



**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

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.

**Second Quarter 2015 Progress Report
Whirlpool Facility - Fort Smith, Arkansas**

- 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.

**Second Quarter 2015 Progress Report
Whirlpool Facility - Fort Smith, Arkansas**

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 $\mu\text{g/L}$ to 100 $\mu\text{g/L}$; 177,000 ft^2 for the portion of the plume with TCE concentrations ranging from 100 $\mu\text{g/L}$ to 1,000 $\mu\text{g/L}$; and, no portion of the plume exhibits TCE concentrations greater than 1,000 $\mu\text{g/L}$;
- 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 $\mu\text{g/L}$ to 100 $\mu\text{g/L}$; 320,900 ft^2 for the portion of the plume with TCE concentrations ranging from 100 $\mu\text{g/L}$ to 1,000 $\mu\text{g/L}$; and 82,600 ft^2 for the portion of the plume with TCE concentrations ranging from 1,000 $\mu\text{g/L}$ to 10,000 $\mu\text{g/L}$.
- 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 $\mu\text{g/L}$ to 100 $\mu\text{g/L}$;

**Second Quarter 2015 Progress Report
Whirlpool Facility - Fort Smith, Arkansas**

and, 70,500 ft² 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

**Second Quarter 2015 Progress Report
Whirlpool Facility - Fort Smith, Arkansas**

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

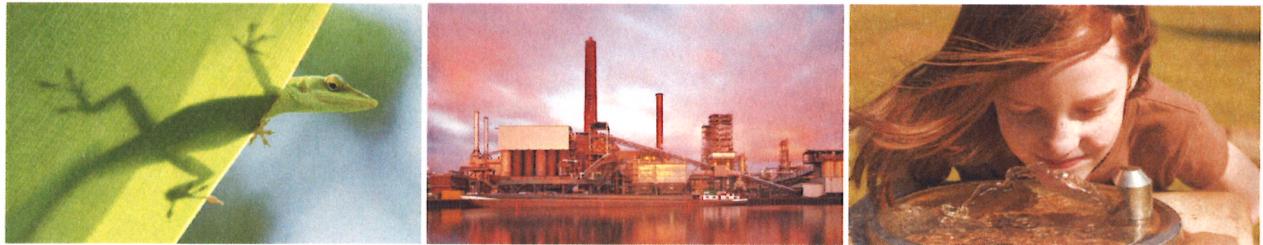
Attachment B: Second Quarter 2015 Soil Vapor Monitoring/Vapor Intrusion Report

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

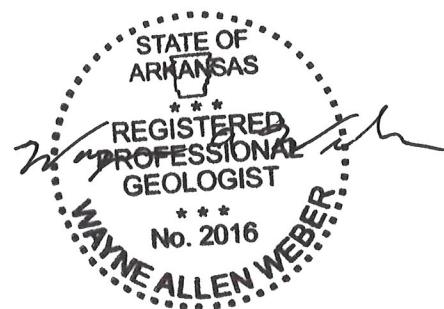


Table of Contents

	<u>Page</u>
1 Introduction	1
2 Groundwater Sample Collection and Onsite Activities	2
2.1 Static Water Level Measurements	2
2.2 Monitoring Well Sampling	2
2.3 Other Site Monitoring Activities	2
3 Results	5
3.1 Hydrogeology	5
3.2 Analytical Methods	6
3.3 Analytical Results	7
3.3.1 VOC Results	7
3.3.2 MNA Results	10
3.3.2.1 Chemical Lines of Evidence	11
3.3.2.2 Geochemical Lines of Evidence	12
3.3.2.3 Microbial Lines of Evidence	10
3.4 Data Quality Assessment	15
3.4.1 Field Data	15
3.4.2 Laboratory Analytical Data	15
4 Plume Stability	18
4.1 Lines Of Evidence	18
4.1.1 Statistical Analysis of Temporal Trends	19
4.1.2 Isoconcentration Maps	22
4.1.3 Concentration vs. Time Plots	23
4.2 Summary of Plume Stability	23
5 Summary and Conclusion	18
6 References	28

List of Tables

- Table 1: Constituents of Concern and RADD Groundwater Remedial Action Levels
Table 2: Groundwater Monitoring Well Network Sampled for RADD Quarterly Events
Table 3: Summary of Monitoring Well Static Water Level Measurements
Table 4: Summary of Final Well Ground Water Field Parameter Measurements
Table 5: Summary of Monitoring Well Ground Water Sampling Analytical Results (Second Quarter 2015)
Table 6: Historical Summary of Groundwater Concentration for TCE and Daughter-Products
Table 7: Summary of Statistical Temporal Trend Analysis (2009 - 2015)
Table 8: Summary of Temporal Trend Analysis by Well Category
Table 9: Summary of Average Detected Concentrations (2009 – 2015)
Table 10: Summary of TCE Concentrations (Area 1) September 2014 – April 2015
Table 11: Summary of TCE Concentrations (MW-25, MW-85 and MW-86) May 2014 – April 2015
Table 12: Summary of TCE Concentrations (Supplemental Neck Area) May 2014 – April 2015
Table 13: Summary of TCE Concentrations (Areas 2 and 3) May 2014 – April 2015
Table 14: Summary of Field Parameters (Area 1) March 2014 – April 2015
Table 15: Summary of Field Parameters (Supplemental Neck Area) March 2014 – April 2015
Table 16: Summary of Field Parameters (Areas 2 and 3) March 2014 – April 2015

List of Figures

- Figure 1: Second Quarter 2015 Potentiometric Surface Map
Figure 2A: Second Quarter 2015 TCE Isoconcentration Map – Northern and Northeastern Plumes
Figure 2B: Second Quarter 2015 TCE Isoconcentration Map – Southern Plume
Figure 3: TCE Concentration with Time at Source Area Onsite Wells
Figure 4: TCE Concentration with Time at Northern Onsite Wells
Figure 5: MW-25 TCE & Cis-1,2-DCE Trends
Figure 6: TCE, Cis-1,2-DCE, VC Average Concentration vs Time – All Wells
Figure 7: TCE, Cis-1,2-DCE, VC Average Concentration vs Time – Northern Plume Wells
Figure 8: TCE, Cis-1,2-DCE, VC Average Concentration vs Time – Southern Plume Wells
Figure 9: TCE, Cis-1,2-DCE, VC Average Concentration vs Time – Source Area Plume Wells
Figure 10: TCE, Cis-1,2-DCE, VC Average Concentration vs Time – Northeast Corner Plume Wells
Figure 11: TCE, Cis-1,2-DCE, VC Average Concentration vs Time – ITMW-9 and ITMW-10
Figure 12: TCE, Cis-1,2-DCE, VC Average Concentration vs Time – ITMW-19 and MW-25
Figure 13: TCE, Cis-1,2-DCE, VC Average Concentration vs Time – IW-76 and IW-77
Figure 14: TCE Concentration vs Time – MW61

List of Appendices

- Appendix A: Calibration Logs
- Appendix B: Laboratory Analytical Data
- Appendix C: Quarterly Summary of Field Parameter Measurements & Groundwater Sample Analytical Results
- Appendix D: Data Validation Report

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 reports¹.

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 trichloroethylene (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° 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-05-201504 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 ($\mu\text{g}/\text{L}$) (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 $\mu\text{g}/\text{L}$);
- MW-36: Bromomethane concentration of 14.4 $\mu\text{g}/\text{L}$; and
- MW-61 and MW-63: TCE concentrations of 10.9 and 9.2 $\mu\text{g}/\text{L}$, 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 $\mu\text{g}/\text{L}$ 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 $\mu\text{g}/\text{L}$. This result is consistent with historical TCE concentrations in this well. In 2006, a result of 11.6 $\mu\text{g}/\text{L}$ 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 attenuation 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

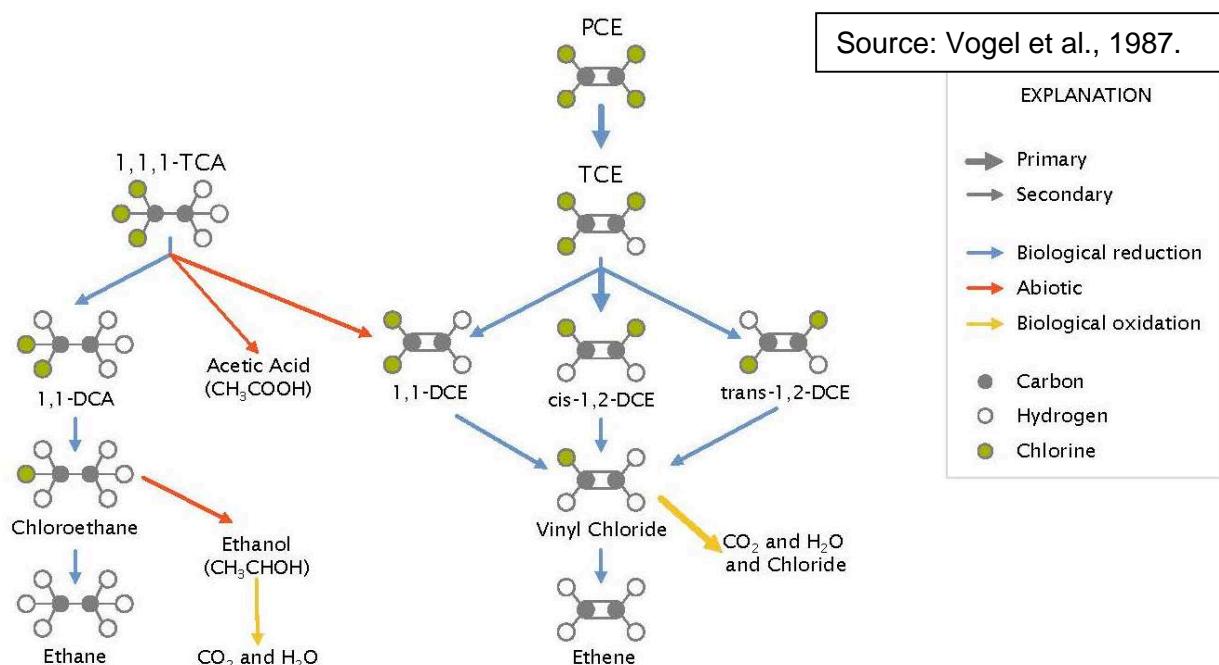


Table 5 presents a summary of analytical results for VOCs in groundwater. These data provide lines of evidence that natural attenuation of TCE is continuing to occur via biological mechanisms in both onsite and offsite groundwater. Groundwater sample results continue to show elevated levels of cis-1,2-DCE 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 ethene 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 (ft²) (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 ft² 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 ft² 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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*Second Quarter 2015 Groundwater Monitoring Report
Whirlpool Facility – Fort Smith, Arkansas*

Tables

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

Constituent of Concern	Remedial Action Level ($\mu\text{g/L}$) ⁽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-Tetrachloroethane	0.066 ⁽²⁾
Tetrachloroethene (PCE)	5.0
Toluene	1,000
1,1,1-Trichloroethane	200
1,1,2-Trichloroethane	5.0
Trichloroethene (TCE)	5.0
Vinyl chloride	2.0
Xylenes (total)	10,000

Notes:

RADD = Remedial action decision document

$\mu\text{g/L}$ = Micrograms per liter

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

(2) = USEPA tapwater screening 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							

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	NA	463.08	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	NA	463.20	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	NA	463.21	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.

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	4/13/2015	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	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	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										

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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		ITMW-1	ITMW-7	ITMW-9	ITMW-10	ITMW-10	ITMW-11	ITMW-12	ITMW-13	ITMW-14	ITMW-15	ITMW-17	ITMW-18	ITMW-19	ITMW-21	IW-80	MW-25	MW-32R	MW-33R		
ENVIRON Sample ID	Remedial Action Levels per ADEQ RADD Issued Dec 2013	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, 152350002, 043MD037	60191960007, 152350002, 152370013	60191960002, 043MD040	60191960016, 152350003, 152350014, 043MD043	60191960003, 152350013, 152350018, 043MD032	60191960010, 152350019, 152350017, 043MD046	60191960023	60191960019, 152350016, 152350017, 043MD044	60191960001, 152350016, 152350017, 043MD044	60191960017, 152350016, 152350017, 043MD051	60191960015, 152350006, 152360006, 043MD052	60191868010, 152370016, 152370022, 043MD038	60191960006, 152360002, 043MD036	60191960006, 152360008, 043MD038					
Sample Date		4/15/2015	4/14/2015	4/14/2015	4/14/2015	4/16/2015	4/4/2015	4/4/2015	4/14/2015	4/15/2015	4/4/2015	4/14/2015	4/14/2015	4/14/2015	4/16/2015	4/14/2015	4/14/2015	4/14/2015	4/15/2015	4/15/2015	
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	
Comments																					
Volatile Organic Compounds																					
Acetone	12000	U (5.0)	U (5.0)	U (5.0)	U (1.9)	U (1.9)	U (5.0)	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)	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 (0.50)	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)	U (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 (0.070)	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 (0.16)	30.4 (2.5)	29.7 (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)	0.98 J (0.59)	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)	U (5.0)	U (0.59)	
Carbon Disulfide	720	U (2.5)	U (2.5)	U (2.5)	U (0.12)	U (0.12)	0.15 J (0.12)	U (2.5)	U (2.5)	U (2.5)	U (0.12)	0.14 J (0.12)	U (2.5)	U (2.5)	U (2.5)	3.0 J (2.5)	3.0 J (2.5)	U (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 (0.50)	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 (0.50)	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 (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.15)	
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)	1.2 (0.14)	0.69 J (0.50)	0.70 J (0.50)	2.3 (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)	U (0.080)	U (0.50)	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)	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 (0.50)	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)	
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	2.7 (0.50)	2.8 (0.50)	U (0.50)	0.53 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.13 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)	
1,2-Dichloroethane	5	U (0.50)	U (0.50)	U (0.50)	U (0.12)	U (0.12)	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)	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 (0.50)	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)	U (0.50)	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)	204 (0.40)	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)	21.9 (0.20)	U (0.50)	U (0.50)	U (0.50)</						

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

Location ENVIRON Sample ID	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
Lab Sample ID(s)		DUP-01-201504 60191960022	MW-34-201504 60191868015, 152360003, 152370021,	MW-35R-201504 60191868018, 152360005, 152370024,	MW-38-201504 60192103001, 60192139001	MW-65-201504 60191960014, 152360015, 043MD049	MW-83-201504 60192139002	MW-84-201504 60192139009	MW-85-201504 60192139010	MW-86-201504 60192139011	MW-87-201504 60192139015	MW-88-201504 60192139014	MW-89-201504 60192015001	MW-90-201504 60192139015	MW-91-201504 60192139011	MW-92-201504 60192139013	MW-93-201504 60192139005	MW-94-201504 60192139004	MW-95-201504 60191960018, 152360020, 043MD047	ITMW-2-201504 60191868012, 152350001, 152370018,	ITMW-4-201504 60191868010,
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 (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)	0.29 J (0.060)	0.12 J (0.060)	U (0.50)	U (0.060)	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)	0.68 J (0.50)	2.4 (0.19)	U (0.19)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.19)	U (0.50)	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 (0.50)	U (0.070)	
Bromomethane	7	U (2.5)	6.9 (2.5)	22.9 (2.5)	U (0.16)	3.8 (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)	0.43 (0.16)	U (2.5)	U (0.16)	U (0.16)	
2-Butanone	4900	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)	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)	0.81 J (0.12)	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 (0.18)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.18)	U (0.50)	U (0.50)									
Chlorobenzene	100	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 (0.21)	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 (0.50)	0.61 J (0.21)	
Chloroethane	12000	U (0.50)	U (0.50)	U (0.15)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.15)	U (0.50)	U (0.50)									
Chloroform	80	U (0.50)	U (0.50)	0.73 J (0.14)	U (0.50)	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)	U (0.50)	0.16 J (0.14)	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)	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)
Dibromoethane	80	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 (0.21)	U (0.50)	U (0.50)									
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)	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)	0.68 J (0.050)
1,2-Dichloroethane	5	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 (0.12)	U (0.50)	0.21 J (0.12)	U (0.50)	0.21 J (0.12)	U (0.50)	U (0.50)					
1,1-Dichloroethene	7	0.52 J (0.50)	U (0.50)	23.8 (0.20)	U (0.50)	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)	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 (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)									
4-Methyl-2-pentanone	1000	U (2.5)																			

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

Location		MW-66	MW-67	MW-68	MW-96	MW-96	MW-97	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	Remedial Action Levels per ADEQ	MW-66-201504	MW-67-201504	MW-68-201504	MW-96-201504	DUP-06-201504	MW-97-201504	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)	RADD Issued Dec 2013	60191960008, 152360017, 043MD028	60191960013, 152360016, 043MD033	60191794001, 152350024, 043MD001	60192138004	60192138003	60192138005	60192138002	60191960021, 152360010, 043MD042	60191960012, 152360011, 043MD031	60191960004, 152360015, 043MD029	60191868001, 152360009, 043MD041	60191868002, 152370007, 043MD029	60191960032, 152360020, 043MD041	60191868020, 152360014, 043MD025	60191960032, 152360020, 043MD025	60191868023, 152360014, 043MD025	60192103005, 152360020, 043MD025	60192103006, 152360020, 043MD025			
Sample Date		4/15/2015	4/15/2015	4/13/2015	4/16/2015	4/16/2015	4/16/2015	4/16/2015	4/15/2015	4/15/2015	4/15/2015	4/15/2015	4/15/2015	4/15/2015	4/15/2015	4/15/2015	4/14/2015	4/14/2015	4/14/2015	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		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 (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 (0.060)	U (0.50)	U (0.060)	U (0.50)	U (0.50)	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 (0.19)	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)	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)	U (2.5)	7.7 (2.5)	11.1 (2.5)	U (0.16)	U (2.5)	U (0.16)	U (2.5)	U (0.16)	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 (0.59)	U (5.0)	U (0.59)	3.7 J (0.59)	U (5.0)	U (0.59)	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 (0.12)	U (2.5)	U (0.12)	U (2.5)	U (0.12)	U (2.5)	U (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 (0.18)	U (0.50)	U (0.18)	U (0.50)	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 (0.21)	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 (0.15)	U (0.50)	U (0.15)	U (0.15)	U (0.50)	U (0.15)	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 (0.14)	U (0.50)	U (0.14)	U (0.50)	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)	U (0.50)	2.8 (0.50)	17.0 (0.50)	U (0.080)	U (0.080)	U (0.080)	U (0.080)	U (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 (0.21)	U (0.50)	U (0.21)	U (0.21)	U (0.50)	U (0.21)	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 (0.050)	U (0.50)	U (0.050)	U (0.50)	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 (0.12)	U (0.50)	U (0.12)	U (0.50)	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)	U (0.50)	U (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)	0.47 J (0.20)	0.67 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)	U (0.50)	U (0.50)	U (0.50)	U (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)		
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)	1.1 J (0.50)	0.51 J (0.50)	0.70 J (0.50)	0.47 J (0.20)	0.57 J (0.20)	0.70 J (0.20)	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 (1.2)	U (5.0)	U (1.2)	U (1.2)	U (1.2)	U (5.0)	U (1.2)		
4-Methyl-2-pentanone																						

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

Location ENVIRON Sample ID	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
		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)				
Bromodichloromethane	80	U (0.50)	U (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)				
Bromoform	80	U (0.50)	4.5 (0.50)	U (0.50)	U (0.50)	5.9 B (2.5)	U (2.5)	U (2.5)	U (2.5)	0.44 (0.16)	U (2.5)				
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)				
2-Butanone	4900	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)					
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)				
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)
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)				
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)
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)	U (0.50)	0.68 J (0.50)	0.13 (0.080)	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)				
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)
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)
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)	0.62 J (0.50)	U (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)	0.88 J (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 (1.2)	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)	2.5 J (2.5)	U (2.5)	U (0.42)	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)				
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)				
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)				
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)				
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)				
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)				
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)				
Metals															
Iron	NE	984 (50.0)	NM	NM	243 (50.0)	NM									
Manganese	NE	1070 (5.0)	NM	NM	1040 (5.0)	NM									
Monitored Natural Attenuation Parameters (Laboratory)															
Acetic acid	NE	U (5000)	NM	NM	U (5000)	NM									
Acetylene	NE	U (0.50)	NM	NM	U (0.50)</										

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 U
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 ($\mu\text{g/L}$)	# of Detects	# of Samples	Concentration ($\mu\text{g/L}$)	# of Detects	# of Samples	Concentration ($\mu\text{g/L}$)	# 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	0	34
10/28/2009	228	14	25	8	9	25	0	0	25
5/13/2010	255	17	28	11	10	28	0	0	28
11/4/2010	333	21	27	16	10	27	0	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	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:

$\mu\text{g/L}$: Micrograms per liter

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

Date(s)	TCE Concentrations ($\mu\text{g/L}$)											
	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%
	-	-	-	-	-	-	96%	19.4%	-2.1%	37.1%	35%	1%
	-	-	-	-	-	-	92%	54.7%	95.6%	63.8%	66%	-18%

4th Quarter 2014

1st Quarter 2015

2nd Quarter 2015

Notes:

nd = not detected

nm = not measured

$\mu\text{g/L}$ = 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

Date(s)	TCE Concentrations ($\mu\text{g/L}$)										Total TCE Reduction (all wells)
	MW-94	MW-95	MW-172	ITMW-11	ITMW-12	ITMW-15	ITMW-17	ITMW-18	ITMW-19		
9/11/2014	nm	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

$\mu\text{g/L}$ = 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

Date(s)	TCE Concentrations ($\mu\text{g}/\text{L}$)			
	MW-25	MW-85	MW-86	Total TCE Reduction (all wells)
5/15/2014	18500	nm	nm	
5/29/2014	nm	1970	533000	553470
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%
	86.4%	-201.5%	84.8%	83.8%
	74.9%	87.0%	91.2%	90.7%

4th Quarter 2014
 1st Quarter 2015
 2nd Quarter 2015

Notes:

nm = not measured

$\mu\text{g}/\text{L}$ = micrograms per liter

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

Date(s)	TCE Concentrations ($\mu\text{g}/\text{L}$)						Total TCE Reduction (all wells)
	IW-101	MW-23	MW-24	MW-83	MW-84		
5/22/2014	nm	22.8	79.7	470	214		
5/23/2014	509	nm	nm	nm	nm		1296
7/8/2014	150	27.8	102	nm	nm		
9/12/2014	139	62.1	55.7	213	0.93		
10/23/2014	nm	189	33.1	210	0.68		572
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%		4th Quarter 2014
	-	-404.4%	66.2%	78.5%	99.8%		1st Quarter 2015
	-	-152.2%	76.4%	67.9%	99.8%		2nd Quarter 2015

Notes:

nm = Not measured

$\mu\text{g}/\text{L}$ = 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

Date(s)	TCE Concentrations ($\mu\text{g}/\text{L}$)											Total TCE Reduction (all wells)
	IW-115	MW-81	MW-82	IW-77	IW-78	IW-79	MW-34	MW-35R	MW-36	MW-65	IW-80	
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	
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%
	-	24.8%	76.8%	86.2%	-	-	-10.6%	94.0%	-	90.2%	70.7%	68.7%
	-	61.3%	99.8%	89.5%	-	-	30.7%	78.4%	-	91.8%	62.0%	79.7%
												4th Quarter 2014
												1st Quarter 2015
												2nd Quarter 2015

Notes:

nm = not measured

$\mu\text{g}/\text{L}$ = 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	0	nm
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	

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	0	nm
MW-85	11/1/2014 8:46	474.41	9.89	464.52	19.28	1380	20.55	4.99	275.5	0.2	nm
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	0	nm
MW-86	11/1/2014 8:56	473.19	8.44	464.75	20.06	5177	30.67	4.44	365	2	nm
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	0	0
MW-92	11/1/2014 8:40	473.74	9.08	464.66	19.38	1358	15.21	5.41	273.7	0	0
MW-92	11/3/2014 14:08	473.74	8.51	46							

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

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

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

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-10	6/6/2014 9:09	14.23	19.82	226	4.63	6.3	265.9	21
ITMW-10	6/11/2014 7:52	14.41	20.08	251	6.23	5.93	277.7	0
ITMW-10	7/8/2014 15:00	14.75	21.9	497	3.94	7.93	228	210
ITMW-10	7/30/2014 0:00	14.85	21.53	233	0.42	5.78	172.6	nm
ITMW-10	10/15/2014 0:00	14.45	19.76	216	6.6	7.03	92.7	nm
ITMW-10	1/14/2015 12:35	15.1	16.02	222	5.73	6.92	59	0
ITMW-10	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

