenic mode of action. In addition to the previous document's list of these contaminants, Chromium VI, 7,12-Dimethylbenz(a)anthracene, Benz(a)anthracene, Benzo(b)fluoranthene, Benzo(k)fluoranthene, Chrysene and Indeno(1,2,3-c,d)pyrene are also considered carcinogenic by a mutagenic mode of action.

5.18 Trichloroethylene (TCE)

It is recommended that a regional risk assessor be consulted when evaluating TCE in any medium especially when less than chronic exposure scenarios are considered. The Superfund program issued a Compilation of Information Relating of Early/Interim Actions at Superfund Sites and the TCE IRIS Assessment memo in August 2014. Several regions have issued their own guidance as well.

In order to make the calculator display the correct results for TCE, the standard cancer and mutagen equations needed to be combined. Since TCE requires the use of different toxicity values for cancer and mutagen equations, it was decided to make a toxicity value adjustment factor for cancer (CAF) and mutagens (MAF). The adjustments were done for oral (o) and inhalation (i). These adjustment factors are used in the TCE equation images presented in section 4. The equations used are presented below. The adjustment factors are based on the adult-based toxicity values and these are the cancer toxicity values presented in the Generic Tables.

$$CAF_o(0.804) = \frac{CSF_o\left(\frac{3.7\times10^{-2}\,mg}{Kg\text{-}day}\right)^{-1}\ \text{NHL+Liver oral slope factor}}{CSF_o\left(\frac{4.6\times10^{-2}\,mg}{Kg\text{-}day}\right)^{-1}\ \text{Adult-based oral slope factor}} \qquad MAF_o(0.202) = \frac{CSF_o\left(\frac{9.3\times10^{-3}\,mg}{Kg\text{-}day}\right)^{-1}\ \text{Kidney oral slope factor}}{CSF_o\left(\frac{4.6\times10^{-2}\,mg}{Kg\text{-}day}\right)^{-1}\ \text{Adult-based oral slope factor}}$$

$$CAF_i(0.756) = \frac{IUR\left(3.1\times10^{-6}\,\mu g/m^3\right)^{-1}\ \text{NHL+Liver unit risk estimate}}{IUR\left(4.1\times10^{-6}\,\mu g/m^3\right)^{-1}\ \text{Adult-based unit risk estimate}} \qquad MAF_i(0.244) = \frac{IUR\left(1\times10^{-6}\,\mu g/m^3\right)^{-1}\ \text{Kidney unit risk estimate}}{IUR\left(4.1\times10^{-6}\,\mu g/m^3\right)^{-1}\ \text{Adult-based unit risk estimate}}$$

5.19 Mercuric Chloride (and other Mercury salts)

The IRIS RfC for "Mercury (elemental)" is used as a surrogate for "Mercuric Chloride (and other Mercury salts)". Note, that the VF for "Mercury (elemental)" is not used as a surrogate for "Mercuric Chloride (and other Mercury salts)". The use of the surrogate RfC would appear to be a violation of the RSL toxicity hierarchy because Cal EPA offers a RfC for Mercuric Chloride. However, the actual form of mercury evaluated for the Cal EPA RfC was elemental mercury. Since IRIS already had a RfC for "Mercury (elemental)", it was decided to use the tier 1 source

Mr. Mostafa Mehran
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118

RE: Well Replacement Letter Report
Whirlpool Corporation Facility – Fort Smith, Arkansas
EPA No. ARD042755389
AFIN No. 66-00048
CAO LIS 13-202

Dear Mr. Mehran:

Ramboll Environ US Corporation (Ramboll Environ), on behalf of Whirlpool Corporation (Whirlpool), is submitting this letter report documenting the replacement of 0.75 inch diameter monitoring wells with 2 inch diameter permanent wells. This effort was completed in accordance with the Replacement of Temporary Monitoring Wells Work Plan, approved by the Arkansas Department of Environmental Quality (ADEQ), via letter dated January 14, 2015. The 0.75 inch diameter monitoring wells were properly abandoned and replaced with 2 inch diameter monitoring wells during the weeks of June 22nd and June 29th, 2015.

OVERVIEW

Based on an ADEQ comment on the 2014 Second Quarter Progress Report, ADEQ considered the 0.75 inch diameter wells to be temporary monitoring locations (as per ADPCE PRCR 96-4) and therefore requested that the 0.75 inch diameter wells be abandoned and replaced with properly constructed permanent monitoring wells. In addition, MW-67, a 2 inch diameter monitoring well, was replaced due to filter pack sand being observed in the well during prior groundwater monitoring events that indicated damage to the well screen.

The 0.75 inch diameter monitoring wells were installed between 2001 and 2005 (Geoprobe® Systems 0.75 inch diameter prepack monitoring wells) and MW-67 was installed in 2006 (2 inch diameter monitoring well via Hollow-Stem Auger) to characterize the extent of groundwater impact at onsite and offsite locations. By 2005, twenty 0.75 inch diameter wells had been installed beginning near the facility's north property boundary at Ingersoll Avenue and eventually extending northeast to Brazil Avenue. Fourteen of the 0.75 inch diameter wells and MW-67 were in service as of June 2015. MW-42B and MW-43 were damaged and capped in place in 2009 and abandoned on October 30, 2014. MW-35 and MW-46 were replaced by 2 inch diameter monitoring wells MW-35R and MW-46R in 2006. MW-31, MW-32 and MW-33 were replaced with 2 inch diameter wells (MW-31R, MW-32R and MW-33R) in January 2015 during the Shallow Offsite Groundwater Investigation.

WELL REPLACEMENT FIELD EFFORT

The field effort was completed in accordance with the ADEQ approved Work Plan (Environ, December 2014). The field effort included the following main tasks:

- Obtain access agreements for each offsite property at which a well was abandoned and replaced;
- Perform a private utility locate at each well location;
- Abandon the temporary 0.75 inch diameter wells and MW-67;
- Install and develop the 2 inch diameter replacement wells;
- Survey the replacement wells; and
- Repair surface ruts from drilling equipment accessing the various locations.

A total of seventeen 0.75 inch diameter wells have been replaced in accordance with the approved work plan. Three of the wells (MW-31R, MW-32R and MW-33R) were replaced in January 2015 during the Shallow Offsite Groundwater Investigation field effort and the remaining fourteen 0.75 inch diameter wells were replaced during the field effort completed between June 22 and July 2, 2015. In addition, MW-67, a 2 inch diameter well, was replaced during the same effort. The well casing and screen for MW-67 were pulled from the ground and subsequent inspection identified a loose PVC well end cap and filter pack sand inside of the well screen.

Site Preparation

Access agreements were obtained from the property owners prior to conducting any field efforts. Ramboll Environ, on behalf of Whirlpool, mailed notification letters to each of the property owners one week in advance of the scheduled well replacement work. Prior to initiating drilling activities, a private utility locator was contracted to identify underground utilities and other potential obstructions in the work areas. Field work was conducted between 8 am and 6 pm (Monday through Friday) per the requirements of the property access agreements.

Well Abandonment and Replacement

Based on the proximity of existing wells to obstructions such as underground utilities, fences or trees, 6 of the replacement wells (MW-39R, MW-40R, MW-41R, MW-57R, MW-58R and MW-61R) were offset from the previous well location to allow for proper installation of the 2 inch diameter wells. The well abandonment, drilling and installation of the replacement wells were completed using sonic drilling techniques. All well construction materials were over-drilled and removed during abandonment, followed by installation of a 2 inch diameter well in the same boring location (with the exception of the six wells that required offsetting). If the replacement well location was offset, the well casing and screen were removed and the remaining boring and well materials were grouted in place. If attempts to pull the entire well were unsuccessful, the upper portion of the well casing was removed to a depth greater than 3 feet below ground surface (bgs) and the remaining boring and well materials were grouted in place. Figure 1 presents the locations of the replacement wells.

The 2 inch replacements wells were constructed with a 2 inch diameter PVC casing and PVC well screen ranging from 2 feet to 10 feet in length depending upon the lithology based on the boring log for the previous well (see Table 1 for the respective well screen lengths). If no boring log was available for the previous well (MW-31, MW-34 and MW-36), a boring was performed to determine the lithology and appropriate screen interval for the replacement well. Soil samples from the stratigraphic borings were logged and field screened with a photoionization detector (PID) by a Ramboll Environ geologist. In all replacement wells, except MW-31R and MW-32R, a 20/40 grade sand pack was installed in the well annulus around the PVC screen to approximately 2-feet above the top of the screen followed by 2-feet of annular seal consisting of hydrated bentonite chips or pellets above the top of the sand pack. MW-31R and MW-32R only had 1-foot of 20/40 grade sand pack installed above the screen. The remainder of the annular space was pressure grouted with a bentonite/cement grout installed with a tremie pipe from the bottom of the open well annulus to the surface. The wells were completed at the surface with a traffic rated flush mount protective cover installed within a concrete apron. One well, MW-58R, was completed with a 3-foot stickup due to its location in a wet area where ponded water had been routinely observed during prior groundwater sampling events. Well construction logs are provided in Appendix A.

All newly constructed monitoring wells were properly developed in accordance with ADEQ guidance (Interim Policy PRCR 96-4, Section L, Page 9) and all newly constructed wells were surveyed by an Arkansas licensed surveyor.

Investigation Derived Waste

The soil cuttings and former small diameter well materials from drilling and abandonment activities were containerized in a 20 yard roll-off box and staged on the former Whirlpool manufacturing facility property. Purge water generated during groundwater development activities was containerized in totes and 55-gallon drums and staged on the former Whirlpool manufacturing facility property. The investigation derived waste was disposed of as non-hazardous waste by Environmental Remediation Specialists and transported to American Environmental Landfill, Inc. on July 2 and July 6, 2015. Waste manifests are included as Appendix B.

SUMMARY

The replacement wells will be monitored as part of the ongoing quarterly groundwater sampling efforts. The replacement wells were sampled as part of the third quarter groundwater sampling event in July and results will be included in the progress report for the third quarter 2015.

-oo0oo-

If you have any further questions or comments, please feel free to contact us.

Yours sincerely,

Michael F. Ellis, PE
Principal

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LIST OF ATTACHMENTS

Table 1:	Monitoring Well Construction Details – Replacement Wells
Figure 1:	Location of Replacement Monitoring Wells
Appendix A:	Replacement Well Construction Logs
Appendix B:	Waste Manifest Documentation

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TABLE

Table 1
Monitoring Well Construction Details - Replacement Wells
Whirlpool Facility - Fort Smith, Arkansas

2 inch Diameter Replacement Well			
Well ID	**Screened Interval (feet)**	**Screen Length (feet)**	**Total Depth (feet bgs)**
MW-31R	20-30	10	30
MW-32R	20.5-30.5	10	30.5
MW-33R	19-29	10	29
MW-34R	21.5-28.5	7	28.5
MW-36R	20-29	9	29
MW-39R	24.5-29.5	5	29.5
MW-40R	18.5-28.5	10	28.5
MW-41R	18-28	10	28
MW-50R	13-18	5	18
MW-55R	19-21	2	21
MW-56R	18-20	2	20
MW-57R	15-20	5	20
MW-58R	14-19	5	19
MW-60R	10.5-15.5	5	15.5
MW-61R	10.5-15.5	5	15.5
MW-62R	15-20	5	20
MW-63R	15-20	5	20
MW-67R	12-17	5	17

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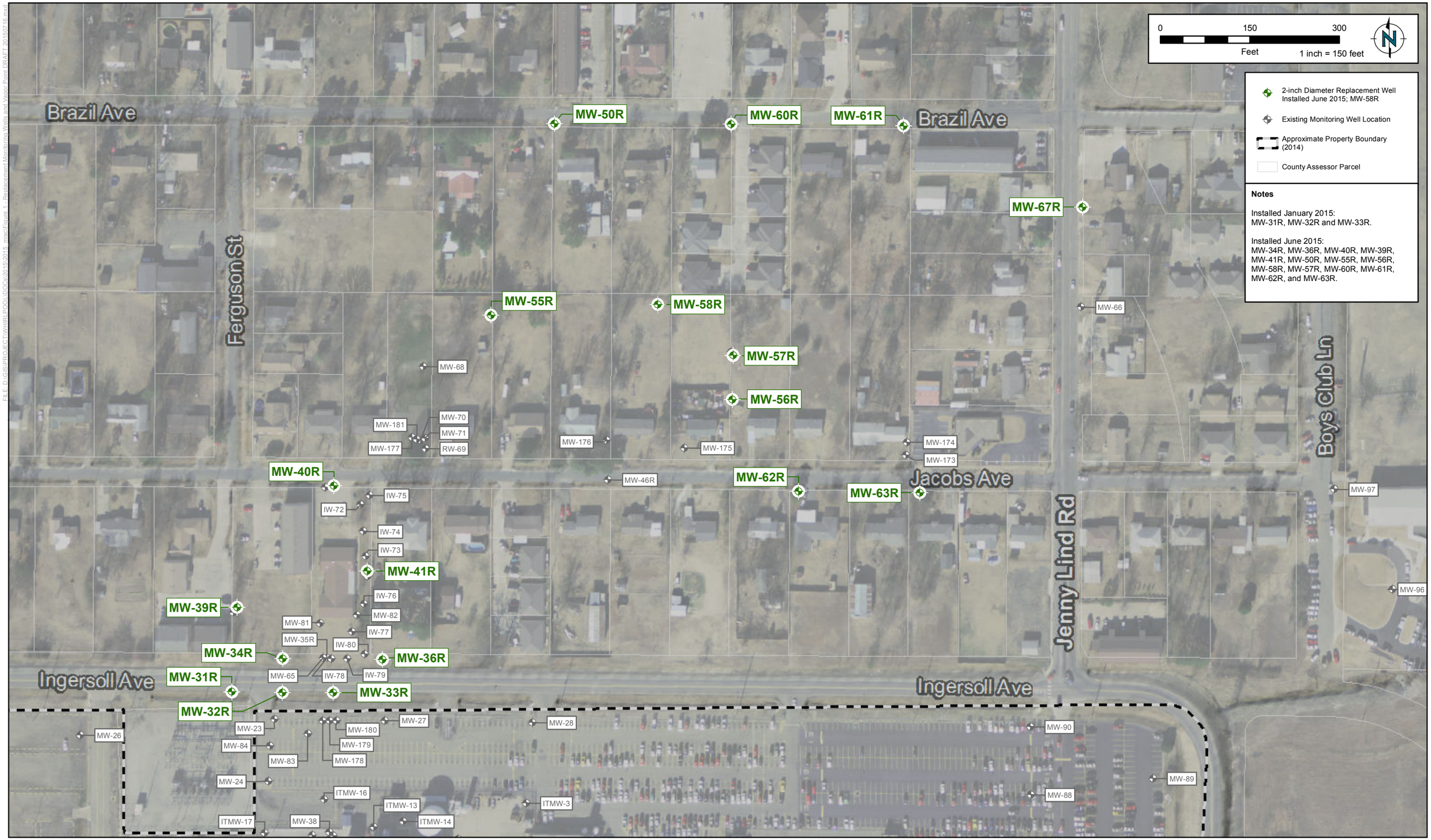
FIGURE

FILE: D:\GIS\PROJECTS\WHIRLPOOL\DOCs\2015\2015_misc\Figure 1 - Replacement Monitoring Wells and Vapor Point DRAFT 20150716.mxd



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DRAFTED BY: KTS | DATE: 07/17/2015

LOCATION OF REPLACEMENT MONITORING WELLS

Whirlpool Facility - Fort Smith, Arkansas

Figure 1

PROJECT: 3437500A

APPENDIX A
Replacement Well Construction Logs

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-31R		Date(s): **1/16/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **W. Weber**	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **476.03 ft amsl**	TOC Elevation: **475.73 ft amsl**
Sampling Method: **Direct Push (2001)**		North: **369288.03**	East: **590823.23**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **30.0 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 20 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	20 FT to 30 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 16 FT	Remarks: **Lithology from MW-31 drilling log dated 01/04/2001.**	
Bentonite	16 FT to 19 FT		
Sand	19 FT to 30 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
475		4				SM	SILTY SAND, DARK BROWN, SLIGHTLY MOIST, SOFT, ORGANIC RICH WITH GRASS AND ROOTLETS		Flush Mount
						CL	SILTY SAND, MEDIUM BROWN, MOIST, SOFT, ROCKS UP TO 0.75 INCHES IN DIAMETER PRESENT		
						SM	SILTY CLAY, GRAYISH BROWN, SLIGHTLY MOIST, FIRM, SOME IRON NODULES AND ORANGE STREAKING PRESENT		
	5					CL	SILTY SAND, BLACK, DRY, GRAVEL AND ROCK INCLUSIONS UP TO 1 INCH IN DIAMETER ARE PRESENT		
470		4					SILTY CLAY, SILTY CLAY GRADING TO CLAY, MEDIUM BROWN, MOIST, FIRM, MASSIVE		
						GC	GRAVEL, MEDIUM BROWN, MOIST, LOOSE, SOFT, MIXTURE WITH ROCKS UP TO 1 INCH IN DIAMETER		
						SM			
	10	4				CL	SILTY SAND, MEDIUM BROWN, MOIST, LOOSE, SOFT, ROCK INCLUSIONS UP TO 1 INCH IN DIAMETER		
465							SILTY CLAY, MEDIUM BROWN GRADING TO REDDISH BROWN AT 11 FEET, MOIST, FIRM, GRAY AND RED INCLUSIONS PRESENT BEGINNING AT 11 FEET		
						GC			
		4				CL	GRAVEL, MEDIUM BROWN, LOOSE, WET, WITH ROCKS UP TO 0.5 INCHES IN DIAMETER		
	15						SILTY CLAY, MEDIUM BROWN, WET, FLUFFY, WITH ROCK INCLUSIONS UP TO 0.5 INCHES IN DIAMETER		
460						GC			
						CL	SILTY CLAY, REDDISH BROWN WITH GRAY AND ORANGE STREAKING, MOIST, FIRM, MASSIVE		
		4					GRAVEL, MEDIUM BROWN, LOOSE		
							SILTY CLAY, MEDIUM BROWN GRADING TO REDDISH BROWN AND GRAY, VERY MOIST GRADING TO SLIGHTLY MOIST, SOFT FROM 17 - 18 FEET, FIRM FROM 18 TO 24 FEET		
	20								
455		4							
							SILTY CLAY, MEDIUM REDDISH BROWN, MOIST, LOOSE		
	25					GC	GRAVEL, MEDIUM BROWN, MOIST, LOOSE		
450		4				CL	SILTY CLAY, MEDIUM REDDISH BROWN, MOIST, SOFT, LOOSE		
							SANDY CLAY, LIGHT BROWN, MOIST, SOFT		
		2					SILTY CLAY, REDDISH LIGHT BROWN, FIRM, WITH ROCK INCLUSIONS UP TO 0.5 INCHES IN DIAMETER		
	30						SANDY CLAY, LIGHT BROWN, WET, SOFT, SOME GRAVEL PRESENT		
						SHALE	OTHER, REDDISH, DRY, BRITTLE, IRON-RICH MATERIAL		
445							SHALE, GRAY, SLIGHTLY MOIST, FIRM, WEATHERED		

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-32R		Date(s): **1/16/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **M. Eddings**		Checked By: **W. Weber**	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **475.82 ft amsl**	TOC Elevation: **475.50 ft amsl**
Sampling Method: **HSA Continuous Sampler**		North: **369281.75**	East: **590907.95**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **30.5 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 20.5 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	20.5 FT to 30.5 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 16.5 FT	Remarks:	
Bentonite	16.5 FT to 19.5 FT		
Sand	19.5 FT to 30.5 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
475	0	5					TOPSOIL		Flush Mount
							COARSE GRAVEL FILL		
						CL	SILTY CLAY, RED BROWN, MOTTLED, FIRM, PLASTIC, MOIST		
470	5	5					SILTY CLAY, RED BROWN, MOTTLED, SLIGHTLY SANDY, FINE GRAIN, SLIGHTLY FIRM, MOIST		
							SILTY CLAY, BROWN, OCCASIONAL ORGANIC NODULES, FIRM, SLIGHTLY PLASTIC, MOIST		
465	10	5							
460	15	5							
455	20	5				SC	CLAYEY SAND, RED BROWN, FINE TO MEDIUM GRAIN, WELL ROUNDED, MOIST		
						CL	SILTY CLAY, LIGHT BROWN, WITH GRAVEL, FINE TO MEDIUM GRAIN, VERY MOIST		
							SILTY CLAY, RED BROWN, SLIGHTLY SANDY, FINE TO COARSE GRAIN, SLIGHTLY MOIST		
450	25	5.5				GC	CLAYEY GRAVEL, RED BROWN, SILTY, FINE TO COARSE GRAIN, DRY		
445	30						SHALE		

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-33R		Date(s): **1/15/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **J. Myers**		Checked By: **W. Weber**	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **474.93 ft amsl**	TOC Elevation: **474.60 ft amsl**
Sampling Method: **HSA Continuous Sampler**		North: **369277.36**	East: **590992.90**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **29.0 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 19 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	19 FT to 29 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 15 FT	Remarks:	
Bentonite	15 FT to 17 FT		
Sand	17 FT to 29 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
		1.5				MH	TOP SOIL, DARK BROWN, WITH SILT, SOME TRACE CLAY, FRIABLE, NON-PLASTIC, DRY CLAYEY SILT, LIGHT BROWN TO TAN, LIGHT GRAY, SLIGHTLY PLASTIC, MOIST		Flush Mount
470	5	5				CL	CLAYEY SILT, REDDISH BROWN, SOME GRAVEL, STIFF, SLIGHTLY PLASTIC, WET SILTY CLAY, STRONG BROWN, SOME GRAVEL, STIFF, SLIGHTLY PLASTIC, MOIST SILTY CLAY, STRONG BROWN TO LIGHT BROWN, SOME GRAY, STIFF, PLASTIC, DRY		
465	10	5					SILTY CLAY, BROWN, WEAK, SLIGHTLY PLASTIC, VERY MOIST SILTY CLAY, VERY DARK BROWN, WITH DARK GRAY TO BLACK, GRAVELLY, WEAK, PLASTIC, MOIST		
						ML	SILT, TAN TO REDDISH BROWN, GRAY TO LIGHT GRAY SAND LENSES, VERY FINE GRAIN, FRIABLE, DRY		
460	15	5				CL	SILTY CLAY, REDDISH BROWN TO LIGHT GRAY, FRIABLE, STIFF, DRY		
						SM	SAND, STRONG BROWN, VERY FINE GRAIN, ROUND TO SUBROUND, SOME SILT, LIGHT GRAY, FRIABLE, SLIGHTLY MOIST		
						SP	SAND, DARK BROWN, FINE GRAIN, SOME MEDIUM GRAIN, SUBROUND TO ROUND, MOIST		
455	20	4.5				ML	GRAVELLY SANDY SILT, DARK BROWN, SAND, VERY FINE GRAIN, NON-COHESIVE, WET		
						GM	SILTY SANDY GRAVEL, DARK BROWN, SAND, VERY FINE GRAIN, NON-COHESIVE, WET		
450	25	4				GW	SANDY GRAVEL, LIGHT BROWN, COARSE TO FINE GRAIN, ROUND, SAND, VERY FINE TO FINE GRAIN, WET		
							WEATHERED SHALE, LIGHT BROWN, WITH REDDISH HUE, SOME LAMINATING, DRY		
445	30						SHALE, BLACK TO DARK GRAY, SLIGHTLY WEATHERED, SOME LAMINATIONS		

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 7/16/15

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-34R		Date(s): **6/30/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **W. Weber**	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **474.48 ft amsl**	TOC Elevation: **474.23 ft amsl**
Sampling Method: **Sonic**		North: **369338.63**	East: **590911.38**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **28.5 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 21.5 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	21.5 FT to 28.5 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 17.5 FT	Remarks:	
Bentonite	17.5 FT to 19.5 FT		
Sand	19.5 FT to 28.5 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
		5		0	MH	Topsoil, dark brown, with root hairs, moist
				0		Clayey Silt, light brown, with gray mottling, with black nodules, trace gravel, fine, subrounded, stiff, slightly plastic, moist
470	5			0		
		5		0	CL	Silty Clay, yellow brown, with gray mottling, trace black nodules, stiff, plastic, moist
465	10			0		
		5		0		
460	15			0		
		5		0		Silty Clay as above, with sand, fine, increasing silt
455	20			0		Sandy Clay, red brown, trace gray mottling, with silt, fine sand, soft, cohesive (sticky), plastic, wet
						Silty Clay, red brown, with gray mottling, with sand, fine, trace black nodules, slightly stiff to stiff, plastic, moist
						Silty Clay as above, occasional gravel, fine, subrounded, wet
		5		0	GC	Sand and Gravel, dark brown, with silty clay, fine to medium sand, occasional coarse, fine to coarse gravel, subrounded, slightly stiff, cohesive, moist
450	25			0		Sand and Gravel, red brown, with silty clay, fine to coarse sand, fine to coarse gravel, subrounded, soft, cohesive, wet
		3.5			CL	Silty Clay, red brown, with sand, fine to coarse, with gravel, fine to coarse, subrounded, very stiff, cohesive, moist
				0.9	MH	Clayey Silt, red brown, hard laminated, dry
445	30				MH	Clayey Silt as above, with weathered shale
						Shale, very dark gray, hard, laminated, dry
440						

Water Level

Well Construction
Flush Mount

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-36R		Date(s): **6/30/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **W. Weber**	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **473.33 ft amsl**	TOC Elevation: **472.98 ft amsl**
Sampling Method: **Sonic**		North: **369328.48**	East: **591078.41**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **29.0 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 20 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	20 FT to 29 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 16 FT	Remarks:	
Bentonite	16 FT to 18 FT		
Sand	18 FT to 29 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	USCS Code	Material Description
				0	MH	Topsoil, dark brown, with root hairs, moist
470	5	5		0		Clayey Silt, yellow brown, with red brown mottling, occasional gravel, fine, subrounded, slightly stiff, slightly plastic, moist
				0		Clayey Silt as above, with sand, fine
465	10	5		0	CL	Silty Clay, red brown, with gray mottling, with black nodules, stiff, plastic, moist, increasing silt with depth
460	15	5		0		Silty Clay, red brown, with gray mottling, with sand, fine, stiff, plastic, moist, increasing silt with depth
				0	SC	Clayey Sand, yellow brown, with silt, fine sand, cohesive, wet
455	20	5		0	CL	Sandy Clay, yellow brown and red brown, with gray mottling, with silt, trace black nodules, fine sand, slightly stiff, slightly plastic, moist
				0	SC	Clayey Sand, yellow brown and red brown, with gray mottling, trace black nodules, fine sand, soft, cohesive, moist
				0	SW	Sand, red brown, trace clay, fine to medium sand, occasional coarse sand, occasional gravel, fine, subrounded, loose, wet
450	25	5		0	GC	Sand and Gravel, red brown, with silty clay, fine to medium sand, occasional coarse sand, fine to coarse gravel, subrounded, stiff, cohesive, moist
		4		0	MH	Clayey Silt, yellow brown, trace black nodules, hard, slightly plastic (crumbles when dry), laminated, dry
445				0		Clayey Silt as above, with weathered shale
						Shale, very dark gray, hard, laminated, dry
	30					
440						

Water Level

Well Construction
Flush Mount

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-39R		Date(s): **6/29/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **W. Weber**	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **475.05 ft amsl**	TOC Elevation: **474.72 ft amsl**
Sampling Method: **Direct Push (2003)**		North: **369428.77**	East: **590839.68**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **29.5 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 24.5 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	24.5 FT to 29.5 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 20.5 FT	Remarks: **Lithology from MW-39 drilling log dated 07/14/2003.**	
Bentonite	20.5 FT to 22.5 FT		
Sand	22.5 FT to 29.5 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
		4		0		CL	Silty Clay, grayish brown, occasional rootlets, occasional shale, 1/2" diameter, black, hard, dry		Flush Mount
						SM	Silty Sand to Sandy Silt, pale brown, abundant rootlets, stiff, crumbly, moist to dry		
				0		CL	Silty Sandy Clay, pale brown, with red brown mottling, occasional iron nodules, 1/2" diameter, occasional rootlets, slighlty plastic to crumbly, moist		
470	5	4		0			Silty Sandy Clay, strong brown to orange, with dark brown mottling, occasional pale brown, abundant iron nodules, firm, moist to dry		
				0			Silty Clay, strong brown, dark brown, and orange mottled, occasional iron nodules, 1/2" diameter, occasional calcareous nodules, 1/2" - 1" diameter, stiff to firm, moist		
465	10	4		0			Silty Clay, pale brown, dark brown, and orange mottled, occasional calcareous nodules, 1/2" - 1" diameter, stiff to soft, moist		
				0			Silty Clay, strong brown, with pale brown, minor dark brown, firm to hard, crumbly to plastic, moist		
		4		0		SC	Silty Clay, strong brown, minor pale gray, abundant dark brown mottling, abundant calcareous and iron nodules, 1/4" diameter, hard, crumbly, moist		
460	15			0		CL	Silty Sandy Clay, strong brown, minor pale gray, abundant dark brown mottling, stiff to firm, plastic, moist		
		4		0		SC	Clayey Silty Sand, strong brown, with abundant dark brown mottling, abundant calcareous nodules, 1/4" - 1/2" diameter, stiff, crumbly, moist		
				0			Silty Sandy Clay, strong brown, with pale brown, minor dark brown mottling, stiff, slightly plastic, moist		
455	20	4		0		CL	Silty Clayey Sand, brown to strong brown, minor dark brown mottling, soft to firm, slightly crumbly, moist to wet		
				0		SC	Silty Clayey Sand to Silty Sand Clay, strong brown to brown, occasional dark brown mottling, soft to firm, slightly crumbly to slightly plastic, moist to wet		
				0		CL	Silty Clay, red brown, occasional dark brown mottling, hard, plastic, moist		
450	25	4		0		SC	Silty Clayey Sand to Silty Sand Clay, strong brown to brown, occasional dark brown mottling, soft to firm, slightly crumbly to slightly plastic, moist to wet, silty sand pocket medium grained at base		
				0		CL	Silty Sandy Clay, strong brown, stiff to firm, plastic, moist		
				0		SC	Clayey Silty Sand, strong brown, with dark brown mottling, occasional quartzite gravel, fine, stiff, moist to wet, sand grain size increasing with depth (medium at 24.5' bgs)		
				0		CL			
		1.5		0		SW	Gravelly Sandy Clay to Clayey Sand, strong brown, with pale gray mottling, with quartzite gravel, fine, hard, crumbly, moist		
445	30					CL	Silty Gravelly Clayey Sand, brown, with quartzite gravel, fine, saturated		
							Gravelly Sandy Clay to Clayey Sand, strong brown, with pale gray mottling, with quartzite gravel, fine, hard, crumbly, wet to saturated		
							Gravelly Sand, strong brown, with quartzite gravel, fine to coarse, medium to coarse sand, dense, saturated		
							Silty Clay, brown to brownish gray, stiff to hard, plastic, moist to wet,		

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 7/16/15

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-39R

Project Name: **Whirlpool Corporation**

Project Number: **3433244A**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							grades to fissile shale at base Shale, gray, with occasional brown mottling along fractures, fissile, weathered		
435	40								
430	45								
425	50								
420	55								
415	60								
410	65								
405	70								
400	75								
395	80								

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-40R		Date(s): **6/24/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **W. Weber**	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **473.46 ft amsl**	TOC Elevation: **473.09 ft amsl**
Sampling Method: **Direct Push (2003)**		North: **369623.61**	East: **591012.65**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **28.5 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 18.5 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	18.5 FT to 28.5 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 14.5 FT	Remarks: **Lithology from MW-40 drilling log dated 07/14/2003.**	
Bentonite	14.5 FT to 16.5 FT		
Sand	16.5 FT to 28.5 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
470	0	4		0		CL	Silty Sandy Clay, gray, abundant rootlets, soft, crumbly, dry to damp		Flush Mount
							Weathered Shale, black to dark gray, with silt, soft, crumbly, fissile		
				0		ML	Silty Sandy Clay, strong brown, black, and gray mottled, abundant rootlets, firm, plastic, wet		
						CL	Sandy Silt, brown, occasional dark brown mottling, soft, crumbly, saturated		
	5	4		0		MH	Silty Clay, brown, occasional dark brown mottling, soft, crumbly, saturated		
							Sandy Clayey Silt, brown and strong brown, occasional dark brown mottling, soft, wet to saturated		
				0		CL	Silty Sandy Clay, strong brown, gray mottling, stiff to hard, plastic, moist		
465				0			Silty Sandy Clay, strong brown, occasional pale gray mottling, stiff to hard, moist		
	10	4		0			Silty Sandy Clay, strong brown, with gray mottling, stiff to hard, plastic, moist		
							Silty Clay, pale brown, soft, wet		
460				0			Silty Clay, gray, occasional strong brown mottling, stiff, plastic, moist		
		4					Silty Clay, strong brown, occasional gray to pale gray mottling, stiff, plastic, moist		
	15			0		MH	Silty Sandy Clay, strong brown, occasional dark brown mottling, firm, plastic moist		
						CL	Clayey Sandy Silt, strong brown, with sand coarse, with gravel, fine, soft, loose wet to water saturated		
455		4		0			Silty Clay, strong brown and pale gray, stiff to hard		
	20					SC	Silty Sandy Clay, strong brown, occasional pale gray mottling, stiff, slightly crumbly to plastic, moist		
		4		0		CL	Silty Sandy Clay, strong brown, with gray mottling, stiff, plastic, wet		
						GM	Silty Clayey Sand, strong brown to brown, with gravel, fine, dense, wet to water saturated		
450				0			Silty Sandy Clay, strong brown, with gray mottling, stiff, plastic, wet		
						GC	Silty Sandy Gravel, fine, loose to flowing, water saturated, grades to clayey gravel		
	25	4		0		CL	Clayey Gravel, stiff, crumbly, wet to water saturated		
						GM	Gravelly Clay, strong brown, fine, hard, plastic, wet to moist		
						SM	Silty Sandy Gravel, strong brown to brown, fine, dense, water saturated		
				0		CL	Gravelly Silty Sand, strong brown, fine, dense, crumbly water saturated		
445		0.5		0		GP	Sandy Clay, strong brown, with very pale gray mottling, with gravel, fine to coarse, hard, crumbly, moist to wet		
	30					CL	Sandy Gravel, brown to strong brown, fine, hard, dense, wet		
							Sandy Silty Clay, pale gray, with strong brown mottling, stiff to hard, plastic, moist		
440							Silty Clay, strong brown to orange, with occasional gray mottling, fissile to slightly blocky texture (weathered shale)		

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 7/16/15

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-40R

Project Name: **Whirlpool Corporation**

Project Number: **3433244A**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							Shale, gray, hard, slightly crumbly, fissile, moist		
435	40								
430	45								
425	50								
420	55								
415	60								
410	65								
405	70								
400	75								
395	80								

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-41R		Date(s): **6/24/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **W. Weber**	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **472.38 ft amsl**	TOC Elevation: **471.84 ft amsl**
Sampling Method: **Direct Push (2003)**		North: **369477.88**	East: **591060.79**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **28.0 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 13 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	18 FT to 28 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 14 FT	Remarks: **Lithology from MW-41 drilling log dated 07/15/2003.**	
Bentonite	14 FT to 16 FT		
Sand	16 FT to 28 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
470	0	4		0		CL	Silty Clay, gray, abundant rootlets, occasional iron nodules, firm, plastic to slightly crumbly, moist		Flush Mount
				0			Silty Clay, gray, with orange mottling, abundant rootlets, occasional iron nodules up to 1/4" diameter, firm to stiff, plastic, moist		
				0			Silty Sandy Clay, brown, with gray mottling, slightly plastic to slightly crumbly, moist		
	5	4		0			Silty Clay, brown to pale brown, with dark brown and orange mottling, abundant calcareous nodules 1/4" to 1/2" diameter, occasional 1/4" diameter iron nodules, hard, crumbly, blocky, moist		
465				0			Silty Clay, strong brown and pale gray mottled, occasional calcareous nodules up to 1" diameter, occasional iron nodules up to 1/2" diameter, stiff to hard, plastic, moist		
				0		SM	Silty Clay, pale brown, with strong brown and gray mottling, hard, plastic, moist, soft and sandy at 7' bgs		
	10	4		0		CL	Silty Clay, gray and strong brown mottled, soft, plastic, wet		
460				0			Silty Sand, brown, abundant dark gray grain, medium grained, loose to flowing, saturated		
				0			Silty Sandy Clay, strong brown to orange, with pale gray mottling, minor dark brown mottling, occasional iron nodules up to 1/2" diameter, hard, plastic, moist		
	15	4		0			Silty Clay, pale gray, occasional orange to strong brown mottling, hard, plastic, moist		
455				0			Silty Clay as above, occasional iron nodules up to 18" diameter		
		4		0			Silty Clay as above, with pale gray, sandy		
				0		SM	Sand to Silty Sand, strong brown, minor pale brown mottling, medium, dense, saturated		
	20			0		CL			
				0		GC	Gravelly Silty Sandy Clay, strong brown, fine to coarse gravel, hard, crumbly, moist to wet		
450		4		0		GM	Silty Sandy Clayey Gravel, strong brown, fine to coarse gravel, medium sand, dense, crumbly, saturated		
				0			Silty Sandy Gravel, strong brown, fine to coarse gravel, coarse sand, dense, crumbly, saturated		
	25	4		0			Silty Sandy Gravel, strong brown, fine gravel, dense, saturated		
445				0		CL	Silty Clay and Shale, strong brown, to orange grading to dark gray to black, fissile, moist (logged from cuttings)		
		1		0					
	30								
440									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 7/16/15

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-50R		Date(s): **6/23/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **W. Weber**	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **463.05 ft amsl**	TOC Elevation: **462.65 ft amsl**
Sampling Method: **Direct Push/HSA Continuous Sampler (2003)**		North: **370210.13**	East: **591414.99**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **18.0 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 13 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	13 FT to 18 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 9 FT	Remarks: **Lithology from MW-50 drilling log dated 11/13/2003.**	
Bentonite	9 FT to 11 FT		
Sand	11 FT to 18 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							No Recovery, sediment to soft		Flush Mount
		3		0		MH	Clayey Silt, dark brown, abundant rootlets, trace gravel, fine, non-plastic, damp		
460						CL	Silty Clay, brown, red and pale brown mottled, with some yellowish red, with rootlets, stiff, slightly plastic, damp		
	5	4		0			Sandy Silty Clay and Clayey Sand, dark brown, with some pale brown and yellowish red mottled, stiff, slightly plastic, damp, with a parting of silty clay, gray, slightly plastic, soft		
				0		MH	Silty Clay, brown and pale brown mottled, soft, plastic, dry to damp, with a parting of clayey silt, yellowish red, loose		
455						CL	Sandy Clayey Silt, yellowish red, with some gray mottling, very fine grained, with nodules, up to 1/4" diameter, with black clayey burrowing, luster, crumbly, non-plastic, dry, becomes looser towards base		
	10	4		0			Silty Clay, brown, with trace yellowish red mottling, plastic, wet		
				0			Clay, reddish brown, stiff, plastic, damp		
450				0			Silty Clay, gray, stiff to firm, slightly plastic, damp, with lamination of silty clayey sand, yellowish red, trace iron concretions, non-plastic		
	15	4		0		SC	Clay, yellowish red, very stiff, plastic, moist, becoming hard towards base, decreasing moisture towards base		
				0			Gravelly Clay, red and dark brown mottled, abundant gravel, fine, abundant iron and black staining, very dense, hard, damp to moist		
445		2.6		0		CL	Sandy Clay: Gravelly Sandy Clay, red and yellowish brown mottled, abundant gravel, fine to coarse, dense, non-plastic, hard, wet, increasing gravelly clayey sand towards base		
	20						Clayey Silty Sand: Gravelly Clayey Silty Sand, abundant gravel, fine to coarse, semirounded and angular, dense to loose, wet		
							Clayey Silty Sand, gray and yellowish brown, fine grained, dense to very loose, wet		
440							Clay, dark gray, hard, plastic, weathered, fissile to shale at 17.8' bgs		
	25								
435									
	30								
430									

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-55R		Date(s): **6/29/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **W. Weber**	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **465.61 ft amsl**	TOC Elevation: **465.30 ft amsl**
Sampling Method: **Direct Push (2004)**		North: **369895.17**	East: **591291.47**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **21.0 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 19 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	19 FT to 21 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 15 FT	Remarks: **Lithology from MW-55 drilling log dated 11/17/2004.**	
Bentonite	15 FT to 17 FT		
Sand	17 FT to 21 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
465		3		37.9		MH	Clayey Silt, dark brown, abundant root hairs and organic debris, loose, moist, strong pine odor		Flush Mount
				0		CL	Silty Clay, gayish medium brown to grayish red brown, very soft, plastic, moist, slight pine odor		
							Silty Clay, red light brown, occasional iron nodules (2 mm), very soft, plastic, wet		
460	5	4		0			Silty Clay, mottled orange and light brown, occasional silt veins and clay nodules (1-3 cm), soft, rare iron nodules (2 mm), soft, plastic, moist		
				0			Silty Clay, orange light brown, abundant sand veins, soft, plastic, moist		
							Silty Clay, mottled orange and light to medium gray, occasional sand veins, soft, plastic, moist		
455	10	4		0			Silty Clay, mediu to dark gray, with orange and light brown mottling, soft, plastic, moist		
				0			Silty Clay, medium to dark gray, with orange and light brown mottling, soft, plastic, moist		
		4		0			Sand Silty Clay, orange, with light gray mottling, with clay interbeds, abundant iron nodules (2 mm), occasional silt veins, plastic, moist		
							Silty Clay, orange, with occasional red medium brown and light gray mottling, common silt to very fine sand veins, stiff, plastic, moist		
450	15			0		SC	Sandy Clay, light gray, with orange mottling, occasional sand veins, soft, plastic, moist		
				0		CL	Silty Clay, red light brown, very soft, plastic, moist		
		4					Silty Sandy Clay, grayish light brown, rare silt veins, very soft, plastic, moist		
				0		SM	Sandy Silty Clay, light gray, with orange and gray medium brown, occasional silt veins, stiff, plastic, moist		
445	20	1		0		CL	Sandy Clay, orange, with light gray and medium brown mottling, very soft, slightly plastic, moist		
							Sandy Clay, light gray, with orange mottling, occasional silt veins, very soft, slightly plastic, moist		
							Silty Clayey Sand, orange, loose, saturated		
440	25						Silty Sandy Clay, orange, abundant quartzite gravel (2 mm), occasional iron nodules (2 mm), occasional clay inclusions (2.5 mm), stiff, plastic, moist		
							Gravelly Clay, greenish light gray, abundant quartzite gravel (1-2 cm), stiff, plastic, moist		
							Gravelly Clay, orange, rare greenish light gray mottling, abundant quartzite gravel (1-3 cm), rare iron nodules (2 mm), stiff, slightly plastic, moist		
							Silty Sand, orange, occasional quartzite gravel (1 cm), flowing, saturated		
435	30						Sandy Clay, orange, with light brown and medium gray mottling, rare black mottling, common quartzite gravel (1-3 cm), stiff, slightly plastic, moist		
							Silty Clay, orange, with light gray and black laminae, occasional orange, light gray and black silt laminae, stiff, plastic, moist		
							Silty Clay, light gray, with orange and black laminae, occasional light gray, orange and black silt laminae, very stiff, plastic, moist		

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 7/16/15

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-55R

Project Name: **Whirlpool Corporation**

Project Number: **3433244A**

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
430							Shale, dark gray, occasional orange mottling, hard, crumbly, fissile, damp		
425	40								
420	45								
415	50								
410	55								
405	60								
400	65								
395	70								
390	75								
385	80								

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 7/16/15

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-56R		Date(s): **6/25/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **W. Weber**	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **463.61 ft amsl**	TOC Elevation: **463.17 ft amsl**
Sampling Method: **Direct Push (2004)**		North: **369732.37**	East: **591687.49**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **20.0 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 18 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	18 FT to 20 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 14 FT	Remarks: **Lithology from MW-56 drilling log dated 11/18/2004.**	
Bentonite	14 FT to 16 FT		
Sand	16 FT to 20 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
							No Recovery, extremely wet conditions		Flush Mount
460		1.7				CL	Silty Sandy Clay, grayish medium brown, with orange mottling, soft, plastic, moist		
	5						Silty Sandy Clay, dark gray, with occasional light gray mottling, occasional very fine sand and silt inclusions, stiff, plastic, moist		
		4					Silty Sandy Clay, dark gray, with light gray mottling, occasional very fine and silt inclusions, occasional iron nodules (1-2 mm), stiff, plastic, moist		
455							Silty Clay, light gray, with dark gray mottling, occasional silt veins, occasional iron nodules (2 mm), stiff, plastic, moist		
	10	4					Silty Clay, light gray, with occasional dark gray mottling and orange mottling, occasional silt and very fine sand veins and inclusions, occasional iron nodules (2mm), stiff, plastic, moist		
							Silty Clay, light gray, with orange mottling, abundant iron nodules, abundant silt and very fine sand inclusions, occasional quartzite gravel (1-2 cm), stiff, plastic, moist		
450						SM			
		4				SC	Silty Sandy Clay, orange, with light gray mottling, occasional iron nodules (2-4 mm), occasional silt and very fine sand veins, stiff, plastic, moist		
	15					CL			
						SC	Sandy Clay, light brown, with orange and black mottling, with gravel, abundant iron nodules (1 mm - 1 cm), stiff, slightly plastic, moist		
						CL	Sandy Clay, light brown, with orange and black mottling, stiff, plastic, moist		
445		4					Sandy Clay, light gray, with orange and light brown mottling, occasional very fine sand and silt inclusions, occasional iron nodules (1-2 mm), stiff, plastic, moist		
	20	1					Silty Sand, orange light brown, loose, wet		
							Clayey Sand, orange, abundant quartzite gravel (1 cm), occasional iron nodules (2 mm), loose, wet		
							Sandy Clay, orange, abundant quartzite gravel (1-2 cm), abundant iron nodules (2 mm), stiff, slightly plastic, wet		
440							Sandy Clay, orange, abundant quartzite gravel (1 cm), stiff, slightly plastic, wet		
	25						Clayey Sand, light brown, loose, saturated		
							Gravelly Clay, orange, abundant quartzite gravel (1-3 cm), abundant iron nodules (2 mm-1 cm), stiff, moist		
							Sandy Clay, red light brown, very soft, slightly plastic, saturated		
435							Gravelly Clay, orange, abundant iron nodules (2 mm), stiff, slightly plastic, moist		
	30						Silty Sandy Clay, orange, with light and medium gray mottling, very stiff, plastic, moist		
							Shale, dark gray, with occasional orange mottling, hard, fissile, crumbly, damp		
430									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 7/16/15