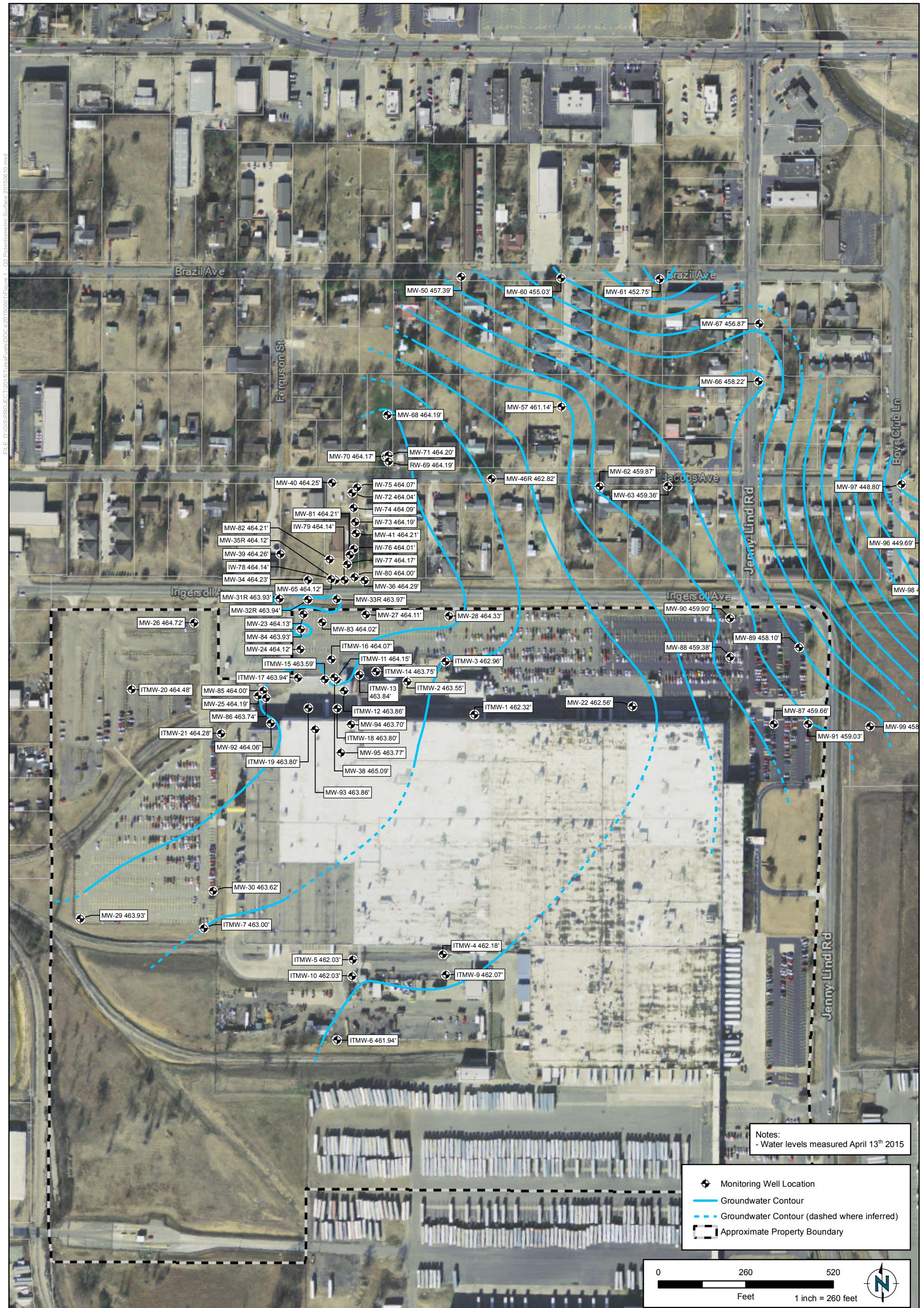
SU = Standard unit

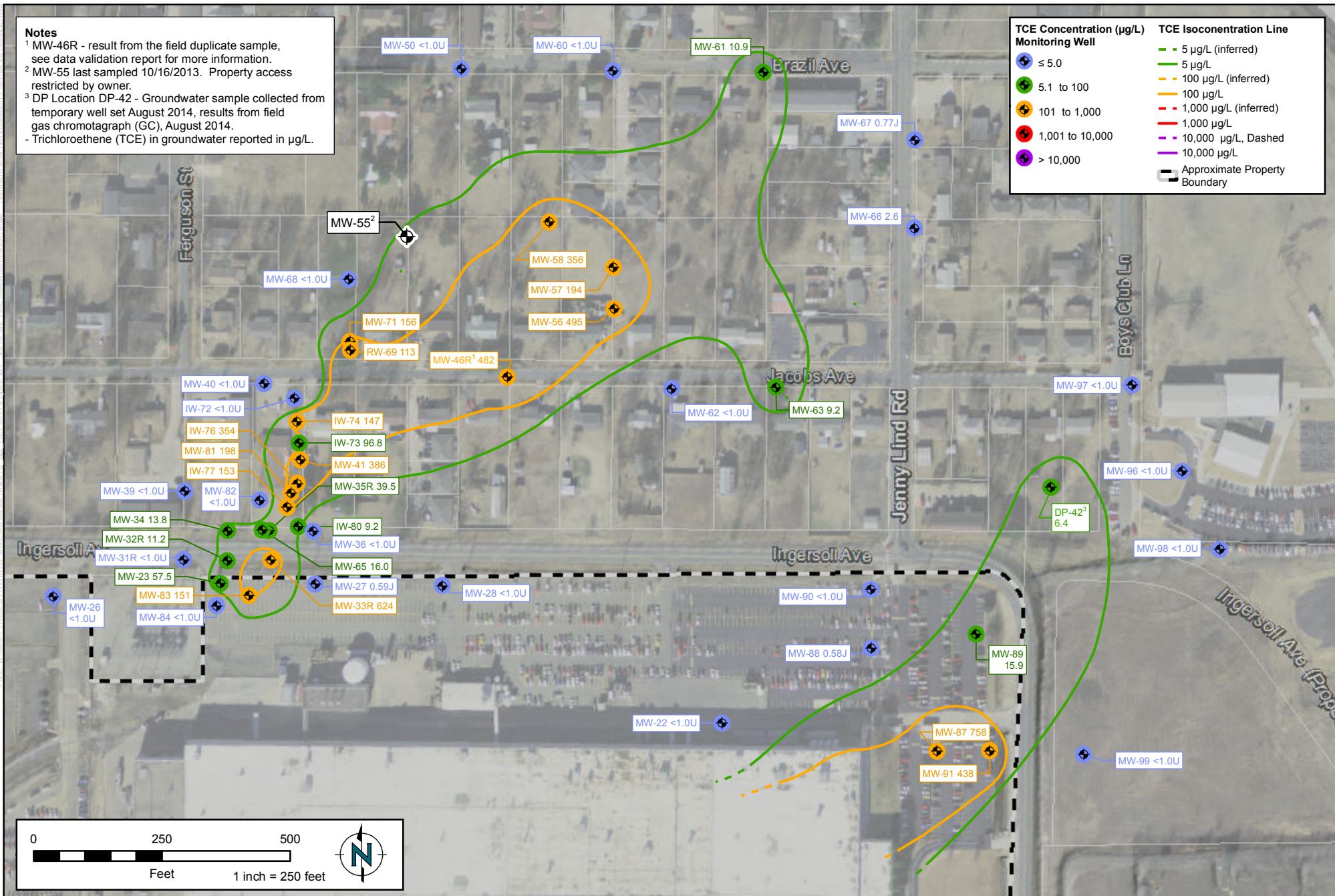
mV = Millivolts

Injection Start Injection Stop

5/31/2014 11:00 6/3/2014 17:18

Figures



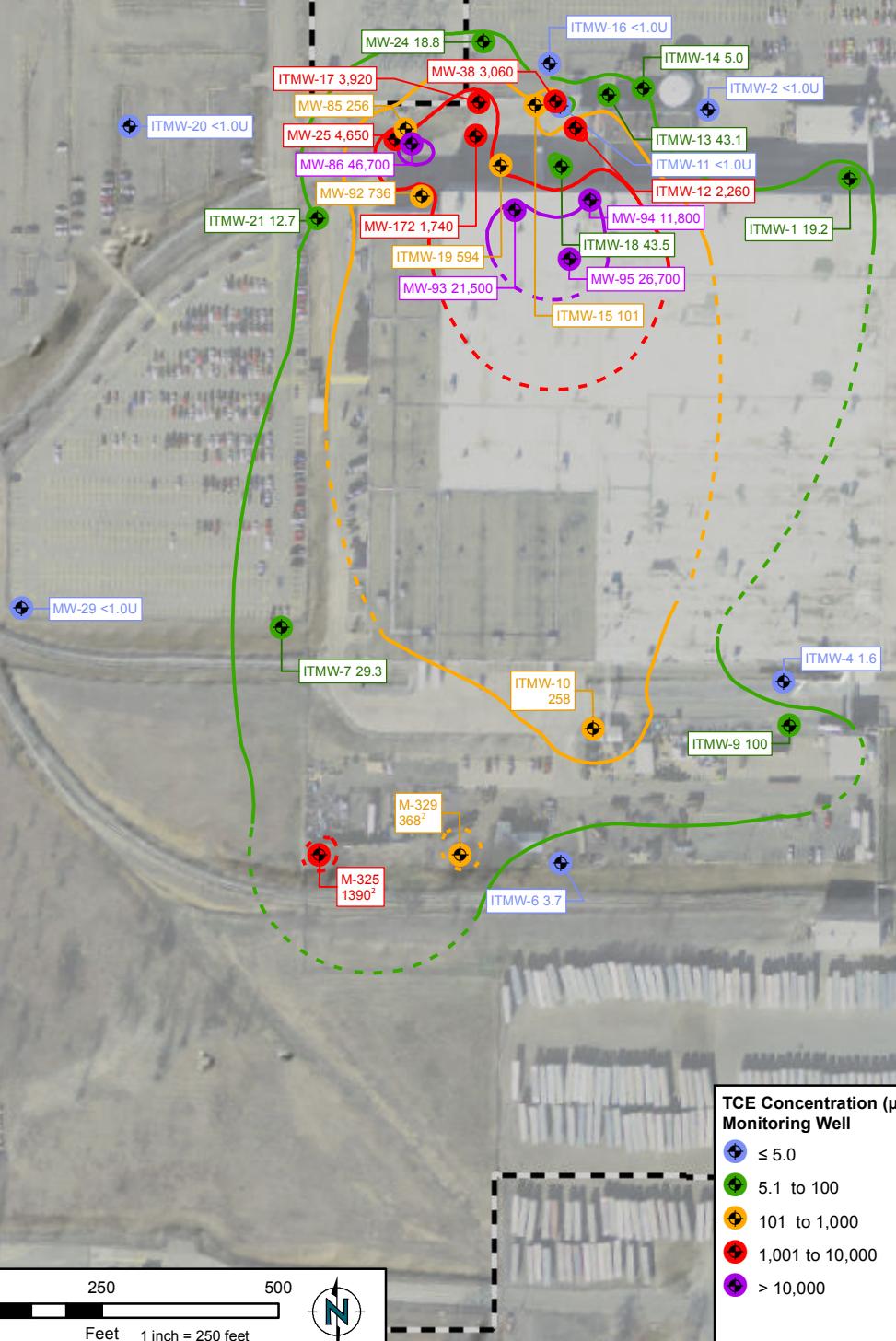


2015 SECOND QUARTER TCE ISOCONCENTRATION MAP
NORTHERN AND NORTHEASTERN PLUMES

Whirlpool Facility - Fort Smith, Arkansas

Notes

- ¹ Trichloroethene (TCE) in groundwater reported in µg/L.
² M-325 and M-329 - temporary monitoring well set at MIP soil boring location, results from field gas chromatograph (GC), August 2014.

Ingersoll Ave

TCE Concentration with Time at Source Area Onsite Wells

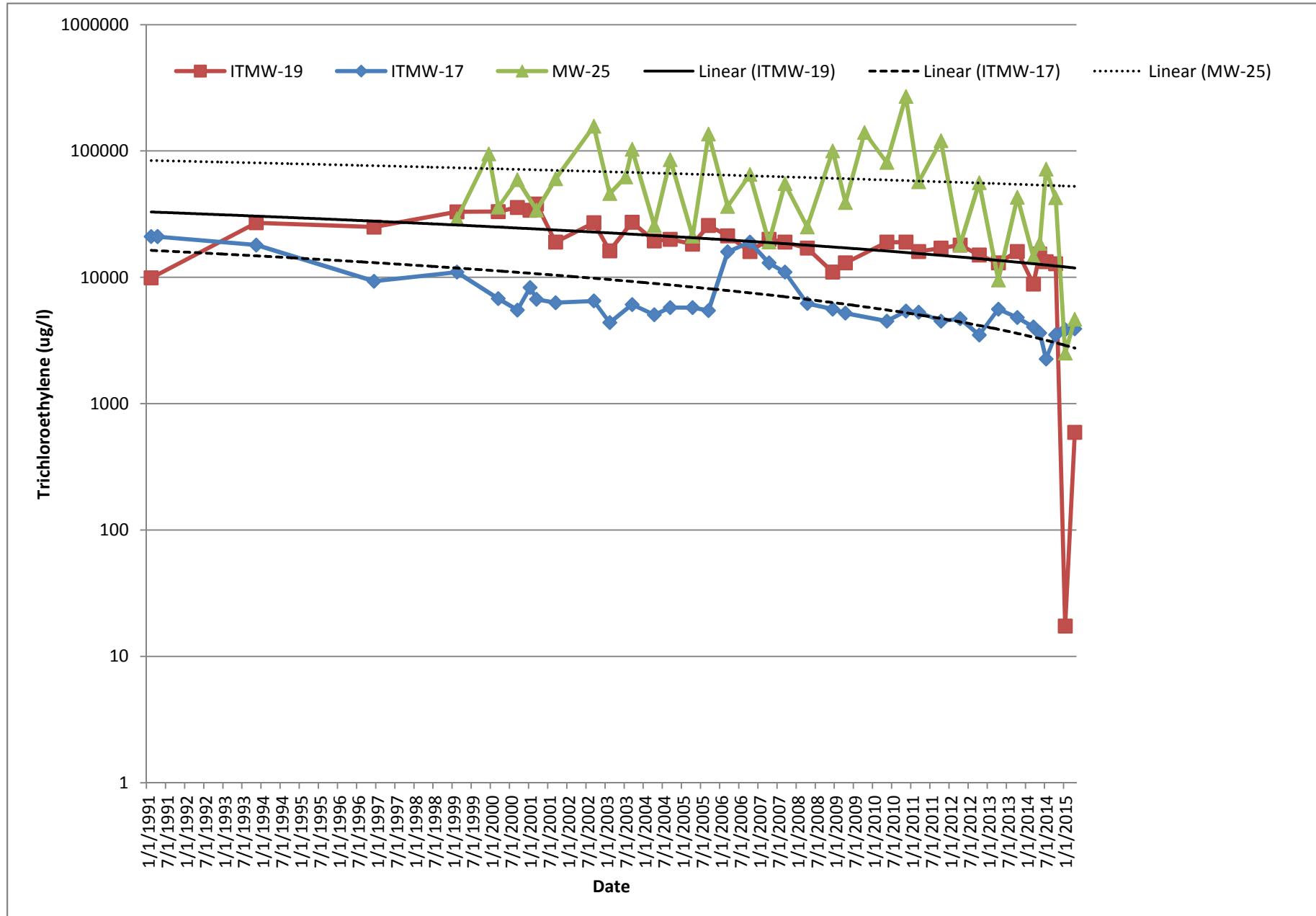


Figure 3

Whirlpool Facility
Fort Smith, Arkansas

TCE Concentration with Time at Northern Onsite Wells

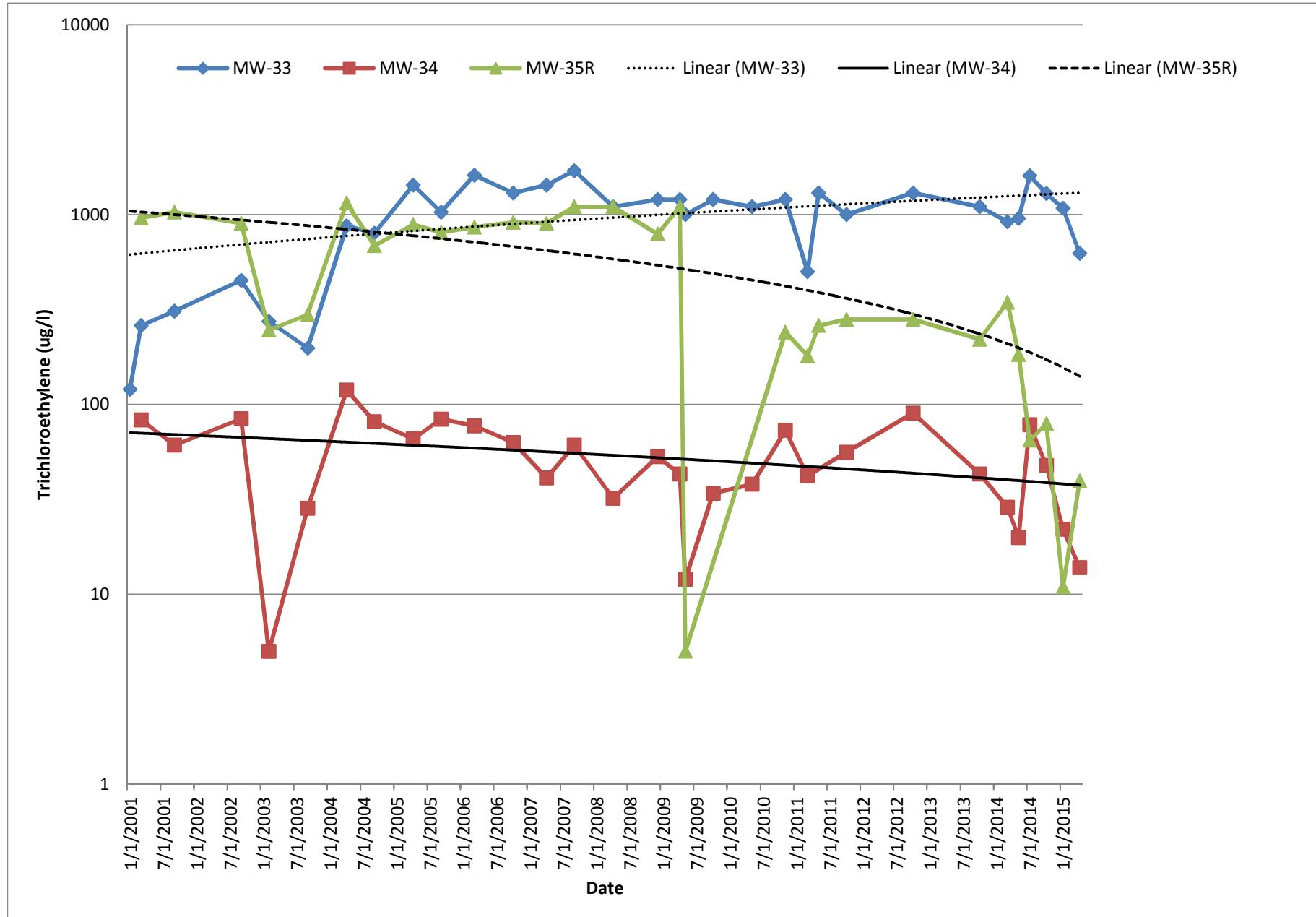


Figure 4

Whirlpool Facility
Fort Smith, Arkansas

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

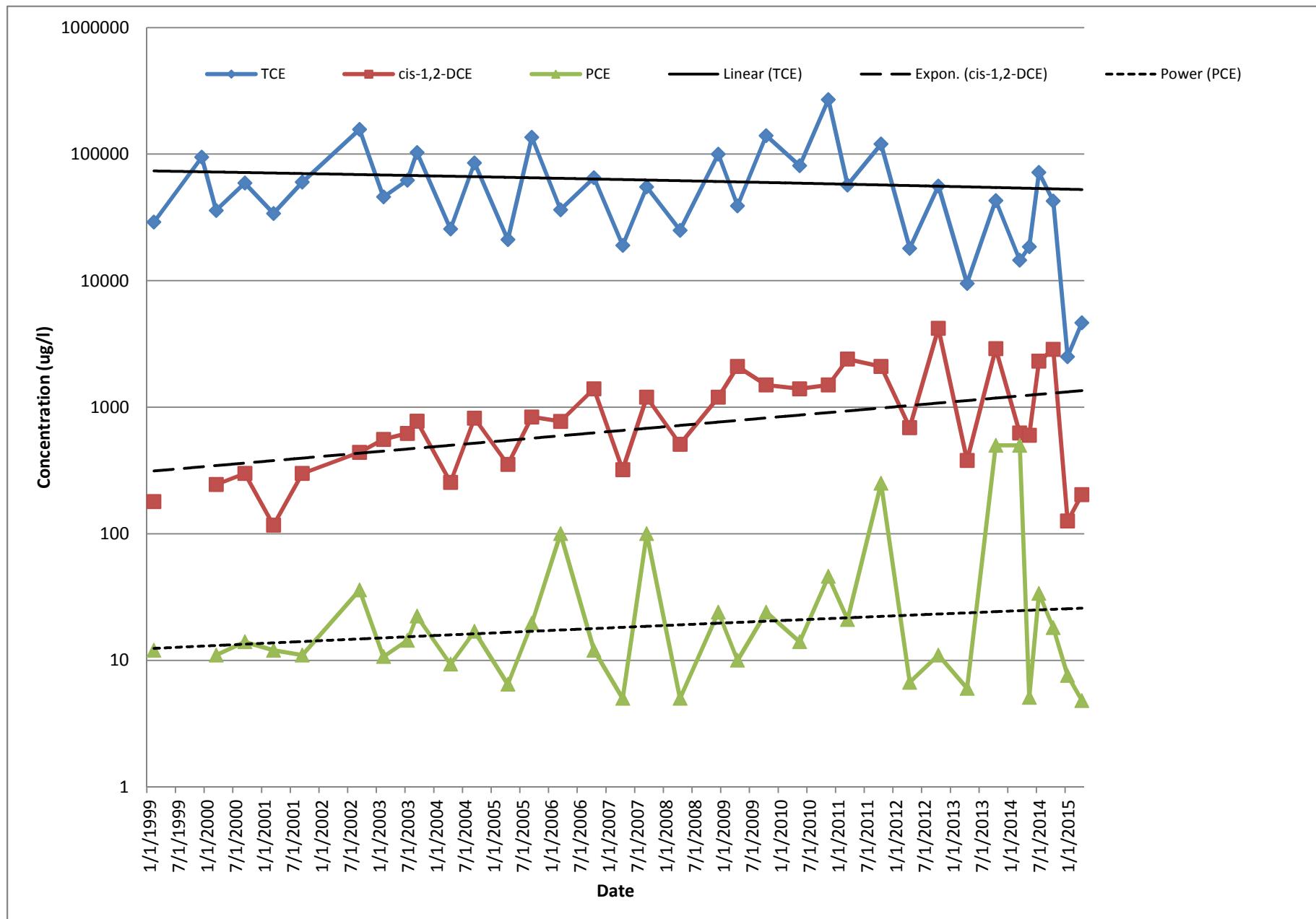


Figure 5

Whirlpool Facility
Fort Smith, Arkansas

Average Concentrations vs Time – All Wells

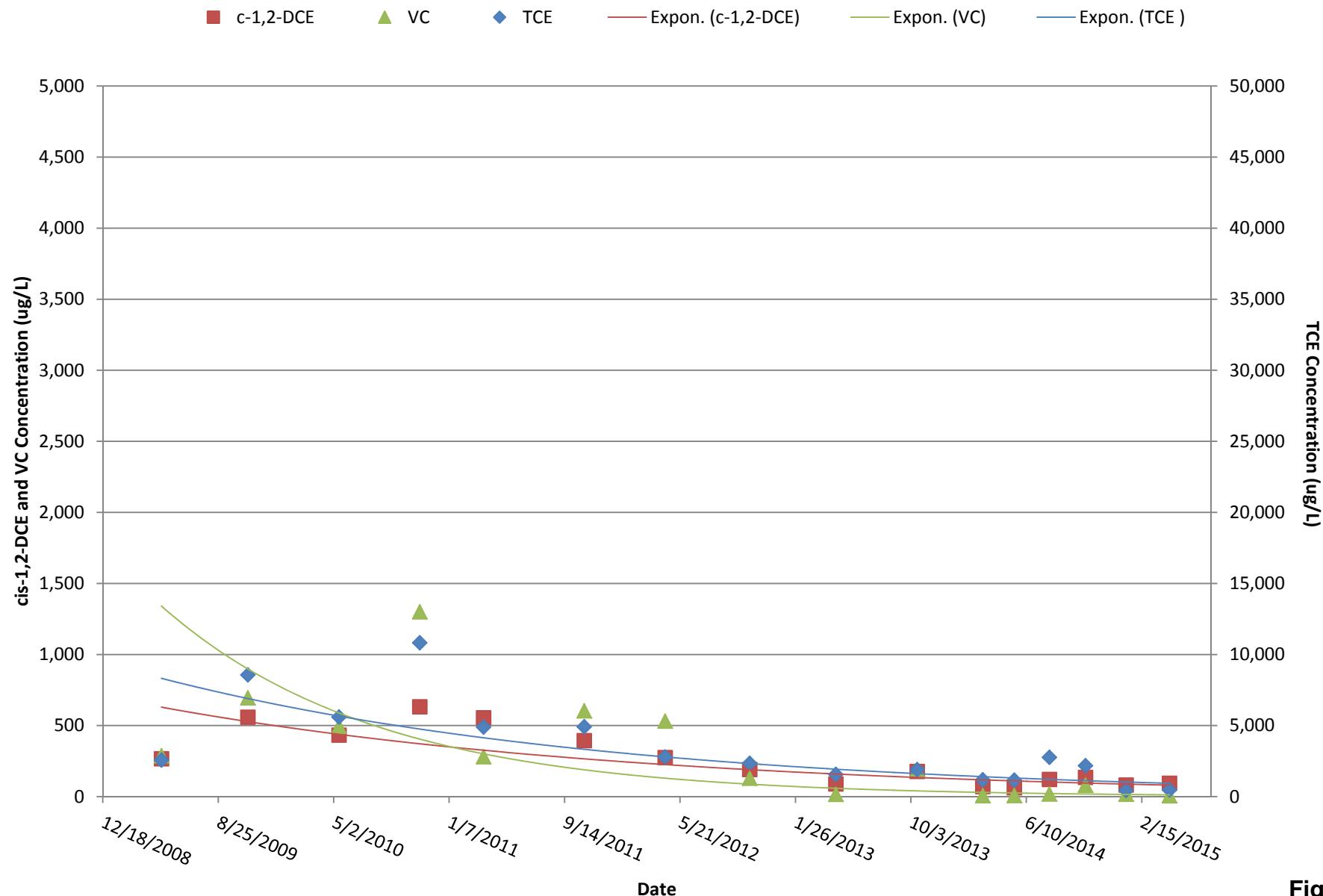


Figure 6

Whirlpool Facility
Fort Smith, Arkansas

Average Concentrations vs Time – Northern Plume Wells

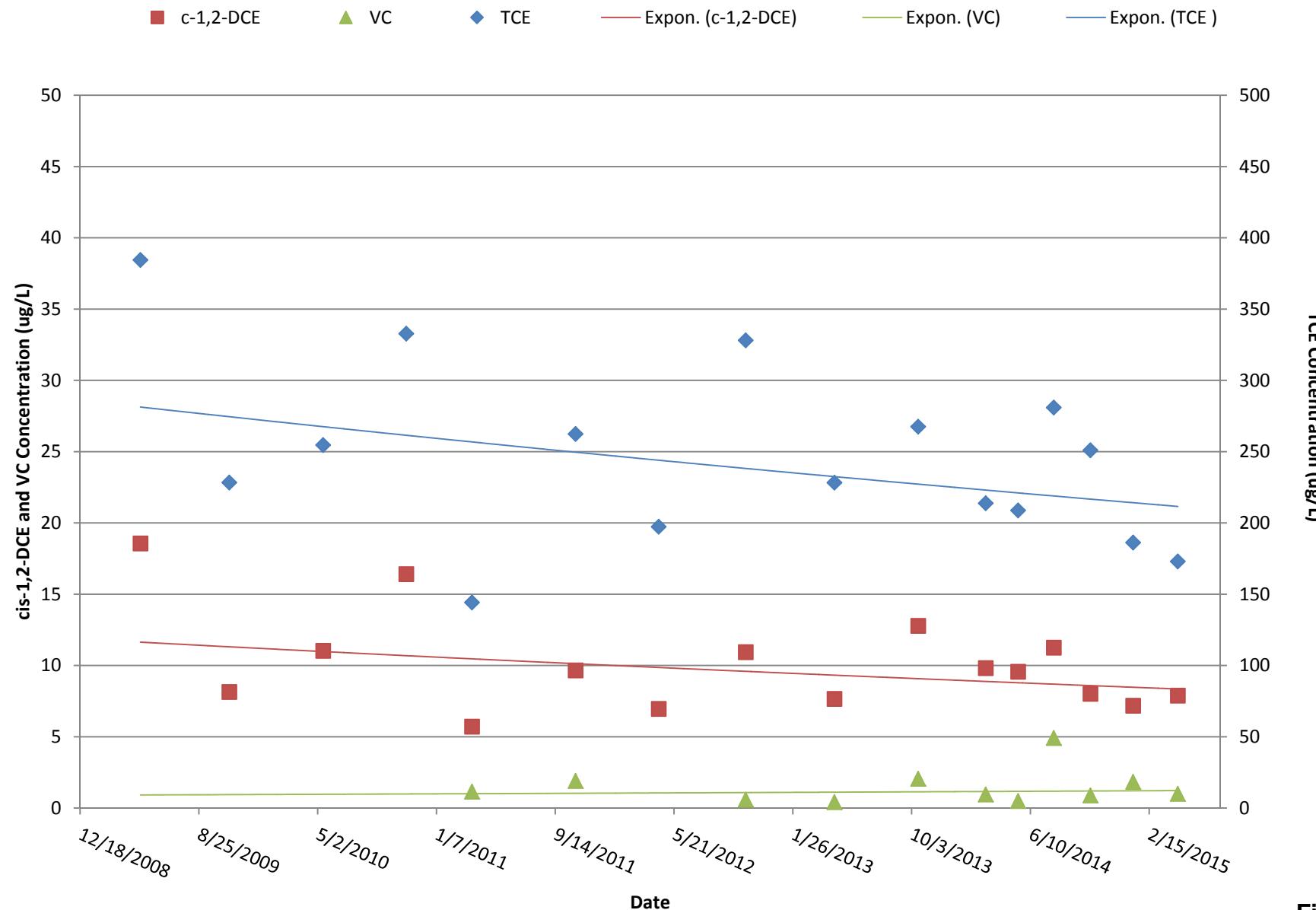


Figure 7

Whirlpool Facility
Fort Smith, Arkansas

Average Concentrations vs Time – Southern Plume Wells

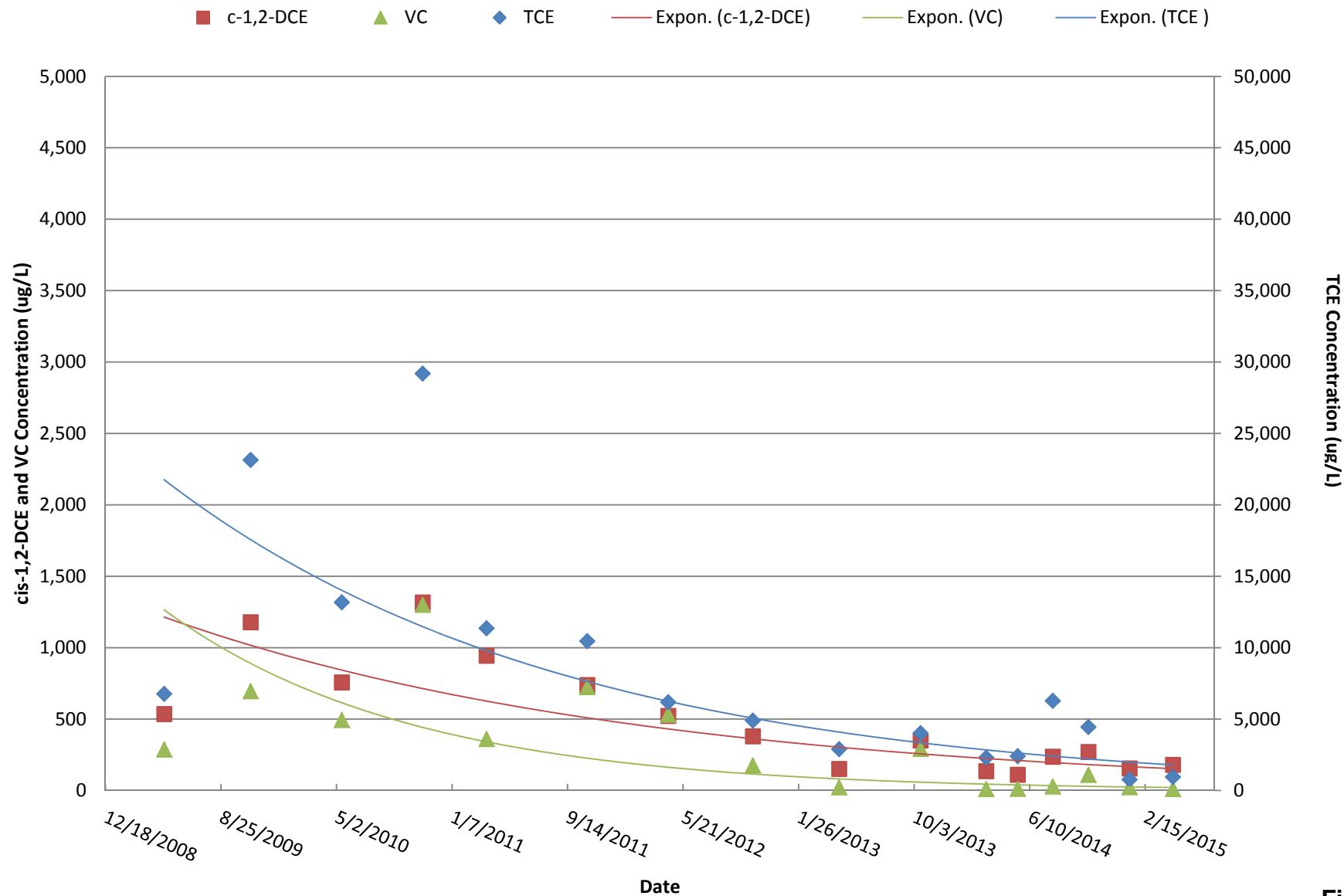


Figure 8

Whirlpool Facility
Fort Smith, Arkansas

Average Concentrations vs Time – Source Area Wells

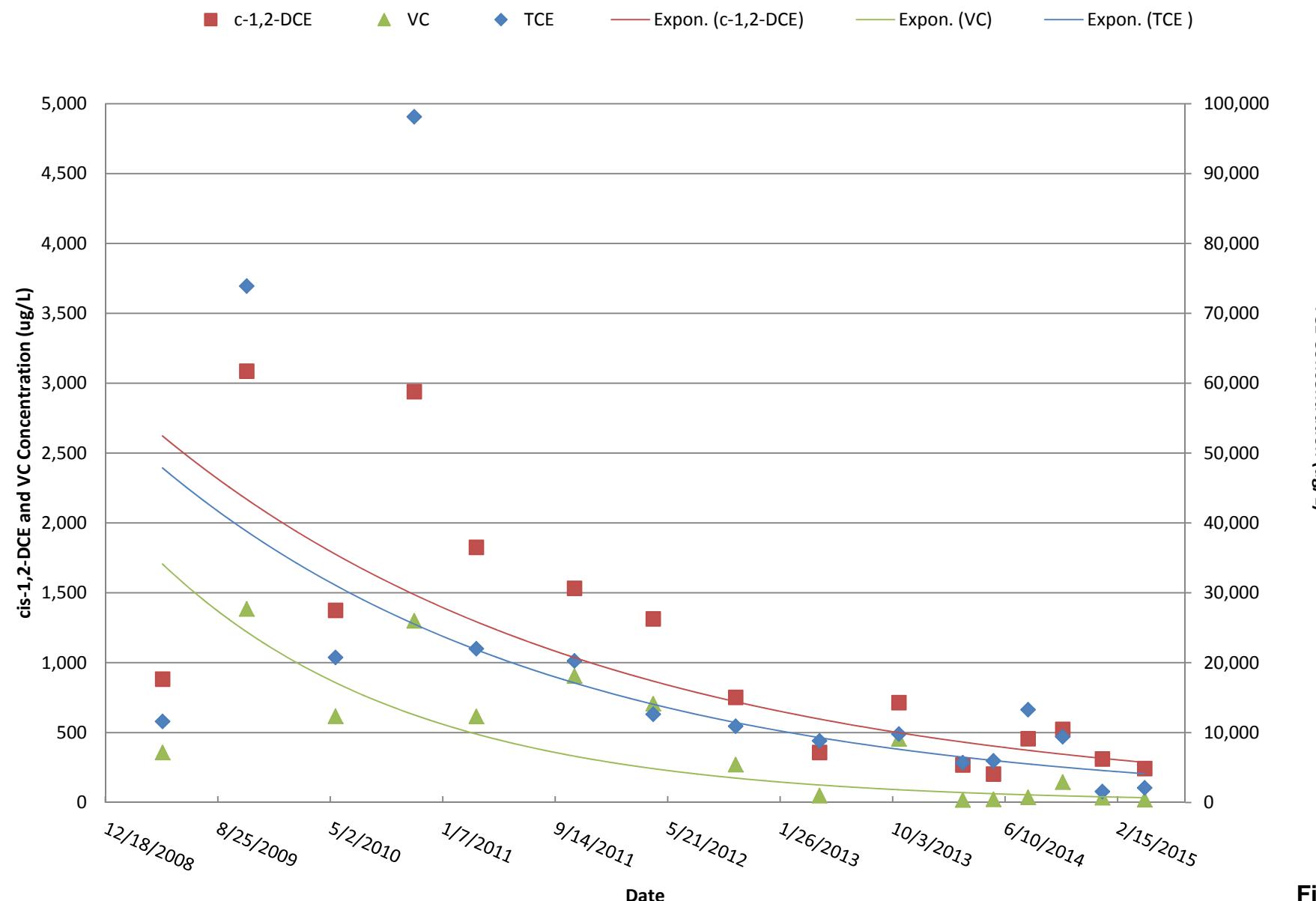


Figure 9

Whirlpool Facility
Fort Smith, Arkansas

Average Concentrations vs Time – North East Corner Wells

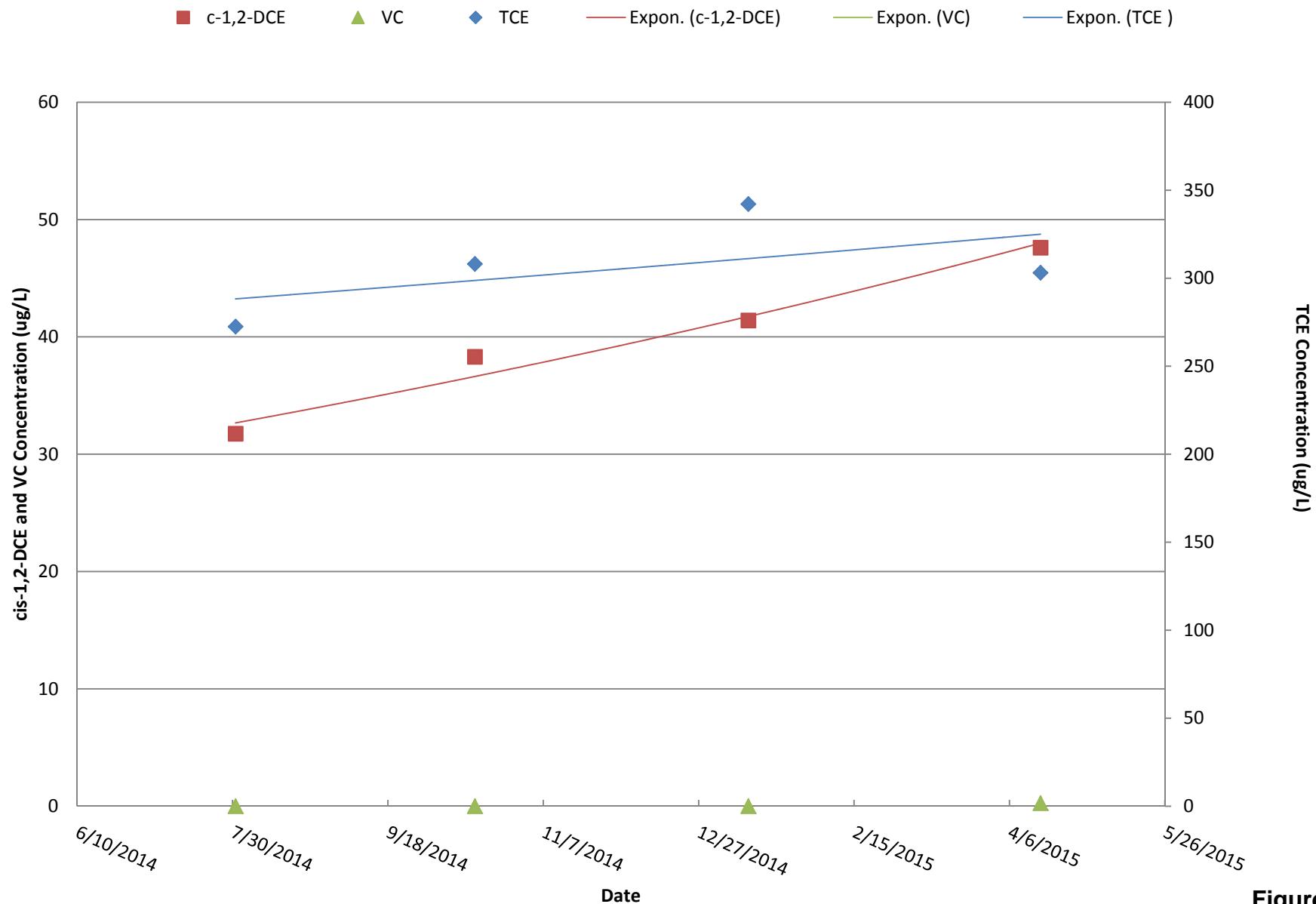
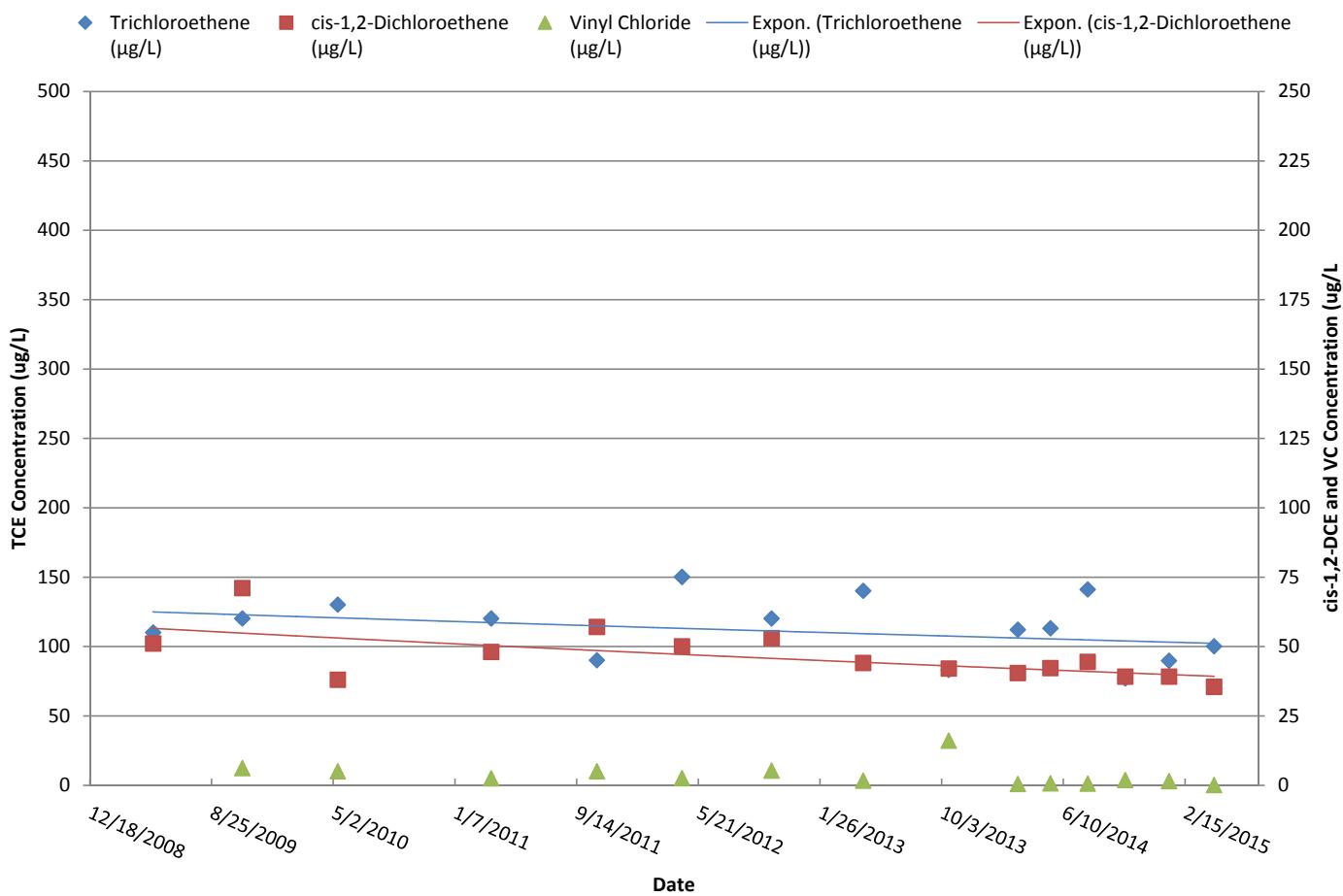