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-57R		Date(s): **6/25/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **W. Weber**	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **463.16 ft amsl**	TOC Elevation: **462.92 ft amsl**
Sampling Method: **Direct Push (2004)**		North: **369805.80**	East: **591693.01**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **20.0 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 15 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	15 FT to 20 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 11 FT	Remarks: **Lithology from MW-57 drilling log dated 11/18/2004.**	
Bentonite	11 FT to 13 FT		
Sand	13 FT to 20 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
460	0	4		0		CL	Silty Sandy Clay, medium brown, occasional iron nodules (2 mm), very soft, plastic, saturated		Flush Mount
				0			Silty Sandy Clay, light to medium brown, with orange mottling, very fine, stiff, plastic, moist		
	5	4		0		GC	Sandy Clay, medium brown, with orange mottling, very fine, stiff, plastic, slightly damp		
				0		CL	Gravel, orange, with iron nodules (2-4 mm), moist, quartzite gravel in clay mixture		
455				0		ML	Silty Clay, light gray, with orange mottling, occasional silt veins and inclusions, occasional iron nodules (2 mm), stiff, plastic, moist		
	10	4		0		CL	Sandy Silt, light brown to light gray, loose, slightly damp		
				0			Silty Clay, light gray, with dark gray mottling, occasional silt veins and inclusions, soft, plastic, moist		
450				0			Silty Clay, dark brown, with black and orange mottling, occasional silt inclusions, soft, plastic, moist		
	15	4		0			Silty Clay, light to medium brown, very soft, slightly plastic, wet		
				0			Silty Sandy Clay, orange, abundant iron nodules (2-4 mm), stiff, slightly plastic, moist		
445				0		SC	Sandy Silty Clay, light gray and orange, occasional iron nodules (2 mm), occasional silt and very fine sand inclusions, stiff, plastic, moist		
	20	4		0		CL	Silty Clay, light greenish gray, with orange mottling, occasional silt veins, stiff, plastic, moist		
		0.5		0			Sandy Silty Clay, light gray, rare orange mottling, occasional silt and very fine sand veins and inclusions, stiff, plastic, moist		
							Sandy Silty Clay, orange, rare light gray mottling, abundant iron nodules (2 mm), numerous quartzite gravel (2-3 cm), stiff, plastic, moist		
440							Sandy Silty Clay, dark brown, abundant iron nodules (2mm), stiff, slightly plastic, moist		
	25						Sandy Clay, mottled light gray and orange, occasional quartzite gravel (3-4 cm), soft, slightly plastic, moist		
435							Sandy Clay, orange, abundant iron nodules (2 mm), occasional quartzite gravel (1 cm), soft, slightly plastic, moist		
	30						Clayey Silty Sand, orange light brown, flowing, saturated		
430							Sandy Clay, orange, with light gray mottling, occasional quartzite gravel (1-3 cm), soft, slightly plastic, moist		
							Gravelly Clay, orange, abundant quartzite gravel (2-3 cm), soft, slightly plastic, moist		
							Silty Clay, greenish gray, soft, plastic, moist		
							Silty Clay, dark brown to dark gray, very stiff, plastic, damp		
							Shale, dark gray, with occasional orange mottling, hard, crumbly, fissile, damp		

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 7/16/15

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-58R		Date(s): **6/29/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **W. Weber**	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **462.61 ft amsl**	TOC Elevation: **465.98 ft amsl**
Sampling Method: **Direct Push (2004)**		North: **369897.96**	East: **591571.41**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **19.0 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 14 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	14 FT to 19 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 10 FT	Remarks: **Lithology from MW-58 drilling log dated 11/19/2004.**	
Bentonite	10 FT to 12 FT		
Sand	12 FT to 19 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction Stick-Up
460	0	3.4		0		CL	Silty Sandy Clay, medium brown, with iron staining along root hairs, abundant root hairs, with organic debris, very soft, plastic, wet		
				0			Silty Sandy Clay, medium brown, with occasional orange mottling, occasional iron nodules (2 mm), very soft, plastic, saturated		
				0			Silty Sandy Clay, dark brown, with red mottling, occasional silt and sand veins and inclusions, very fine, soft, plastic, moist		
	5	4		0		CL	Silty Sandy Clay, dark brown, with orange mottling, occasional silt and sand veins and inclusions, very fine, soft, plastic, moist		
455				0			Silty Clay, light greenish gray, with orange mottling, rare dark gray and brown mottling, occasional silt and sand veins and inclusions, very fine, stiff, plastic, moist		
				0			Silty Clay, light greenish gray, with orange mottling, rare dark gray to dark brown mottling, occasional silt and sand veins and inclusions, very fine, occasional iron nodules (2 mm-1 cm), very soft, plastic, very moist		
	10	4		0			Silty Sandy Clay, light greenish gray, occasional silt and sand veins and inclusions, very fine, occasional iron nodules (2 mm-1 cm), stiff, plastic, moist		
450				0		SC	Sandy Clay, orange, abundant iron nodules (2-4 mm), occasional quartzite gravel (1 cm), stiff, plastic, moist		
		4		0		SM	Silty Clay, mottled orange, black and rarely light brown, occasional silt veins, stiff, plastic, moist		
	15			0		CL	Sandy Clay, light gray, with orange and black mottling, stiff, slightly plastic, moist		
445		3		0		SC	Clayey Sand, light gray, with orange and black mottling, dense, moist		
				0		CL	Clayey Sand, mottled orange and light gray, occasional quartzite gravel (2-3 cm), dense, moist		
	20						Clayey Sand, orange, abundant iron nodules (2 mm-1 cm), occasional quartzite gravel (2-3 cm), dense, moist		
440							Silty Sand, orange medium brown, flowing, saturated		
							Sandy Clay, orange, occasional iron nodules (2 mm), occasional quartzite gravel (3 mm-1 cm), stiff, very slightly plastic, moist		
	25						Clayey Sand, orange, occasional quartzite gravel (2 mm), loose, wet		
435							Silty Clay, orange, with dark brown, light gray and black mottling, occasional silt veins, very stiff, slightly plastic, slightly damp		
							Silty Clay, dark brown to dark gray, with orange, with light gray and black mottling, occasional silt veins, hard, slightly plastic, slightly damp		
	30						Shale, black, hard, crumbly, fissile, damp		
430									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 7/16/15

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-60R		Date(s): **6/23/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **W. Weber**	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **460.84 ft amsl**	TOC Elevation: **460.66 ft amsl**
Sampling Method: **Direct Push (2005)**		North: **370192.97**	East: **591710.48**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **15.5 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 10.5 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	10.5 FT to 15.5 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 6.5 FT	Remarks: **Lithology from MW-60 drilling log dated 04/04/2005.**	
Bentonite	6.5 FT to 8.5 FT		
Sand	8.5 FT to 15.5 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
460		4		0		CL	Sandy Clay, dark brown, minor yellow red mottling, abundant root and root hairs, very soft, plastic, moist		Flush Mount
				3.3		SC	Sandy Clay, dark brown, occasional root hairs, very soft, slightly plastic, damp		
						CL	Clayey Sand, brown, loose, saturated		
455	5	4		0			Sandy Clay, brown, occasional iron nodules (2 mm), very soft, plastic, very moist		
				0			Sandy Clay, occasional iron nodules (2 mm), very soft, slightly plastic, saturated		
450	10	4		0			Sandy Clay, mottled light gray, yellow red, and red brown, occasional iron nodules (2 mm), stiff, slightly plastic, very moist		
				0			Sandy Clay, red brown, abundant iron nodules (2 mm), stiff, plastic, moist		
				0			Sandy Clay, mottled light gray, yellow red and red brown, occasional iron nodules (2 mm), stiff, slightly plastic, very moist		
				0			Sandy Clay, red brown, abundant iron nodules (2 mm), stiff, plastic, moist		
				0			Sandy Clay, mottled light gray, yellow red and red brown, occasional iron nodules (2 mm), stiff, slightly plastic, very moist		
445	15	4		0			Sandy Clay, red brown, abundant iron nodules (2 mm), stiff, plastic, moist		
							Sandy Clay, mottled light gray, yellow red and red brown, occasional iron nodules (2 mm), stiff, slightly plastic, moist		
		1.5		0			Sandy Clay, red brown, abundant iron nodules (2 mm), stiff, plastic, moist		
							Sandy Clay, gray brown, very soft, slightly plastic, saturated		
440	20						Sandy Clay to Clayey Sand, dark grayish brown, minor yellow red mottling, abundant iron nodules (2 mm), abundant coarse sand, stiff, slightly plastic, damp		
							Sandy Clay to Clayey Sand, mottled yellow red, and greenish gray, abundant iron nodules (2 mm), abundant coarse sand, stiff, very slightly plastic, damp		
435	25						Sandy Clay, mottled yellow red, light gray and light brown, occasional iron nodules (2 mm), stiff, slightly plastic, moist		
							Gravelly Sandy Clay, mottled yellow red and brown, occasional iron nodules (2 mm), abundant gravel (1-3 cm), abundant coarse sand, stiff, very slightly plastic, damp		
430	30						Shale, dark gray, minor yellow red mottling, hard, slightly damp, fissile, weathered		

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 7/16/15

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-61R		Date(s): **6/23/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **W. Weber**	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **459.65 ft amsl**	TOC Elevation: **459.31 ft amsl**
Sampling Method: **Direct Push (2005)**		North: **370174.88**	East: **591999.04**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **15.5 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 10.5 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	10.5 FT to 15.5 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 6.5 FT	Remarks: **Lithology from MW-61 drilling log dated 04/04/2005.**	
Bentonite	6.5 FT to 8.5 FT		
Sand	8.5 FT to 15.5 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
455	5	4		0		CL	Sandy Clay, dark brown, abundant root hairs, very soft, slightly plastic, very soft, moist		Flush Mount
				0			Sandy Clay, brown, slightly plastic, very soft, occasional root hairs, moist		
				76			Sandy Clay, mottled yellow red and brown, occasional iron nodules (2mm), occasional quartzite gravel (2 cm), soft, very slightly plastic, damp		
		4		83			Sandy Clay, red brown, abundant iron nodules (2-4 mm), stiff, very slightly plastic, damp		
450	10			254			Sandy Clay, yellow red, with minor light brown mottling, occasional iron nodules (2-4 mm), stiff, very slightly plastic, slightly damp		
		4		763			Sandy Clay, red brown, abundant iron nodules (2-4 mm), stiff, very slightly plastic, damp		
				524			Sandy Clay, mottled yellow red and light gray, soft, slightly plastic, slightly damp		
445	15	4		757		SC	Sandy Clay, red brown, abundant iron nodules (2-4 mm), stiff, very slightly plastic, damp		
						CL	Sandy Clay, red brown, very soft, slightly plastic, saturated		
							Gravelly Sandy Clay, with gravel (quartzite 1-2 cm), soft, slightly plastic, damp		
							Silty Clay, light brown, stiff, slightly plastic, damp		
440	20						Gravelly Clay, yellow brown, abundant quartzite (1-3 cm), soft, plastic, damp		
							Sandy Clay, yellow brown, occasional iron nodules (2 mm), occasional quartzite (2 mm-1 cm), soft, slightly plastic, damp		
435	25						Clayey Sand, coarse-grained sand, occasional quartzite (1-2 cm), loose, saturated		
							Silty Clay, yellow red, stiff, slightly plastic, damp		
430	30						Shale, dark gray, with minor yellow red mottling, hard, fissile, slightly damp		
425									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 7/16/15

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-62R		Date(s): **6/25/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **W. Weber**	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **464.26 ft amsl**	TOC Elevation: **464.19 ft amsl**
Sampling Method: **Direct Push (2005)**		North: **369572.29**	East: **591790.09**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **20.0 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 15 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	15 FT to 20 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 11 FT	Remarks: **Lithology from MW-62 drilling log dated 04/04/2005.**	
Bentonite	11 FT to 13 FT		
Sand	13 FT to 20 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
460	5	1		0		CL	Silty Clay, dark brown with minor yellowish-red mottling, abundant root hairs, loose, moist, poor recovery		Flush Mount
				0			Silty Clay, dark brown, occasional root hairs, very soft, plastic, moist		
				0			Silty Clay, brown with occasional yellow red mottling, trace root hairs, very soft, plastic, moist		
				0			Silty Clay, brown with occasional yellow red mottling, very soft, plastic, wet		
		4		0			Silty Clay, brown with occasional red mottling, very soft, plastic, moist		
				0			Silty Clay, brown with occasional yellow red mottling, occasional light brown silt to very fine sandy veins and inclusions, stiff, slightly plastic, damp		
455	10			0			Silty Clay, brown with occasional red mottling, very soft, plastic, moist		
		4		0			Silty Sandy Clay, brown with occasional yellow red and light brown, occasional silt and very fine sand veins, mottling, stiff, slightly plastic, damp		
				0			Silty Sandy Clay, light gray with occasional yellow red mottling, occasional silt and very fine sand veins, stiff, slightly plastic, damp		
				0			Silty Sandy Clay, mottled light gray and yellow red, occasional iron nodules (1-3 mm), stiff, slightly plastic, damp		
450	15	4		0			Silty Sandy Clay, mottled light gray and yellow red, stiff, slightly plastic, damp		
				0			Sandy Clay, yellow red with minor light gray mottling, abundant iron nodules (2-4 mm), stiff, very slightly plastic, damp		
				0			Sandy Gravelly Clay, yellow red, abundant iron nodules (2-4mm), abundant quartzite (1 cm), stiff, very slightly plastic, damp		
		4				SC	Silty Sandy Clay, mottled yellow red, light gray and dark gray, soft, plastic, damp		
445				0		CL	Sandy Gravelly Clay, yellow red, abundant iron nodules (2-4mm), abundant quartzite (1 cm), stiff, very slightly plastic, damp		
	20	1		0			Silty Sandy Clay, brown, with minor red mottling, very soft, plastic, moist		
							Gravelly Clay, yellow red, abundant iron nodules (2-4 mm), abundant quartzite (1-3cm), stiff, very slightly plastic, damp		
440							Gravelly Clayey Sand, mottled light brown and yellow red, with clay, abundant quartzite (1-3 cm), loose, damp		
	25						Sandy Clay, brown, very soft, slightly plastic, saturated		
435							Shale, dark gray, hard, fissile, slightly damp		
	30								
430									

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-63R		Date(s): **6/24/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **W. Weber**	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **464.31 ft amsl**	TOC Elevation: **463.94 ft amsl**
Sampling Method: **Direct Push (2005)**		North: **369558.61**	East: **591993.18**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **21.5 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 15 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	15 FT to 20 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 11 FT	Remarks: **Lithology from MW-63 drilling log dated 04/05/2005.**	
Bentonite	11 FT to 13 FT		
Sand	13 FT to 20 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
		2		0		MH	Clayey Silt, brown, minor yellowish red mottling, abundant root hairs, loose, moist		Flush Mount
				0		CL	Silty Clay, brown, rare root hairs, soft, plastic, moist		
							Silty Sandy Clay, soft, very slightly plastic, saturated		
460							Sandy Clay, brown, occasional red mottling, soft, plastic, moist		
	5	4		0	NA		Sandy Clay, brown, occasional yellow red mottling, soft, plastic, moist		
				0			No Recovery		
							Sandy Clay, brown, with minor red mottling, soft, plastic, moist		
				0			Sandy Clay, brown, minor yellow red mottling, very soft, very slightly plastic, saturated		
455				0			Sandy Clay, mottled brown, gray, and yellow red, soft, plastic, moist		
	10	2.5					Sandy Clay, mottled brown, gray, and yellow red, stiff, plastic, moist		
				0			Sandy Clay, mottled gray and yellow red, soft, plastic, moist		
							Sandy Clay, yellow red, minor brown mottling, hard, plastic, damp		
				0			Sandy Clay to Clayey Sand, yellow red, minor light brown mottling, abundant sand, coarse, stiff, very slightly plastic, damp		
450		2.5							
	15			0					
							Gravelly Clay, yellow red, minor light brown mottling, abundant iron nodules (1-2 mm), abundant quartzite (1-3 cm), with sand, coarse, stiff, slightly plastic, damp		
		2.5		0			Sandy Clay, yellow red, occasional quartzite (1-3 cm), stiff, slightly plastic, damp		
445						SC	Clayey Sand, light brown, occasional quartzite (2-5 mm), loose, damp		
	20	1.5		0		CL	Silty Clay, yellow red, hard, becoming fissile, slightly plastic, damp		
							Shale, dark gray, hard, fissile, very slightly damp		
440	25								
435	30								
430									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 7/16/15

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-67R		Date(s): **7/1/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By: **W. Weber**	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **459.43 ft amsl**	TOC Elevation: **459.16 ft amsl**
Sampling Method: **HSA Continuous Sampler (2006)**		North: **370022.42**	East: **592291.15**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **17.0 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 12 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	12 FT to 17 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 8 FT	Remarks: **Lithology from MW-67 drilling log dated 03/29/2006.**	
Bentonite	8 FT to 10 FT		
Sand	10 FT to 17 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
455	5	4				CL	Silty Sandy Clay, dark brown, abundant rootlets, firm, slightly crumbly, moist, saturated from 3-4' bgs		Flush Mount
		4					Silty Sandy Clay, pale gray, black and red mottling, occasional rootlets, occasional gravel, fine, firm, moist, slightly crumbly		
450	10	4					Silty Sandy Clay, pale gray, red mottling, firm, slightly crumbly, moist		
		4					Silty Sandy Clay, pale gray, black and red mottling, occasional gravel, fine, firm, slightly crumbly, moist		
445	15	4					Gravelly Clay, red, fine to coarse gravel, firm, crumbly, moist		
							Gravelly Clay, brown, fine to coarse gravel, firm, crumbly, moist		
							Clay (weathered shale), black, with very pale brown silt lenses, firm, fissile, moist		
440	20								
435	25								
430	30								
425									

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 7/16/15

APPENDIX B
Waste Manifest Documentation

504250

D/U

American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

Non-Hazardous Waste Manifest

Generator

Generator's Name: Whirlpool Corp

Mailing Address: 6400 Jenny Lind Rd

Ft Smith AR

City State Zip

Point of Generation Address: Same

City State Zip

Contact: Nick 636-579-6583

Name Phone

Manifest Job No.: MN 233W PC02 (Purge water)

Bill to Name: ERS

Address: 1105 No. Peoria 74106

Tulsa OK 74106

City State Zip

Contact: Ken Duckworth 918 832-8888

Name Phone

Common Name of Waste Material	Container No.	Container Type	Total Quantity	Unit
Purge water		Drums	4	
Full		Totes		
(1) Empty tote				

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Ken Duckworth — Generator Authorized Agent Name

[signature] — Signature

7-3-15 — Shipment Date

Transporter

Transporter Name: ERS

Address: 1105 North Peoria

City, State Zip: Tulsa OK 74106

Driver Name (Print): Rick Albertson

Tag No.: 53734 State: OK

USDOT No.: 75510

I hereby certify that the above material was picked up at the generator site listed above.

x Virgil Smith — Driver Signature

7-3-15 — Ship Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Virgil Smith — Driver Signature

7-2-15 — Delivery Date

Destination

American Environmental Landfill, Inc.
212 N. 177th W Ave.
Sand Springs, OK 74063

Phone: (918) 245-7786
Fax: (918) 245-7774
Permit No: 3557021

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is accurate.

Name of Authorized Agent

[signature] — Signature

7-2-15 — Receipt Date

White – Destination Retention • Yellow – Return to Bill to • Pink – Transporter Retain • Goldenrod – Generator Retain

American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

Non-Hazardous Waste Manifest

504532

Virgil S.

Truck

Generator

Generator's Name: Whirlpool Corp

Mailing Address: 6400 Jenny Lane Rd

Ft Smith Ark

City State Zip

Point of Generation Address: Same

City State Zip

Contact: Nick 636-579-6883

Name Phone

Manifest Job No. MW233WPC01

Bill to Name: ERS

Address: 1105 North Peoria

Tulsa OK 74106

City State Zip

Contact: Kevin Duckworth 918-632-8[illegible]

Name Phone

Common Name of Waste Material	Container No.	Container Type	Total Quantity	Unit
Soil Borings		Rolloff	10yd	
			4.13T	

I hereby certify that the above named material is not a hazardous waste as defined by 40 CFR Part 261 or any applicable state law, has been properly described, classified and packaged, and is in proper condition for transportation according to applicable regulations.

Kevin Duckworth — Generator Authorized Agent Name

[signature] — Signature

7-3-15 — Shipment Date

Transporter

Transporter Name: ERS

Address: 1105 North Peoria

City, State Zip: Tulsa OK 74106

Driver Name (Print): Virgil Smith

Tag No. State: OK

USDOT No.

I hereby certify that the above material was picked up at the generator site listed above.

X — Driver Signature

Ship Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

[signature] — Driver Signature

7 — Delivery Date

Destination

American Environmental Landfill, Inc.
212 N. 177th W Ave.
Sand Springs, OK 74063

Phone: (918) 245-7786
Fax: (918) 245-7774
Permit No: 3557021

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is accurate.

[signature] — Name of Authorized Agent

[signature] — Signature

7-6-15 — Receipt Date

White – Destination Retention • Yellow – Return to Bill to • Pink – Transporter Retain • Goldenrod – Generator Retain

Mr. Mostafa Mehran
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118

RE: Installation of New Monitoring Well
Whirlpool Corporation Facility – Fort Smith, Arkansas
EPA No. ARD042755389
AFIN No. 66-00048
CAO LIS 13-202

Dear Mr. Mehran:

Ramboll Environ US Corporation (Ramboll Environ), on behalf of Whirlpool Corporation (Whirlpool), is submitting this letter report documenting the installation of a new monitoring well (MW-182) southwest of the location of the membrane interface probe (MIP) point M-325. Based on the Arkansas Department of Environmental Quality's (ADEQ's) comment on the 2014 Third Quarter Progress Report, ADEQ requested that a monitoring well be installed south of the location of MIP point M-325 to monitor the southern plume in this area. In response to this comment MW-182 was installed on June 26, 2015.

SITE PREPARATION

Prior to initiating drilling activities, a private utility locator was contracted to identify underground utilities and other potential obstructions in the work areas. The area was heavily vegetated and required clearing in order to access the location for well installation. Figure 1 presents the location of MW-182.

SOIL SAMPLING AND WELL INSTALLATION

A soil boring was completed in order to assess the lithology at the location for MW-182 and two soil samples were collected for analysis. The soil sample intervals were chosen in the field based on field observations and field screening results [e.g. visual observation of shallow permeable zones and elevated photoionization detector (PID) readings]. One shallow soil sample was collected at 11.5 feet below ground surface (bgs) and the second soil sample was collected at 28.5 bgs. Soil samples were collected utilizing 5035 kits for volatile organic compound (VOC) analysis using EPA Method 8260. Soil samples were submitted to Pace Analytical Laboratory for analysis. No VOCs were detected in the shallow soil sample and trichloroethene was the only VOC detected in the deeper soil sample at a concentration of 10 micrograms per kilograms (µg/kg) or 0.010 milligrams per kilograms (mg/kg), which is less than the ADEQ remedial action level of 0.129 mg/kg[1]. The soil boring lithology is presented in the well construction log provided in Appendix A. The soil analytical report is included as Appendix B.

[1]ADEQ remedial action level based on site-specific risk based protection of groundwater soil screening level (Risk Evaluation Report June 2007)

Monitoring well MW-182 was constructed with a 2-inch diameter schedule 40 PVC casing and a 10 feet long 0.010 inch slotted 2-inch diameter schedule 40 PVC well screen to a total depth of approximately 31 feet bgs. A 20/40 grade sand pack was installed in the well annulus around the PVC screen to approximately 2-feet above the top of the screen followed by 2-feet of annular seal consisting of hydrated bentonite pellets above the top of the sand pack. The remainder of the annular space was pressure grouted with a bentonite/cement grout installed with a tremie pipe from the bottom of the open well annulus to the surface. The well was completed with an expandable, locking well cap and covered with a steel cover flush with the ground surface. The well construction log is provided in Appendix A.

MW-182 was properly developed on June 28, 2015 in accordance with ADEQ guidance (Interim Policy PRCR 96-4, Section L, Page 9), and surveyed by an Arkansas licensed surveyor. Figure 1 presents the location of MW-182.

INVESTIGATION DERIVED WASTE

The soil cuttings generated from drilling activities for MW-182 were collected and containerized in a 20 yard roll-off box and staged on the former Whirlpool manufacturing facility property. Purge water generated from groundwater development activities was containerized for disposal. The soil and water investigation derived waste was disposed of as non-hazardous waste by Environmental Remediation Specialists and transported to American Environmental Landfill, Inc. on July 3, 2015. Waste manifests are included as Appendix B to the Monitoring Well Replacement Report (Attachment C of the Second Quarter 2015 Progress Report).

SUMMARY

MW-182 was sampled during the third quarter groundwater sampling effort (completed during the week of July 20, 2015), and results will be included in the progress report for the third quarter 2015. MW-182 will be included in the quarterly monitoring program for a minimum of four quarters.

-oo0oo-

If you have any further questions or comments, please feel free to contact us.

Yours sincerely,

Michael F. Ellis, PE
Principal

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Wayne Weber, PG, PE
Manager

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LIST OF ATTACHMENTS

Figure 1: Location of MW-182
Appendix A: Monitoring Well Construction Log
Appendix B: Pace Analytical Report for Soil Samples

RAMBOLL ENVIRON

FIGURE

FILE: D:\GIS\PROJECT\WHIRLPOOL\DOCS\2015\2016_misc\Figure 1 - Location of MW-182 20150717.mxd

RAMBOLL ENVIRON

LOCATION OF MW-182

Whirlpool Facility - Fort Smith, Arkansas

Figure 1

DRAFTED BY: KTS | DATE: 07/17/2015 | PROJECT: 3436269

APPENDIX A
Monitoring Well Construction Log

RAMBOLL ENVIRON

1807 Park 270 Drive Suite 320, St. Louis, MO 63146

Site ID: MW-182		Date(s): **6/26/2015**	
Location: **Fort Smith, Arkansas**			
Logged By: **N. Zurweller**		Checked By:	
Contractor: **Walker-Hill Environmental**		Purpose: **Monitoring Well**	
Drilling Method: **Sonic**		GS Elevation: **475.04 ft amsl**	TOC Elevation: **474.64 ft amsl**
Sampling Method: **Sonic**		North: **367899.51**	East: **590403.42**
Well Construction:		Borehole Dia.: **6 inches**	Total Depth: **31.0 feet**
Blank Casing: Sch. 40 PVC 2 Inch	0 FT to 21 FT	Project Number: **3433244A**	
Screen: Sch. 40 2 Inch 0.010 PVC	21 FT to 31 FT	Project Name: **Whirlpool Corporation**	
Annular Fill: Cement Grout	0 FT to 17 FT	Remarks:	
Bentonite	17 FT to 19 FT		
Sand	19 FT to 31 FT		

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
				0			Topsoil, light brown, with root hairs, loose, dry		Flush Mount
							Silty Fill, light brown, with gravel, coarse, subangular, loose, dry		
		5		0			Gravel Fill, very dark brown, with silt, coarse, subangular, loose, dry		
						MH	Clayey Silt, yellow brown, with light gray and red brown mottling, trace gravel, fine, subrounded, trace black nodules, slightly stiff, slightly plastic, moist		
470	5								
				0		CL	Silty Clay, red brown, with light gray mottling, trace black nodules, very stiff, plastic, moist		
		5							
				0					
465	10		MW-182 11.5FT	12		MH	Clayey Silt, red brown, with light gray mottling, trace black nodules, trace sand, fine, slightly stiff, plastic, moist		
		5				CL	Silty Clay, yellow brown, with light gray mottling, trace black nodules, stiff, plastic to slightly plastic, moist		
				11.8					
460	15			0		MH	Clayey Silt, yellow brown, with gray mottling, trace black nodules, with sand, fine, soft, slightly plastic, moist		
		5							
				0.8					
455	20			0.1					
		5				CL	Sandy Clay, yellow brown and red brown, occasional gray mottling, with silt, occasional gravel, fine, subrounded, medium to fine sand, slightly stiff, slightly plastic, cohesive, moist		
				0.2			Silty Clay, red brown, with sand, medium, with gravel, fine to coarse, subrounded, stiff, slightly plastic, moist		
450	25								
				1.1			Sandy Clay, red brown, with light gray mottling, with silt, with gravel, fine, subrounded, fine sand, slightly stiff, cohesive, slightly plastic, moist, wet from 25.5-25.8' bgs		
		5	MW-182 28.5FT	0			Silty Clay, red brown, with sand, medium to coarse, with gravel, fine to coarse, slightly stiff, cohesive, moist		
445	30					MH	Clayey Silt, yellow brown, trace gravel, fine, subrounded, hard, laminated, dry		
		1		0			Shale, very dark gray, hard, laminated, dry		

Report: WELL_LOG_REV_MKE; File: WHIRLPOOL_LOGS (JH_EDITS).GPJ; 7/15/15

RAMBOLL ENVIRON

APPENDIX B
Pace Analytical Report for Soil Samples

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

July 10, 2015

Wendy Stonestreet
Environ International Corporation
7500 College Blvd Ste 925
Overland Park, KS 66210

RE: Project: FORT SMITH, AR
Pace Project No.: 60197312

Dear Wendy Stonestreet:
Enclosed are the analytical results for sample(s) received by the laboratory on June 27, 2015. The results relate only to the samples included in this report. Results reported herein conform to the most current TNI standards and the laboratory's Quality Assurance Manual, where applicable, unless otherwise noted in the body of the report.

If you have any questions concerning this report, please feel free to contact me.

Sincerely,

Colleen Clyne
colleen.clyne@pacelabs.com
Project Manager

Enclosures

cc: Tamara Gleason, ENVIRON International Corporation

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: FORT SMITH, AR
Pace Project No.: 60197312

Kansas Certification IDs
9608 Loiret Boulevard, Lenexa, KS 66219
WY STR Certification #: 2456.01
Arkansas Certification #: 13-012-0
Illinois Certification #: 003097
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212008A
Oklahoma Certification #: 9205/9935
Texas Certification #: T104704407
Utah Certification #: KS00021

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: FORT SMITH, AR
Pace Project No.: 60197312

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60197312001	**MW-182-SL-11.5 FT-20150626**	Solid	06/26/15 13:30	06/27/15 08:15
60197312002	**MW-182-SL-28.5 FT-20150626**	Solid	06/26/15 14:55	06/27/15 08:15
60197312003	**TRIP BLANK-01-20150626**	Solid	06/26/15 14:55	06/27/15 08:15

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60197312

Lab ID	Sample ID	Method	Analysts	Analytes Reported
60197312001	**MW-182-SL-11.5 FT-20150626**	EPA 8260	JKL	37
		ASTM D2974	DWC	1
60197312002	**MW-182-SL-28.5 FT-20150626**	EPA 8260	JKL	37
		ASTM D2974	DWC	1
60197312003	**TRIP BLANK-01-20150626**	EPA 8260	JKL	37

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project: FORT SMITH, AR
Pace Project No.: 60197312

Method: **EPA 8260**
Description: 8260 MSV 5035A VOA
Client: Environ_AR
Date: July 10, 2015

General Information:
3 samples were analyzed for EPA 8260. All samples were received in acceptable condition with any exceptions noted below or on the chain-of custody and/or the sample condition upon receipt form (SCUR) attached at the end of this report.

Hold Time:
The samples were analyzed within the method required hold times with any exceptions noted below.

Initial Calibrations (including MS Tune as applicable):
All criteria were within method requirements with any exceptions noted below.

Continuing Calibration:
All criteria were within method requirements with any exceptions noted below.

Internal Standards:
All internal standards were within QC limits with any exceptions noted below.

Surrogates:
All surrogates were within QC limits with any exceptions noted below.

Method Blank:
All analytes were below the report limit in the method blank, where applicable, with any exceptions noted below.

Laboratory Control Spike:
All laboratory control spike compounds were within QC limits with any exceptions noted below.

Matrix Spikes:
All percent recoveries and relative percent differences (RPDs) were within acceptance criteria with any exceptions noted below.

QC Batch: MSV/70386

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60197255032

M1: Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.

- MS (Lab ID: 1594454)
  - 1,1,2,2-Tetrachloroethane
  - Trichloroethene
- MSD (Lab ID: 1594455)
  - Trichloroethene

R1: RPD value was outside control limits.

- MSD (Lab ID: 1594455)
  - 1,1,2,2-Tetrachloroethane

Additional Comments:

This data package has been reviewed for quality and completeness and is approved for release.

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60197312

Sample: MW-182-SL-11.5 FT-20150626 **Lab ID: 60197312001** Collected: 06/26/15 13:30 Received: 06/27/15 08:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260								
Acetone	ND	ug/kg	18.8	9.4	1		07/01/15 13:30	67-64-1	
Benzene	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	71-43-2	
Bromodichloromethane	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	75-27-4	
Bromoform	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	75-25-2	
Bromomethane	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	74-83-9	
2-Butanone (MEK)	ND	ug/kg	9.4	4.7	1		07/01/15 13:30	78-93-3	
Carbon disulfide	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	75-15-0	
Carbon tetrachloride	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	56-23-5	
Chlorobenzene	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	108-90-7	
Chloroethane	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	75-00-3	
Chloroform	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	67-66-3	
Chloromethane	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	74-87-3	
Dibromochloromethane	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	124-48-1	
1,1-Dichloroethane	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	75-34-3	
1,2-Dichloroethane	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	107-06-2	
1,1-Dichloroethene	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	156-60-5	
1,2-Dichloropropane	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	78-87-5	
cis-1,3-Dichloropropene	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	10061-02-6	
Ethylbenzene	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	100-41-4	
2-Hexanone	ND	ug/kg	18.8	9.4	1		07/01/15 13:30	591-78-6	
Methylene chloride	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	9.4	4.7	1		07/01/15 13:30	108-10-1	
Styrene	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	79-34-5	
Tetrachloroethene	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	127-18-4	
Toluene	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	108-88-3	
1,1,1-Trichloroethane	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	79-00-5	
Trichloroethene	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	79-01-6	
Vinyl chloride	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	75-01-4	
Xylene (Total)	ND	ug/kg	4.7	2.3	1		07/01/15 13:30	1330-20-7	
Surrogates									
Toluene-d8 (S)	102	%	82-137		1		07/01/15 13:30	2037-26-5	
4-Bromofluorobenzene (S)	102	%	82-119		1		07/01/15 13:30	460-00-4	
1,2-Dichloroethane-d4 (S)	113	%	81-142		1		07/01/15 13:30	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974								
Percent Moisture	**14.9**	%	0.50	0.50	1		07/06/15 00:00		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60197312

Sample: MW-182-SL-28.5 FT-20150626 **Lab ID: 60197312002** Collected: 06/26/15 14:55 Received: 06/27/15 08:15 Matrix: Solid

Results reported on a "dry weight" basis and are adjusted for percent moisture, sample size and any dilutions.

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260								
Acetone	ND	ug/kg	15.3	7.6	1		07/01/15 13:45	67-64-1	
Benzene	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	71-43-2	
Bromodichloromethane	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	75-27-4	
Bromoform	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	75-25-2	
Bromomethane	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	74-83-9	
2-Butanone (MEK)	ND	ug/kg	7.6	3.8	1		07/01/15 13:45	78-93-3	
Carbon disulfide	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	75-15-0	
Carbon tetrachloride	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	56-23-5	
Chlorobenzene	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	108-90-7	
Chloroethane	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	75-00-3	
Chloroform	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	67-66-3	
Chloromethane	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	74-87-3	
Dibromochloromethane	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	124-48-1	
1,1-Dichloroethane	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	75-34-3	
1,2-Dichloroethane	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	107-06-2	
1,1-Dichloroethene	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	156-60-5	
1,2-Dichloropropane	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	78-87-5	
cis-1,3-Dichloropropene	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	10061-02-6	
Ethylbenzene	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	100-41-4	
2-Hexanone	ND	ug/kg	15.3	7.6	1		07/01/15 13:45	591-78-6	
Methylene chloride	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	7.6	3.8	1		07/01/15 13:45	108-10-1	
Styrene	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	79-34-5	
Tetrachloroethene	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	127-18-4	
Toluene	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	108-88-3	
1,1,1-Trichloroethane	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	79-00-5	
Trichloroethene	**10.0**	ug/kg	3.8	1.9	1		07/01/15 13:45	79-01-6	
Vinyl chloride	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	75-01-4	
Xylene (Total)	ND	ug/kg	3.8	1.9	1		07/01/15 13:45	1330-20-7	
Surrogates									
Toluene-d8 (S)	100	%	82-137		1		07/01/15 13:45	2037-26-5	
4-Bromofluorobenzene (S)	101	%	82-119		1		07/01/15 13:45	460-00-4	
1,2-Dichloroethane-d4 (S)	114	%	81-142		1		07/01/15 13:45	17060-07-0	
Percent Moisture	Analytical Method: ASTM D2974								
Percent Moisture	**10.8**	%	0.50	0.50	1		07/06/15 00:00		

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: FORT SMITH, AR
Pace Project No.: 60197312

Sample: TRIP BLANK-01-20150626 **Lab ID: 60197312003** Collected: 06/26/15 14:55 Received: 06/27/15 08:15 Matrix: Solid

Results reported on a "wet-weight" basis

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV 5035A VOA	Analytical Method: EPA 8260								
Acetone	ND	ug/kg	20.0	10.0	1		07/10/15 10:51	67-64-1	
Benzene	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	71-43-2	
Bromodichloromethane	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	75-27-4	
Bromoform	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	75-25-2	
Bromomethane	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	74-83-9	
2-Butanone (MEK)	ND	ug/kg	10.0	5.0	1		07/10/15 10:51	78-93-3	
Carbon disulfide	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	75-15-0	
Carbon tetrachloride	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	56-23-5	
Chlorobenzene	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	108-90-7	
Chloroethane	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	75-00-3	
Chloroform	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	67-66-3	
Chloromethane	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	74-87-3	
Dibromochloromethane	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	124-48-1	
1,1-Dichloroethane	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	75-34-3	
1,2-Dichloroethane	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	107-06-2	
1,1-Dichloroethene	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	156-60-5	
1,2-Dichloropropane	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	10061-02-6	
Ethylbenzene	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	100-41-4	
2-Hexanone	ND	ug/kg	20.0	10.0	1		07/10/15 10:51	591-78-6	
Methylene chloride	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/kg	10.0	5.0	1		07/10/15 10:51	108-10-1	
Styrene	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	79-34-5	
Tetrachloroethene	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	127-18-4	
Toluene	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	108-88-3	
1,1,1-Trichloroethane	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	79-00-5	
Trichloroethene	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	79-01-6	
Vinyl chloride	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	75-01-4	
Xylene (Total)	ND	ug/kg	5.0	2.5	1		07/10/15 10:51	1330-20-7	
Surrogates									
Toluene-d8 (S)	100	%	82-137		1		07/10/15 10:51	2037-26-5	
4-Bromofluorobenzene (S)	97	%	82-119		1		07/10/15 10:51	460-00-4	
1,2-Dichloroethane-d4 (S)	95	%	81-142		1		07/10/15 10:51	17060-07-0	

REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60197312

QC Batch: MSV/70386
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 60197312001, 60197312002

METHOD BLANK: 1594452
Matrix: Solid
Associated Lab Samples: 60197312001, 60197312002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	ND	5.0	07/01/15 11:12	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	07/01/15 11:12	
1,1,2-Trichloroethane	ug/kg	ND	5.0	07/01/15 11:12	
1,1-Dichloroethane	ug/kg	ND	5.0	07/01/15 11:12	
1,1-Dichloroethene	ug/kg	ND	5.0	07/01/15 11:12	
1,2-Dichloroethane	ug/kg	ND	5.0	07/01/15 11:12	
1,2-Dichloropropane	ug/kg	ND	5.0	07/01/15 11:12	
2-Butanone (MEK)	ug/kg	ND	10.0	07/01/15 11:12	
2-Hexanone	ug/kg	ND	20.0	07/01/15 11:12	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	10.0	07/01/15 11:12	
Acetone	ug/kg	ND	20.0	07/01/15 11:12	
Benzene	ug/kg	ND	5.0	07/01/15 11:12	
Bromodichloromethane	ug/kg	ND	5.0	07/01/15 11:12	
Bromoform	ug/kg	ND	5.0	07/01/15 11:12	
Bromomethane	ug/kg	ND	5.0	07/01/15 11:12	
Carbon disulfide	ug/kg	ND	5.0	07/01/15 11:12	
Carbon tetrachloride	ug/kg	ND	5.0	07/01/15 11:12	
Chlorobenzene	ug/kg	ND	5.0	07/01/15 11:12	
Chloroethane	ug/kg	ND	5.0	07/01/15 11:12	
Chloroform	ug/kg	ND	5.0	07/01/15 11:12	
Chloromethane	ug/kg	ND	5.0	07/01/15 11:12	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	07/01/15 11:12	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	07/01/15 11:12	
Dibromochloromethane	ug/kg	ND	5.0	07/01/15 11:12	
Ethylbenzene	ug/kg	ND	5.0	07/01/15 11:12	
Methylene chloride	ug/kg	ND	5.0	07/01/15 11:12	
Styrene	ug/kg	ND	5.0	07/01/15 11:12	
Tetrachloroethene	ug/kg	ND	5.0	07/01/15 11:12	
Toluene	ug/kg	ND	5.0	07/01/15 11:12	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	07/01/15 11:12	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	07/01/15 11:12	
Trichloroethene	ug/kg	ND	5.0	07/01/15 11:12	
Vinyl chloride	ug/kg	ND	5.0	07/01/15 11:12	
Xylene (Total)	ug/kg	ND	5.0	07/01/15 11:12	
1,2-Dichloroethane-d4 (S)	%	102	81-142	07/01/15 11:12	
4-Bromofluorobenzene (S)	%	98	82-119	07/01/15 11:12	
Toluene-d8 (S)	%	98	82-137	07/01/15 11:12	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60197312

LABORATORY CONTROL SAMPLE: 1594453

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	100	124	124	71-130	
1,1,2,2-Tetrachloroethane	ug/kg	100	104	104	68-118	
1,1,2-Trichloroethane	ug/kg	100	106	106	72-115	
1,1-Dichloroethane	ug/kg	100	121	121	70-121	
1,1-Dichloroethene	ug/kg	100	116	116	65-132	
1,2-Dichloroethane	ug/kg	100	112	112	72-120	
1,2-Dichloropropane	ug/kg	100	116	116	76-118	
2-Butanone (MEK)	ug/kg	500	549	110	64-116	
2-Hexanone	ug/kg	500	550	110	67-119	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	550	110	77-120	
Acetone	ug/kg	500	548	110	55-124	
Benzene	ug/kg	100	119	119	74-121	
Bromodichloromethane	ug/kg	100	116	116	76-124	
Bromoform	ug/kg	100	109	109	71-131	
Bromomethane	ug/kg	100	111	111	30-163	
Carbon disulfide	ug/kg	100	116	116	63-142	
Carbon tetrachloride	ug/kg	100	125	125	64-142	
Chlorobenzene	ug/kg	100	110	110	78-117	
Chloroethane	ug/kg	100	116	116	60-134	
Chloroform	ug/kg	100	113	113	70-120	
Chloromethane	ug/kg	100	95.3	95	21-173	
cis-1,2-Dichloroethene	ug/kg	100	108	108	75-120	
cis-1,3-Dichloropropene	ug/kg	100	118	118	78-119	
Dibromochloromethane	ug/kg	100	110	110	77-122	
Ethylbenzene	ug/kg	100	115	115	77-121	
Methylene chloride	ug/kg	100	111	111	61-127	
Styrene	ug/kg	100	110	110	80-122	
Tetrachloroethene	ug/kg	100	115	115	73-130	
Toluene	ug/kg	100	117	117	77-117	
trans-1,2-Dichloroethene	ug/kg	100	116	116	67-125	
trans-1,3-Dichloropropene	ug/kg	100	116	116	75-122	
Trichloroethene	ug/kg	100	117	117	75-122	
Vinyl chloride	ug/kg	100	111	111	57-147	
Xylene (Total)	ug/kg	300	338	113	77-121	
1,2-Dichloroethane-d4 (S)	%			103	81-142	
4-Bromofluorobenzene (S)	%			102	82-119	
Toluene-d8 (S)	%			101	82-137	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1594454 1594455

Parameter	Units	60197255032 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/kg	ND	104	104	115	102	110	98	39-128	12	34	
1,1,2,2-Tetrachloroethane	ug/kg	ND	104	104	6.8	12.3	7	12	10-149	57	41	M1,R1
1,1,2-Trichloroethane	ug/kg	ND	104	104	101	90.5	98	87	11-135	11	34	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60197312

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1594454 1594455

Parameter	Units	60197255032 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/kg	ND	104	104	117	104	113	101	31-128	12	32	
1,1-Dichloroethene	ug/kg	ND	104	104	113	99.3	109	96	38-128	13	35	
1,2-Dichloroethane	ug/kg	ND	104	104	108	96.7	104	93	22-143	11	31	
1,2-Dichloropropane	ug/kg	ND	104	104	106	94.7	102	91	22-131	11	32	
2-Butanone (MEK)	ug/kg	ND	519	518	546	491	104	94	11-136	11	41	
2-Hexanone	ug/kg	ND	519	518	568	505	109	97	10-152	12	43	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	519	518	552	492	106	95	10-144	11	39	
Acetone	ug/kg	ND	519	518	576	508	109	96	10-144	12	42	
Benzene	ug/kg	ND	104	104	112	99.5	108	96	32-137	12	27	
Bromodichloromethane	ug/kg	ND	104	104	106	96.1	102	93	16-139	10	34	
Bromoform	ug/kg	ND	104	104	98.4	86.3	95	83	10-146	13	39	
Bromomethane	ug/kg	ND	104	104	114	106	110	102	10-138	8	48	
Carbon disulfide	ug/kg	ND	104	104	103	91.3	99	88	28-141	12	34	
Carbon tetrachloride	ug/kg	ND	104	104	107	96.0	103	93	32-137	11	34	
Chlorobenzene	ug/kg	ND	104	104	93.4	83.3	90	80	12-133	11	34	
Chloroethane	ug/kg	ND	104	104	115	101	111	97	12-137	13	35	
Chloroform	ug/kg	ND	104	104	110	98.4	106	95	25-132	11	32	
Chloromethane	ug/kg	ND	104	104	95.1	85.8	92	83	10-156	10	41	
cis-1,2-Dichloroethene	ug/kg	ND	104	104	104	91.9	101	89	27-132	13	34	
cis-1,3-Dichloropropene	ug/kg	ND	104	104	105	93.3	101	90	10-138	12	33	
Dibromochloromethane	ug/kg	ND	104	104	102	91.6	99	88	5-142	11	36	
Ethylbenzene	ug/kg	ND	104	104	93.9	84.3	90	81	18-149	11	28	
Methylene chloride	ug/kg	ND	104	104	110	97.5	106	94	15-137	12	35	
Styrene	ug/kg	ND	104	104	90.7	81.4	87	78	10-146	11	39	
Tetrachloroethene	ug/kg	ND	104	104	93.2	82.9	90	80	22-131	12	32	
Toluene	ug/kg	ND	104	104	101	89.6	97	86	26-141	12	28	
trans-1,2-Dichloroethene	ug/kg	ND	104	104	111	98.7	106	95	33-125	11	32	
trans-1,3-Dichloropropene	ug/kg	ND	104	104	108	96.0	104	93	10-135	11	36	
Trichloroethene	ug/kg	ND	104	104	187	163	180	158	29-132	13	32	M1
Vinyl chloride	ug/kg	ND	104	104	110	97.4	106	94	28-139	12	34	
Xylene (Total)	ug/kg	ND	312	311	272	245	87	79	11-154	11	33	
1,2-Dichloroethane-d4 (S)	%						103	104	81-142			
4-Bromofluorobenzene (S)	%						99	97	82-119			
Toluene-d8 (S)	%						99	99	82-137			

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60197312

QC Batch: MSV/70530
QC Batch Method: EPA 8260
Analysis Method: EPA 8260
Analysis Description: 8260 MSV 5035A Volatile Organics
Associated Lab Samples: 60197312003