Figure 10

Whirlpool Facility
Fort Smith, Arkansas

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

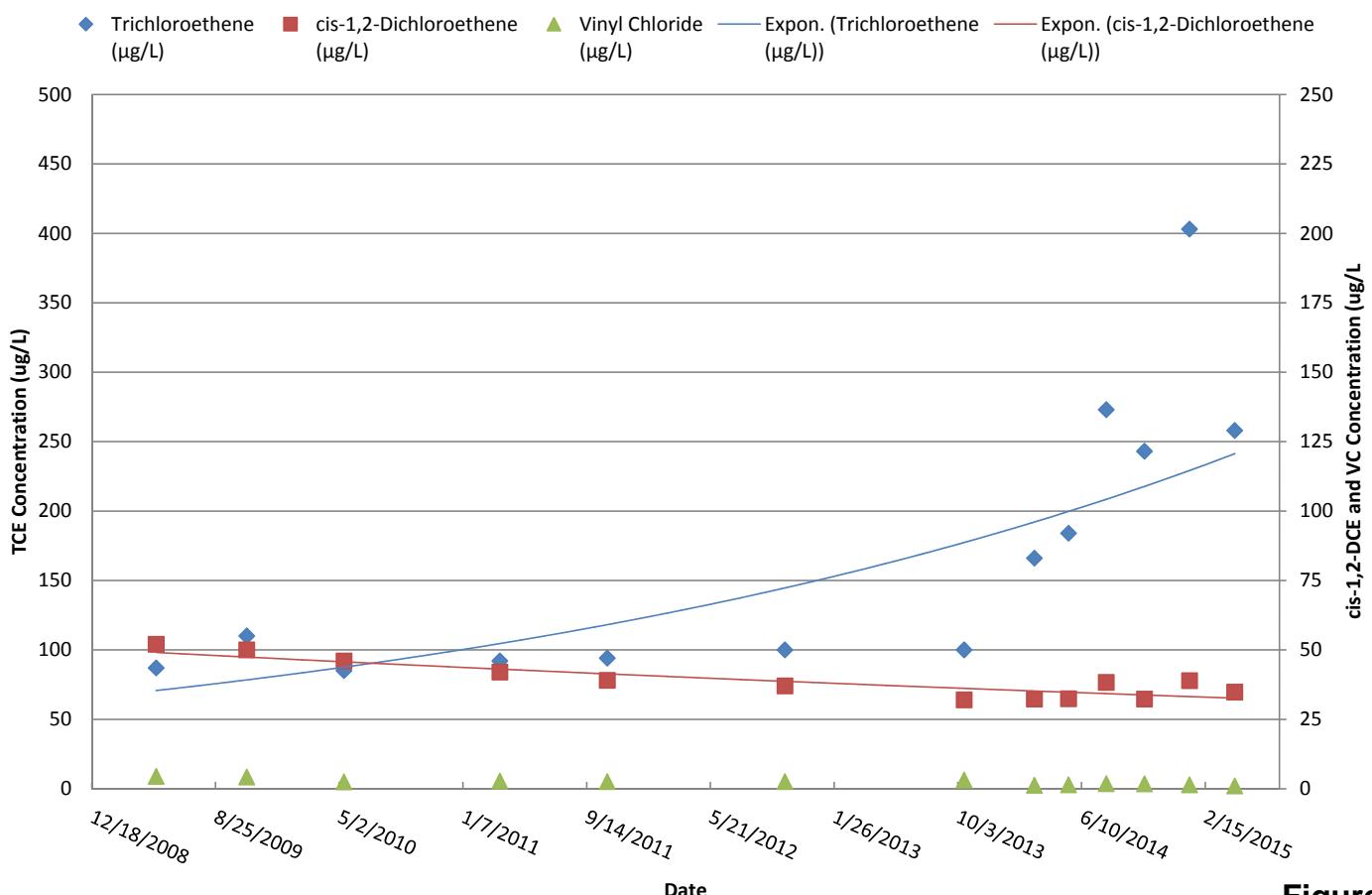
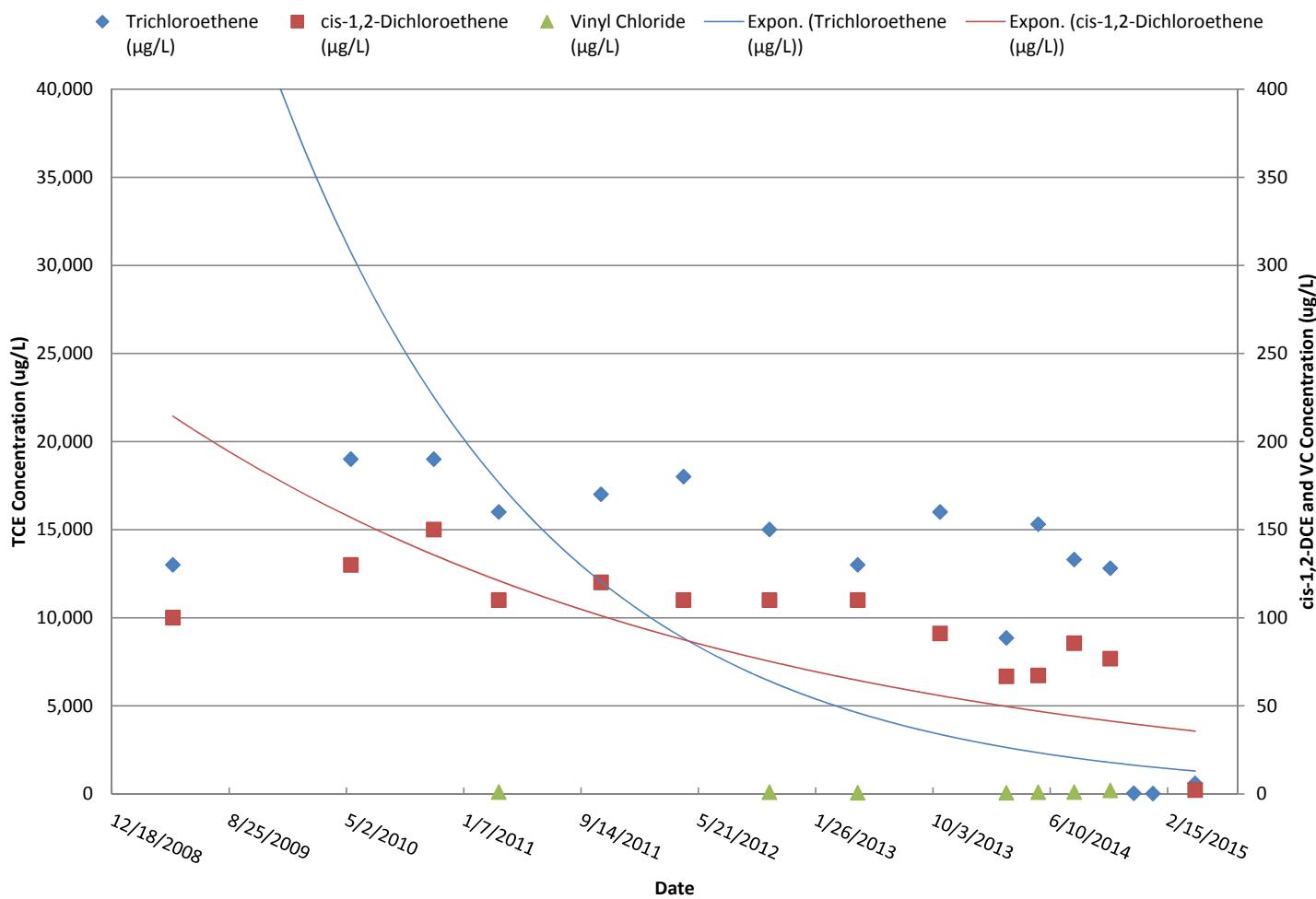


Figure 11

Whirlpool Facility
Fort Smith, Arkansas

TCE, cis-1,2-DCE and Vinyl Chloride Concentrations vs Time – ITMW-19



TCE, cis-1,2-DCE and Vinyl Chloride Concentrations vs Time – MW-25

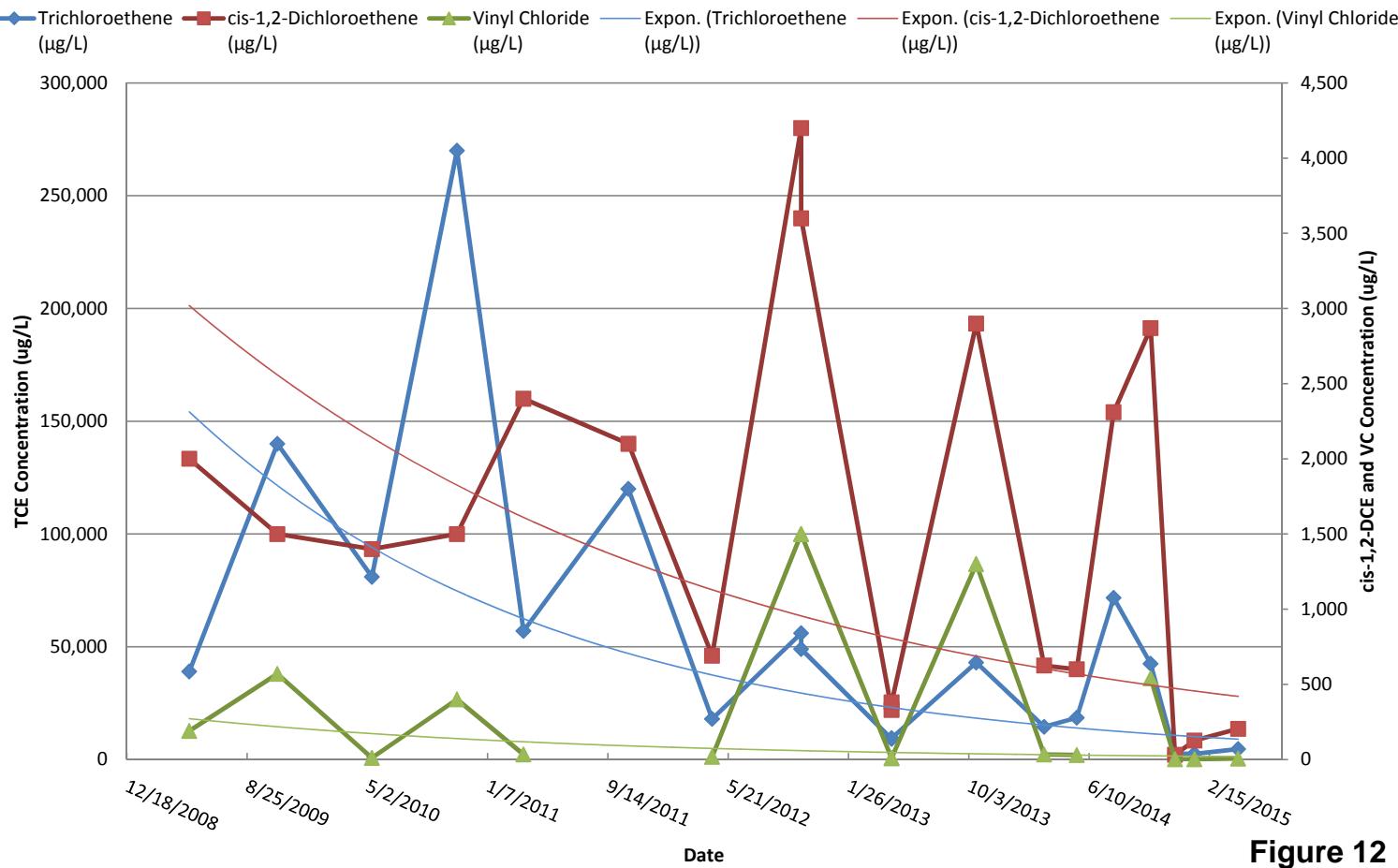
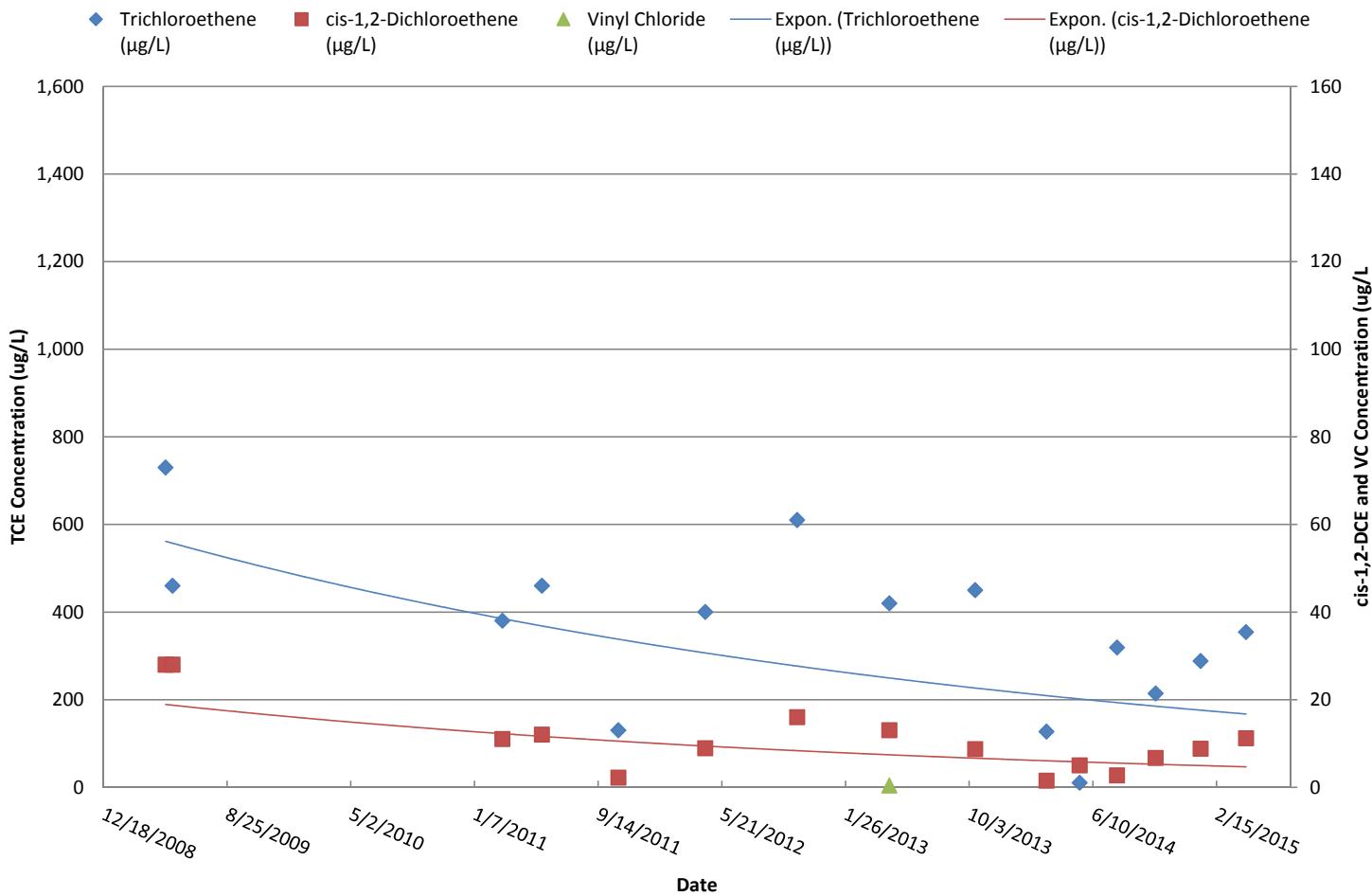


Figure 12

Whirlpool Facility
Fort Smith, Arkansas

TCE, cis-1,2-DCE and Vinyl Chloride Concentrations vs Time – IW-76



TCE, cis-1,2-DCE and Vinyl Chloride Concentrations vs Time – IW-77

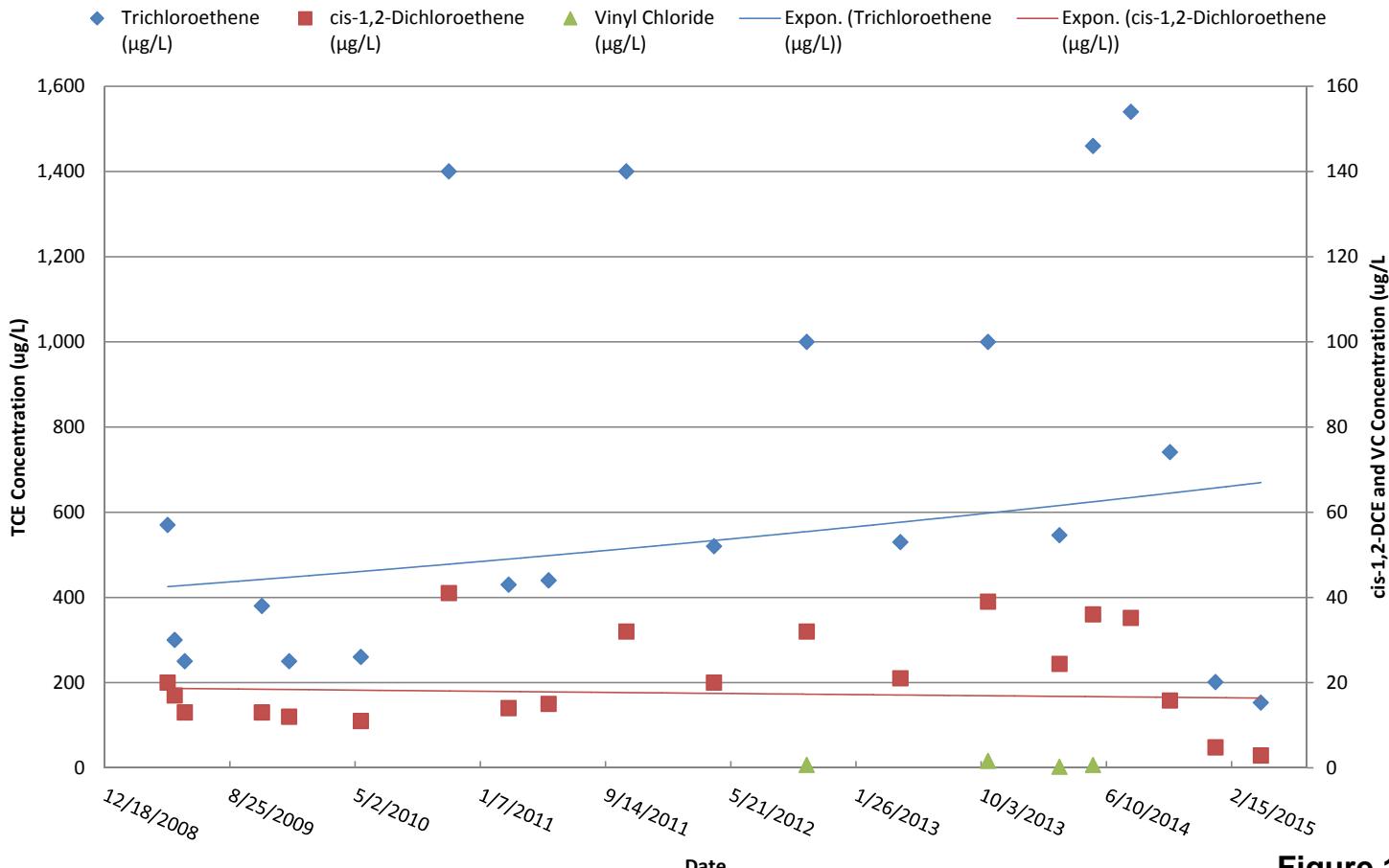


Figure 13

Whirlpool Facility
Fort Smith, Arkansas

TCE Concentrations vs Time – MW-61

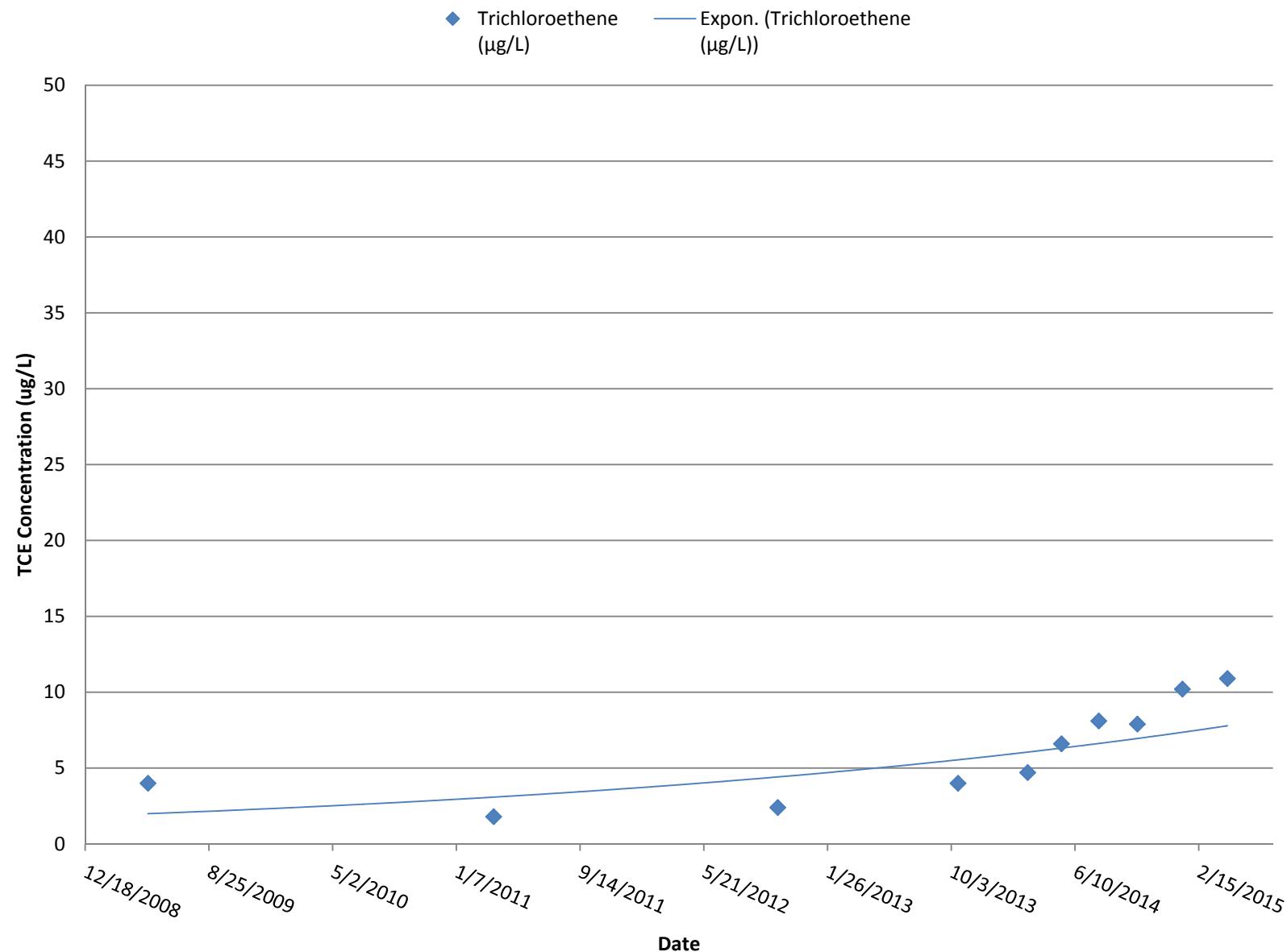


Figure 14

Whirlpool Facility
Fort Smith, Arkansas

**Appendix A
Second quarter 2015 Calibration Logs**

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4/13/15

4 Calibrated by: VSL

5 Turn on YSI. Note time on line 38!

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

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

Lot # 4A1H648

Exp 8/2015

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

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

Lot # 7760

Exp 10/2019

16 3-Point pH calibration (should take at least 4.5 minutes):

- 17 1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
- 18 2. Allow 1 minute for temperature stabilization.
- 19 3. Press "calibrate" after 30 seconds of no significant change in pH. Note below.
- 20 4. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 21 5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
- 22 6. Allow 1 minute for temperature stabilization.
- 23 7. Press "calibrate" after 30 seconds of no significant change in pH. Note below.
- 24 8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 25 9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
- 26 10. Allow 1 minute for temperature stabilization.
- 27 11. Press "calibrate" after 30 seconds of no significant change in pH. Note standard below.
- 28 12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Lot # 4A1F624

Exp: 9/2016

Lot # 4A5507

Exp: 10/2016

Lot # 4A5289

Exp: 10/2016

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

- 38 1. Ensure unit has been on for at least 10 minutes: Initial time: 1228 + 10min = 1238

- 39 2. Enter the local barometric pressure.

40 (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then
41 to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)

$$30.01 \text{ in.} \times 25.4 = 742.25 \text{ mmHg} - 15.169 = 727.09 \text{ mmHg}$$

- 42 3. Place ~3mm of DI water in the bottom of the calibration cup.
- 43 4. Lightly screw on the calibration cup (only 1 or 2 threads!)
- 44 5. Allow 10 minutes for the air in the cup to become water-saturated and temp to stabilize.
- 45 6. Press "calibrate" after 30 seconds of no significant change in DO. Note below.
- 46 7. Discard used DI water, and rinse calibration cup and probes with DI water.

47 Turbidity calibration:

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

52 Field Notebook calibration entry:

53 YSI – Serial Number: 175064389

- 54 1. Specific Conductance: 1.389

- 55 2. ORP: 246.2

- 56 3. pH:

- 57 • Point 1: 4.54
- 58 • Point 2: 9.80
- 59 • Point 3: 4.419

- 60 4. DO: 11.54

61 Colorimeter Model/Serial Number:

62 Turbidity Meter Model/Serial Number:

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist

2 Date: 4/13/15

3 Calibrated by: J. Stumpf

4 Turn on YSI. Note time on line 38!

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

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

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

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

15 3-Point pH calibration (should take at least 4.5 minutes):

- 16 1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
- 17 2. Allow 1 minute for temperature stabilization.
- 18 3. Press "calibrate" after 30 seconds of no significant change in pH. Note below.
- 19 4. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 20 5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
- 21 6. Allow 1 minute for temperature stabilization.
- 22 7. Press "calibrate" after 30 seconds of no significant change in pH. Note below
- 23 8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 24 9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
- 25 10. Allow 1 minute for temperature stabilization.
- 26 11. Press "calibrate" after 30 seconds of no significant change in pH. Note standard below.
- 27 12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

- 29 1. Ensure unit has been on for at least 10 minutes: Initial time: 13:38 + 10min = 14:00

- 30 2. Enter the local barometric pressure.

31 (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then
32 to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)

$$32 \quad 30.01 \text{ in.} \times 25.4 = 762.3 \text{ mmHg} - 15.169 = 747.1 \text{ mmHg}$$

- 33 3. Place ~3mm of DI water in the bottom of the calibration cup.
- 34 4. Lightly screw on the calibration cup (only 1 or 2 threads!)
- 35 5. Allow 10 minutes for the air in the cup to become water-saturated and temp to stabilize.
- 36 6. Press "calibrate" after 30 seconds of no significant change in DO. Note below.
- 37 7. Discard used DI water, and rinse calibration cup and probes with DI water.