METHOD BLANK: 1598757
Matrix: Solid
Associated Lab Samples: 60197312003

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/kg	ND	5.0	07/10/15 10:36	
1,1,2,2-Tetrachloroethane	ug/kg	ND	5.0	07/10/15 10:36	
1,1,2-Trichloroethane	ug/kg	ND	5.0	07/10/15 10:36	
1,1-Dichloroethane	ug/kg	ND	5.0	07/10/15 10:36	
1,1-Dichloroethene	ug/kg	ND	5.0	07/10/15 10:36	
1,2-Dichloroethane	ug/kg	ND	5.0	07/10/15 10:36	
1,2-Dichloropropane	ug/kg	ND	5.0	07/10/15 10:36	
2-Butanone (MEK)	ug/kg	ND	10.0	07/10/15 10:36	
2-Hexanone	ug/kg	ND	20.0	07/10/15 10:36	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	10.0	07/10/15 10:36	
Acetone	ug/kg	ND	20.0	07/10/15 10:36	
Benzene	ug/kg	ND	5.0	07/10/15 10:36	
Bromodichloromethane	ug/kg	ND	5.0	07/10/15 10:36	
Bromoform	ug/kg	ND	5.0	07/10/15 10:36	
Bromomethane	ug/kg	ND	5.0	07/10/15 10:36	
Carbon disulfide	ug/kg	ND	5.0	07/10/15 10:36	
Carbon tetrachloride	ug/kg	ND	5.0	07/10/15 10:36	
Chlorobenzene	ug/kg	ND	5.0	07/10/15 10:36	
Chloroethane	ug/kg	ND	5.0	07/10/15 10:36	
Chloroform	ug/kg	ND	5.0	07/10/15 10:36	
Chloromethane	ug/kg	ND	5.0	07/10/15 10:36	
cis-1,2-Dichloroethene	ug/kg	ND	5.0	07/10/15 10:36	
cis-1,3-Dichloropropene	ug/kg	ND	5.0	07/10/15 10:36	
Dibromochloromethane	ug/kg	ND	5.0	07/10/15 10:36	
Ethylbenzene	ug/kg	ND	5.0	07/10/15 10:36	
Methylene chloride	ug/kg	ND	5.0	07/10/15 10:36	
Styrene	ug/kg	ND	5.0	07/10/15 10:36	
Tetrachloroethene	ug/kg	ND	5.0	07/10/15 10:36	
Toluene	ug/kg	ND	5.0	07/10/15 10:36	
trans-1,2-Dichloroethene	ug/kg	ND	5.0	07/10/15 10:36	
trans-1,3-Dichloropropene	ug/kg	ND	5.0	07/10/15 10:36	
Trichloroethene	ug/kg	ND	5.0	07/10/15 10:36	
Vinyl chloride	ug/kg	ND	5.0	07/10/15 10:36	
Xylene (Total)	ug/kg	ND	5.0	07/10/15 10:36	
1,2-Dichloroethane-d4 (S)	%	96	81-142	07/10/15 10:36	
4-Bromofluorobenzene (S)	%	98	82-119	07/10/15 10:36	
Toluene-d8 (S)	%	100	82-137	07/10/15 10:36	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60197312

LABORATORY CONTROL SAMPLE: 1598758

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/kg	100	95.0	95	71-130	
1,1,2,2-Tetrachloroethane	ug/kg	100	82.5	82	68-118	
1,1,2-Trichloroethane	ug/kg	100	92.2	92	72-115	
1,1-Dichloroethane	ug/kg	100	93.6	94	70-121	
1,1-Dichloroethene	ug/kg	100	96.5	96	65-132	
1,2-Dichloroethane	ug/kg	100	87.8	88	72-120	
1,2-Dichloropropane	ug/kg	100	96.5	96	76-118	
2-Butanone (MEK)	ug/kg	500	378	76	64-116	
2-Hexanone	ug/kg	500	434	87	67-119	
4-Methyl-2-pentanone (MIBK)	ug/kg	500	434	87	77-120	
Acetone	ug/kg	500	411	82	55-124	
Benzene	ug/kg	100	98.9	99	74-121	
Bromodichloromethane	ug/kg	100	96.3	96	76-124	
Bromoform	ug/kg	100	105	105	71-131	
Bromomethane	ug/kg	100	76.4	76	30-163	
Carbon disulfide	ug/kg	100	91.6	92	63-142	
Carbon tetrachloride	ug/kg	100	104	104	64-142	
Chlorobenzene	ug/kg	100	94.7	95	78-117	
Chloroethane	ug/kg	100	88.5	88	60-134	
Chloroform	ug/kg	100	91.5	91	70-120	
Chloromethane	ug/kg	100	59.1	59	21-173	
cis-1,2-Dichloroethene	ug/kg	100	94.5	94	75-120	
cis-1,3-Dichloropropene	ug/kg	100	105	105	78-119	
Dibromochloromethane	ug/kg	100	100	100	77-122	
Ethylbenzene	ug/kg	100	97.3	97	77-121	
Methylene chloride	ug/kg	100	95.6	96	61-127	
Styrene	ug/kg	100	97.0	97	80-122	
Tetrachloroethene	ug/kg	100	101	101	73-130	
Toluene	ug/kg	100	97.1	97	77-117	
trans-1,2-Dichloroethene	ug/kg	100	96.4	96	67-125	
trans-1,3-Dichloropropene	ug/kg	100	102	102	75-122	
Trichloroethene	ug/kg	100	99.1	99	75-122	
Vinyl chloride	ug/kg	100	78.7	79	57-147	
Xylene (Total)	ug/kg	300	285	95	77-121	
1,2-Dichloroethane-d4 (S)	%			99	81-142	
4-Bromofluorobenzene (S)	%			102	82-119	
Toluene-d8 (S)	%			101	82-137	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
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(913)599-5665

QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60197312

QC Batch: PMST/10882
QC Batch Method: ASTM D2974
Analysis Method: ASTM D2974
Analysis Description: Dry Weight/Percent Moisture
Associated Lab Samples: 60197312001, 60197312002

METHOD BLANK: 1596101
Matrix: Solid
Associated Lab Samples: 60197312001, 60197312002

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Percent Moisture	%	ND	0.50	07/06/15 00:00	

SAMPLE DUPLICATE: 1596102

Parameter	Units	60197276001 Result	Dup Result	RPD	Max RPD	Qualifiers
Percent Moisture	%	20.1	19.8	1	20	

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REPORT OF LABORATORY ANALYSIS

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: FORT SMITH, AR
Pace Project No.: 60197312

DEFINITIONS

DF - Dilution Factor, if reported, represents the factor applied to the reported data due to dilution of the sample aliquot.

ND - Not Detected at or above adjusted reporting limit.

J - Estimated concentration above the adjusted method detection limit and below the adjusted reporting limit.

MDL - Adjusted Method Detection Limit.

PQL - Practical Quantitation Limit.

RL - Reporting Limit.

S - Surrogate

1,2-Diphenylhydrazine decomposes to and cannot be separated from Azobenzene using Method 8270. The result for each analyte is a combined concentration.

Consistent with EPA guidelines, unrounded data are displayed and have been used to calculate % recovery and RPD values.

LCS(D) - Laboratory Control Sample (Duplicate)

MS(D) - Matrix Spike (Duplicate)

DUP - Sample Duplicate

RPD - Relative Percent Difference

NC - Not Calculable.

SG - Silica Gel - Clean-Up

U - Indicates the compound was analyzed for, but not detected.

N-Nitrosodiphenylamine decomposes and cannot be separated from Diphenylamine using Method 8270. The result reported for each analyte is a combined concentration.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
R1	RPD value was outside control limits.

Pace Analytical Services, Inc.
9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: FORT SMITH, AR
Pace Project No.: 60197312

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60197312001	**MW-182-SL-11.5 FT-20150626**	EPA 8260	MSV/70386		
60197312002	**MW-182-SL-28.5 FT-20150626**	EPA 8260	MSV/70386		
60197312003	**TRIP BLANK-01-20150626**	EPA 8260	MSV/70530		
60197312001	**MW-182-SL-11.5 FT-20150626**	ASTM D2974	PMST/10882		
60197312002	**MW-182-SL-28.5 FT-20150626**	ASTM D2974	PMST/10882		

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Sample Condition Upon Receipt

WO#: 60197312

60197312

Client Name: Environ

Optional
Proj Due Date:
Proj Name:

Courier: FedEx ☒ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Other ☐ Client ☐

Tracking #: 8047 3340 6957 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: CF +1.4 / CF -0.5 T-239 / T-262 **Type of Ice:** Wet Blue None ☐ Samples received on ice, cooling process has begun.
(circle one)

Cooler Temperature: 3.1

Date and initials of person examining contents: JB 6/27

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. Kirs
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 JB 6/27 ☒N/A	11.
Filtered volume received for dissolved tests?	☐Yes ☐No ☒N/A	12.
Sample labels match COC:	☒Yes ☐No ☐N/A	
Includes date/time/ID/analyses Matrix: SL		13.
All containers needing preservation have been checked.	☐Yes ☐No ☒N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	☐Yes ☐No ☒N/A	14.
Exceptions: VOA, Coliform, O&G, WI-DRO (water)	☐Yes ☒No	Initial when completed / Lot # of added preservative
Trip Blank present:	☒Yes ☐No ☐N/A	
Pace Trip Blank lot # (if purchased): 020915-3		15.
Headspace in VOA vials (>6mm):	☐Yes ☒No ☐N/A	16.
Project sampled in USDA Regulated Area:	☐Yes ☒No ☐N/A	17. List State: AR

Client Notification/ Resolution: Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Colleen Clayton Date: 06/29/2015

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

The Chain-of-Custody is a LEGAL DOCUMENT. All relevant fields must be completed accurately.

Page: 1 of 1

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company:	Environ	Report To:	Wendy Stonestreet	Attention:	Tamara Gleason
Address:	7500 College Blvd., Ste. 925	Copy To:	Tamara Gleason	Company Name:	
	Overland Park, KS 66210		tgleason@environcorp.com	Address:	
Email To:	wstonestreet@environcorp.com	Purchase Order No.:		Pace Quote Reference:	
Phone:	913-553-5926 Fax:	Project Name:	Fort Smith, AR	Pace Project Manager:	MJ Walls
Requested Due Date/TAT:	Standard	Project Number:	34375004	Pace Profile #:	7444 water, 7709 soil

REGULATORY AGENCY

☐ NPDES ☐ GROUND WATER ☐ DRINKING WATER
☐ UST ☐ RCRA ☐ OTHER _____

Site Location STATE: AR

Requested Analysis Filtered (Y/N)

Section D Required Client Information

SAMPLE ID (A-Z, 0-9 / ,-) Sample IDs MUST BE UNIQUE

Valid Matrix Codes

MATRIX	CODE
DRINKING WATER	DW
WATER	WT
WASTE WATER	WW
PRODUCT	P
SOIL/SOLID	SL
OIL	OL
WIPE	WP
AIR	AR
OTHER	OT
TISSUE	TS

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COMPOSITE START TIME	COMPOSITE END/GRAB DATE	COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 client specific list	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-182-SL-11.5FT-20150626	SL	G			6/26/15	1330		4	X						X	X		X		60197312-01
2	MW-182-SL-28.5FT-20150626	SL	G			6/26/15	1455		4	X						X	X		X		60197312-02
3	Trip Blank-01-20150626																				60197312-03
4																					
5																					
6																					
7																					
8																					
9																					
10																					
11																					
12																					

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	ENVIRON	6/26/15	1830		6/27	0815	3.1	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Nick Zurweller

SIGNATURE of SAMPLER: _____ DATE Signed (MM/DD/YY): 6/26/15

Temp In °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

Nelson Mullins

Nelson Mullins Riley & Scarborough LLP
Attorneys and Counselors at Law
151 Meeting Street / Sixth Floor / Charleston, SC 29401-2239
Tel: 843.853.5200 Fax: 843.722.8700
www.nelsonmullins.com

Robert H. Brunson
(Admitted in SC & GA)
Tel: 843.534.4226
robert.brunson@nelsonmullins.com

August 13, 2015

Ms. Tammie Hynum
Chief Hazardous Waste Division
Arkansas Department of Environmental Quality
5301 Northshore Drive
North Little Rock, Arkansas 72118-5317

RE: Status of Deed Restrictions for Residential Properties Located Across from Former Whirlpool Facility on Ingersoll Avenue

Dear Ms. Hynum:

The purpose of this letter is to provide the Arkansas Department of Environmental Quality with an update on Whirlpool's progress in obtaining deed restrictions for residential properties located to the North of Whirlpool's former Jenny Lind facility.[1] As you will see from the information below, we have obtained deed restrictions or are in the process of obtaining deed restrictions for all but one of the parcels located on the plume. In addition, we expect that by the end of 2015, we will have executed deed restrictions for all, or substantially all, of the residential properties identified below. Accordingly, in this letter, we first identify below the properties that already have executed deed restrictions (regardless of whether they are located on the plume) and identify the exhibit, attached to this letter, where a copy of the deed restriction may be found. Then, we summarize the status of our efforts to obtain deed restrictions for the four remaining properties located on the plume. Finally, we summarize the status of our efforts to obtain a deed restriction for the property located within the neighborhood but not on the plume.

Properties with Executed Deed Restrictions:
(1) 1400 Brazil Avenue (Exh. A)
(2) 1404 Brazil Avenue (Exh. B)
(3) 1500 Brazil Avenue (Exh. C)

[1] The residential properties at issue generally are located within the area bounded by Brazil Avenue, Jenny Lind Avenue, Ingersoll Avenue, and Ferguson Street (as if it extended all the way to Ingersoll Avenue).

(4) 1504 Brazil Avenue (Exh. D)
(5) 1600 Brazil Avenue (Exh. E)
(6) 1604 Brazil Avenue (Exh. F)
(7) 1700 Brazil Avenue (Exh. G)
(8) 1704 Brazil Avenue (Exh. H)
(9) 1710 Brazil Avenue (Exh. I)
(10) 1714 Brazil Avenue (Exh. J)
(11) 1718 Brazil Avenue (Exh. K)
(12) 1722 Brazil Avenue (Exh. L)
(13) 1726 Brazil Avenue (Exh. M)
(14) 1730 Brazil Avenue (Exh. N)
(15) 1804 Brazil Avenue (Exh. O)
(16) 1900 Brazil Avenue (Exh. P)
(17) 5800 Jenny Lind Avenue (Exh. Q)
(18) 5812 Jenny Lind Avenue (Exh. R)
(19) 5814 Jenny Lind Avenue (Exh. S)
(20) 5815 Jenny Lind Avenue (Exh. T)
(21) 5816 Jenny Lind Avenue (Exh. U)
(22) 5818 Jenny Lind Avenue (Exh. V)
(23) 5903 Jenny Lind Avenue (Exh. W)
(24) 5904 Jenny Lind Avenue (Exh. X)
(25) 5907 Jenny Lind Avenue (Exh. Y)
(26) 5908 Jenny Lind Avenue (Exh. Z)
(27) 1322, 1324, 1326, 1328 Jacobs Avenue (Exh. AA)
(28) 1401 Jacobs Avenue (Exh. BB)
(29) 1405 Jacobs Avenue (Exh. CC)
(30) 1409 Jacobs Avenue (Exh. DD)
(31) 1500 Jacobs Avenue (Exh. EE)
(32) 1504 Jacobs Avenue (Exh. FF)
(33) 1600 Jacobs Avenue (Units A through F) (Exh. GG)
(34) 1601 Jacobs Avenue (Exh. HH)
(35) 1604 Jacobs Avenue (Exh. II)
(36) 1605 Jacobs Avenue (Exh. JJ)
(37) 1700 Jacobs Avenue (Exh. KK)
(38) 1701 Jacobs Avenue (Exh. LL)
(39) 1704 Jacobs Avenue (Exh. MM)
(40) 1705 Jacobs Avenue (Exh. NN)
(41) 1800 Jacobs Avenue (Exh. OO)
(42) 1801 Jacobs Avenue (Exh. PP)
(43) 1804 Jacobs Avenue (Exh. QQ)
(44) 1805 Jacobs Avenue (Exh. RR)
(45) 1808 Jacobs Avenue (Exh. SS) – filing in process
(46) 1809 Jacobs Avenue (Exh. TT)

(47) 1900 Jacobs Avenue (Exh. UU) – filing in process
(48) 1904 Jacobs Avenue (Exh. VV)
(49) 1908 Jacobs Avenue (Exh. WW)
(50) 2002 Jacobs Avenue (Exh. XX)
(51) 2004 Jacobs Avenue (Exh. YY)
(52) 5921 Ferguson Street (Exh. ZZ)
(53) 5923 Ferguson Street (Exh. AAA)

Status of Deed Restrictions for Remaining Plume Properties:
(1) 1400 Jacobs Avenue – This property is the subject of a probate proceeding. The Probate Court has approved the estate's acceptance of Whirlpool's settlement offer, and Whirlpool is now working with the attorneys for the parties to finalize the settlement documents, including the deed restriction.

(2) 1410 Jacobs Avenue – Whirlpool has had a constructive settlement dialogue with the owners of this property, but has not yet reached a settlement agreement.

(3) 1501 Jacobs Avenue – This property is owned by Whirlpool, which is in the process of executing and filing the deed restriction.

(4) 1505 Jacobs Avenue – This is the Plunkett property. Whirlpool has reached a settlement agreement with Ms. Plunkett and has sent the settlement check and documents, including the deed restriction, to Ms. Plunkett's attorney for execution.

Status of Deed Restriction for Property within the Residential Area, but Not on the Plume:
(1) 5919 Ferguson Street – This is a vacant lot that the City of Refuge Church generally uses for overflow parking. Whirlpool has had constructive settlement dialogue with the representatives of the Church, but has not yet reached a settlement agreement due to delays in getting an appraisal conducted.

We hope that you find this information useful. Please let us know if you have any additional questions.

Sincerely,

Robert H. Brunson

RHB:skw

FILE: D:\GIS\PROJECT\WHIRLPOOL\DOCs\2015\2015_misc\Figure 1- Property Info 20150622.mxd

0 150 300
Feet
1 inch = 154 feet

TCE Isoconentration Line (2015 Q2)
5 µg/L

Status of Property Deed Restriction
Deed Restriction Filed
Deed Restriction Not Filed
Parcel Boundary
City of Fort Smith Property

Notes
Deed Restriction Status as of June 19, 2015

Brazil Ave
Brazil Ave
Ferguson St
Jacobs Ave
Jenny Lind Rd
Boys Club Ln
Ingersoll Ave
Ingersoll Ave

1301 BRAZIL AVE
1313 BRAZIL AVE
1323 BRAZIL AVE
1325 BRAZIL AVE
1401 BRAZIL AVE
1431 BRAZIL AVE
1451 BRAZIL AVE
1501 BRAZIL AVE
1507 BRAZIL AVE
1505 BRAZIL AVE
1601 BRAZIL AVE
1701 BRAZIL AVE
1705 BRAZIL AVE
1820 S ZERO STREET
1805 BRAZIL AVE
1851 BRAZIL AVE
1905 BRAZIL AVE
1926 S ZERO ST
5712 JENNY LIND AVE
5720 JENNY LIND AVE
5712 JENNY LIND AVE
5714 JENNY LIND AVE
5703 JENNY LIND AVE
5707 JENNY LIND AVE
5719 JENNY LIND AVE
2107 BRAZIL AVE

1300 BRAZIL AVE
1312 BRAZIL AVE
1322 BRAZIL AVE
5918 FERGUSON ST
5919 FERGUSON ST
5921 FERGUSON ST
5920 FERGUSON ST
5923 FERGUSON ST
1319 JACOBS AVE
1321 JACOBS AVE
1323 JACOBS AVE
1400 BRAZIL AVE
1404 BRAZIL AVE
1500 BRAZIL AVE
1504 BRAZIL AVE
1600 BRAZIL AVE
1604 BRAZIL AVE
1700 BRAZIL AVE
1704 BRAZIL AVE
1718 BRAZIL AVE
1722 BRAZIL AVE
1710 BRAZIL AVE
1726 BRAZIL AVE
1714 BRAZIL AVE
1730 BRAZIL AVE
1804 BRAZIL AVE
1900 BRAZIL AVE
5814 JENNY LIND AVE
5812 JENNY LIND AVE
5800 JENNY LIND AVE
5816 JENNY LIND AVE
5818 JENNY LIND AVE
5904 JENNY LIND AVE
5908 JENNY LIND AVE
1409 JACOBS AVE
1501 JACOBS AVE
1505 JACOBS AVE
1601 JACOBS AVE
1605 JACOBS AVE
1701 JACOBS AVE
1705 JACOBS AVE
1801 JACOBS AVE
1805 JACOBS AVE
1809 JACOBS AVE
1401 JACOBS AVE
1405 JACOBS AVE

2004 BRAZIL AVE
2010 BRAZIL AVE
JENNY LIND
5815 JENNY LIND AVE
5817 JENNY LIND AVE
5816 BOYS CLUB LN
5903 JENNY LIND AVE
5904 BOYS CLUB LN
JENNY LIND APT
5912 BOYS CLUB LN
5907 JENNY LIND AVE
2011 JACOBS AVE

1318 JACOBS AVE
1320 JACOBS AVE
1322 JACOBS AVE
1400 JACOBS AVE
1410 JACOBS AVE
1500 JACOBS AVE
1504 JACOBS AVE
1600 JACOBS AVE
1600 JACOBS UNITS #A&B
1600 JACOBS UNITS #C&D
1600 JACOBS UNITS #E&F
1604 JACOBS AVE
1700 JACOBS AVE
1704 JACOBS AVE
1800 JACOBS AVE
1804 JACOBS AVE
1808 JACOBS AVE
1900 JACOBS AVE
1904 JACOBS AVE
1908 JACOBS AVE
2002 JACOBS AVE
2004 JACOBS AVE
2006 JACOBS AVE
2008 JACOBS AVE
2010 JACOBS AVE
6015 JENNY LIND AVE

1599 INGERSOLL AVE
6400 JENNY LIND AVE

RAMBOLL ENVIRON

DRAFTED BY: KTS | DATE: 08/07/2015

STATUS OF RESIDENTIAL PROPERTY DEED RESTRICTION

Whirlpool Facility - Fort Smith, Arkansas

Figure 1

PROJECT: 3437500A

Exhibit A

1400 Brazil Avenue

2015F-07501
Certificate of Record
FORT SMITH DISTRICT
SEBASTIAN COUNTY, ARKANSAS
SHARON BROOKS
COUNTY CLERK & RECORDER
06/02/2015 01:16:34PM
Fee: 25.00 Pages: 3

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by James Westpfahl (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 10th day of March, 2015.

James Westpfahl

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, JEAN WALKER (Notary Public for the State of Arkansas), do hereby certify that James Westpfahl personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 10th day of March, 2015.

JEAN WALKER NOTARY PUBLIC REG # 12397094 MY COMMISSION EXPIRES 12/17/2023 CRAWFORD COUNTY, ARKANSAS

Notary Public of Arkansas
My Commission Expires: 12/17/2023

[Notary Seal]

EXHIBIT A

Legal Description

Lot 1 Less South 140 feet, Block E, Brazil & Jacob's Homesite Acres, Fort Smith, Sebastian County Arkansas. Less and except public roads and rights of way.

Exhibit B

1404 Brazil Avenue

2015F-10945 3
2015F-10945
Certificate of Record
FORT SMITH DISTRICT
SEBASTIAN COUNTY, ARKANSAS
SHARON BROOKS, CO CLERK & RECORDER
08/05/2015 03:19:54PM
Fee: 25.00 Pages: 3

STATE OF ARKANSAS)
)
COUNTY OF SEBASTIAN)

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by River of Life Church (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 25th day of April, 2015.

RIVER OF LIFE CHURCH

Phil Redding Pastor

Phil Redding, Pastor

STATE OF ARKANSAS)
)
COUNTY OF Crawford)

ACKNOWLEDGMENT

I, Shaun Kaye Redding, Notary Public for the State of Arkansas), do hereby certify that Phil Redding personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 25 day of April, 2015.

Shaun Kaye Redding
Notary Public of Crawford County
My Commission Expires: March 19, 2023
Commission # 12392322

[Notary Seal]

EXHIBIT A
Legal Description

Lot 2, less and except the South 140.00 feet thereof in Block "E", Brazil and Jacob's Homesite Acres, an Addition to the City of Fort Smith, Arkansas

Exhibit C

1500 Brazil Avenue

2015F-10946 3
2015F-10946
Certificate of Record
FORT SMITH DISTRICT
SEBASTIAN COUNTY, ARKANSAS
SHAROL BROOKS, CO CLERK & RECORDER
08/05/2015 03:19:55PH
Fee: 25.00 Pages: 3

STATE OF ARKANSAS)
)
COUNTY OF SEBASTIAN)

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by River of Life Church (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 25th day of April, 2015.