38 Turbidity calibration:

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

43 Field Notebook calibration entry:

44 YSI – Serial Number: 019811

45 1. Specific Conductance: 1.413

46 2. ORP: 240

47 3. pH:

- 48 • Point 1: 7.00
- 49 • Point 2: 10.00
- 50 • Point 3: 4.00

51 4. DO: 98.3

52 Colorimeter Model/Serial Number:

53 Turbidity Meter Model/Serial Number:

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4/13/2015

4 Calibrated by: J. Myers

5 Turn on YSI. Note time on line 38!

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

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

11 1.241 mS/cm 1.342 mS/cm

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

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

17 $\text{ORP } 240.1$

18 3-Point pH calibration (should take at least 4.5 minutes):

- 19 1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
- 20 2. Allow 1 minute for temperature stabilization.
- 21 3. Press "calibrate" after 30 seconds of no significant change in pH. Note below. 6.94
- 22 4. Discard used calibration standard, and rinse calibration cup and probes with DI water. 6.88 pH Titr.
- 23 5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
- 24 6. Allow 1 minute for temperature stabilization.
- 25 7. Press "calibrate" after 30 seconds of no significant change in pH. Note below
- 26 8. Discard used calibration standard, and rinse calibration cup and probes with DI water. 4.94
- 27 9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
- 28 10. Allow 1 minute for temperature stabilization.
- 29 11. Press "calibrate" after 30 seconds of no significant change in pH. Note standard below.
- 30 12. Discard used calibration standard, and rinse calibration cup and probes with DI water. 4.02

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

- 32 1. Ensure unit has been on for at least 10 minutes: Initial time: 1345 + 10min = 1445

- 33 2. Enter the local barometric pressure.

34 (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then
35 to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)

$$30.01 \text{ in.} \times 25.4 = 762.3 \text{ mmHg} - 15.169 = 747.1 \text{ mmHg}$$

- 36 3. Place ~3mm of DI water in the bottom of the calibration cup.
- 37 4. Lightly screw on the calibration cup (only 1 or 2 threads!)
- 38 5. Allow 10 minutes for the air in the cup to become water-saturated and temp to stabilize.
- 39 6. Press "calibrate" after 30 seconds of no significant change in DO. Note below.
- 40 7. Discard used DI water, and rinse calibration cup and probes with DI water. ✓

41 98.3%

42 Turbidity calibration:

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

47 Field Notebook calibration entry:

48 YSI - Serial Number: 146101342

- 49 1. Specific Conductance: 1.342 mS/cm

- 50 2. ORP: 240.1

- 51 3. pH:

- 52 • Point 1: 6.94

- 53 • Point 2: 9.99

- 54 • Point 3: 7.02

- 55 4. DO: 98.3

56 Colorimeter Model/Serial Number: 141824

57 Turbidity Meter Model/Serial Number: 018684

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4/13/2015
4

5 Calibrated by: NES
6

7 Turn on YSI. Note time on line 38!
8

9 Specific Conductance calibration (should take *at least* 1.5 minutes):
10

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.

15 ORP calibration (should take *at least* 1.5 minutes):
16

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.

21 3-Point pH calibration (should take *at least* 4.5 minutes):
22

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.

37 Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):
38

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.)

$$\underline{30.01} \text{ in.} \times 25.4 = \underline{762.25} \text{ mmHg} - 15.169 = \underline{747.09} \text{ mmHg}$$

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.

49 Turbidity calibration:
50

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).

55 Field Notebook calibration entry:
56

YSI – Serial Number: 10 K101389

57 1. Specific Conductance: 1413 ms/cm

58 2. ORP: 240.0

59 3. pH:

60 • Point 1: 10.00

61 • Point 2: 4.00

62 • Point 3: 7.00

63 4. DO: 100%

64 Colorimeter Model/Serial Number:

65 Turbidity Meter Model/Serial Number:

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4-13-2015
4

5 Calibrated by: Lucy Cross
6

7 Turn on YSI. Note time on line 38!
8

9 Specific Conductance calibration (should take at least 1.5 minutes):
10

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.

15 ORP calibration (should take at least 1.5 minutes):
16

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.

21 3-Point pH calibration (should take at least 4.5 minutes):
22

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.

37 Dissolved Oxygen (% DO) calibration (should take at least 10 minutes):
38

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.)

$$\underline{30.01 \text{ in.} \times 25.4 = 762.3 \text{ mmHg}} - 15.169 = \underline{747.1 \text{ mmHg}}$$

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.

48 Turbidity calibration:
49

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).

55 Field Notebook calibration entry:
56

YSI – Serial Number:

57 1. Specific Conductance: 1.413

58 2. ORP: 240.0

59 3. pH:

- Point 1: 7.00
- Point 2: 10.00
- Point 3: 4.00

63 4. DO: 0.26

64 Colorimeter Model/Serial Number:

65 Turbidity Meter Model/Serial Number:

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist

2 Date: 4/13/15

3 Calibrated by: LAW MARTON

4 Turn on YSI. Note time on line 38!

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

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

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

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

15 3-Point pH calibration (should take at least 4.5 minutes):

- 16 1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
- 17 2. Allow 1 minute for temperature stabilization.
- 18 3. Press "calibrate" after 30 seconds of no significant change in pH. Note below.
- 19 4. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 20 5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
- 21 6. Allow 1 minute for temperature stabilization.
- 22 7. Press "calibrate" after 30 seconds of no significant change in pH. Note below
- 23 8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 24 9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
- 25 10. Allow 1 minute for temperature stabilization.
- 26 11. Press "calibrate" after 30 seconds of no significant change in pH. Note standard below.
- 27 12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

28 Dissolved Oxygen (% DO) calibration (should take at least 10 minutes):
29 1. Ensure unit has been on for at least 10 minutes: Initial time: 4:51:40 + 10min = 14:20:40
30 2. Enter the local barometric pressure.
31 (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then
32 to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
33 30.01 in. x 25.4 = 762.3 mmHg - 15.169 = 747.1 mmHg
34 3. Place ~3mm of DI water in the bottom of the calibration cup.
35 4. Lightly screw on the calibration cup (only 1 or 2 threads!).
36 5. Allow 10 minutes for the air in the cup to become water-saturated and temp to stabilize.
37 6. Press "calibrate" after 30 seconds of no significant change in DO. Note below.
38 7. Discard used DI water, and rinse calibration cup and probes with DI water.

39 Turbidity calibration:

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

44 Field Notebook calibration entry:

45 YSI - Serial Number: 111K100350

46 1. Specific Conductance: 1413

47 2. ORP: 240

48 3. pH:

- 49 • Point 1: 7.00
- 50 • Point 2: 10.01
- 51 • Point 3: 4.03

52 4. DO: 98.3 - "OUT OF RANGE, LET SIT FOR ~20 MIN (WORLD
53 NOT GET IN RANGE)

54 Colorimeter Model/Serial Number:

55 Turbidity Meter Model/Serial Number:

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4/14/15

4 Calibrated by: Rachel Lafond

5 Turn on YSI. Note time on line 38!

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

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

Exp 10/31/2015

Lot # 4A J853

1,298 mS/cm²

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

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

Exp 10/31/15

Lot 4A J853

1,298 mS/cm²

239.8

16 3-Point pH calibration (should take at least 4.5 minutes):

- 17 1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
- 18 2. Allow 1 minute for temperature stabilization.
- 19 3. Press "calibrate" after 30 seconds of no significant change in pH. Note below.
- 20 4. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 21 5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
- 22 6. Allow 1 minute for temperature stabilization.
- 23 7. Press "calibrate" after 30 seconds of no significant change in pH. Note below.
- 24 8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 25 9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
- 26 10. Allow 1 minute for temperature stabilization.
- 27 11. Press "calibrate" after 30 seconds of no significant change in pH. Note standard below.
- 28 12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Exp 8/30/16

Lot # 4A H570

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

- 38 1. Ensure unit has been on for at least 10 minutes: Initial time: 0650 + 10min = 0703
- 39 2. Enter the local barometric pressure.

40 (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then
41 to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)

$$30.11 \text{ in.} \times 25.4 = 761.744 \text{ mmHg} - 15.169 = 749.625 \text{ mmHg}$$

- 42 3. Place ~3mm of DI water in the bottom of the calibration cup.
- 43 4. Lightly screw on the calibration cup (only 1 or 2 threads!)
- 44 5. Allow 10 minutes for the air in the cup to become water-saturated and temp to stabilize.
- 45 6. Press "calibrate" after 30 seconds of no significant change in DO. Note below.
- 46 7. Discard used DI water, and rinse calibration cup and probes with DI water.

47 Turbidity calibration:

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

55 Field Notebook calibration entry:

56 YSI - Serial Number: 14L101344

57 1. Specific Conductance: 1,298 mS/cm²

58 2. ORP: 239.8

59 3. pH:

- 60 • Point 1: 6.98
- 61 • Point 2: 10.12
- 62 • Point 3: 4.04

63 4. DO: 14.6

b5 329

64 Colorimeter Model/Serial Number:

65 Turbidity Meter Model/Serial Number: D25108

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 9/14/15
4

5 Calibrated by: J. Shumpf
6

7 Turn on YSI. Note time on line 38!
8

9 Specific Conductance calibration (should take at least 1.5 minutes):
10

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.

15 ORP calibration (should take at least 1.5 minutes):
16

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.

21 3-Point pH calibration (should take at least 4.5 minutes):
22

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.

37 Dissolved Oxygen (% DO) calibration (should take at least 10 minutes):
38

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.)

$$\underline{30.11} \text{ in.} \times 25.4 = \underline{764.8} \text{ mmHg} - 15.169 = \underline{749.6} \text{ mmHg}$$

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.

48 Turbidity calibration:
49

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).

55 Field Notebook calibration entry:
56

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:

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4/14/2015

4 Calibrated by: Lucy Cross

5 Turn on YSI. Note time on line 38!

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

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

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

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

16 3-Point pH calibration (should take at least 4.5 minutes):

- 17 1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
- 18 2. Allow 1 minute for temperature stabilization.
- 19 3. Press "calibrate" after 30 seconds of no significant change in pH. Note below.
- 20 4. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 21 5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
- 22 6. Allow 1 minute for temperature stabilization.
- 23 7. Press "calibrate" after 30 seconds of no significant change in pH. Note below
- 24 8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 25 9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
- 26 10. Allow 1 minute for temperature stabilization.
- 27 11. Press "calibrate" after 30 seconds of no significant change in pH. Note standard below.
- 28 12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

- 30 1. Ensure unit has been on for at least 10 minutes: Initial time: 7:09 + 10min = 7:19
- 31 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
32 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
- 33 3. Place ~3mm of DI water in the bottom of the calibration cup.
- 34 4. Lightly screw on the calibration cup (only 1 or 2 threads!)
- 35 5. Allow 10 minutes for the air in the cup to become water-saturated and temp to stabilize.
- 36 6. Press "calibrate" after 30 seconds of no significant change in DO. Note below.
- 37 7. Discard used DI water, and rinse calibration cup and probes with DI water.

38 Turbidity calibration:

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

43 Field Notebook calibration entry:

44 YSI – Serial Number:

- 45 1. Specific Conductance: 1413
- 46 2. ORP: 240.0
- 47 3. pH:
 - 48 • Point 1: 7.00
 - 49 • Point 2: 10.00
 - 50 • Point 3: 4.00
- 51 4. DO: 98.5%

52 Colorimeter Model/Serial Number:

53 Turbidity Meter Model/Serial Number:

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4/14/15

4 Calibrated by: Victoria Siegen

5 Turn on YSI. Note time on line 38!

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

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

Lot # 44
4A14e48

Exp 8/2015

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

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

Lot # 7760

Exp 4/12/09

16 3-Point pH calibration (should take at least 4.5 minutes):

- 17 1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
- 18 2. Allow 1 minute for temperature stabilization.
- 19 3. Press "calibrate" after 30 seconds of no significant change in pH. Note below.
- 20 4. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 21 5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
- 22 6. Allow 1 minute for temperature stabilization.
- 23 7. Press "calibrate" after 30 seconds of no significant change in pH. Note below.
- 24 8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 25 9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
- 26 10. Allow 1 minute for temperature stabilization.
- 27 11. Press "calibrate" after 30 seconds of no significant change in pH. Note standard below.
- 28 12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Lot # 4A14e24

Exp 9/2016

Lot # 4A5507

Exp 10/12/09

Lot # 4A5289

Exp 10/12/09

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

- 38 1. Ensure unit has been on for at least 10 minutes: Initial time: 0700 + 10min = 0710

- 39 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.)

$$\text{in.} \times 25.4 = \text{mmHg} - 15.169 = 749.4 \text{ mmHg}$$

- 40 3. Place ~3mm of DI water in the bottom of the calibration cup.
- 41 4. Lightly screw on the calibration cup (only 1 or 2 threads!)
- 42 5. Allow 10 minutes for the air in the cup to become water-saturated and temp to stabilize.
- 43 6. Press "calibrate" after 30 seconds of no significant change in DO. Note below.
- 44 7. Discard used DI water, and rinse calibration cup and probes with DI water.

45 Turbidity calibration:

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

50 Field Notebook calibration entry:

51 YSI – Serial Number: 1301

- 52 1. Specific Conductance: 143

- 53 2. ORP: ±10258

- 54 3. pH:

- 55 • Point 1: 7.04

- 56 • Point 2: 8.43

- 57 • Point 3: 3.94

- 58 4. DO: 2589.14

59 Colorimeter Model/Serial Number:

60 Turbidity Meter Model/Serial Number:

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4/19/2015
4

5 Calibrated by: MES
6

7 Turn on YSI. Note time on line 38!
8

9 Specific Conductance calibration (should take at least 1.5 minutes):
10

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.

15 ORP calibration (should take at least 1.5 minutes):
16

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.

21 3-Point pH calibration (should take at least 4.5 minutes):
22

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.

37 Dissolved Oxygen (% DO) calibration (should take at least 10 minutes):
38

1. Ensure unit has been on for at least 10 minutes: Initial time: 7:20 + 10min = 8:20
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.

48 Turbidity calibration:
49

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).

55 Field Notebook calibration entry:
56

YSI – Serial Number: 10K101389

57 1. Specific Conductance: 1.413 mS/cm³

58 2. ORP: 240.1

59 3. pH:

- Point 1: 11.00
- Point 2: 10.00 9.99
- Point 3: 6.73

63 4. DO: 9.00

64 Colorimeter Model/Serial Number:

65 Turbidity Meter Model/Serial Number:

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4/14/15

4

5 Calibrated by: LWM MARION

6

7 Turn on YSI. Note time on line 38!

8

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

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

14

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

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

20

21 3-Point pH calibration (should take at least 4.5 minutes):

- 22 1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
- 23 2. Allow 1 minute for temperature stabilization.
- 24 3. Press "calibrate" after 30 seconds of no significant change in pH. Note below.
- 25 4. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 26
- 27 5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
- 28 6. Allow 1 minute for temperature stabilization.
- 29 7. Press "calibrate" after 30 seconds of no significant change in pH. Note below
- 30 8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 31
- 32 9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
- 33 10. Allow 1 minute for temperature stabilization.
- 34 11. Press "calibrate" after 30 seconds of no significant change in pH. Note standard below.
- 35 12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

36

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

- 38 1. Ensure unit has been on for at least 10 minutes: Initial time: 0717 + 10min = 0727

- 39 2. Enter the local barometric pressure.

40

41 (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then
42 to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
749.6 in. x 25.4 = 1890.6 mmHg - 15.169 = 1875.4 mmHg

- 43 3. Place ~3mm of DI water in the bottom of the calibration cup.
- 44 4. Lightly screw on the calibration cup (only 1 or 2 threads!)
- 45 5. Allow 10 minutes for the air in the cup to become water-saturated and temp to stabilize.
- 46 6. Press "calibrate" after 30 seconds of no significant change in DO. Note below.
- 47 7. Discard used DI water, and rinse calibration cup and probes with DI water.

48

49 Turbidity calibration:

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

54

55 Field Notebook calibration entry:

56 YSI – Serial Number: JK100360

- 57 1. Specific Conductance: 7.413

- 58 2. ORP: 240.0

- 59 3. pH:

- 60 • Point 1: 7.00

- 61 • Point 2: 10.00

- 62 • Point 3: 4.03

- 63 4. DO: 98.10

64 Colorimeter Model/Serial Number:

65 Turbidity Meter Model/Serial Number:

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4/14/2015

4
5 Calibrated by: J Myer

6
7 Turn on YSI. Note time on line 38!

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

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

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

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

20 ✓ 3-Point pH calibration (should take at least 4.5 minutes):

- 22 1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
- 23 2. Allow 1 minute for temperature stabilization.
- 24 3. Press "calibrate" after 30 seconds of no significant change in pH. Note below.
- 25 4. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 26
27 5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
- 28 6. Allow 1 minute for temperature stabilization.
- 29 7. Press "calibrate" after 30 seconds of no significant change in pH. Note below
- 30 8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 31
32 9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
- 33 10. Allow 1 minute for temperature stabilization.
- 34 11. Press "calibrate" after 30 seconds of no significant change in pH. Note standard below.
- 35 12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

- 38 1. Ensure unit has been on for at least 10 minutes: Initial time: 0655 + 10min = 0705
- 39 2. Enter the local barometric pressure.

40 (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then
41 to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)

$$42 \underline{30.11} \text{ in.} \times 25.4 = \underline{764.8} \text{ mmHg} - 15.169 = \underline{749.6} \text{ mmHg}$$

- 43 3. Place ~3mm of DI water in the bottom of the calibration cup.
- 44 4. Lightly screw on the calibration cup (only 1 or 2 threads!)
- 45 5. Allow 10 minutes for the air in the cup to become water-saturated and temp to stabilize.
- 46 6. Press "calibrate" after 30 seconds of no significant change in DO. Note below.
- 47 7. Discard used DI water, and rinse calibration cup and probes with DI water.

48 ✓ Turbidity calibration:

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

54 Field Notebook calibration entry:

55 YSI – Serial Number: 176834 146101342

- 56 1. Specific Conductance: 1413
- 57 2. ORP: 240
- 58 3. pH:
 - 60 • Point 1: 6.91 → 7.0
 - 61 • Point 2: 10.15 → 10.0
 - 62 • Point 3: 4.24 → 4.04
- 63 4. DO: 98.6%

64 Colorimeter Model/Serial Number: 145824

65 Turbidity Meter Model/Serial Number: 018094

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist

2 Date: 4/15/2015

3 Calibrated by: JM

4 Turn on YSI. Note time on line 38!

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

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

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

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

15 3-Point pH calibration (should take at least 4.5 minutes):

- 16 1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
- 17 2. Allow 1 minute for temperature stabilization.
- 18 3. Press "calibrate" after 30 seconds of no significant change in pH. Note below.
- 19 4. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 20 5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
- 21 6. Allow 1 minute for temperature stabilization.
- 22 7. Press "calibrate" after 30 seconds of no significant change in pH. Note below
- 23 8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 24 9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
- 25 10. Allow 1 minute for temperature stabilization.
- 26 11. Press "calibrate" after 30 seconds of no significant change in pH. Note standard below.
- 27 12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

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

37 Turbidity calibration:

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

42 Field Notebook calibration entry:

43 YSI – Serial Number: 1416161341

44 1. Specific Conductance: 1491 → 1413

45 2. ORP: 238.1 → 240.0

46 3. pH:

- 47 • Point 1: 4.03 → 4.00
- 48 • Point 2: 6.96 → 7.00
- 49 • Point 3: 10.02 → 10.00

50 4. DO: 92.1 → 98.1

51 Colorimeter Model/Serial Number: 141824

52 Turbidity Meter Model/Serial Number: D14084

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist

2 Date: 4/15/2015

3 Calibrated by: Lucy Cross

4 Turn on YSI. Note time on line 38!

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

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

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

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

15 3-Point pH calibration (should take at least 4.5 minutes):

- 16 1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
- 17 2. Allow 1 minute for temperature stabilization.
- 18 3. Press "calibrate" after 30 seconds of no significant change in pH. Note below.
- 19 4. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 20
- 21 5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
- 22 6. Allow 1 minute for temperature stabilization.
- 23 7. Press "calibrate" after 30 seconds of no significant change in pH. Note below
- 24 8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 25
- 26 9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
- 27 10. Allow 1 minute for temperature stabilization.
- 28 11. Press "calibrate" after 30 seconds of no significant change in pH. Note standard below.
- 29 12. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 30

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

32 1. Ensure unit has been on for at least 10 minutes: Initial time: 7:11 + 10min = 7:21

33 2. Enter the local barometric pressure.

34 (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then
35 to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)

$$36 \underline{29.91} \text{ in.} \times 25.4 = \underline{761.238} \text{ mmHg} - 15.169 = \underline{746.069} \text{ mmHg}$$

- 37 3. Place ~3mm of DI water in the bottom of the calibration cup.
- 38 4. Lightly screw on the calibration cup (only 1 or 2 threads!)
- 39 5. Allow 10 minutes for the air in the cup to become water-saturated and temp to stabilize.
- 40 6. Press "calibrate" after 30 seconds of no significant change in DO. Note below.
- 41 7. Discard used DI water, and rinse calibration cup and probes with DI water.

42 Turbidity calibration:

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

47 Field Notebook calibration entry:

48 YSI – Serial Number:

49 1. Specific Conductance: 1.413

50 2. ORP: 240.0

51 3. pH:

52 • Point 1: 7.00

53 • Point 2: 10.00

54 • Point 3: 4.00

55 4. DO: 94.5

56 Colorimeter Model/Serial Number:

57 Turbidity Meter Model/Serial Number:

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist

2 Date: 4/15/15

3 Calibrated by: LUCY MARTON

4 Turn on YSI. Note time on line 38!

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

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

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

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

15 3-Point pH calibration (should take at least 4.5 minutes):

- 16 1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
- 17 2. Allow 1 minute for temperature stabilization.
- 18 3. Press "calibrate" after 30 seconds of no significant change in pH. Note below.
- 19 4. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 20 5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
- 21 6. Allow 1 minute for temperature stabilization.
- 22 7. Press "calibrate" after 30 seconds of no significant change in pH. Note below
- 23 8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 24 9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
- 25 10. Allow 1 minute for temperature stabilization.
- 26 11. Press "calibrate" after 30 seconds of no significant change in pH. Note standard below.
- 27 12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

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

37 Turbidity calibration:

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

42 Field Notebook calibration entry:

43 YSI – Serial Number: 11K100350

NOTE: WHILE AT IIMW-18, DO CALIBRATION

10F102253 APPEARED OFF, RECALIBRATED

44 1. Specific Conductance: 1.413 1.413

AT 0917

45 2. ORP: 240

DO WOULD NOT CALIBRATE,
SWITCHED YSIs & CALIBRATED
10F102253

46 3. pH:

- 47 • Point 1: 7.0 7.0
- 48 • Point 2: 10.0 4.0
- 49 • Point 3: 4.02 9.98

50 4. DO: 98.4 78.4

51 Colorimeter Model/Serial Number:

52 Turbidity Meter Model/Serial Number:

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4/15/2015

4 Calibrated by: WES

5 Turn on YSI. Note time on line 38!

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

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

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

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

16 3-Point pH calibration (should take *at least* 4.5 minutes):

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

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

- 30 1. Ensure unit has been on for at least 10 minutes: Initial time: 600 + 10min = 610

- 31 2. Enter the local barometric pressure.

32 (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then
33 to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)

$$34 \underline{29.97 \text{ in.}} \times 25.4 = \underline{761.238 \text{ mmHg}} - 15.169 = \underline{746.069 \text{ mmHg}}$$

- 35 3. Place ~3mm of DI water in the bottom of the calibration cup.
- 36 4. Lightly screw on the calibration cup (only 1 or 2 threads!)
- 37 5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
- 38 6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
- 39 7. Discard used DI water, and rinse calibration cup and probes with DI water.

40 Turbidity calibration:

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

45 Field Notebook calibration entry:

46 YSI – Serial Number: 10K101390

- 47 1. Specific Conductance: 1413 us/cm²

- 48 2. ORP: 240.0

- 49 3. pH:

- 50 • Point 1: 10.00
- 51 • Point 2: 4.05
- 52 • Point 3: 6.86

- 53 4. DO: 9.41 mg/l

54 Colorimeter Model/Serial Number:

55 Turbidity Meter Model/Serial Number:

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4/15/15

4 Calibrated by: LWJ MARION

5 Turn on YSI. Note time on line 38!

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

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

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

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

16 3-Point pH calibration (should take at least 4.5 minutes):

- 17 1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
- 18 2. Allow 1 minute for temperature stabilization.
- 19 3. Press "calibrate" after 30 seconds of no significant change in pH. Note below.
- 20 4. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 21 5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
- 22 6. Allow 1 minute for temperature stabilization.
- 23 7. Press "calibrate" after 30 seconds of no significant change in pH. Note below
- 24 8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 25 9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
- 26 10. Allow 1 minute for temperature stabilization.
- 27 11. Press "calibrate" after 30 seconds of no significant change in pH. Note standard below.
- 28 12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

- 30 1. Ensure unit has been on for at least 10 minutes: Initial time: 4:40 + 10min = 5:40
- 31 2. Enter the local barometric pressure.

32 (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then
33 to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)

$$29.97 \text{ in.} \times 25.4 = 746.209 \text{ mmHg} - 15.169 = 731.040 \text{ mmHg}$$

- 34 3. Place ~3mm of DI water in the bottom of the calibration cup.
- 35 4. Lightly screw on the calibration cup (only 1 or 2 threads!)
- 36 5. Allow 10 minutes for the air in the cup to become water-saturated and temp to stabilize.
- 37 6. Press "calibrate" after 30 seconds of no significant change in DO. Note below.
- 38 7. Discard used DI water, and rinse calibration cup and probes with DI water.

39 Turbidity calibration:

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

44 Field Notebook calibration entry:

45 YSI – Serial Number: 11K10035U

46 1. Specific Conductance: 1413

47 2. ORP: 240

48 3. pH:

- 49 • Point 1: 10.0
- 50 • Point 2: 4.0
- 51 • Point 3: 0.96

52 4. DO: 98.6

53 Colorimeter Model/Serial Number:

54 Turbidity Meter Model/Serial Number:

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

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4/15/2015

4 Calibrated by: Rachel Lafave

5 Turn on YSI. Note time on line 38!

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

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

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

- 12 1. Pour ORP (Zobell) standard into calibration cup and immerse sensor.
- 13 2. Allow 1 minute for temperature stabilization.
- 14 3. Press "calibrate" after 30 seconds of no significant change in ORP. Note below.
- 15 4. Discard used calibration standard, and rinse calibration cup and probes with DI water. ↗
16 Exp 10/31/15
17 Lot # 4AJS853
18 Lot # 7140
19 Exp 6/2019

20 3-Point pH calibration (should take at least 4.5 minutes):

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

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

- 34 1. Ensure unit has been on for at least 10 minutes: Initial time: 06:50 + 10min = 07:00
- 35 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 = 760.13 mmHg - 15.169 = 745.561 mmHg
- 36 3. Place ~3mm of DI water in the bottom of the calibration cup.
- 37 4. Lightly screw on the calibration cup (only 1 or 2 threads!)
- 38 5. Allow 10 minutes for the air in the cup to become water-saturated and temp to stabilize.
- 39 6. Press "calibrate" after 30 seconds of no significant change in DO. Note below.
- 40 7. Discard used DI water, and rinse calibration cup and probes with DI water.

41 Turbidity calibration:

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

46 Field Notebook calibration entry:

47 YSI - Serial Number: 146101344 RL

- 48 1. Specific Conductance: 1,283 - ~~1,283~~
- 49 2. ORP: 243.0
- 50 3. pH:
 - 51 • Point 1: 6.90
 - 52 • Point 2: 10.03
 - 53 • Point 3: 4.01
- 54 4. DO: 99.8

55 Colorimeter Model/Serial Number: 65329

56 Turbidity Meter Model/Serial Number: 025109

1 **Whirlpool Ft. Smith Field Equipment Calibration Checklist**

2 Date: 4/15/15

3 Calibrated by: Victoria Siegler

4 Turn on YSI. Note time on line 38!

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

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

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

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

15 3-Point pH calibration (should take at least 4.5 minutes):

- 16 1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
- 17 2. Allow 1 minute for temperature stabilization.
- 18 3. Press "calibrate" after 30 seconds of no significant change in pH. Note below.
- 19 4. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 20 5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
- 21 6. Allow 1 minute for temperature stabilization.
- 22 7. Press "calibrate" after 30 seconds of no significant change in pH. Note below
- 23 8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 24 9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
- 25 10. Allow 1 minute for temperature stabilization.
- 26 11. Press "calibrate" after 30 seconds of no significant change in pH. Note standard below.
- 27 12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

- 29 1. Ensure unit has been on for at least 10 minutes: Initial time: 04:44 + 10min = 05:54
- 30 2. Enter the local barometric pressure.

31 (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then
32 to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)

$$\underline{30.01} \text{ in.} \times 25.4 = \underline{762.25} \text{ mmHg} - 15.169 = \underline{747.09} \text{ mmHg}$$

- 33 3. Place ~3mm of DI water in the bottom of the calibration cup.
- 34 4. Lightly screw on the calibration cup (only 1 or 2 threads!)
- 35 5. Allow 10 minutes for the air in the cup to become water-saturated and temp to stabilize.
- 36 6. Press "calibrate" after 30 seconds of no significant change in DO. Note below.
- 37 7. Discard used DI water, and rinse calibration cup and probes with DI water.

38 Turbidity calibration:

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

43 Field Notebook calibration entry:

44 YSI – Serial Number: 17507

45 1. Specific Conductance: 149.2

46 2. ORP: 235.6

47 3. pH:

48 • Point 1: 4.85 4.58

49 • Point 2: 9.57

50 • Point 3: 9.34

51 4. DO: 0.46

52 Colorimeter Model/Serial Number:

53 Turbidity Meter Model/Serial Number:

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4/15/15
4

5 Calibrated by: J. Shumpf
6

7 Turn on YSI. Note time on line 38!
8

9 Specific Conductance calibration (should take at least 1.5 minutes):
10

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.

15 ORP calibration (should take at least 1.5 minutes):
16

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.

21 3-Point pH calibration (should take at least 4.5 minutes):
22

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.

37 Dissolved Oxygen (% DO) calibration (should take at least 10 minutes):
38

1. Ensure unit has been on for at least 10 minutes: Initial time: 0053 + 10min = 0103
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.

49 Turbidity calibration:
50

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).

55 Field Notebook calibration entry:
56

YSI – Serial Number: 011871

57 1. Specific Conductance: 141.2

58 2. ORP: 237.6 → 240

59 3. pH:

- Point 1: 7.00
- Point 2: 4.00
- Point 3: 10.01

63 4. DO: 98.2

64 Colorimeter Model/Serial Number:

65 Turbidity Meter Model/Serial Number:

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4/15/15 /
4 Calibrated by: VS
5

Turn on YSI. Note time on line 38!

8 Specific Conductance calibration (should take at least 1.5 minutes):
9

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

14 ORP calibration (should take at least 1.5 minutes):
15

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

Lot # 7160

Exp 4/2019

21 3-Point pH calibration (should take at least 4.5 minutes):
22

- 23 1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. *Lot # 4A1624*
24 2. Allow 1 minute for temperature stabilization.
25 3. Press "calibrate" after 30 seconds of no significant change in pH. Note below. *Exp 9/2014*
26 4. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 27 5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. *Lot # 4AJS07*
28 6. Allow 1 minute for temperature stabilization.
29 7. Press "calibrate" after 30 seconds of no significant change in pH. Note below *Exp 10/2016*
30 8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 31 9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor. *Lot # 4AJS289*
32 10. Allow 1 minute for temperature stabilization.
33 11. Press "calibrate" after 30 seconds of no significant change in pH. Note standard below. *Exp 4/2016*
34 12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

37 Dissolved Oxygen (% DO) calibration (should take at least 10 minutes):
38

- 39 1. Ensure unit has been on for at least 10 minutes: Initial time: 0:44 + 10min = 6:54

- 40 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.)

$$29.97 \text{ in.} \times 25.4 = 761.24 \text{ mmHg} - 15.169 = 746.07 \text{ mmHg}$$

- 41 3. Place ~3mm of DI water in the bottom of the calibration cup.
- 42 4. Lightly screw on the calibration cup (only 1 or 2 threads!)
- 43 5. Allow 10 minutes for the air in the cup to become water-saturated and temp to stabilize.
- 44 6. Press "calibrate" after 30 seconds of no significant change in DO. Note below.
- 45 7. Discard used DI water, and rinse calibration cup and probes with DI water.

48 Turbidity calibration:

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

55 Field Notebook calibration entry:

56 YSI – Serial Number:

- 57 1. Specific Conductance: 1153

- 58 2. ORP: 231.5

- 59 3. pH:

- 60 • Point 1: 6.95
- 61 • Point 2: 9.85
- 62 • Point 3: 4.65/4.14

- 63 4. DO: 10.01

64 Colorimeter Model/Serial Number:

65 Turbidity Meter Model/Serial Number:

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4/16/15
4

5 Calibrated by: J. Myrs
6

7 Turn on YSI. Note time on line 38!
8

9 Specific Conductance calibration (should take at least 1.5 minutes):
10

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.

15 ORP calibration (should take at least 1.5 minutes):
16

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.

21 ✓ 3-Point pH calibration (should take at least 4.5 minutes):
22

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.

37 ✓ Dissolved Oxygen (% DO) calibration (should take at least 10 minutes):
38

1. Ensure unit has been on for at least 10 minutes: Initial time: 655 + 10min = 6705
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.)
30.0 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.

49 Turbidity calibration:
50

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).

55 Field Notebook calibration entry:
56

YSI – Serial Number: 1416101342

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: 141824

Turbidity Meter Model/Serial Number: 0146084

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist

2 Date: 4-16-2015

3 Calibrated by: Lucy Cross

4 Turn on YSI. Note time on line 38!

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

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

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

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

15 3-Point pH calibration (should take *at least* 4.5 minutes):

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

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

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

36 Turbidity calibration:

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

41 Field Notebook calibration entry:

42 YSI – Serial Number: 12441
43 1. Specific Conductance: 1413
44 2. ORP: 240.1
45 3. pH:

- 46 • Point 1: 7.00
- 47 • Point 2: 10.00
- 48 • Point 3: 4.00

49 4. DO: 95.5%

50 Colorimeter Model/Serial Number:

51 Turbidity Meter Model/Serial Number:

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4/16/15
4

5 Calibrated by: V. Stumpf
6

7 Turn on YSI. Note time on line 38!
8

9 Specific Conductance calibration (should take at least 1.5 minutes):
10

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.

15 ORP calibration (should take at least 1.5 minutes):
16

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.

21 3-Point pH calibration (should take at least 4.5 minutes):
22

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.

37 Dissolved Oxygen (% DO) calibration (should take at least 10 minutes):
38

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.)

$$\underline{30.01} \text{ in.} \times 25.4 = \underline{762.25} \text{ mmHg} - 15.169 = \underline{747.081} \text{ mmHg}$$

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.

49 Turbidity calibration:
50

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).

55 Field Notebook calibration entry:
56

- 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

64 Colorimeter Model/Serial Number:

65 Turbidity Meter Model/Serial Number:

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4/16/15

4
5 Calibrated by: Rachel LaFlore

6 Turn on YSI. Note time on line 38!

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

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

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

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

17 3-Point pH calibration (should take at least 4.5 minutes):

- 18 1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor.
- 19 2. Allow 1 minute for temperature stabilization.
- 20 3. Press "calibrate" after 30 seconds of no significant change in pH. Note below.
- 21 4. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 22 5. Pour pH 10.0 standard into the calibration cup and immerse pH sensor.
- 23 6. Allow 1 minute for temperature stabilization.
- 24 7. Press "calibrate" after 30 seconds of no significant change in pH. Note below
- 25 8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
- 26 9. Pour pH 4.0 standard into the calibration cup and immerse pH sensor.
- 27 10. Allow 1 minute for temperature stabilization.
- 28 11. Press "calibrate" after 30 seconds of no significant change in pH. Note standard below.
- 29 12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

- 31 1. Ensure unit has been on for at least 10 minutes: Initial time: 0648 + 10min = 0658
- 32 2. Enter the local barometric pressure.

33 (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then
34 to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)

$$30.02 \text{ in.} \times 25.4 = 762.508 \text{ mmHg} - 15.169 = 747.339 \text{ mmHg}$$

- 35 3. Place ~3mm of DI water in the bottom of the calibration cup.
- 36 4. Lightly screw on the calibration cup (only 1 or 2 threads!)
- 37 5. Allow 10 minutes for the air in the cup to become water-saturated and temp to stabilize.
- 38 6. Press "calibrate" after 30 seconds of no significant change in DO. Note below.
- 39 7. Discard used DI water, and rinse calibration cup and probes with DI water.

40 Turbidity calibration:

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

45 Field Notebook calibration entry:

46 YSI – Serial Number: 141101344X

- 47 1. Specific Conductance: 1.685

- 48 2. ORP: 240.1

- 49 3. pH:

- 50 • Point 1: 3.98

- 51 • Point 2: 10.07

- 52 • Point 3: 6.98

- 53 4. DO: 98.8

54 Colorimeter Model/Serial Number: 05329

55 Turbidity Meter Model/Serial Number: 025108

1 Whirlpool Ft. Smith Field Equipment Calibration Checklist
2

3 Date: 4/16/2015
4

5 Calibrated by: NES
6

7 Turn on YSI. Note time on line 38!
8

9 Specific Conductance calibration (should take *at least* 1.5 minutes):
10

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.

15 ORP calibration (should take *at least* 1.5 minutes):
16

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.

21 3-Point pH calibration (should take *at least* 4.5 minutes):
22

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.

37 Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes):
38

1. Ensure unit has been on for at least 10 minutes: Initial time: 1020 + 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.)

$$\underline{30.03} \text{ in.} \times 25.4 = \underline{\text{747.593}} \text{ mmHg}$$

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.

48 Turbidity calibration:
49

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).

54 Field Notebook calibration entry:
55

56 YSI – Serial Number: 10K1b13B9
57

58 1. Specific Conductance: 1413 μS/cm

59 2. ORP: 240.0

60 3. pH:

- Point 1: 10.00
- Point 2: 4.01
- Point 3: 6.87

63 4. DO: 9.58

64 Colorimeter Model/Serial Number:

65 Turbidity Meter Model/Serial Number:

**Appendix B
Laboratory Analytical Data**

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



REPORT OF LABORATORY ANALYSIS

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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

REPORT OF LABORATORY ANALYSIS

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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:

REPORT OF LABORATORY ANALYSIS

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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:

REPORT OF LABORATORY ANALYSIS

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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:

REPORT OF LABORATORY ANALYSIS

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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:

REPORT OF LABORATORY ANALYSIS

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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:

REPORT OF LABORATORY ANALYSIS

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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

REPORT OF LABORATORY ANALYSIS

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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.

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
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		

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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		

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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		

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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		

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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
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		

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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

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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		Prepared	Analyzed	CAS No.	Qual
			Limit	MDL				
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		

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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		

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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
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		

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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		

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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		

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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		

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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		Prepared	Analyzed	CAS No.	Qual
			Limit	MDL				
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	

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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

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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
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	Reporting		Analyzed	Qualifiers
		Result	Limit			
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		MS		MSD				% Rec Limits	RPD	Max RPD	Qual
		Spike Conc.	Result	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec					
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.: 60191794

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:	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	Max 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.: 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	Reporting		Qualifiers
		Result	Limit	Analyzed	
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	LCS		% Rec		Qualifiers
		Conc.	Result	% Rec	Limits		
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	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		60191794002	Spike	Conc.	Result	Result	Result	% Rec	Result	% Rec	RPD	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	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		60191794003	Spike	Conc.	Result	Result	Result	% Rec	Result	% Rec	RPD	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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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-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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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	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		60191794002	Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	% Rec				
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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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR

Pace Project No.: 60191794

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		1551635		1551636													
Parameter	Units	MS		MSD		MS		MSD		MS		MSD		% Rec	Limits	Max	
		60191794002	Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	MSD % Rec	RPD	RPD	Qual	RPD	RPD	RPD	RPD	
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	MS		MSD		MS		MSD		MS		MSD		% Rec	Limits	Max	
		60191794003	Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	MSD % Rec	RPD	RPD	Qual	RPD	RPD		RPD	RPD
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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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR

Pace Project No.: 60191794

Parameter	Units	60191794003		MS Spike		MSD Spike		MSD		MS % Rec		MSD % Rec		% Rec Limits		Max RPD		Max Qual	
		Result	Conc.	Conc.	Result	Conc.	Result	% Rec	Result	% Rec	RPD	RPD	RPD	RPD	Limits	RPD	RPD	RPD	
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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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	Reporting	Analyzed	Qualifiers
		Result	Limit		
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	20.0	04/17/15 08:09	
Alkalinity, Total as CaCO ₃	mg/L	ND	20.0	04/17/15 08:09	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	20.0	04/17/15 08:09	

LABORATORY CONTROL SAMPLE: 1550752

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Alkalinity, Total as CaCO ₃	mg/L	500	507	101	90-110	

SAMPLE DUPLICATE: 1550753

Parameter	Units	60191794002	Dup	RPD	Max	Qualifiers
		Result	Result		RPD	
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO ₃	mg/L	81.6	82.2	1	10	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	81.6	82.2	1	10	

SAMPLE DUPLICATE: 1550754

Parameter	Units	60191794003	Dup	RPD	Max	Qualifiers
		Result	Result		RPD	
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO ₃	mg/L	99.9	102	2	10	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	99.9	102	2	10	

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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	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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	mg/L	ND	ND		20	

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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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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	Reporting	Analyzed	Qualifiers
		Result	Limit		
Phosphate as P04	mg/L	ND	0.030	04/20/15 13:26	

LABORATORY CONTROL SAMPLE: 134537

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Phosphate as P04	mg/L	1.5	1.4	93	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 134538 134539

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		7525099001	Spike										
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	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		60191794002	Spike										
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	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		60191794003	Spike										
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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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.

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 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		

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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

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Sample Condition Upon Receipt

WO# : 60191794



60191794

Client Name: EnviroCourier: FedEx UPS VIA Clay PEX ECI Pace Other Client Optional
Proj Due Date:
Proj Name: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 2PLCThermometer Used: T-239 / T-194Type of Ice: Wet Blue None Samples received on ice, cooling process has begun.Cooler Temperature: 3.3 / 2.5(circle one)
Date and initials of person examining contents: pw4/14/15

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. <u>NOLN03 FC27</u>
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	Matrix: <u>WT</u>	13.
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
Exceptions: <u>VOA, Coliform, O&G, WI-DRO (water)</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed Lot # of added preservative
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank lot # (if purchased): <u>03-915-3</u>		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
		16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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: mwDate: 4/14/15



CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: Environ	Address: 7500 College Blvd., Ste. 925 Overland Park, KS 66210	Report To: Wendy Stonestreet	Copy To: Tammy Gleason	Attention: Tammy Gleason	Company Name: Environ
Email To: wstonestreet@environcorp.com	Purchase Order No.: NA	Project Name: Fort Smith, AR	Project Number:	Pace Profile #: 7444, line 1	Pace Date Reference: Michigan, 49503
Phone: 913-553-5926	Fax:	Manager: MJ Walls		Site Location: AR	Pace Project Manager: MJ Walls
Requested Due Date/TAT:				STATE: AR	
REGULATORY AGENCY					
		<input type="checkbox"/> NPDES	<input type="checkbox"/> GROUND WATER	<input type="checkbox"/> DRINKING WATER	
		<input type="checkbox"/> UST	<input type="checkbox"/> RCRA	<input type="checkbox"/> OTHER	<input type="checkbox"/> ADAq
Residual Chlorine (Y/N)					
<input checked="" type="checkbox"/>					
Requested Analysis Filtered (Y/N)					
		<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>	<input checked="" type="checkbox"/>
Analyses Test ↑ ↓					
# OF CONTAINERS					
SAMPLE TEMP AT COLLECTION					
Section D Required Client Information		COLLECTED		Preservatives	
SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE		COMPOSITE START	COMPOSITE END/GRAB		
ITEM #	MATRIX CODES DRINKING WATER WATER WASTE WATER PRODUCT SOLID OIL WIPE AIR OTHER TISSUE	DW WT WW P SL OL WP AR OT TS	MATRIX CODE (G=GRAIN) WT/G WT/G WT/G WT/G WT/G WT/G WT/G WT/G WT/G WT/G	DATE 4/3/15 4/3/15 4/3/15 4/3/15 4/3/15 4/3/15 4/3/15 4/3/15 4/3/15 4/3/15	TIME 1445 1535 1500 1645 1645 1645 1645 1645 1645 1645
1 MW-10-201504 3064H 3D9m	WT/G	WT/G	WT/G	WT/G	WT/G
2 MW-20-201504 3064H MS/MSD	WT/G	WT/G	WT/G	WT/G	WT/G
3 MW-28-201504 ↓	WT/G	WT/G	WT/G	WT/G	WT/G
4 EB-07-201504 3064H	WT/G	WT/G	WT/G	WT/G	WT/G
5 TB-01-201504	WT/G	WT/G	WT/G	WT/G	WT/G
6 MW-22-201504	WT/G	WT/G	WT/G	WT/G	WT/G
7 MW-26-201504 ↓	WT/G	WT/G	WT/G	WT/G	WT/G
8 TB-02-201504	WT/G	WT/G	WT/G	WT/G	WT/G
9 MW-27-201504 ↓	WT/G	WT/G	WT/G	WT/G	WT/G
10					
11					
12					
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		ACCEPTED BY / AFFILIATION	
Swallow a data package (please see page 1)		Wendy Stonestreet / Enviro 4/3/15 1800		John Page 4/14/15 1800	
SAMPLE NAME AND SIGNATURE		TIME		TIME	
PRINT Name of SAMPLER: Wendy Stonestreet		DATE: 04/14/15		DATE: 04/14/15	
SAMPLE CONDITIONS		TIME		TIME	
Temp in °C		0130		0130	
Received on C		2-5		2-5	
Cooled (Y/N)					
Samples intact (Y/N)					

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



REPORT OF LABORATORY ANALYSIS

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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
60191868004	MW-71-201504	SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
		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
60191868005	RW-69-201504	SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
		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
60191868006	MW-60-201504	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
		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
60191868007	ITMW-7-201504	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
		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
60191868008	MW-50-201504	SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
		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
60191868009	MW-29-201504	SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
		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.: 60191868

Lab ID	Sample ID	Method	Analysts	Analytics Reported	Laboratory
60191868010	ITMW-21-201504	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
		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
60191868011	MW-63-201504	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
		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
60191868012	ITMW-4-201504	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
		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

REPORT OF LABORATORY ANALYSIS

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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
60191868013	ITMW-6-201504	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
		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
60191868014	MW-62-201504	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
		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
60191868016	IW-80-201504	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
		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
60191868017	MW-36-201504	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
		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
60191868018	MW-35R-201504	SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
		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
60191868019	MW-61-201504	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
		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
60191868020	MW-46R-201504	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
		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
60191868021	MW-31R-201504	SM 4500-P E	BAF	1	PASI-D
		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:

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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:

REPORT OF LABORATORY ANALYSIS

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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:

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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:

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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.