RIVER OF LIFE CHURCH

Phil Redding, Pastor

STATE OF ARKANSAS)
)
COUNTY OF Crawford)

ACKNOWLEDGMENT

I, Sharon Taye Redding, Notary Public for the State of Arkansas), do hereby certify that Phil Redding personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 25 day of April, 2015.

Sharon Taye Redding
Notary Public of Crawford County
My Commission Expires: March 19, 2023

[Notary Seal]

SHARON KAYE REDDING
Arkansas - Crawford County
Notary Public - Comm# 12392322
My Commission Expires Mar 19, 2023

EXHIBIT A

Legal Description

Lot 3 Block E, Brazil and Jacob's Homesite Acres, according to Plat Filed May 31, 1947, being a part of the North Half of Section 4, Township 7 North, Range 32 West, Sebastian County, Arkansas

Exhibit D

1504 Brazil Avenue

2015F-07502
Certificate of Record
FORT SMITH DISTRICT
SEBASTIAN COUNTY, ARKANSAS
SHARON BROOKS
COUNTY CLERK & RECORDER
06/02/2015 01:16:35PM
Fee: $15.00 Pages: 3

STATE OF ARKANSAS)
)
COUNTY OF SEBASTIAN)

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Jerry L. and Sharon Ann Marrs (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 17th day of March, 2015.

Jerry L Marrs

Sharon A Marrs

JERRY L. and SHARON ANN MARRS

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Tammera E Spears (Notary Public for the State of Arkansas), do hereby certify that Jerry and Sharon Marrs personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 17th day of March, 2015.

Tammera E Spears

Notary Public of Arkansas
My Commission Expires: May 1, 2018

[Notary Seal]

TAMMERA E. SPEARS COMM 12365340 NOTARY PUBLIC NOTARY SEAL COMM. EXP. MAY 1, 2018 SEBASTIAN COUNTY, ARKANSAS

EXHIBIT A

Legal Description

Lot Four (4), Block "E", Brazil and Jacobs Homesite Acres, Sebastian County, Arkansas.

Exhibit E

1600 Brazil Avenue

2015F-07503
Certificate of Record
FORT SMITH DISTRICT
SEBASTIAN COUNTY, ARKANSAS
SHARON BROOKS
COUNTY CLERK & RECORDER
06/02/2015 01:16:36PM
Fee: 25.00 Pages: 3

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Sam Reith (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 17th day of March, 2015.

Jerry Reith

Sam Reith

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Pulaski)

I, Sarah K. Turner (Notary Public for the State of Arkansas), do hereby certify that Sam Reith personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 17th day of March, 2015.

Sarah K Turner
Notary Public of Arkansas
My Commission Expires: 12/15/19

[Notary Seal]

SARAH K. TURNER NOTARY PUBLIC #12374217 EXPIRES 12-15-2019 PULASKI COUNTY AR

EXHIBIT A
Legal Description

Lot 5, Block E, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit F

1604 Brazil Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
04/09/2015 01:49:33PM
2015F-04689 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Eddie D. Jamison (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

CONNER & WINTERS LLP
4375 N VANTAGE DRIVE. STE 405
FAYETTEVILLE AR 72703

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 27 day of March, 2015.

EDDIE D. JAMISON

STATE OF ARKANSAS)
)
COUNTY OF Sebastian)

ACKNOWLEDGMENT

I, LINDA K MILLSPAW (Notary Public for the State of Arkansas), do hereby certify that EDDIE D. JAMISON personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 27 day of March, 2015.

Linda K. Millspaw
Notary Public of Arkansas
My Commission Expires: Sept 3, 2015

[Notary Seal]

LINDA K. MILLSPAW NOTARY PUBLIC SEBASTIAN COUNTY

EXHIBIT A

Lot 6, Block "E", Brazil and Jacob's Homesite Acres, now an Addition to the City of Fort Smith, Arkansas

Parcel ID 10741-0006-00005-00

1604 Brazil Avenue

Fort Smith, Arkansas 72908

Exhibit G

1700 Brazil Avenue

2015F-07504
Certificate of Record
FORT SMITH DISTRICT
SEBASTIAN COUNTY, ARKANSAS
SHARON BROOKS
COUNTY CLERK & RECORDER
06/02/2015 01:16:37PM
Fee: 25.00 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by John Swaim (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 19th day of March, 2015.

JOHN SWAIM

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Qiana M. McGhee (Notary Public for the State of Arkansas), do hereby certify that John Swaim personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 19th day of March, 2015.

Qiana M. McGhee
Notary Public of Sebastian County
My Commission Expires: December 5, 2021

[Notary Seal]

STATE OF NOTARY PUBLIC ARKANSAS
QIANA M. McGHEE
Notary Seal, State of Arkansas
Sebastian County
Commission No. 12385200
My Commission Expires Dec. 5, 2021

EXHIBIT A

Legal Description

Lot 7 Block E in Brazil & Jacobs Homesite Acres, an Addition to the City of Fort Smith, Sebastian County, Arkansas, according to Plat filed May 31, 1947.

Exhibit H

1704 Brazil Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 01:16:38PM
2015F-07505 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Ronnie Threet Revocable Trust (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16th day of March, 2015.

Ronnie Threet, on behalf of the
Ronnie Threet Revocable Trust

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Sarah K. Turner (Notary Public for the State of Arkansas), do hereby certify that Ronnie Threet personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16th day of March, 2015.

Sarah K. Turner
Notary Public of Arkansas
My Commission Expires: 12/15/2019

[Notary Seal]

SARAH K. TURNER NOTARY PUBLIC #12374217 EXPIRES 12-15-2019 PULASKI COUNTY, AR

EXHIBIT A

Legal Description

Lot 8A of Brazil & Jacobs Homesite Acres, Block E, Lots 8A-8C and 9A-9D, being a replat of Lots 8 and 9 Block E, Brazil and Jacobs Homesite Acres, an Addition to the City of Fort Smith, according to Plat filed July 29, 1998.

Exhibit I

1710 Brazil Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 01:16:39PM
2015F-07506 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Alan & Natasha Taylor (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16th day of March, 2015.

Natasha Taylor

Natasha Taylor

Alan Taylor

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, JEAN WALKER (Notary Public for the State of Arkansas), do hereby certify that Natasha and Alan Taylor personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16th day of March, 2015.

JEAN WALKER
NOTARY PUBLIC
REG # 12397094
MY COMMISSION EXPIRES
12/17/2023
CRAWFORD COUNTY, ARKANSAS

Notary Public of Arkansas
My Commission Expires: 12/17/23

[Notary Seal]

EXHIBIT A

Legal Description

Lot 8B, Block E, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit J

1714 Brazil Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 01:16:40PM
2015F-07507 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Alan & Natasha Taylor (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16th day of March, 2015.

Natasha Taylor

Natasha Taylor

Alan Taylor

Alan Taylor

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Jean Walker (Notary Public for the State of Arkansas), do hereby certify that Natasha & Alan Taylor personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16th day of March, 2015.

JEAN WALKER NOTARY PUBLIC REG # 12397094 MY COMMISSION EXPIRES 12/17/2023 CRAWFORD COUNTY, ARKANSAS

Jean Walker

Notary Public of Arkansas
My Commission Expires: 12/17/2023

[Notary Seal]

EXHIBIT A
Legal Description

Lot 8C, Block E, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit K

1718 Brazil Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 01:16:41PM
2015F-07508 Pages: 3

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Alan & Natasha Taylor (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16th day of March, 2015.

Natasha Taylor

Natasha Taylor

Alan Taylor

Alan Taylor

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, JEAN WALKER (Notary Public for the State of Arkansas), do hereby certify that Natasha & Alan Taylor personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16th day of March, 2015.

Jean Walker

Notary Public of Arkansas
My Commission Expires: 12/17/2023

[Notary Seal]

JEAN WALKER NOTARY PUBLIC REG # 12397094 MY COMMISSION EXPIRES 12/17/2023 CRAWFORD COUNTY, ARKANSAS

EXHIBIT A
Legal Description

Lot 9A, Block E, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit L

1722 Brazil Avenue

FORT SMITH DISTRICT
SEBASTIAN CO. AR - SHARON BROOKS
06/02/2015 01:16:42PM
2015F-07509 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Alan & Natasha Taylor (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16th day of March, 2015.

Natasha Taylor

Natasha Taylor

Alan Taylor

Alan Taylor

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Jean Walker (Notary Public for the State of Arkansas), do hereby certify that Natasha & Alan Taylor personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16th day of March, 2015.

Jean Walker

Notary Public of Arkansas
My Commission Expires: 12/17/2023

[Notary Seal]

JEAN WALKER NOTARY PUBLIC REG # 12397094 MY COMMISSION EXPIRES 12/17/2023 CRAWFORD COUNTY, ARKANSAS

EXHIBIT A
Legal Description

Lot 9B, Block E, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit M

1726 Brazil Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 01:16:43PM
2015F-07510 Pages: 3

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Alan & Natasha Taylor (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16th day of March, 2015.

Natasha Taylor

Natasha Taylor

Alan Taylor

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Jean Walker (Notary Public for the State of Arkansas), do hereby certify that Natasha and Alan Taylor personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16th day of March, 2015.

JEAN WALKER NOTARY PUBLIC REG # 12397094 MY COMMISSION EXPIRES 12/17/2023 CRAWFORD COUNTY, ARKANSAS

Notary Public of Arkansas
My Commission Expires: 12/17/2023

[Notary Seal]

EXHIBIT A
Legal Description

Lot 9C, Block E, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit N

1730 Brazil Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 02:36:32PM
2015F-07529 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Alan & Natasha Taylor (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16th day of March, 2015.

Natasha Taylor

Natasha Taylor

Alan Taylor

Alan Taylor

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Jean Walker (Notary Public for the State of Arkansas), do hereby certify that Natasha and Alan Taylor personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16th day of March, 2015.

Jean Walker

Notary Public of Arkansas
My Commission Expires: 12/17/2023

[Notary Seal]

JEAN WALKER NOTARY PUBLIC REG # 12397094 MY COMMISSION EXPIRES 12/17/2023 CRAWFORD COUNTY, ARKANSAS

EXHIBIT A
Legal Description

Lot 9D, Block E, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit O

1804 Brazil Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 02:36:33PM
2015F-07530 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Kralicek & Flusche LLC (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16TH day of MARCH, 2015.

Jerome Flusche, on behalf of
Kralicek and Flusche LLC

Jerome Flusche

STATE OF ARKANSAS)
)
COUNTY OF SEBASTIAN)

ACKNOWLEDGMENT

I, KIMBERLY KELLY (Notary Public for the State of Arkansas), do hereby certify that JEROME FLUSCHE personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16TH day of MARCH, 2015.

Kimberly K. Kelly
Notary Public of Arkansas
My Commission Expires: 03/11/2020

[Notary Seal]

EXHIBIT A

Legal Description

LOT TEN (10), BLOCK "E" OF BRAZIL & JACOBS HOMESITE ACRES, AS SHOWN BY PLAT FILED MAY 31, 1947.

Exhibit P

1900 Brazil Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 02:36:34PM
2015F-07531 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Kralicek & Flusche LLC (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16TH day of MARCH, 2015.

Jerome Flusche, on behalf of
Kralicek and Flusche LLC

Jerome Flusche

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF SEBASTIAN)

I, KIMBERLY KELLY (Notary Public for the State of Arkansas), do hereby certify that JEROME FLUSCHE personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16TH day of MARCH, 2015.

Kimberly K. Kelly
Notary Public of Arkansas
My Commission Expires: 03/11/2020

[Notary Seal]

KIMBERLY K. KELLY
Commission No. 12376788
NOTARY PUBLIC
My Commission Expires March 11, 2020
CRAWFORD CO., ARKANSAS

EXHIBIT A
Legal Description

Lot 11, Block E, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit Q

5800 Jenny Lind Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
04/09/2015 01:49:34PM
2015F-04690 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by William R. Newbold Living Trust (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

CONNER & WINTERS LLP
4375 N VANTAGE DRIVE. STE 405
FAYETTEVILLE AR 72703

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 27 day of March, 2015.

William R. Newbold
WILLIAM R. NEWBOLD LIVING TRUST

TRUSTEE
TITLE

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, LINDA K. MILLSPAW (Notary Public for the State of Arkansas), do hereby certify that WILLIAM R. NEWBOLD personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 27 day of March, 2015.

Linda K. Millspaw
Notary Public of Arkansas
My Commission Expires: Sept 3, 2015

[Notary Seal]

EXHIBIT A

North (69) Sixty Nine Feet of Lots Twelve (12), Thirteen (13), and Fourteen (14) in Block "E", Brazil and Jacob's Homesite Acres, According to plat filed May 31, 1947. Being a part of the North Half of Section 4, Township 7 North of Range 32 West.

Parcel ID 10741-0014-00005-03

5800 Jenny Lind Road

Fort Smith, Arkansas 72908

Exhibit R

5812 Jenny Lind Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:24:10PM
2015F-07566 Pages: 3

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Reith Properties LLC (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 17th day of March, 2015.

Jerry Reith

Sam Reith

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Pulaski)

I, Sarah K. Turner (Notary Public for the State of Arkansas), do hereby certify that Sam Reith personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 17th day of March, 2015.

Sarah K. Turner
Notary Public of Arkansas
My Commission Expires: 12/15/19

[Notary Seal]

SARAH K. TURNER NOTARY PUBLIC #12374217 EXPIRES 12-15-2019 PULASKI COUNTY, AR

EXHIBIT A
Legal Description

The south 69.5 feet of the north 139 feet of Lots 12, 13, and 14, Block E, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit S

5814 Jenny Lind Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:24:11PM
2015F-07567 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Dan Hong and Phuong Nguyen (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 19th day of March, 2015.

Dan Nguyen Phuong Nguyen

DAN HONG AND PHUONG NGUYEN

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Lisa R. Smith (Notary Public for the State of Arkansas), do hereby certify that Dan Hong & Phuong Nguyen personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 19th day of March, 2015.

Lisa Robertson Smith

Notary Public of Arkansas
My Commission Expires: 9-1-2022

[Notary Seal]

LISA ROBERTSON SMITH
COMM. #12389444
Notary Public - Arkansas
Sebastian County
My Comm. Expires Sep. 1, 2022

EXHIBIT A

Legal Description

The North 69.5 feet of the South 139 feet of Lots 12, 13 and 14 in Block "E", Brazil and Jacob's Homesite Acres, an Addition to the City of Fort Smith, Arkansas.

Exhibit T

5815 Jenny Lind Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:24:12PM
2015F-07568 Pages: 3

STATE OF ARKANSAS)
)
COUNTY OF SEBASTIAN)

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by John Przbysz (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 17 day of March, 2015.

John Przbysz

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Alicia Triplett (Notary Public for the State of Arkansas), do hereby certify that John Przybysz personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 17 day of March, 2015.

Alicia Triplett
Notary Public of Arkansas
My Commission Expires: October 23, 2019

[Notary Seal]

ALICIA TRIPLETT
SEBASTIAN COUNTY
NOTARY PUBLIC - ARKANSAS
My Commission Expires October 23, 2019
Commission No. 12373623

EXHIBIT A
Legal Description

The north 69.50 feet of the South 139 feet of Lot 1 and 2, Block D, of Brazil and Jacob's Homesite Acres, , as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit U

5816 Jenny Lind Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:24:13PM
2015F-07569 Pages: 3

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Kralicek & Flusche LLC (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16TH day of MARCH, 2015.

Jerome Flusche, on behalf of
Kralicek and Flusche LLC

Jerome Flusche

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF SEBASTIAN)

I, KIMBERLY KELLY (Notary Public for the State of Arkansas), do hereby certify that JEROME FLUSCHE personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16TH day of MARCH, 2015.

Kimberly K. Kelly
Notary Public of Arkansas
My Commission Expires: 03/11/2020

[Notary Seal]

KIMBERLY K. KELLY
Commission No. 12371788
NOTARY PUBLIC
My Commission Expires March 11, 2020
CRAWFORD CO., ARKANSAS

EXHIBIT A

Legal Description

The South 69.5 feet of Lots Twelve (12), Thirteen (13) and Fourteen (14) in Block "E" of Brazil & Jacobs Homesite Acres, an Addition to the City of Fort Smith, Arkansas.

Exhibit V

5818 Jenny Lind Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:24:14PM
2015F-07570 Pages: 3

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Maham LLC (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 17 day of March, 2015.

John Przbysz on behalf of Maham LLC

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Alicia Triplett (Notary Public for the State of Arkansas), do hereby certify that John Przybysz personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 17 day of March, 2015.

Alicia Triplett
Notary Public of Arkansas
My Commission Expires: October 23, 2019

[Notary Seal]

ALICIA TRIPLETT
SEBASTIAN COUNTY
NOTARY PUBLIC - ARKANSAS
My Commission Expires October 23, 2019
Commission No. 12373623

EXHIBIT A

Legal Description

The North 92 Feet of Lots 15, 16 and 17, Block E in Brazil Jacobs Homesite Addition to the City of Fort Smith, Arkansas.

Exhibit W

5903 Jenny Lind Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:24:15PM
2015F-07571 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by John Przbysz (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 17 day of March, 2015.

John Przbysz

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Alicia Triplett (Notary Public for the State of Arkansas), do hereby certify that John Przybysz personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 17 day of March, 2015.

Alicia Triplett
Notary Public of Arkansas
My Commission Expires: October 23, 2019

[Notary Seal]

ALICIA TRIPLETT
SEBASTIAN COUNTY
NOTARY PUBLIC - ARKANSAS
My Commission Expires October 23, 2019
Commission No. 12373623

EXHIBIT A

Legal Description

Lots A and B, Brazil & Jacobs Homesite Addition, Lots A,B,C,D and E, being a replat of the Corrective Plat of a replat of Lot 6A and Lots 5,6,7 and 8 of Block D of Brazil and Jacobs Homesite Addition, an Addition to the City of Fort Smith, Arkansas.

Exhibit X

5904 Jenny Lind Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:31:16PM
2015F-07573 Pages: 3

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Maham LLC (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 17 day of March, 2015.

John Przybysz, on behalf of Maham LLC

John Przybysz

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Alicia Triplett (Notary Public for the State of Arkansas), do hereby certify that John Przybysz personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 17 day of March, 2015.

Alicia Triplett
Notary Public of Arkansas
My Commission Expires: October 23, 2019

[Notary Seal]

ALICIA TRIPLETT
SEBASTIAN COUNTY
NOTARY PUBLIC - ARKANSAS
My Commission Expires October 23, 2019
Commission No. 12373623

EXHIBIT A

Legal Description

Part of Lots 15, 16, and 17, Block E, Brazil & Jacob's Homesite Acres to the City of Fort Smith, Arkansas, being more particularly described as follows: Commencing at the Southeast corner of Lot 15, Block E, Homesite Acres, same being the West right of way line of Jenny Lind. Thence along the East line of said Lot 15 and along said right of way line, North 93.6 feet to a set rebar and the point of beginning. Thence leaving said right of way line and said East line of Lot 15, South 89 degrees 48 minutes 03 seconds West, 231.83 feet to a set rebar on the West line of Lot 17, Block E. Thence along said West line, North 00 degrees 05 minutes 43 seconds West, 92.26 feet to a set rebar. Thence leaving said West line, North 89 degrees 32 minutes 21 second East, 231.99 feet to an existing iron pin on the East line of Lot 15, Block E, Brazil & Jacob's Homesite Acres and the West right of way line of Jenny Lind. Thence along said right of way line and the East line of said Lot 15, South 93.32 feet to the point of the beginning.

Exhibit Y

5907 Jenny Lind Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:31:17PM
2015F-07574 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Harold Corley (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 17th day of March, 2015.

Harold Corley

Harold Corley

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Pulaski)

I, Sarah K. Turner (Notary Public for the State of Arkansas), do hereby certify that Harold Corley personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 17th day of March, 2015.

Sarah K. Turner
Notary Public of Arkansas
My Commission Expires: 12/15/2019

[Notary Seal]

SARAH K. TURNER NOTARY PUBLIC #12374217 EXPIRES 12-15-2019 PULASKI COUNTY, AR

EXHIBIT A

Legal Description

The South 69.50 feet of Lots 7 and 8, Block D, Brazil and Jacob's Homesite Acres, an addition to the City of Fort Smith, Arkansas, according to plat filed May 31, 1947.

Exhibit Z

5908 Jenny Lind Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:31:18PM
2015F-07575 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Potts Family Enterprises/David Potts (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16th day of March, 2015.

David Potts, on behalf of
Potts Family Enterprises

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Leacretia Swearingen, (Notary Public for the State of Arkansas), do hereby certify that _____ personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16th day of March, 2015.

Leacretia Swearingen
Notary Public of Arkansas
My Commission Expires: Aug 14, 2017

[Notary Seal]

LEACRETIA SWEARINGEN
COMM. NO. 12361666
NOTARY PUBLIC
SEBASTIAN COUNTY, AR
COMM. EXP. 8-14-17

EXHIBIT A

Legal Description

The South 93.60 feet of Lots 15, 16 and 17, Block "E", of Brazil and Jacob's Homesite Acres, an Addition to the City of Fort Smith, Arkansas.

Exhibit AA

1322, 1324, 1326, 1328 Jacobs Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 02:36:36PM
2015F-07533 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Kralicek & Flusche LLC (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16TH day of MARCH, 2015.

Jerome Flusche, on behalf of
Kralicek and Flusche LLC

Jerome Flusche

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF SEBASTIAN)

I, KIMBERLY KELLY (Notary Public for the State of Arkansas), do hereby certify that JEROME FLUSCHE personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16TH day of MARCH, 2015.

Kimberly K Kelly
Notary Public of Arkansas
My Commission Expires: 03/11/2020

[Notary Seal] KIMBERLY K. KELLY Commission No. 12375788 NOTARY PUBLIC My Commission Expires March 11, 2020 CRAWFORD CO., ARKANSAS

EXHIBIT A

Legal Description

Lot 9, and that part of Ferguson Street as closed by City Ordinance, Block G, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit BB

1401 Jacobs Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 02:36:37PM
2015F-07534 Pages: 4

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Rockie and Barbara Hamm (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

4/30

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 26th day of March, 2015.

Rockie Hamm

Rockie Hamm

Barbara Hamm

Barbara Hamm

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Washington)

I, Rick Woods (Notary Public for the State of Arkansas), do hereby certify that Rockie Hamm personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 26th day of March, 2015.

Notary Public of _____
My Commission Expires:_____

[Notary Seal]

RICK WOODS
MY COMMISSION # 12346637
EXPIRES: February 23, 2016
Washington County

STATE OF ARKANSAS)
)
COUNTY OF Washington)

ACKNOWLEDGMENT

I, Rick Woods (Notary Public for the State of Arkansas), do hereby certify that Barbara Hamm personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 26th day of March, 2015.

Notary Public of _____
My Commission Expires: _____

[Notary Seal]

RICK WOODS
NOTARY PUBLIC
MY COMMISSION # 12346637
EXPIRES: February 23, 2016
Washington County

EXHIBIT A

Legal Description

Beginning at the Southwest Corner of Lot 28, Block "E", Brazil and Jacob Homesite Acres, Sebastian County, Arkansas; thence North 139.1 feet; thence East 75 feet; thence South 139.1 feet; thence West 75 feet to the place of beginning. (Being a part of Lot 28, Block "E", Brazil & Jacob's Homesite Acres Addition to the City of Fort Smith, Sebastian County, Arkansas.)

Exhibit CC

1405 Jacobs Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 02:36:38PM
2015F-07535 Pages: 5

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Rockie and Barbara Hamm (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 26 day of March, 2015.

Perry Johnson

Barbara Hamm

Melva Johnson

Rockie Hamm

STATE OF ARKANSAS)
)
COUNTY OF Washington)

ACKNOWLEDGMENT

I, Rick Woods (Notary Public for the State of Arkansas), do hereby certify that Perry Johnson personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 26 day of March, 2015.

Notary Public of _____
My Commission Expires: _____

[Notary Seal]

RICK WOODS
MY COMMISSION # 12346637
EXPIRES: February 23, 2016
Washington County

STATE OF ARKANSAS)
)
COUNTY OF Washington)

ACKNOWLEDGMENT

I, Rick Woods (Notary Public for the State of Arkansas), do hereby certify that Melva Johnson personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 26th day of March, 2015.

Notary Public of _____
My Commission Expires:_____

[Notary Seal]

RICK WOODS
MY COMMISSION # 12346637
EXPIRES: February 23, 2016
Washington County

STATE OF ARKANSAS)
)
COUNTY OF Washington)

ACKNOWLEDGMENT

I, Rick Woods (Notary Public for the State of Arkansas), do hereby certify that Rockie Hamm personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 26th day of March, 2015.

Notary Public of _____
My Commission Expires:_____

[Notary Seal]

RICK WOODS
MY COMMISSION # 12346637
EXPIRES: February 23, 2016
Washington County

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Washington)

I, Rick Woods (Notary Public for the State of Arkansas), do hereby certify that Barbara Hamm personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 26th day of March, 2015.

Notary Public of _____
My Commission Expires:_____

[Notary Seal]

RICK WOODS
MY COMMISSION # 12346637
EXPIRES: February 23, 2016
Washington County

EXHIBIT A

Legal Description

The East 25.00 feet of the South half of Lot 28 and the West 50.00 feet of the South half of Lot 27, Block E, Brazil and Jacobs Homesite Acres, now an addition to the City of Fort Smith, Arkansas.

Exhibit DD

1409 Jacobs Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 02:36:39PM
2015F-07536 Pages: 3

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Neal Morrison and Suzanne Morrison Holloway (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16th day of March, 2015.

Neil Morrison

Neil S Morrison

Suzanne Morrison Holloway

Suzanne Holloway

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Jean Walker (Notary Public for the State of Arkansas), do hereby certify that Neal Morrison & Suzanne Holloway personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16th day of March, 2015.

JEAN WALKER NOTARY PUBLIC REG # 12397094 MY COMMISSION EXPIRES 12/17/2023 CRAWFORD COUNTY, ARKANSAS

Jean Walker

Notary Public of Arkansas
My Commission Expires: 12/17/2023

[Notary Seal]

EXHIBIT A

Legal Description

Part of Lots 26 and 27, Block "E", Brazil and Jacobs Addition to the City of Fort Smith, Sebastian County, Arkansas, more particularly described as follows: Beginning at the Northeast corner of said Lot 26, thence 75 feet West to the point of beginning; thence West 75 feet; thence South 139.1 feet; thence East 75 feet; thence North 139.1 feet to the point of beginning.

Exhibit EE

1500 Jacobs Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 02:36:40PM
2015F-07537 Pages: 3

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Barbara Wilkinson (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16th day of March, 2015.

Barbara Wilkinson

Barbara G Wilkinson

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Pulaski)

I, Sarah K. Turner (Notary Public for the State of Arkansas), do hereby certify that Barbara G. Wilkinson personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16th day of March, 2015.

Sarah K. Turner
Notary Public of Arkansas
My Commission Expires: 12/15/2019

[Notary Seal]

SARAH K. TURNER NOTARY PUBLIC #12374217 EXPIRES 12-15-2019 PULASKI COUNTY AR

EXHIBIT A
Legal Description

Lot 3, Block H, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit FF

1504 Jacobs Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 02:36:41PM
2015F-07538 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Mance & Ethel Fowler (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16th day of March, 2015.

Mance Fowler

Mance W. Fowler

Ethel ~~Wayne~~ Fowler

Ethel Fowler

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Pulaski)

I, Sarah K. Turner (Notary Public for the State of Arkansas), do hereby certify that Mance and Ethel Fowler personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16th day of March, 2015.

Sarah K. Turner
Notary Public of Arkansas
My Commission Expires: 12/15/2019

[Notary Seal]

SARAH K. TURNER NOTARY PUBLIC #12374217 EXPIRES 12-15-2019 PULASKI COUNTY, AR.

EXHIBIT A
Legal Description

Lot 4, Block H, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit GG

1600 Jacobs Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:08:11PM
2015F-07547 Pages: 3

STATE OF ARKANSAS)
)
COUNTY OF SEBASTIAN)

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Reith Properties LLC (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 17th day of March, 2015.

Jerry Reith
Jerry Reith

Sam Reith, on behalf of
Reith Properties LLC

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Pulaski)

I, Sarah K. Turner (Notary Public for the State of Arkansas), do hereby certify that Sam Reith personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 17th day of March, 2015.

Sarah K. Turner
Notary Public of Arkansas
My Commission Expires: 12/15/2019

[Notary Seal]

SARAH K. TURNER NOTARY PUBLIC #12374217 EXPIRES 12-15-2019 PULASKI COUNTY, AR

EXHIBIT A
Legal Description

Lot 5B, Block H, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:08:13PM
2015F-07549 Pages: 3

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Reith Properties LLC (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 17th day of March, 2015.

Sam Reith, on behalf of
Reith Properties LLC

Jerry Reith

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Pulaski)

I, Sarah K Turner (Notary Public for the State of Arkansas), do hereby certify that Sam Reith personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 17th day of March, 2015.

Sarah K. Turner
Notary Public of Arkansas
My Commission Expires: 12/15/2019

[Notary Seal]

SARAH K. TURNER
NOTARY
PUBLIC
#12374217
EXPIRES
12-15-2019
PULASKI COUNTY, AR

EXHIBIT A
Legal Description

Lot 5C, Block H, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:08:12PM
2015F-07548 Pages: 3

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Reith Properties LLC (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 17th day of March, 2015.

Jerry Reith

Sam Reith, on behalf of
Reith Properties LLC

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Pulaski)

I, Sarah K. Turner (Notary Public for the State of Arkansas), do hereby certify that Sam Reith personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 17th day of March, 2015.

Sarah K. Turner
Notary Public of Arkansas
My Commission Expires: 12/15/2019

[Notary Seal]

SARAH K. TURNER NOTARY PUBLIC #12374217 EXPIRES 12-15-2019 PULASKI COUNTY AR

EXHIBIT A
Legal Description

Lot 5D, Block H, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit HH

1601 Jacobs Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:08:14PM
2015F-07550 Pages: 3

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Carolyn Nichols (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16th day of March, 2015.

Carolyn Nichols

Carolyn K. Nichols

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Sarah K. Turner (Notary Public for the State of Arkansas), do hereby certify that Carolyn Nichols personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16th day of March, 2015.

Sarah K. Turner
Notary Public of Arkansas
My Commission Expires: 12/15/2019

[Notary Seal]

SARAH K. TURNER NOTARY PUBLIC #12374217 EXPIRES 12-15-2019 PULASKI COUNTY, AR

EXHIBIT A
Legal Description

Lot 24, Block E, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit II

1604 Jacobs Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:08:15PM
2015F-07551 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Rayma Watts (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 5 day of May, 2015.

Rayma Watts
RAYMA WATTS

STATE OF ~~ARKANSAS~~ TEXAS)
) ACKNOWLEDGMENT
COUNTY OF BOWIE)

I, CHRISTOPHER M. MCGEE (Notary Public for the State of TEXAS), do hereby certify that RAYMA WATTS personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 12 day of MAY, 2015.

Notary Public of TEXAS
My Commission Expires: 11-28-15

[Notary Seal]

CHRISTOPHER MICHAEL MCGEE
Notary Public, State of Texas
My Commission Expires
November 28, 2015

EXHIBIT A

Lot 6, Block H, Brazil and Jacobs Homesite Acres an Addition to the City of Fort Smith, Arkansas as per plat on file in the office of the Circuit Clerk of Sebastian County, Arkansas

Exhibit JJ

1605 Jacobs Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:08:16PM
2015F-07552 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by K. Wayne and Charlotte S. King (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 18 day of March, 2015.

K. WAYNE and CHARLOTTE S. KING

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Crawford)

I, Brandie Wingfield (Notary Public for the State of Arkansas), do hereby certify that Wayne and Charlotte King personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 18 day of March, 2015.

Notary Public of Arkansas
My Commission Expires: Oct. 23, 2024

[Notary Seal]

BRANDIE WINGFIELD
Notary Seal, State of Arkansas
Crawford County
Commission #12401541
My Commission Expires Oct. 23, 2024

EXHIBIT A

Legal Description

Lot 23, Block "E", Brazil & Jacob's Homesite Acres now an Addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit KK

1700 Jacobs Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:08:17PM
2015F-07553 Pages: 3

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Raymond Flowers (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16th day of March, 2015.

Raymond Flowers

Raymond J Flowers

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Sarah K. Turner (Notary Public for the State of Arkansas), do hereby certify that Raymond Flowers personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16th day of March, 2015.

Sarah K. Turner
Notary Public of Arkansas
My Commission Expires: 12/15/2019

[Notary Seal]

SARAH K. TURNER NOTARY PUBLIC #12374217 EXPIRES 12-15-2019 PULASKI COUNTY AR

EXHIBIT A
Legal Description

Lot 7, Block H, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit LL

1701 Jacobs Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:08:18PM
2015F-07554 Pages: 3

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Harry Edmund Smith (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16th day of March, 2015.

Harry Smith

Harry Smith

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Sarah K. Turner (Notary Public for the State of Arkansas), do hereby certify that Harry Smith personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16th day of March, 2015.

Sarah K. Turner
Notary Public of Arkansas
My Commission Expires: 12/15/2019

[Notary Seal]

SARAH K. TURNER NOTARY PUBLIC #12374217 EXPIRES 12-15-2019 PULASKI COUNTY, AR

EXHIBIT A
Legal Description

Lot 22, Block E, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit MM

1704 Jacobs Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:08:19PM
2015F-07555 Pages: 3

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Mary Winters (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16th day of March, 2015.

Mary Winters

Mary F. Winters

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Pulaski)

I, Sarah K. Turner (Notary Public for the State of Arkansas), do hereby certify that Mary F. Winters personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16th day of March, 2015.

Sarah K. Turner
Notary Public of Arkansas
My Commission Expires: 12/15/2019

[Notary Seal]

SARAH K. TURNER NOTARY PUBLIC #12374217 EXPIRES 12-15-2019 PULASKI COUNTY AR

EXHIBIT A
Legal Description

Lot 8, Block H, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit NN

1705 Jacobs Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:08:20PM
2015F-07556 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Junior P. and Jane Winters (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this _____ day of _____, 2015.

Junior P Winters
Jane E. Roann winters
JUNIOR P. and JANE WINTERS

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, LINDA MILLSPAW (Notary Public for the State of Arkansas), do hereby certify that JUNIOR P. AND JANE WINTERS personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 17 day of March, 2015.

Linda K Millspaw
Notary Public of _____
My Commission Expires: Sept 3, 2015

[Notary Seal]

LINDA K. MILLSPAW NOTARY PUBLIC SEBASTIAN COUNTY, ARK.

EXHIBIT A

Legal Description

Lot Twenty-one (21) in Block "E" of Brazil & Jacob's Homesite Acres, as shown by Plat filed May 31, 1947, being a part of the North Half of Section 4, Township 7 North, Range 32 West, Fort Smith, Sebastian County, Arkansas. Less and except public roads and rights of way.

Exhibit OO

1800 Jacobs Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:24:06PM
2015F-07562 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Larry Linson (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16th day of March, 2015.

Larry Linson

Larry Linson

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, JEAN WALKER (Notary Public for the State of Arkansas), do hereby certify that Larry Linson personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16th day of March, 2015.

Jean Walker

Notary Public of Arkansas
My Commission Expires: 12/17/2023

[Notary Seal]

JEAN WALKER NOTARY PUBLIC REG # 12397094 MY COMMISSION EXPIRES 12/17/2023 CRAWFORD COUNTY, ARKANSAS

EXHIBIT A

Legal Description

Lot 9 in Block "H" in Brazil and Jacobs Homesite Acres, as shown by plat filed May 31, 1947.

Exhibit PP

1801 Jacobs Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:24:07PM
2015F-07563 Pages: 3

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Wanda Morgan (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16th day of March, 2015.

Wanda Morgan

Wanda Morgan

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Sarah K. Turner (Notary Public for the State of Arkansas), do hereby certify that Wanda Morgan personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16th day of March, 2015.

Sarah K. Turner
Notary Public of Arkansas
My Commission Expires: 12/15/2019

[Notary Seal]

SARAH K. TURNER NOTARY PUBLIC #12374217 EXPIRES 12-15-2019 PULASKI COUNTY, AR.

EXHIBIT A

Legal Description

Lot 20, Block "E", of BRAZIL AND JACOBS HOMESITE ACRES, now an addition to the City of Fort Smith, Arkansas.

Exhibit QQ

1804 Jacobs Avenue

2014F-09329 3
2014F-09329
Certificate of Record
FORT SMITH DISTRICT
SEBASTIAN COUNTY, ARKANSAS
SHARON BROOKS CIRCUIT CLERK & RECORDER
07/10/2014 01:53:36PM
Fee: 25.00 Pages: 3

STATE OF ARKANSAS)
)
COUNTY OF SEBASTIAN)

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Debra Keith (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has contamination within or beneath it that has or may in the future migrate from the former facility located at 6400 Jenny Lind Avenue in Fort Smith, Arkansas. As a result of that migration, groundwater within or beneath the Property has been determined by the Arkansas Department of Environmental Protection to be unsafe for consumptive uses, must be subject to testing and monitoring and restricted from withdrawal for any use except remediation, testing and monitoring.

2. The drilling of wells for and the withdrawal of water for domestic, commercial, irrigation, agricultural or landscape or any other consumptive use is prohibited.

3. Declarant has for herself and all of her tenants, subtenants, successors and assigns to any portion of the Property, settled and released all claims for property damage arising from, related to, or in connection with the presence of trichloroethylene (TCE) or any other pollution or contaminants alleged to have been released from the former Whirlpool manufacturing facility located at 6400 Jenny Lind Avenue in Fort Smith, Arkansas, whether such release and/or migration has yet occurred or occurs in the future.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and her successors and assigns, shall

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____. 2014F-09329

5. Except as otherwise limited by Arkansas law, this Declaration shall have perpetual duration. If Arkansas law hereafter limits the period during which covenants may run with the land, then to the extent consistent with such law, this Declaration shall automatically be extended at the expiration of such period for successive periods of 10 years each, unless terminated as provided herein. Notwithstanding the above, if any of the covenants, conditions, restrictions, or other provisions of this Declaration shall be unlawful, void, or voidable for violation of the rule against perpetuities, then such provisions shall continue only until 21 years after the death of the last survivor of the now living descendants of Elizabeth II, Queen of England.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 9th day of July, 2014.

DEBRA KEITH

Debra E. Keith

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, Heather Sanford (Notary Public for the State of Arkansas), do hereby certify that Debra Keith personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 9th day of July, 2014.

Heather J. Sanford
Notary Public of Arkansas
My Commission Expires: 9/1/21

[Notary Seal]

HEATHER J. SANFORD
Notary Public - Arkansas
Washington County
My Commission Expires Sept. 1, 2021
12383903

EXHIBIT A
Legal Description

Lot 10, Block H, Brazil & Jacob's Homesite Acres now an addition to the City of Fort Smith, Arkansas.

Exhibit RR

1805 Jacobs Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:24:08PM
2015F-07564 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Kralicek & Flusche LLC (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 16TH day of MARCH, 2015.

Name:
Jerome Flusche

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF SEBASTIAN)

I, KIMBERLY KELLY (Notary Public for the State of Arkansas), do hereby certify that JEROME FLUSCHE personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 16TH day of MARCH, 2015.

Kimberly K Kelly
Notary Public of Arkansas
My Commission Expires: 03/11/2020

[Notary Seal]

EXHIBIT A
Legal Description

Lot 19, Block E, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit SS

1808 Jacobs Avenue

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) CONDITIONS AND RESTRICTIONS
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Oscar T. Long, Jr. and Delmar Long (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 10 day of July, 2015.

Delmar Long

OSCAR T. LONG, JR. and DELMAR LONG

STATE OF ARKANSAS)
)
COUNTY OF Crawford)

ACKNOWLEDGMENT

I, Jeri Partlow (Notary Public for the State of Arkansas), do hereby certify that Delmar Long personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 10 day of July, 2015.

Jeri Partlow

Notary Public of Crawford
My Commission Expires: 2-8-2024

[Notary Seal]

JERI L. PARTLOW
CRAWFORD COUNTY
NOTARY PUBLIC - ARKANSAS
My Commission Expires February 08, 2024
Commission No. 12396180

EXHIBIT A
Legal Description

Lot 11, Block H, Brazil & Jacob's Homesite Acres, as shown by plat filed May 31, 1947.

Exhibit TT

1809 Jacobs Avenue

2014F-04489 5
2014F-04489
Certificate of Record
FORT SMITH DISTRICT
SEBASTIAN COUNTY, ARKANSAS
SHARON BROOKS, CO CLERK & RECORDER
04/08/2014 11:07:19AM
Fee: 35.00 Pages: 5

STATE OF ARKANSAS)
)
COUNTY OF SEBASTIAN)

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Roberta Hindmarsh, Arthur R. Scroggins, Jr., Carol Scroggins, and Marie Scroggins, (the "Declarants").

W I T N E S S E T H

WHEREAS, Declarants are the owner of the real property described on Exhibit A ("Property") and desire to restrict the Property as provided herein.

NOW THEREFORE, Declarants hereby declare that all of the Property shall be held, sold, used and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has contamination within or beneath it that has or may in the future migrate from the former facility located at 6400 Jenny Lind Avenue in Fort Smith, Arkansas. As a result of that migration, groundwater within or beneath the Property has been determined by the Arkansas Department of Environmental Protection to be unsafe for consumptive uses, must be subject to testing and monitoring and restricted from withdrawal for any use except remediation, testing and monitoring.

2. The drilling of wells for and the withdrawal of water for domestic, commercial, irrigation, agricultural or landscape or any other consumptive use is prohibited.

3. Declarants have for themselves and all of their tenants, subtenants, successors and assigns to any portion of the Property, settled and released all claims for property damage arising from, related to, or in connection with the presence of trichloroethylene (TCE) or any other pollution or contaminants alleged to have been released from the former Whirlpool manufacturing facility located at 6400 Jenny Lind Avenue in Fort Smith, Arkansas, whether such release and/or migration has yet occurred or occurs in the future.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarants and their successors and assigns, shall

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. Except as otherwise limited by Arkansas law, this Declaration shall have perpetual duration. If Arkansas law hereafter limits the period during which covenants may run with the land, then to the extent consistent with such law, this Declaration shall automatically be extended at the expiration of such period for successive periods of 10 years each, unless terminated as provided herein. Notwithstanding the above, if any of the covenants, conditions, restrictions, or other provisions of this Declaration shall be unlawful, void, or voidable for violation of the rule against perpetuities, then such provisions shall continue only until 21 years after the death of the last survivor of the now living descendants of Elizabeth II, Queen of England.

IN WITNESS WHEREOF, the undersigned Declarants have executed this Declaration, this 2nd day of April, 2014.

ROBERTA HINDMARSH

Roberta Hindmarsh

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, LINDA K. MILLSPAW (Notary Public for the State of Arkansas), do hereby certify that Roberta Hindmarsh personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 2 day of apr, 2014.

Linda K. Millspaw

Notary Public of _____
My Commission Expires: Sept 3, 2015

[Notary Seal]

LINDA K. MILLSPAW NOTARY PUBLIC SEBASTIAN COUNTY, ARKANSAS

ARTHUR R. SCROGGINS, JR.

Arthur R Scroggins Jr

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, LINDA K. MILLSPAW (Notary Public for the State of Arkansas), do hereby certify that Arthur R. Scroggins, Jr., personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 2 day of Apr, 2014.

Linda K. Millspaw
Notary Public of _____
My Commission Expires: Sept 3, 2015

[Notary Seal]

LINDA K. MILLSPAW NOTARY PUBLIC SEBASTIAN COUNTY, ARKANSAS

CAROL SCROGGINS

Carol Scroggins

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, LINDA K. MILLSPAW (Notary Public for the State of Arkansas), do hereby certify that Carol Scroggins personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 2 day of Apr, 2014.

Linda K. Millspaw
Notary Public of _____
My Commission Expires: Sept 3, 2015

[Notary Seal]

LINDA K. MILLSPAW NOTARY PUBLIC SEBASTIAN COUNTY, ARKANSAS

MARIE SCROGGINS

Marie Scroggins

STATE OF ARKANSAS)
) ACKNOWLEDGMENT
COUNTY OF Sebastian)

I, LINDA K MILLSPAW (Notary Public for the State of Arkansas), do hereby certify that Marie Scroggins personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 2 day of Apr., 2014.

Linda K. Millspaw
Notary Public of _____
My Commission Expires: Sept 3, 2015

[Notary Seal]

LINDA K. MILLSPAW NOTARY PUBLIC SEBASTIAN COUNTY, ARKANSAS

EXHIBIT A
Legal Description

Lot 18, Block E, Brazil & Jacob's Homesite Acres now an addition to the City of Fort Smith, Arkansas.

Exhibit UU

1900 Jacobs Avenue

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) CONDITIONS AND RESTRICTIONS
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Oscar T. Long, Jr. and Delmar Long (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 10 day of July, 2015.

Delmar Long

OSCAR T. LONG, JR. and DELMAR LONG

STATE OF ARKANSAS)
)
COUNTY OF Crawford)

ACKNOWLEDGMENT

I, Jeri Partlow (Notary Public for the State of Arkansas), do hereby certify that Delmar Long personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 10 day of July, 2015.

Jeri Partlow

Notary Public of Crawford
My Commission Expires: 2-8-2024

[Notary Seal]

JERI L. PARTLOW
CRAWFORD COUNTY
NOTARY PUBLIC - ARKANSAS
My Commission Expires February 08, 2024
Commission No. 12398130

EXHIBIT A
Legal Description

Lot 12, Block H, Brazil & Jacob's Homesite Acres, as shown by plat filed May 31, 1947.

Exhibit VV

1904 Jacobs Avenue

2015F-10675 3
2015F-10675
Certificate of Record
FORT SMITH DISTRICT
SEBASTIAN COUNTY, ARKANSAS
CERTIFIED, FILED & RECORDED
07/31/2015 02:35:58PM
Fee: 25.00 Pages: 3

STATE OF ARKANSAS)
)
COUNTY OF SEBASTIAN)

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Glenda Wilson (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 13th day of April, 2015.

PROPERTY OWNER, GLENDA WILSON

Glenda Wilson

STATE OF ARKANSAS)
)
COUNTY OF Benton) ACKNOWLEDGMENT

I, Caitlin Shemin (Notary Public for the State of Arkansas), do hereby certify that Glenda Wilson personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 13th day of April, 2015.

CAITLIN V. SHEMIN
BENTON COUNTY
NOTARY PUBLIC -- ARKANSAS
My Commission Expires Nov. 7, 2021
Commission No. 12385005

Notary Public of Benton Co, AR
My Commission Expires: November 7, 2021

[Notary Seal]

EXHIBIT A
Legal Description

Lot 13 in Block "H" in Brazil & Jacob's Homesite Acres, as shown by Plat filed May 31st, 1947.

Being a part of the North half of Section 4, Township 7 North of Range 32 West.

Exhibit WW

1908 Jacobs Avenue

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 03:24:09PM
2015F-07565 Pages: 3

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by David and Becky Love (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 18th day of March, 2015.

David Love

Becky Love

DAVID AND BECKY LOVE

STATE OF ARKANSAS)
)
COUNTY OF Sebastian)

ACKNOWLEDGMENT

I, Sally Miller (Notary Public for the State of Arkansas), do hereby certify that David and Becky Love personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 18th day of March, 2015.

Sally Miller

Notary Public of ARKANSAS
My Commission Expires: 01-25-2018

[Notary Seal]

OFFICIAL SEAL
SALLY MILLER
COMMISSION #12364740
NOTARY PUBLIC, ARKANSAS
SEBASTIAN COUNTY
MY COMMISSION EXP. 01-25-2018

EXHIBIT A

Legal Description

Lot 14, in Block "H", in Brazil-Jacob's Homesite Acres, according to Plat filed May 31st, 1947. Being a part of the North half of Section 4, Township 7 North of Range 32 West.