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
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		

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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

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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

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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		

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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		

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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		

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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		

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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		

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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		

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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

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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		

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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		

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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		

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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

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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
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		

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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
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		

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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		

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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		

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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		

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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

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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
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		

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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
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		

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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		

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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	
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		

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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		

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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
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		

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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		

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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		

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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		

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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		

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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		

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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		

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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

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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		

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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		

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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
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

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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		

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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		

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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
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

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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		

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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		

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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
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		

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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		

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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		

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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		

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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

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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

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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		

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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	Reporting	Analyzed	Qualifiers
		Result	Limit		
2-Chloroethanol	ug/L	ND	10000	04/20/15 16:13	

LABORATORY CONTROL SAMPLE: 134599

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
2-Chloroethanol	ug/L	100000	86400	86	40-140	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 134600 134601

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	% Rec	Max
		60191794002	Spike								
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.: 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	Max RPD	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.: 60191868

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:	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	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	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.: 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	Reporting	Analyzed	Qualifiers
		Result	Limit		
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	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
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	MS 60191868013 Result	MSD Spike Conc.	MS Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Max Qual
		Result	Conc.	Conc.	Result	Result	% Rec	% Rec	RPD	RPD	RPD	RPD
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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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR

Pace Project No.: 60191868

QC Batch:	MPRP/31444	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3010	Analysis Description:	6010 MET
Associated Lab Samples:	60191868021, 60191868022		

METHOD BLANK: 1550747 Matrix: Water

Associated Lab Samples: 60191868021, 60191868022

Parameter	Units	Blank	Reporting	Analyzed	Qualifiers
		Result	Limit		
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	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
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	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		60191842001	Spike										
Iron	ug/L	3940	10000	10000	13800	13600	98	96	96	75-125	2	20	
Manganese	ug/L	880	1000	1000	1840	1810	96	93	93	75-125	1	20	

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REPORT OF LABORATORY ANALYSIS

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR

Pace Project No.: 60191868

QC Batch: MSV/68904 Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260

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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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	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		60191794002	Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	% Rec				
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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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR

Pace Project No.: 60191868

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		1551635		1551636													
Parameter	Units	MS		MSD		MS		MSD		MS		MSD		% Rec Limits	RPD RPD	Max Qual	
		60191794002	Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	MSD % Rec	RPD	RPD	MSD % Rec	RPD				
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	MS		MSD		MS		MSD		MS		MSD		% Rec Limits	RPD RPD	Max Qual	
		60191794003	Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	MSD % Rec	RPD	RPD	MSD % Rec	RPD				
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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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR

Pace Project No.: 60191868

Parameter	Units	60191794003		MS Spike		MSD Spike		MSD		MS % Rec		MSD % Rec		% Rec Limits		Max RPD		Max Qual	
		Result	Conc.	Conc.	Result	Conc.	Result	% Rec	Result	% Rec	RPD	RPD	RPD	RPD	Limits	RPD	RPD	RPD	
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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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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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	MS		MSD		MS		MSD		% Rec		Max	
		60191868013	Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	MSD % Rec	Limits	RPD	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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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR

Pace Project No.: 60191868

Parameter	Units	60191868013		MS Spike		MSD Spike		MSD		MS % Rec		MSD % Rec		% Rec		Max	
		Result	Conc.	Conc.	Result	Conc.	Result	Result	% Rec	Result	% Rec	Result	% Rec	Limits	RPD	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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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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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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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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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60191868

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: 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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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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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		Qualifiers
			Limit	Analyzed	
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 CaCO ₃	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	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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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
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Associated Lab Samples: 60191868021, 60191868022

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	20.0	04/20/15 08:48	
Alkalinity, Total as CaCO ₃	mg/L	ND	20.0	04/20/15 08:48	
Alkalinity,Bicarbonate (CaCO ₃)	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 CaCO ₃	mg/L	500	519	104	90-110	

SAMPLE DUPLICATE: 1552783

Parameter	Units	60191890002 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO ₃	mg/L	162	163	1	10	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	162	163	1	10	

SAMPLE DUPLICATE: 1552784

Parameter	Units	60191890009 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO ₃	mg/L	280	284	2	10	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	280	284	2	10	

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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	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	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:	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	Reporting		Qualifiers
		Result	Limit	Analyzed	
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	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
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	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		60191868001	Spike										
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	Spike	MS	MS	% Rec	% Rec	Qualifiers
		Result	Conc.	Result	% Rec	Limits		
Chloride	mg/L	150	50	203	105	80-120		
Sulfate	mg/L	86.7	50	135	97	80-120		

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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	Reporting		Qualifiers
		Result	Limit	Analyzed	
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	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
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	MS		MSD		MS		MSD		MSD		% Rec	Limits	RPD	Max RPD	Qual
		60191868014 Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD					
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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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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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	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.: 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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	mg/L	1.8	1.8	1	20	

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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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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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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	Reporting	Analyzed	Qualifiers
		Result	Limit		
Phosphate as P04	mg/L	ND	0.030	04/20/15 16:06	

LABORATORY CONTROL SAMPLE: 134645

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Phosphate as P04	mg/L	1.5	1.5	99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 134646 134647

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		60191868001	Spike										
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	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		60191868013	Spike										
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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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	Reporting	Analyzed	Qualifiers
		Result	Limit		
Phosphate as P04	mg/L	ND	0.030	04/22/15 11:41	

LABORATORY CONTROL SAMPLE: 135086

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Phosphate as P04	mg/L	1.5	1.4	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 135087 135088

Parameter	Units	7525148001	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		Result	Spike	Spike										
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	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		Result	Spike	Spike										
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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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		

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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
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

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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		

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
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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60191868

Optional
Proj Due Date:
Proj Name:

Client Name: Enviro
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 CF-1.8
T-239 / T-194
Type of Ice: Wet Blue None Samples received on ice, cooling process has begun.

Cooler Temperature: 51 55 11 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:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1. <u>JTAW-16-201504</u> collected 4/14/15 at 1714	
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2. <u>not on COC container!</u> (1) BP3u (1) BP3s	
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3. <u>(1) AG3S (1) BP3Z</u>	
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4. <u>(2) D64H (1) PPMW</u>	
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5. <u>(2) D64H (3) DG4Q</u>	
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. <u>NO₂/NO_x Fe²⁺ pH</u> (1) DTHP	
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.	
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.	
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.	
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.	
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.	
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12.	
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Includes date/time/ID/analyses	Matrix: <u>WT</u>	13.	
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.	
Exceptions: <u>VOA, Coliform, O&G, WI-DRO (water)</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed	Lot # of added preservative
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A		
Pace Trip Blank lot # (if purchased): <u>4/8/15</u>		15.	
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A		
		16.	
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 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: _____

1RWE-16414

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.



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	Report To: Wendy Stonestreet	Copy To: Tammy Gleason
Address: 7500 College Blvd., Ste. 925 Overland Park, KS 66210	Purchase Order No.: NA	Project Name: Fort Smith, AR
Email To: wstonestreet@environcorp.com	Project Number:	
Phone: 913-553-5926	Fax:	
Requested Due Date/TAT:		

Section C

Invoiced Information:

Attention: Tammy Gleason	Company Name: Environ
Address: 250 Monroe Ave. NW Grand Rapids	NPDES
Phone Quote: Michigan, 49503	GROUND WATER
Reference: Manager: MJ Walls	DRINKING WATER
Pace Profile #: 7444, line 1	UST
	RCRA
	OTHER
	ADEQ

Section B

Required Project Information:

Project Name: Fort Smith, AR	Site Location
Project Number:	STATE: AR

REGULATORY AGENCY

Address: 250 Monroe Ave. NW Grand Rapids	NPDES
Phone Quote: Michigan, 49503	GROUND WATER
Reference: Manager: MJ Walls	DRINKING WATER
Pace Profile #: 7444, line 1	UST
	RCRA
	OTHER
	ADEQ

Section D

Required Client Information:

ITEM #	SAMPLE ID (A-Z, 0-9, -)	Sample IDs MUST BE UNIQUE	COLLECTED			# OF CONTAINERS	SAMPLE TEMP AT COLLECTION
			TIME	DATE	TIME		
1	17MW-16-2015041800 AM	WTG 4/14/15	1435	—	—	14	14
2	MW-162-2015041800 BP32	WTG 4/14/15	125	—	—	11	11
3	MW-34-201504	WTG 4/14/15	1500	—	—	11	11
4	MW-30-201504	WTG 4/14/15	1330	—	—	11	11
5	MW-30-201504	WTG 4/14/15	1345	—	—	11	11
6	TB-03-201504	WTG 4/14/15	—	—	—	3	3
7	TB-04-201504	WTG 4/14/15	—	—	—	3	3
8	TB-05-201504	WTG 4/14/15	—	—	—	3	3
9	TB-06-201504	WTG 4/14/15	—	—	—	3	3
10	MW-352-2015041800 AM	WTG 4/14/15	1715	—	—	11	11
11	MW-61-201504	WTG 4/14/15	1715	—	—	11	11
12	MW-44-201504	WTG 4/14/15	1355	—	—	11	11

ADDITIONAL COMMENTS

RELINQUISHED BY / AFFILIATION

ACCEPTED BY / AFFILIATION

DATE

TIME



CHAIN-OF-CUSTODY / Analytical Request Document

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

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.

6113 5281 6743 → 5.1

6262 7065 4461 → 5.5

6262 7065 4483 → 6.1

6262 7065 4450 → 3.7

6262 7065 4472 → 4.1

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



REPORT OF LABORATORY ANALYSIS

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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

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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

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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

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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.

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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

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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		

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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		

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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.

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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

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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.

REPORT OF LABORATORY ANALYSIS

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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		

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt

WO# : 60191895

 60191895

Client Name: Enviro
Optional
Courier: FedEx UPS VIA Clay PEX ECI Pace Other Client
Proj Due Date:
Tracking #: 6262 7065 4472
Pace Shipping Label Used? Yes No
Proj Name:
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.

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:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	Matrix: <u>WT</u>	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Exceptions: <u>VOA, Coliform, O&G, WI-DRO (water)</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed Lot # of added preservative
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
		16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:																																																																																																																		
Company: Enviro	Address: 1500 College Blvd, Ste 925	Report To: Tammy Stonestreet	Copy To: Tammy Gleason	Attention: Tammy Gleason	Company Name: Enviro																																																																																																																	
Email to: whonestreet@enviircorp.com	Purchase Order No.: N/A	Project Name: Fort Smith, AR	Project Number: 913-553-5926	Address: 750 Monroe Ave. N.W.	DRINKING WATER																																																																																																																	
Phone: 913-553-5926	Fax: 913-553-5926	Project Profile #: 7444	Project Manager: M. J. Walls	Reference: Michigan, 49150-3 Report	<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input checked="" type="checkbox"/> RCRA																																																																																																																	
Requested Due Date/TAT:		Site Location: Fort Smith, AR	STATE: AR	Site Profile #: 7444	<input type="checkbox"/> UST <input type="checkbox"/> RCR																																																																																																																	
Section D Required Client Information																																																																																																																						
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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



REPORT OF LABORATORY ANALYSIS

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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	Analytics Reported
60191896001	MW-176-201504	EPA 5030B/8260	PGH	38

REPORT OF LABORATORY ANALYSIS

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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	Analysis Method:	EPA 5030B/8260
QC Batch 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	Analysis Method:	EPA 5030B/8260
QC Batch 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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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	

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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.

REPORT OF LABORATORY ANALYSIS

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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		

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt

WO# : 60191896



60191896

Client Name: Enviro

Courier: FedEx UPS VIA Clay PEX ECI Pace Other Client

Tracking #: 6262 7065 4472

Pace Shipping Label Used? Yes No

Optional
Proj Due Date:
Proj Name:

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 CF-1.8
T-239 T-194Type 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:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	Matrix: WT	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Exceptions: VOA, Coliform, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed Lot # of added preservative
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
		17. List State:

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: 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.

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



REPORT OF LABORATORY ANALYSIS

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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

REPORT OF LABORATORY ANALYSIS

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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
60191960004	IW-76-201504	SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
		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
60191960005	MW-32R-201504	SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
		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
60191960006	MW-33R-201504	SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
		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
60191960007	ITMW-9-201504	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
		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
60191960008	MW-66-201504	SM 4500-CO2 D	TJG	1	PASI-K
		SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
		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
60191960009	ITMW-1-201504	SM 5310C	JMC1	1	PASI-K
		SM 4500-P E	BAF	1	PASI-D
		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

REPORT OF LABORATORY ANALYSIS

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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
60191960010	ITMW-13-201504	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
		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
60191960011	IW-72-201504	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
		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
60191960012	IW-74-201504	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
		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
60191960013	MW-67-201504	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
		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
60191960014	MW-65-201504	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
		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
60191960016	ITMW-11-201504	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
		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
60191960017	ITMW-17-201504	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
		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
60191960021	IW-73-201504	SM 4500-P E	BAF	1	PASI-D
		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
60191960022	DUP-01-201504	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
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
60191960023	DUP-03-201504	EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
60191960024	DUP-05-201504	EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
60191960025	TB-08-201504	EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
60191960026	DUP-02-201504	EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
60191960027	DUP-04-201504	EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
60191960028	DUP-05-201504	EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
60191960029	DUP-06-201504	EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
60191960030	DUP-07-201504	EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
60191960031	DUP-08-201504	EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
60191960032	DUP-09-201504	EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		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.

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
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		

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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		

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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		
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		

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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		

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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
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		

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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
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		

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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		

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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		

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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
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		

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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		

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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
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		

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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
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		

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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		
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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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

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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		

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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		

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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

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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		

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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
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		

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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		

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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		

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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		

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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		

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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
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		

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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
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		

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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		

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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		

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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		

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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		

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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		
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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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

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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		

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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

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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		

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR

Pace Project No.: 60191960

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: 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	Max 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	Reporting		Qualifiers
		Result	Limit	Analyzed	
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	Result	MS		MSD		% Rec	MSD % Rec	% Rec	Max		
			Spike Conc.	Spike Conc.	MS Result	MSD Result				RPD	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	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	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	Reporting	Analyzed	Qualifiers
		Result	Limit		
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	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
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	MS Result	MSD Spike Conc.	MS Result	MSD Spike Conc.	MS Result	MSD % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Max Qual
		60191960001	Conc.	Result	Conc.	Result	% Rec	RPD	RPD	Qual		
Iron	ug/L	206	10000	10000	10000	10700	10700	105	105	75-125	0	20
Manganese	ug/L	10.4	1000	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	Analysis Method:	EPA 6010
QC Batch Method:	EPA 3010	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	Max 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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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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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-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	Analysis Method:	EPA 5030B/8260
QC Batch 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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REPORT OF LABORATORY ANALYSIS

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	Analysis Method:	EPA 5030B/8260
QC Batch 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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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	Reporting	Analyzed	Qualifiers
		Result	Limit		
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	20.0	04/20/15 11:27	
Alkalinity, Total as CaCO ₃	mg/L	ND	20.0	04/20/15 11:27	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	ND	20.0	04/20/15 11:27	

LABORATORY CONTROL SAMPLE: 1552791

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Alkalinity, Total as CaCO ₃	mg/L	500	519	104	90-110	

SAMPLE DUPLICATE: 1552792

Parameter	Units	60191960002	Dup	Max	RPD	Qualifiers
		Result	Result			
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO ₃	mg/L	87.4	88.4	1	10	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	87.4	88.4	1	10	

SAMPLE DUPLICATE: 1552793

Parameter	Units	60191960009	Dup	Max	RPD	Qualifiers
		Result	Result			
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO ₃	mg/L	76.0	76.5	1	10	
Alkalinity,Bicarbonate (CaCO ₃)	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	Analysis Method:	SM 2320B
QC Batch Method:	SM 2320B	Analysis Description:	2320B Alkalinity
Associated Lab Samples:	60191960021		

METHOD BLANK: 1552794	Matrix: Water
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Associated Lab Samples: 60191960021

Parameter	Units	Blank Result	Reporting Limit	Analyzed	Qualifiers
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	20.0	04/20/15 13:43	
Alkalinity, Total as CaCO ₃	mg/L	ND	20.0	04/20/15 13:43	
Alkalinity,Bicarbonate (CaCO ₃)	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 CaCO ₃	mg/L	500	520	104	90-110	

SAMPLE DUPLICATE: 1552796

Parameter	Units	60191950001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO ₃	mg/L	2390	2410	1	10	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	2390	2410	1	10	

SAMPLE DUPLICATE: 1552797

Parameter	Units	60191975005 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO ₃	mg/L	1050	1030	3	10	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	1050	1030	3	10	

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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	Reporting	Analyzed	Qualifiers
		Result	Limit		
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	Reporting	Analyzed	Qualifiers
		Result	Limit		
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	Reporting	Analyzed	Qualifiers
		Result	Limit		
Chloride	mg/L	ND	1.0	04/28/15 10:49	

LABORATORY CONTROL SAMPLE: 1556023

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
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	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
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	MSD	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD	Max Qual
			Spike Conc.	Spike Conc.								
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	MS	MS % Rec	% Rec Limits	Qualifiers
			Conc.	Result			
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	Analysis Method:	EPA 300.0
QC Batch 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	MS Result		MSD Result		MS Result		MSD Result		% Rec Limits		RPD	Max RPD	Qual
		60191862001	Spike Conc.	Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits					
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
		Result	Spike Conc.	Result	Spike Conc.	MS % Rec	MSD % Rec	% Rec Limits				
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	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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REPORT OF LABORATORY ANALYSIS

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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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	mg/L	ND	0.047J		20	

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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	Reporting		Qualifiers
		Result	Limit	Analyzed	
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, NO ₂ plus NO ₃	mg/L	ND	0.10	04/16/15 15:44	

LABORATORY CONTROL SAMPLE: 1550791

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Nitrogen, Nitrate	mg/L	1.6	1.7	109	85-115	
Nitrogen, Nitrite	mg/L	.4	0.39	98	90-110	
Nitrogen, NO ₂ plus NO ₃	mg/L	2	2.1	107	90-110	

MATRIX SPIKE SAMPLE: 1550792

Parameter	Units	60191960021	Spike	MS	MS	% Rec	Qualifiers
		Result	Conc.	Result	% Rec	Limits	
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, NO ₂ plus NO ₃	mg/L	0.024J	2	2.3	113	90-110 M1	

MATRIX SPIKE SAMPLE: 1550793

Parameter	Units	60191966002	Spike	MS	MS	% Rec	Qualifiers
		Result	Conc.	Result	% Rec	Limits	
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, NO ₂ plus NO ₃	mg/L	2.3	2	4.2	92	90-110	

SAMPLE DUPLICATE: 1550794

Parameter	Units	60191982002	Dup	Max	RPD	Qualifiers
		Result	Result			
Nitrogen, Nitrate	mg/L	13.5	13.3	1	20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO ₂ plus NO ₃	mg/L	13.5	13.3	1	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR

Pace Project No.: 60191960

QC Batch: WETA/33760

Analysis Method: SM 5310C

QC Batch 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	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	Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	ND		25	

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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	Max RPD	Qualifiers
Total Organic Carbon	mg/L	ND	ND	25	

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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	Reporting	Analyzed	Qualifiers
		Result	Limit		
Phosphate as P04	mg/L	ND	0.030	04/22/15 11:41	

LABORATORY CONTROL SAMPLE: 135086

Parameter	Units	Spike	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
Phosphate as P04	mg/L	1.5	1.4	94	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 135087 135088

Parameter	Units	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	% Rec	Max
		7525148001	Spike								
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	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	% Rec	Max
		60191960001	Spike								
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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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	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max 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	MS Result	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max 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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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

REPORT OF LABORATORY ANALYSIS

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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.

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
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		

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
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

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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
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

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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
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		

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
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		

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
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

REPORT OF LABORATORY ANALYSIS

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Client Name: EnviroCourier: FedEx UPS VIA Clay PEX ECI Pace Other Client

Tracking #:

Pace Shipping Label Used? Yes No

Optional
Proj Due Date:
Proj Name:

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No Packing Material: Bubble Wrap Bubble Bags Foam None Other 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.

Cooler Temperature: 0.3 / 13 / 3.7 / 4.3 / 0.1 / 3.3 (circle one)

Date and initials of person examining contents: pw4/16/15

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6. <u>N02 n03 Feet pH</u>
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	<u>No volume received for DUP-08.</u>
Pace containers used:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	9. <u>Extra samples received.</u>
Containers intact:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	10. <u>DUP-02/2015 DUP-02 - 201504 4/15/15 1520 3DIAH</u>
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11. <u>IW-73-201504 4/15/15 1430 021</u>
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12. <u>3D69H 3D69U 18P3U 1463S 1818S 18P3N 18P32</u>
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<u>Vials for DUP-08 and IW-73 received with TB-12.</u>
Includes date/time/ID/analyses	Matrix: <u>WT</u>	13.
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<u>Added 2.5 ml of HNO3 to IW-74</u>
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<u>PP3N. pH 3.012-0</u>
Exceptions: <input checked="" type="checkbox"/> VOA Coliform, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed <u>PV</u> Lot # of added preservative <u>12989-2-7</u>
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	15.
Pace Trip Blank lot # (if purchased): <u>030915-3/112414-3</u>		
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	17. List State:

Client Notification/ Resolution:

Copy COC to Client? Y / N Field Data Required? Y / N

Person Contacted: W. StreetDate/Time: 4/16/15 email

Comments/ Resolution:

- add IW-73 to log in for all parameters. DUP-08 will arrive tomorrowProject Manager Review: MWDate: 4/16/15



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: Enviro	Report To: Wendy Stonestreet	Section B Required Project Information:	Section C Invoice Information:
Address: 7500 College Blvd., Ste. 925 Overland Park, KS 66210	Copy To: Tammy Gleason	Attention: Tammy Gleason	Company Name: Enviro
Email To: wstonestreet@envirocorp.com	Purchase Order No.: NA	Address: 250 Monroe Ave. NW Grand Rapids Michigan, 49503	<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER
Phone: 913-553-5926 Fax: Requested Due Date/TAT:	Project Name: Fort Smith, AR	Reference: Pace Project Manager: MJ Walls	<input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER <input checked="" type="checkbox"/> ADEQ
	Project Number:	Pace Profile #: 7444, line 1	Site Location: AR

Section D Required Client Information:

ITEM #	SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX CODE DRINKING WATER WATER WASTE WATER PRODUCT SOIL OIL WIPE AIR OTHER TISSUE TS	MATRIX CODE (see valid codes to left) (G=GRAB C=COMP)	SAMPLE TYPE (G=GRAB C=COMP) (see valid codes to left)	COLLECTED			# OF CONTAINERS	#SAMPLE TEMP AT COLLECTION	Preservatives	Analysis Test	Requested Analysis Filtered (Y/N)	Pace Project No./Lab I.D. <i>16191960</i>	
					DATE	TIME	DATE							TIME
1	TMW-15-201504 3069u 30THu	WT G	4/15/15 1600	4/15/15	14:13:27	WT G	4/15/15 1435	11	X	X	X	X	X	X
2	TMW-10-201504 ↓ 3064H	WT G	4/15/15 1435	↓	-	WT G	4/15/15 1435	3	X	X	X	X	X	X
3	DUP-08-201504	WT G	4/15/15 1435	-	-	WT G	4/15/15 1420	-	X	X	X	X	X	X
4	TMW-12-201504	WT G	4/15/15 1420	-	-	WT G	4/15/15 1245	-	X	X	X	X	X	X
5	TMW-76-201504	WT G	4/15/15 1245	-	-	WT G	4/15/15 0920	-	X	X	X	X	X	X
6	MW-32R-201504	WT G	4/15/15 0920	-	-	WT G	4/15/15 1155	-	X	X	X	X	X	X
7	MW-33R-201504	WT G	4/15/15 1155	-	-	WT G	4/15/15 1155	-	X	X	X	X	X	X
8	DUP-01-201504	WT G	4/15/15 1155	-	-	WT G	4/15/15 1120	-	X	X	X	X	X	X
9	TMW-9-201504 309u	WT G	4/15/15 1055	-	-	WT G	4/15/15 1055	-	X	X	X	X	X	X
10	MW-46-201504	WT G	4/15/15 1045	-	-	WT G	4/15/15 1030	-	X	X	X	X	X	X
11	TMW-1-201504	WT G	4/15/15 1030	-	-	WT G	4/15/15 1030	-	X	X	X	X	X	X
12	TMW-13-201504 ↓	WT G	4/15/15 1030	-	-	WT G	4/15/15 1030	-	X	X	X	X	X	X
13	ADDITIONAL COMMENTS				RELINQUISHED BY AFFILIATION	DATE	TIME	ACCEPTED BY AFFILIATION		DATE	TIME	SAMPLE CONDITIONS		
14	Level IV data package required				ULY Cross / ENVIRON	4/15/15	1737 pm/ASE	Y		Y	Y	Y		
15	Samples intact (Y/N)				PRINT Name of SAMPLER: <i>Uly Cross</i>	4/15/15	1737 pm/ASE	Y		Y	Y	Y		
16	Received by (Y/N)				SIGNATURE of SAMPLER: <i>John Cross</i>	4/15/15	1737 pm/ASE	Y		Y	Y	Y		
17	Temp in (C/F)				DATE Signed (MM/DD/YY): <i>4/15/2015</i>	4/15/15	1737 pm/ASE	Y		Y	Y	Y		
18	Customer Serial# (Y/N)				Temp in (C/F)	4/15/15	1737 pm/ASE	Y		Y	Y	Y		
19	Receiced on (MM/DD/YY)				Customer Serial# (Y/N)	4/15/15	1737 pm/ASE	Y		Y	Y	Y		
20	Comments				Comments	4/15/15	1737 pm/ASE	Y		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.