Exhibit XX

2002 Jacobs Avenue

2015F-09196 3
2015F-09196
Certificate of Record
FORT SMITH DISTRICT
SEBASTIAN COUNTY, ARKANSAS
SHIRLEY RIEDER, CIRCUIT CLERK & RECORDER
07/02/2015 04:16:28PM
Fee: 25.00 Pages: 3

STATE OF ARKANSAS)
)
COUNTY OF SEBASTIAN)

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Shirley Rieder (the "Declarant").

WITNESSETH

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 22 day of June, 2015.

Shirley Rieder

Shirley Rieder

ACKNOWLEDGMENT

STATE OF ARKANSAS)
)
COUNTY OF Sebastian)

I, Tammera E Spears (Notary Public for the State of Arkansas), do hereby certify that Shirley Rieder personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 22nd day of June, 2015.

Tammera E Spears

Notary Public of Arkansas
My Commission Expires: May 1, 2018

[Notary Seal]

TAMMERA E. SPEARS COMM 12365330 NOTARY PUBLIC NOTARY SEAL COMM. EXP. MAY 1, 2018 SEBASTIAN COUNTY, ARKANSAS

EXHIBIT A
Legal Description

The west 72 feet of the north 178.2 feet of Lot 1, Block I, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

Exhibit YY

2004 Jacobs Avenue

2015F-09025 3
2015F-09025
Certificate of Record
FORT SMITH DISTRICT
SEBASTIAN COUNTY, ARKANSAS
CHARLOTTE WILLIAMS CIRCUIT CLERK & RECORDER
06/30/2015 12:55:02PM
Fee: 25.00 Pages: 3

STATE OF ARKANSAS)
)
COUNTY OF SEBASTIAN)

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Mark Gamble (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

MG

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 23 day of ~~2015~~.

Mark Gamble

ACKNOWLEDGMENT

STATE OF ARKANSAS)
)
COUNTY OF Sebastian)

I, Julie Ralph (Notary Public for the State of Arkansas), do hereby certify that Mark Gamble personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 23 day of June, 2015.

Notary Public of Benton Cty
My Commission Expires: 2-11-2023

[Notary Seal]

JULIE RALPH
No. 12392015
NOTARY PUBLIC
EXPIRES 02-11-2023
BENTON COUNTY - ARKANSAS

mc

EXHIBIT A
Legal Description

The north 178 feet of the west 54 feet of Lot 2, and the North 178.2 of the east 18 feet of Lot 1, Block I, of Brazil and Jacob's Homesite Acres, as shown by plat filed May 31, 1947, being a part of the North half of Section 4, Township 7, Range 32 W, now an addition to the City of Fort Smith, Sebastian County, Arkansas.

MG

Exhibit ZZ

5921 Ferguson Street

2015F-10673 3
2015F-10673
Certificate of Record
FORT SMITH DISTRICT
SEBASTIAN COUNTY, ARKANSAS
CHRIS BROOKS, CIRCUIT CLERK & RECORDER
07/31/2015 02:35:56PM
Fee: 25.00 Pages: 3

STATE OF ARKANSAS)
)
COUNTY OF SEBASTIAN)

DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Caryn Caddell (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

3/25

include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 13th day of April, 2015.

PROPERTY OWNER, CARYN CADDELL

Caryn Caddell

STATE OF ARKANSAS)
)
COUNTY OF Benton)

ACKNOWLEDGMENT

I, Caitlin V. Shemin (Notary Public for the State of Arkansas), do hereby certify that Caryn Caddell personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 13th day of April, 2015.

CAITLIN V. SHEMIN
BENTON COUNTY
NOTARY PUBLIC -- ARKANSAS
My Commission Expires Nov. 7, 2021
Commission No. 12385005

Notary Public of Benton Co, AR
My Commission Expires: November 1, 2021

[Notary Seal]

Exhibit A
Legal Description

The North 69.00 feet of Lot 28 and the North 69.00 feet of the West 50.00 feet of Lot 27, Block "E", Brazil & Jacobs Homesite Acres, and Addition to the City of Fort Smith, Arkansas.

Subject to easements, right-of-ways, and protective covenants of record, if any.

Exhibit AAA

5923 Ferguson Street

FORT SMITH DISTRICT
SEBASTIAN CO, AR - SHARON BROOKS
06/02/2015 02:36:35PM
2015F-07532 Pages: 3

STATE OF ARKANSAS)
)
) **DECLARATION OF COVENANTS,**
) **CONDITIONS AND RESTRICTIONS**
COUNTY OF SEBASTIAN)

THIS DECLARATION OF COVENANTS, CONDITIONS AND RESTRICTIONS (this "Declaration") is made as of the date set forth on the signature page hereof by Adam Ryan Rogers (the "Declarant").

W I T N E S S E T H

WHEREAS, Declarant is the owner of the real property described on Exhibit A ("Property") and desires to restrict the Property as provided herein.

NOW THEREFORE, Declarant hereby declares that all of the Property shall be held, sold, used, and conveyed subject to the following restrictions, covenants, and conditions, which shall run with the title to the Property. This Declaration shall be binding upon all parties having any right, title, or interest in any portion of the Property, their heirs, successors, successors-in-title, and assigns, and shall inure to the benefit of the owner of the Property.

BY THE RECORDING OF A DEED OR THE ACCEPTANCE OF TITLE TO THE PROPERTY OR ANY INTEREST THEREIN, THE PERSON TO WHOM SUCH PARCEL OR INTEREST THEREIN IS CONVEYED AND SUCH PERSON'S HEIRS, LEGAL REPRESENTATIVES, SUCCESSORS, LESSEES, GRANTEES, ASSIGNS AND BENEFICIARIES SHALL BE DEEMED TO HAVE AGREED TO BE BOUND BY THIS DECLARATION.

1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.

2. Contaminated groundwater under the Property shall not be extracted, disturbed, or utilized in any way, except for:
   (a) extracting, treating and monitoring groundwater in accordance with a monitoring plan approved by the Department;
   (b) dewatering or excavating beneath the water table, if incidental to normal construction activities, with prior written approval of the Department; or,
   (c) incidental passive collection of groundwater that may enter any structures or trenches constructed below the ground surface, provided that said groundwater is managed in accordance with applicable law.

3. With the exception of personal injury claims, all claims for damages related to TCE contamination of the property by Whirlpool Corporation have been released.

4. The covenants, conditions and restrictions set forth herein shall run with the title to the Property and shall be binding upon Declarant and his/her successors and assign shall

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include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

> NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ____, Page ____.

5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration shall be null and void and the restrictions contained herein shall have no force or effect.

IN WITNESS WHEREOF, the undersigned Declarant has executed this Declaration, this 18 day of March, 2015.

ADAM RYAN ROGERS

STATE OF ARKANSAS)
)
COUNTY OF Sebastian)

ACKNOWLEDGMENT

I, Aaron Sutterfield (Notary Public for the State of Arkansas), do hereby certify that Adam Ryan Rogers personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 18 day of March, 2015.

Notary Public of _____
My Commission Expires: 6-6-24

[Notary Seal]

STATE OF ARKANSAS NOTARY PUBLIC
AARON SUTTERFIELD
Notary Seal, State of Arkansas
Sebastian County
Commission Number 12398942
My Commission Expires June 6, 2024

EXHIBIT A

Legal Description

Part of Lots 27 and 28 in Block "E" in Brazil & Jacobs Homesite Acres as shown by Plat filed May 31, 1947, now an Addition to the City of Fort Smith, Sebastian County, Arkansas, as follows: Beginning at a point 69 feet South of the Northwest corner of said Lot 28, thence South 69 feet, thence East 150 feet, thence North 69 feet, thence West 150 feet to the point of beginning.

TABLE 1
THICKNESS OF SATURATED SOILS IN PLUMES
Whirlpool Facility - Fort Smith, Arkansas

Plume	Well ID	Ground Elevation	Top of Saturated Soils	Bottom of Saturated Soils	Saturated Soil Interval
North	IW-72	472.2	450.2	446.4	3.8
North	IW-73	472.1	NA[2]	NA[2]	NA[2]
North	IW-74	472.3	454.3	446.3	8.0
North	IW-75	472.8	NA[2]	NA[2]	NA[2]
North	IW-76	473.2	NA[2]	NA[2]	NA[2]
North	IW-77	473.8	454.8	445.8	9.0
North	IW-78	474.2	NA[2]	NA[2]	NA[2]
North	IW-79	474.1	NA[2]	NA[2]	NA[2]
North	IW-80	473.7	454.7	446.7	8.0
North	MW-23	475.8	453.8	447.8	6.0
North	MW-24	476.6	453.6	447.1	6.5
North	MW-27	475.7	451.7	447.4	4.3
North	MW-28	470.6	447.1	445.9	1.2
North	MW-31	476.1	448.1	447.1	1.0
North	MW-32	475.7	NA[2]	NA[2]	NA[2]
North	MW-33	474.9	NA[2]	NA[2]	NA[2]
North	MW-35R	474.0	NA[2]	NA[2]	NA[2]
North	MW-36	473.4	NA[2]	NA[2]	NA[2]
North	MW-39	475.6	450.1	447.6	2.5
North	MW-40	473.4	450.1	447.1	3.0
North	MW-41	472.3	453.3	445.8	7.5
North	MW-42B	471.8	449.8	446.3	3.5
North	MW-43	471.0	451.0	446.3	4.7
North	MW-46R	466.5	450.5	445.8	4.7
North	MW-50	463.2	451.2	445.6	5.6
North	MW-55	465.5	447.5	446.8	0.7
North	MW-56	463.4	445.4	444.9	0.5
North	MW-57	463.1	447.1	446.5	0.6
North	MW-58	462.9	446.3	445.9	0.4
North	MW-60	461.0	447.2	445.6	1.6 [3]
North	MW-61	459.8	445.5	444.7	0.8 [3]
North	MW-62	464.5	446.0	444.2	1.8
North	MW-63	464.0	444.7	444.5	0.2 [3]
North	MW-65	474.1	453.6	445.7	7.9
North	MW-66	462.7	450.7	446.5	4.2 [3]
North	MW-67	459.4	448.4	445.2	3.2 [3]
North	MW-68	470.0	448.0	446.5	1.5
North	MW-70	471.7	NA[2]	NA[2]	NA[2]
North	MW-71	471.5	NA[2]	NA[2]	NA[2]
North	RW-69	471.5	449.5	445.5	4.0
				Average Thickness (ft)	**3.7**

Notes:
1. Saturated thickness calculated from soil description in boring log.
2. NA - Boring log not available
3. No saturated soil observation recorded in boring log during drilling. Interval inferred based on soil description.

TABLE 1
THICKNESS OF SATURATED SOILS IN PLUMES
Whirlpool Facility - Fort Smith, Arkansas

Plume	Well ID	Ground Elevation	Top of Saturated Soils	Bottom of Saturated Soils	Saturated Soil Interval
South	ITMW-1	474.6	450.6	444.1	6.5
South	ITMW-10	478.6	451.6	446.1	5.5
South	ITMW-11	474.0	457.5	444.5	13.0
South	ITMW-12	474.7	456.7	444.7	12.0
South	ITMW-13	475.4	450.4	446.4	4.0
South	ITMW-14	475.7	455.7	445.7	10.0
South	ITMW-15	474.8	454.0	444.8	9.2
South	ITMW-16	476.5	458.5	445.3	13.2
South	ITMW-17	476.1	454.1	447.1	7.0
South	ITMW-18	473.9	457.9	444.9	13.0
South	ITMW-19	474.3	457.8	445.3	12.5
South	ITMW-2	475.1	457.1	445.6	11.5
South	ITMW-20	475.7	453.2	447.4	5.8
South	ITMW-21	474.4	449.4	446.4	3.0
South	ITMW-3	472.8	451.6	444.6	7.0
South	ITMW-4	477.6	458.1	447.1	11.0
South	ITMW-5	476.6	452.1	446.1	6.0
South	ITMW-6	481.1	455.4	445.6	9.8
South	ITMW-7	479.7	NA[2]	NA[2]	NA[2]
South	ITMW-9	479.5	460.2	446.3	13.9
South	MW-22	473.9	450.9	449.9	1.0
South	MW-25	474.7	446.7	445.0	1.8
South	MW-26	476.1	451.1	446.9	4.2
South	MW-29	475.1	452.1	447.1	5.0
South	MW-30	479.2	446.7	443.7	3.0
South	MW-37	474.0	457.0	445.5	11.5
South	MW-38	474.9	NA[2]	NA[2]	NA[2]
South	MW-92	473.9	451.9	444.9	7.0
South	MW-93	478.0	456.0	443.5	12.5
South	MW-94	478.0	455.0	445.0	10.0
South	MW-95	478.0	452.0	445.0	7.0
South	MW-172	473.4	459.4	445.8	13.6
				Average Thickness (ft)	**8.3**

Notes:
1. Saturated thickness calculated from soil description in boring log.
2. NA - Boring log not available
3. No saturated soil observation recorded in boring log during drilling. Interval inferred based on soil description.

TABLE 1
THICKNESS OF SATURATED SOILS IN PLUMES
Whirlpool Facility - Fort Smith, Arkansas

Plume	Well ID	Ground Elevation	Top of Saturated Soils	Bottom of Saturated Soils	Saturated Soil Interval
NE Corner	MW-87	471.0	451.0	447.8	3.2
NE Corner	MW-88	469.1	453.6	449.1	4.5
NE Corner	MW-89	467.1	451.6	449.5	2.1
NE Corner	MW-90	467.0	452.0	447.0	5.0
NE Corner	MW-91	469.2	451.7	449.2	2.5
NE Corner	MW-96	458.3	449.8	444.0	5.8
NE Corner	MW-97	459.9	451.9	445.9	6.0
NE Corner	MW-98	462.0	451.0	444.4	6.6
NE Corner	MW-99	467.1	449.3	445.1	4.2
				Average Thickness (ft)	**4.4**

Notes:
1. Saturated thickness calculated from soil description in boring log.
2. NA - Boring log not available
3. No saturated soil observation recorded in boring log during drilling. Interval inferred based on soil description.

TABLE 2
ESTIMATED QUANTITY OF TCE IN GROUNDWATER
Whirlpool Facility - Fort Smith, Arkansas

GROUNDWATER	Volume of Water						TCE Concentration		Mass of TCE		Volume of TCE	
Date	Plume Area (Square Feet)	Saturated Thickness (Feet)	Total Porosity[2]	Plume Area (Cubic Feet)	Gallons	Liters	Estimated Avg. Min. Concentration Assumed to be Present Throughout the Respective Section of Plume (µg/L)	Estimated Avg. Max. Concentration Assumed to be Present Throughout the Respective Section of Plume (µg/L)	Min. Kg.	Max. Kg.	Min. Vol. (Gallons)	Max. Vol. (Gallons)
North Plume												
March 2014 - 5 to 100 ug/l	*246,800*	3.7[1]	0.4	366,251	2,739,559	10,369,231	5	100	0.1	1.0	0.0	0.2
March 2014 - 100 to 1,000 ug/l	*184,500*	3.7[1]	0.4	273,798	2,048,009	7,751,714	100	1,000	0.8	7.8	0.1	1.4
March 2014 - > 1,000 ug/l	*100*	3.7[1]	0.4	148	1,110	4,201	1,000	1,500	0.0	0.0	0.0	0.0
March 2014 Subtotal	431,400								0.8	8.8	0.2	1.6
May 2014 - 5 to 100 ug/l	*279,000*	3.7[1]	0.4	414,036	3,096,989	11,722,104	5	100	0.1	1.2	0.0	0.2
May 2014 - 100 to 1,000 ug/l	*185,110*	3.7[1]	0.4	274,703	2,054,780	7,777,343	100	1,000	0.8	7.8	0.1	1.4
May 2014 - > 1,000 ug/l	*100*	3.7[1]	0.4	148	1,110	4,201	1,000	1,500	0.0	0.0	0.0	0.0
May 2014 Subtotal	464,210								0.8	9.0	0.2	1.6
July 2014 - 5 to 100 ug/l	*294,300*	3.7[1]	0.4	436,741	3,266,824	12,364,930	5	100	0.1	1.2	0.0	0.2
July 2014 - 100 to 1,000 ug/l	*192,500*	3.7[1]	0.4	285,670	2,136,812	8,087,832	100	1,000	0.8	8.1	0.1	1.5
July 2014 - > 1,000 ug/l	*200*	3.7[1]	0.4	297	2,220	8,403	1,000	1,500	0.0	0.0	0.0	0.0
July 2014 Subtotal	487,000								0.9	9.3	0.2	1.7
October 2014 - 5 to 100 ug/l	*299,500*	3.7[1]	0.4	444,458	3,324,546	12,583,406	5	100	0.1	1.3	0.0	0.2
October 2014 - 100 to 1,000 ug/l	*199,900*	3.7[1]	0.4	296,652	2,218,954	8,398,741	100	1,000	0.8	8.4	0.2	1.5
October 2014 - > 1,000 ug/l	*400*	3.7[1]	0.4	594	4,440	16,806	1,000	1,500	0.0	0.0	0.0	0.0
October 2014 Subtotal	499,800								0.9	9.7	0.2	1.8
January 2015 - 5 to 100 ug/l	*296,000*	3.7[1]	0.4	439,264	3,285,695	12,436,355	5	100	0.1	1.2	0.0	0.2
January 2015 - 100 to 1,000 ug/l	*180,466*	3.7[1]	0.4	267,812	2,003,230	7,582,227	100	1,000	0.8	7.6	0.1	1.4
January 2015 - > 1,000 ug/l	*0*	3.7[1]	0.4	0	0	0	1,000	1,500	0.0	0.0	0.0	0.0
January 2015 Subtotal	476,466								0.8	8.8	0.1	1.6
April 2015 - 5 to 100 ug/l	308,950	3.7[1]	0.4	458,482	3,429,444	12,980,445	5	100	0.1	1.3	0.0	0.2
April 2015 - 100 to 1,000 ug/l	177,037	3.7[1]	0.4	262,723	1,965,167	7,438,158	100	1,000	0.7	7.4	0.1	1.3
April 2015 - > 1,000 ug/l	0	3.7[1]	0.4	0	0	0	1,000	1,500	0.0	0.0	0.0	0.0
April 2015 Subtotal	485,987								0.8	8.7	0.1	1.6

TABLE 2
ESTIMATED QUANTITY OF TCE IN GROUNDWATER
Whirlpool Facility - Fort Smith, Arkansas

GROUNDWATER	Volume of Water						TCE Concentration		Mass of TCE		Volume of TCE	
Date	Plume Area (Square Feet)	Saturated Thickness (Feet)	Total Porosity[2]	Plume Area (Cubic Feet)	Gallons	Liters	Estimated Avg. Min. Concentration Assumed to be Present Throughout the Respective Section of Plume (µg/L)	Estimated Avg. Max. Concentration Assumed to be Present Throughout the Respective Section of Plume (µg/L)	Min. Kg.	Max. Kg.	Min. Vol. (Gallons)	Max. Vol. (Gallons)
South Plume												
October 2014 - 5 to 100 ug/l	*519,800*	8.3[1]	0.4	1,727,815	12,924,058	48,917,558	5	100	0.2	4.9	0.0	0.9
October 2014 - 100 to 1,000 ug/l	*261,500*	8.3[1]	0.4	869,226	6,501,810	24,609,353	100	1,000	2.5	24.6	0.4	4.5
October 2014 - > 1,000 ug/l	*119,000*	8.3[1]	0.4	395,556	2,958,759	11,198,902	1,000	1,500	11.2	16.8	2.0	3.0
October 2014 Subtotal	900,300								13.9	46.3	2.5	8.4
January 2015 - 5 to 100 ug/l	*442,344*	8.3[1]	0.4	1,470,351	10,998,229	41,628,296	5	100	0.2	4.2	0.0	0.8
January 2015 - 100 to 1,000 ug/l	*324,537*	8.3[1]	0.4	1,078,761	8,069,132	30,541,665	100	1,000	3.1	30.5	0.6	5.5
January 2015 - 1,000 to 10,000 ug/l	*86,311*	8.3[1]	0.4	286,898	2,145,995	8,122,592	1,000	1,500	8.1	12.2	1.5	2.2
January 2015 - > 10,000 ug/l	*16,637*	8.3[1]	0.4	55,301	413,654	1,565,682	10,000	40,000	15.7	62.6	2.8	11.3
January 2015 Subtotal	869,829								11.4	46.9	2.1	8.5
April 2015 - 5 to 100 ug/l	446,025	8.3[1]	0.4	1,482,587	11,089,752	41,974,709	5	100	0.2	4.2	0.0	0.8
April 2015 - 100 to 1,000 ug/l	320,887	8.3[1]	0.4	1,066,628	7,978,380	30,198,170	100	1,000	3.0	30.2	0.5	5.5
April 2015 - 1,000 to 10,000 ug/l	82,635	8.3[1]	0.4	274,679	2,054,597	7,776,650	1,000	1,500	7.8	11.7	1.4	2.1
April 2015 - > 10,000 ug/l	19,906	8.3[1]	0.4	66,168	494,933	1,873,322	10,000	40,000	18.7	74.9	3.4	13.6
April 2015 Subtotal	869,453								11.0	46.1	2.0	8.3

TABLE 2
ESTIMATED QUANTITY OF TCE IN GROUNDWATER
Whirlpool Facility - Fort Smith, Arkansas

GROUNDWATER	Volume of Water						TCE Concentration		Mass of TCE		Volume of TCE	
Date	Plume Area (Square Feet)	Saturated Thickness (Feet)	Total Porosity[2]	Plume Area (Cubic Feet)	Gallons	Liters	Estimated Avg. Min. Concentration Assumed to be Present Throughout the Respective Section of Plume (µg/L)	Estimated Avg. Max. Concentration Assumed to be Present Throughout the Respective Section of Plume (µg/L)	Min. Kg.	Max. Kg.	Min. Vol. (Gallons)	Max. Vol. (Gallons)
Northeast Plume												
October 2014 - 5 to 100 ug/l	*187,600*	4.4[1]	0.4	330,926	2,475,329	9,369,122	5	100	0.0	0.9	0.0	0.2
October 2014 - 100 to 1,000 ug/l	*69,200*	4.4[1]	0.4	122,069	913,075	3,455,987	100	1,000	0.3	3.5	0.1	0.6
October 2014 - > 1,000 ug/l	*0*	4.4[1]	0.4	0	0	0	1,000	1,500	0.0	0.0	0.0	0.0
October 2014 Subtotal	256,800								0.4	4.4	0.1	0.8
January 2015 - 5 to 100 ug/l	*166,439*	4.4[1]	0.4	293,598	2,196,116	8,312,299	5	100	0.0	0.8	0.0	0.2
January 2015 - 100 to 1,000 ug/l	*74,000*	4.4[1]	0.4	130,536	976,409	3,695,709	100	1,000	0.4	3.7	0.1	0.7
January 2015 - > 1,000 ug/l	*0*	4.4[1]	0.4	0	0	0	1,000	1,500	0.0	0.0	0.0	0.0
January 2015 Subtotal	240,439								0.4	4.5	0.1	0.8
April 2015 - 5 to 100 ug/l	183,000	4.4[1]	0.4	322,812	2,414,634	9,139,389	5	100	0.0	0.9	0.0	0.2
April 2015 - 100 to 1,000 ug/l	70,500	4.4[1]	0.4	124,362	930,228	3,520,912	100	1,000	0.4	3.5	0.1	0.6
April 2015 - > 1,000 ug/l	0	4.4[1]	0.4	0	0	0	1,000	1,500	0.0	0.0	0.0	0.0
April 2015 Subtotal	253,500								0.4	4.4	0.1	0.8

Notes:

1 - Saturated Thickness estimated from 4th Quarter 2014 RADD sampled wells and new 4th Quarter well completions (see Table 1).

2 - Total Porosity estimated from Freeze and Cherry (1979).

TCE - Trichloroethylene

µg/L - Micrograms per liter