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:		
Company: Enviro	Address: 7500 College Blvd., Ste. 925 Overland Park, KS 66210. Email To: wistonstreet@envirocorp.com Phone#: 913-553-5926 Requested Due Date/TAT:	Report To: Wendy Stonestreet Purchase Order No.: NA Project Name: Fort Smith, AR Project Number:	Copy To: Tammy Gleason Pace Project Manager Pace Profile #: 7444, line 1	Attention: Tammy Gleason Company Name: Enviro Address: 250 Monroe Ave. NW Grand Rapids Michigan, 49503 Reference: MJ Walls Manager:		
REGULATORY AGENCY						
				NPDES	GROUND WATER	
				UST	RCR	
				OTHER	DRINKING WATER	
				ADQ		
Site Location STATE: AR						
Requested Analysis Filtered (Y/N)						
SAMPLE ID Item # (A-Z, 0-9, -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX CODE DRINKING WATER DW WATER WT WASTE WATER WW PRODUCT P SOL/SOLID SL OIL OL WIPE WP AIR AR OTHER OT TISSUE TS	Matrix Code (see valid codes to left)	# OF CONTAINERS			
			SAMPLE TEMP AT COLLECTION			
			COLLECTED			
			COMPOSITE START	COMPOSITE END/GRAB	TIME	DATE
			WT G	WT G	1630	4/15/15
			WT G	WT G	0925	4/15/15
			WT G	WT G	1120	4/15/15
			WT G	WT G	1120	4/15/15
			WT G	WT G	850	4/15/15
			WT G	WT G	950	4/15/15
WT G	WT G	1622	4/15/15			
WT G	WT G	1140	4/15/15			
WT G	WT G	-	4/15/15			
WT G	WT G	-	4/15/15			
WT G	WT G	1620	4/15/15			
WT G	WT G	0945	4/15/15			
ANALYSIS TEST						
Preservatives						
V/N						
C2O Calc (Alkalinity +pH)						
Sulfide						
Total Phosphate (Pace Details)						
Nitrate+Nitrite						
Ammonia						
F-met Itron Calc (Send field Femto's)						
5010-Iron/Mn						
8015-Chloroethanol (Pace Details)						
Chloride, Surface						
TOC						
Alkalinity						
6260 VOCs						
# OF CONTAINERS						
SAMPLE TEMP AT COLLECTION						
COLLECTED						
ITEM #	SAMPLE TYPE (G=GRAB C=COMP)	MATRIX CODE (see valid codes to left)	Other	HCl	NaOH	
1	DUP-D3-2015043D(H 30404)	WT G		HNO ₃	Na ₂ SO ₃	
2	IWN-72-201504	WT G	30494	HNO ₃	HCl	
3	IWN-74-201504	WT G				
4	DUP-D5-201504	WT G				
5	IWN-67-201504	WT G				
6	MWN-65-201504	WT G	30THR			
7	IWN-19-201504	WT G	3D444			
8	IWN-11-201504	WT G	30THR			
9	TB-08-201504	WT G	3D644			
10	TB-09-201504	WT G				
11	IWN-17-201504	WT G				
12	IWN-2-201504	WT G				
RELINQUISHED BY / AFFILIATION						
ADDITIONAL COMMENTS						
ACCEPTED BY / AFFILIATION						
DATE TIME						
PRINT NAME OF SAMPLER: Lucy Cross						
SIGNATURE OF SAMPLER: Lucy Cross						
DATE Signed: 4/15/2015						
Temp In Rec'd On Loc (Y/N)						
Colder Sealed Samples intact (Y/N)						
1-3						
3-7						
4-7						
5-7						
SAMPLE CONDITIONS						
DATE TIME						
Accepted by / Affiliation						
Date Time						
Print Name of Sampler						
Signature of Sampler						
Date Signed (MM/DD/YY): 4/15/2015						

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



REPORT OF LABORATORY ANALYSIS

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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

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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

REPORT OF LABORATORY ANALYSIS

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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

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60192014

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: 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

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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

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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.

REPORT OF LABORATORY ANALYSIS

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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		

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt

WO# : 60192014



60192014

Client Name: EnviroCourier: FedEx UPS VIA Clay PEX ECI Pace Other Client Tracking #: _____ Pace Shipping Label Used? Yes No

Optional
Proj Due Date:
Proj Name:

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No Packing Material: Bubble Wrap Bubble Bags Foam None Other Thermometer Used: CF-1.8 / T-194Type 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: PUY/16/15

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	<u>WT</u>	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Exceptions: <u>VOA</u> , Coliform, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Lot # of added preservative
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 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: MWDate: 4/16/15



CHAIN-OF-CUSTODY / Analytical Request Document

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

www.pacelabs.com

Microseeps

Section A
Required Client Information:

Company: ENVIRON

Address: 1500 College Blvd. Ste 925

Oakland Park, KS 66210

Email To: wstonstruc@envirocorp.com

Phone: 413.553.5924

Fax:

Requested Due Date/TAT:

Section B
Required Project Information:

Report To: Wendy Stonestreet

Copy: Tammy Gleason

Purchase Order No.: N/A

Project Name: Fort Smith, AR

Project Number:

Section C
Invoice Information:

Attention: Tammy Gleason

Company Name: ENVIRO

Address: 1500 Monroe Ave. NW Ste 500

Phone Quote: Michigan, 49503

Reference:

Project Manager:

Project Profile #: 4444, line 1

Site Location:

STATE: AR

Page: 1 of 1

002953

Page: 1 of 1

002953

Section D Required Client Information												Section E Sample Information												Section F Analytical Test														
SAMPLE ID (A-Z, 0-9, -,.)			Matrix Codes MATRIX / CODE			COLLECTED			TIME			# OF CONTAINERS			Preservatives			TIME			# OF CONTAINERS			Preservatives			TIME			# OF CONTAINERS			Preservatives					
						COMPOSITE START			TIME			Unpreserved						TIME			COMPOSITE ENDGRAB			TIME			Unpreserved			TIME			COMPOSITE ENDGRAB			TIME		
ITEM #	MATERIAL CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)																																				
1	MIN-175-201504	WT G4 15/15 0857																																				
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 10:00 AM			4/15/15			04/15/15 10:00 AM			LUCY CROSS			4/15/15			04/15/15 10:00 AM			X X X X																	
SAMPLE NAME AND SIGNATURE												PRINT NAME of SAMPLER: Lucy Cross												SIGNATURE of SAMPLER: Lucy Cross														
ORIGINAL												Temp in °C												Temp in °C														
Sealed Container (Y/N)												Sealed Container (Y/N)												Sealed Container (Y/N)														
Received on _____												Samples intact (Y/N)												Samples intact (Y/N)														
Printed Name _____												Printed Name _____												Printed Name _____														
Date Signed _____												Date Signed _____												Date Signed _____														
(MM/DD/YY):												(MM/DD/YY):												(MM/DD/YY):														

*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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

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



REPORT OF LABORATORY ANALYSIS

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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

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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

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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

REPORT OF LABORATORY ANALYSIS

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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.

REPORT OF LABORATORY ANALYSIS

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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		

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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		

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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		

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QUALITY CONTROL DATA

Project: FORT SMITH, AR

Pace Project No.: 60192015

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:	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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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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QUALITY CONTROL DATA

Project: FORT SMITH, AR

Pace Project No.: 60192015

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:	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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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	

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.: 60192015

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:	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	

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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	

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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.

REPORT OF LABORATORY ANALYSIS

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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		

REPORT OF LABORATORY ANALYSIS

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WO# : 60192015


60192015

 Client Name: Enviro

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 / CF-1.8
7239 / 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:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	Matrix: <u>WT</u>	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Exceptions: <u>VOA</u> , Coliform, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed Lot # of added preservative
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
		16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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.

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:																																																																																																																																					
Company: ENVIRON Address: 7500 College Blvd , Suite 925 Overland Park, KS Email To: Wspnstreet@environmental.com Phone: (913) - 553 - 5526 Requested Due Date/TA:		Report To: Wendy Stonestreet Copy To: Terrymy Gleeson Purchase Order No.: No. Project Name: Foot Smith, AR Project Number:		Attention: Terrymy Gleeson Company Name: Enviro Address: 350 North Ave, NW Grand Rapids, MI 49503 Project Manager: MJ Wals Pace Profile #: 744, Line 1																																																																																																																																					
				REGULATORY AGENCY <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input type="checkbox"/> OTHER																																																																																																																																					
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Temp in °C Received on _____ Sealed/Cooler (Y/N) Custody Seal intact (Y/N)																																																																																																																																									
F-ALL-Q-020rev.07 Received by _____ Date _____ Temp in °C Sealed/Cooler (Y/N) Custody Seal intact (Y/N)																																																																																																																																									
PRINT NAME of SAMPLER: Josh Myers SIGNATURE of SAMPLER: Josh Myers DATE Signed (MM/DD/YY): 04/15/15 any invoices not paid within 30 days.																																																																																																																																									

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



REPORT OF LABORATORY ANALYSIS

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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

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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

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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

REPORT OF LABORATORY ANALYSIS

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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.

REPORT OF LABORATORY ANALYSIS

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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 Analysis Method: EPA 5030B/8260

QC Batch Method: EPA 5030B/8260 Analysis Description: 8260 M

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	

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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	

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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: EnviroCourier: FedEx UPS VIA Clay PEX ECI Pace Other Client

Tracking #: _____

Pace Shipping Label Used? Yes No

Optional
Proj Due Date:
Proj Name:

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No Packing Material: Bubble Wrap Bubble Bags Foamy None Other Thermometer Used: CF-1.1
T-239 / T-194Type of Ice: Wet Blue None Samples received on ice, cooling process has begun.Cooler Temperature: 0.3

(circle one)

Date and initials of person examining contents: PA 4/16/15

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	<u>WT</u>	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Exceptions: <u>VOA</u> , Coliform, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed Lot # of added preservative
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 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: MWDate: 4/16/15



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																																																																					
002950																																																																								
Section A Required Client Information: Company: ENviron Address: 1500 College Blvd, Ste 926 Oakland Park, FL 33321 Email To: WSTENSTRECH@ENVIRON.COM Phone: (713) 553-5926 Fax: Requested Due Date/TAT: 																																																																								
Section B Required Project Information: Report To: Copy to Tammy Glaser Tammy Glaser Purchase Order No.: NA Project Name: Fort Smith, AR Project Number: 7444, Line 1																																																																								
Section C Invoice Information: Attention: Tammy Glaser Company Name: ENviron Address: 1500 Monroe Ave, NW Grand Rapids Pace Quote Reference: Michigan, 49503 Pace Project Manager: MU Walls Pace Profile #: 7444, Line 1																																																																								
REGULATORY AGENCY <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input checked="" type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER AR																																																																								
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<small>*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 paid within 30 days.</small>																																																																								

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



REPORT OF LABORATORY ANALYSIS

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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

REPORT OF LABORATORY ANALYSIS

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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

REPORT OF LABORATORY ANALYSIS

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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

REPORT OF LABORATORY ANALYSIS

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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

REPORT OF LABORATORY ANALYSIS

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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:

REPORT OF LABORATORY ANALYSIS

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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:

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

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:

REPORT OF LABORATORY ANALYSIS

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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:

REPORT OF LABORATORY ANALYSIS

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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:

REPORT OF LABORATORY ANALYSIS

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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

REPORT OF LABORATORY ANALYSIS

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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

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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
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

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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

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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
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		

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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		

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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		

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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		

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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
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		

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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		

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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		

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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		

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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
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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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	MS		MSD		% Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60191868013	Spike Conc.	Spike Conc.	MS Result						
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.: 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	Reporting	Analyzed	Qualifiers
		Result	Limit		
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	LCS	LCS	% Rec	Qualifiers
		Conc.	Result	% Rec	Limits	
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	MS	MSD	MS	MSD	MS	MSD	% Rec	% Rec	Max	RPD	RPD	Qual
		60192231001	Spike										
Iron	ug/L	20.7J	10000	10000	10400	10300	103	103	103	75-125	1	20	
Manganese	ug/L	20.9	1000	1000	1000	998	98	98	98	75-125	0	20	

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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	

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REPORT OF LABORATORY ANALYSIS

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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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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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR

Pace Project No.: 60192103

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:	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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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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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR
Pace Project No.: 60192103

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:	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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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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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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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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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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QUALITY CONTROL DATA

Project: Whirlpool FORT SMITH AR

Pace Project No.: 60192103

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:	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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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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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 (CaCO ₃)	mg/L	ND	20.0	04/21/15 08:11	
Alkalinity, Total as CaCO ₃	mg/L	ND	20.0	04/21/15 08:11	
Alkalinity,Bicarbonate (CaCO ₃)	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 CaCO ₃	mg/L	500	519	104	90-110	

SAMPLE DUPLICATE: 1553049

Parameter	Units	60192103001 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO ₃	mg/L	242	244	1	10	
Alkalinity,Bicarbonate (CaCO ₃)	mg/L	242	244	1	10	

SAMPLE DUPLICATE: 1553339

Parameter	Units	60191963006 Result	Dup Result	RPD	Max RPD	Qualifiers
Alkalinity, Carbonate (CaCO ₃)	mg/L	ND	ND		10	
Alkalinity, Total as CaCO ₃	mg/L	467	476	2	10	
Alkalinity,Bicarbonate (CaCO ₃)	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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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	MSD Spike	MS Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Conc.	Conc.							
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

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	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.: 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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	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, NO ₂ plus NO ₃	mg/L	3.4	3.4	1	20	

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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	Reporting		Qualifiers
		Result	Limit	Analyzed	
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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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	MS		MSD		% Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
			Spike Conc.	Spike Conc.	MS Result	MSD Result						
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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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

REPORT OF LABORATORY ANALYSIS

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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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

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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

Optional

Proj Due Date:

Proj Name:

Client Name: EnvironCourier: 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 bubbleThermometer Used: CF-0.1 T-239 / CF-1.8 T-194Type of Ice: Wet Blue None Samples received on ice, cooling process has begun.
(circle one)Cooler Temperature: 5.7 / 5.5Date and initials of person examining contents: 8/17/14

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. <u>Fe+, NO2, NO3</u>
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	Matrix: <u>WT</u>	13.
All containers needing preservation have been checked.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	14.
Exceptions: <u>VOA, Coliform, O&G, WI-DRO (water)</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed Lot # of added preservative
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank lot # (if purchased): <u>Jan 05</u>		15.
Headspace in VOA vials (>6mm):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	<u>243 mw57</u> 16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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:

IR00-16448

Project Manager Review:

MWDate: 4/17/15

CHAIN-OF-CUSTODY / Analytical Request Document

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Address: 7500 College Blvd., Ste. 925 Overland Park, KS 66210	Purchase Order No.: NA	Project Name: Fort Smith, AR	Address: 250 Monroe Ave. NW Grand Rapids Michigan, 49503	Reference: MJ Walls	Project Profile #: 7444, line 1																																																																																																																																																																							
Email To: wstonestreet@environmentcord.com	Project Number: 		Site Location: 	STATE: AR																																																																																																																																																																								
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*Important Note: By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

CHAIN-OF-CUSTODY / Analytical Request Document

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Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: Enviro	Report To: Wendy Stonestreet	Copy To: Tamara Gleason	Attention: Tamara Gleason	Company Name: 	REGULATORY AGENCY
Address: 7500 College Blvd., Ste. 925	Purchase Order No.: wstonestreet@environcorp.com	Address: tgleason@environcorp.com		<input type="checkbox"/> NPDES	<input type="checkbox"/> GROUND WATER
Email To: wstonestreet@environcorp.com	Project Name: Fort Smith, AR	Phone: 913-553-5926	Project Number: 	<input type="checkbox"/> UST	<input type="checkbox"/> RCRA
Requested Due Date/TAT: 	Pace Project Manager: MJ Walls	Pace Profile #: 7444 water, 7709 soil		<input type="checkbox"/> OTHER	DRINKING WATER
				<input type="checkbox"/> OTHER	OTHER
				<input type="checkbox"/> RCRA	OTHER
				<input type="checkbox"/> NPDES	DRINKING WATER
				<input type="checkbox"/> UST	OTHER
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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



REPORT OF LABORATORY ANALYSIS

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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

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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

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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

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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.

REPORT OF LABORATORY ANALYSIS

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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		

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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		

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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		

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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		

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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.

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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

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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.

REPORT OF LABORATORY ANALYSIS

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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		

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Sample Condition Upon Receipt

WO# : 60192138



60192138

Client Name: Environ

Courier: FedEx UPS VIA Clay PEX ECI Pace Other Client

Tracking #: _____

Pace Shipping Label Used? Yes No

Optional

Proj Due Date:

Proj Name:

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No Packing Material: Bubble Wrap Bubble Bags Foam None Other TapeThermometer Used: CE-0.1
T-239 / T-194
CF-1.8Type of Ice: Wet Blue None Samples received on ice, cooling process has begun.Cooler Temperature: 5.1 / 5.5

Temperature should be above freezing to 6°C

Date and initials of person examining contents: 8/17/15

Chain of Custody present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	Matrix: <u>WT</u>	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Exceptions: (VOA) Coliform, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Initial when completed Lot # of added preservative
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State: <u>WI</u>

Client Notification/ Resolution:

Copy COC to Client?

Y / N

Field Data Required? Y / N

Person Contacted: _____

Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: MJ WallsDate: 4/17/15



CHAIN-OF-CUSTODY / Analytical Request Document

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

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.

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



REPORT OF LABORATORY ANALYSIS

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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

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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.

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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.

REPORT OF LABORATORY ANALYSIS

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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

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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		

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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-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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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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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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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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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

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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

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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR

Pace Project No.: 60192139

QC Batch:	MSV/68946	Analysis Method:	EPA 5030B/8260
QC Batch 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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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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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

QC Batch: MSV/68968 Analysis Method: EPA 5030B/8260
QC Batch 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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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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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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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

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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.

REPORT OF LABORATORY ANALYSIS

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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		

REPORT OF LABORATORY ANALYSIS

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60192139

 Client Name: Enviro

 Courier: FedEx UPS VIA Clay PEX ECI Pace Other Client

Tracking #: _____

 Pace Shipping Label Used? Yes No

Optional

Proj Due Date:

Proj Name:

 Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No

 Packing Material: Bubble Wrap

 Bubble Bags

 Foam

 None

 Other

 Thermometer Used: EE-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: 5.1 / 5.5

Temperature should be above freezing to 6°C

Date and initials of person examining contents:

Chain of Custody present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	sample label says mw-87 but COC
Pace containers used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	read mw-85 collection date + time match
Containers intact:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	(4/16/15 1225)
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	Matrix: <u>WL</u>	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Exceptions: <u>VOA, Coliform, O&G, WI-DRO (water)</u>	<input type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed Lot # of added preservative
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: Environ	Report To: Wendy Stonestreet	Copy To: Tammy Gleason	Attention: Tammy Gleason	Company Name: Environ	
Address: 7500 College Blvd., Ste. 925 Overland Park, KS 66210	Purchase Order No.: NA	Address: 250 Monroe Ave. NW Grand Rapids Michigan, 49503	Project Number: MJ Walls	Reference: M.J. Walls	Project Profile #: 7444, line 1
Email To: wstonestreet@environtcord.com	Project Name: Fort Smith, AR	Manager: 	Site Location: AR	STATE: 	
Phone: 913-553-5926	Fax: 				
Requested Due Date/TAT:					
REGULATORY AGENCY					
<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> Adeq					
Requested Analysis Filtered (Y/N)					
<input checked="" type="checkbox"/> Residual Chlorine (Y/N) <input checked="" type="checkbox"/> CO2 Calc (Alkalinity +pH) <input checked="" type="checkbox"/> Sulfide <input checked="" type="checkbox"/> Total Phosphate (Pace Details) <input checked="" type="checkbox"/> Nitrate+Nitrite <input checked="" type="checkbox"/> Ammonia <input checked="" type="checkbox"/> Ferrous iron calc. (Send field Ferrous) <input checked="" type="checkbox"/> 6010-Iron/Mn <input checked="" type="checkbox"/> Chloride, Surface <input checked="" type="checkbox"/> TOC <input checked="" type="checkbox"/> Alkalinity <input checked="" type="checkbox"/> 8260 VOCs <input checked="" type="checkbox"/> Preservatives <input checked="" type="checkbox"/> Analysis Test ↑ <input checked="" type="checkbox"/> Other Acrylic Acid <input checked="" type="checkbox"/> NaOH <input checked="" type="checkbox"/> Na2SO3 <input checked="" type="checkbox"/> Methanol <input checked="" type="checkbox"/> HCl <input checked="" type="checkbox"/> HNO3 <input checked="" type="checkbox"/> H2SO4 <input checked="" type="checkbox"/> Unpreserved <input checked="" type="checkbox"/> # OF CONTAINERS <input checked="" type="checkbox"/> SAMPLE TEMP AT COLLECTION <input checked="" type="checkbox"/> MATRIX CODE (see valid codes to left)					
Section D Required Client Information		SAMPLE CODES COLLECTED		Pace Project No./ Lab ID.	
ITEM #	SAMPLE ID (A-Z, 0-9, -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX CODE	DATE COMPOSITE START	TIME COMPOSITE END/GRAB	7 day hold ⁰¹ 7 day hold ⁰² 7 day hold ⁰³ 7 day hold ⁰⁴ 7 day hold ⁰⁵ 7 day hold ⁰⁶ 7 day hold ⁰⁷ 7 day hold ⁰⁸ 7 day hold ⁰⁹ 7 day hold ¹⁰ 7 day hold ¹¹ 7 day hold ¹²
1	MW-83-201504 3C04H	WT (G)	4/1/15 13:50	3	60192139
2	MW-84-201504	WT (G)	4/1/15 0845	3	
3	MW-174-201504 3C04H	WT (G)	4/1/15 14:30	3	
4	MW-95-201504	WT (G)	4/1/15 15:01	3	
5	MW-94-201504	WT (G)	4/1/15 13:10	3	
6	MW-180-201504	WT (G)	4/1/15 14:45	3	
7	MW-24-201504 3C04H	WT (G)	4/1/15 13:30	3	
8	MW-178-201504	WT (G)	4/1/15 14:15	3	
9	MW-85-201504	WT (G)	4/1/15 14:58	3	
10	MW-84-201504	WT (G)	4/1/15 13:46	3	
11	MW-92-201504	WT (G)	4/1/15 12:05	3	
12	MW-172-201504	WT (G)	4/1/15 09:52	3	
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		ACCEPTED BY / AFFILIATION	
Level IV data package required		Victoria Siegen	4/1/15 18:00	Victoria Siegen	4/1/15
		Environ			
		Victoria Siegen	4/17/15 10:20		
SAMPLE NAME AND SIGNATURE					
PRINT NAME OF SAMPLER: Victoria Siegen SIGNATURE OF SAMPLER: Victoria Siegen					
Temp In °C 102 Cool(er) Sealed (Y/N) Y Cool(er) Sealed (Y/N) Y Received on 4/1/15 Samples intact (Y/N) Y					
Custody Seal (Y/N) Y Received on 4/1/15 Samples intact (Y/N) Y					



CHAIN-OF-CUSTODY / Analytical Request Document

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

Important Note: By signing this form you are accepting Face-TM, 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.

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 (°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</										

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-27-201403	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	
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				

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	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	60164494015	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	
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	
Comments	Dec 2013																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)	
Benzene	5.0	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)	
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)	
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)	
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)	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)	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)	0.21 J (5)	0.82 J (5)	0.5 J (5)	0.55 J (5)	U (5)	U (5)	U (5)	1.3 J (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)	
1,1-Dichloroethane	2.4	0.36 J (2.4)	U (2.4)	U (2.4)	4.4	2.4	U (2.4)	U (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)	
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)	0.36 J (5)	U (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)	5.2 (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)	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)	
Tetrachloroethene	5.0	U (5)	0.48 J (5)	0.26 J (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)	6.2 (5)	0.19 J (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	23.4 (5)	0.23 J (5)	0.28 J (5)	1.4 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)	225 (2)	3.4 (2)	3.4 (2)	U (2)	11.6 (2)	U (2)	0.57 J (2)	0.74 J (2)	
Metals																		
Iron	409 (50)	44.3 J (50)	NA	1620 (200)	U (50)	U (50)	U (50)	217 (50)	U (50)	NA	U (50)	259 (50)	U (50)	4220 (200)	U (50)	NA	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)	48.7 (5)	167 (5)	NA	NA	
Monitored Natural Attenuation Parameters (Laboratory)																		
Ammonia	U (100)	U (100)	NA	220 (100)	U (100)	U (100)	U (100)	U (100)	U (100)	NA	U (100)	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)	U (1000)	U (1000)	U (1000)	NA	U (1000)	U (1000)	U (1000)	U (1000)	U (1000)	NA	
Carbon Dioxide ⁶																		

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

Location	Remedial Action Levels	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	MW-56-201403	MW-57-201403	
Laboratory Sample ID	60164418005	60164307001	60164418014	60164494022	60164494016	60164494020	60164494009	60164494008	60164418010	60164418007	60164494027	60164423010	60164418011		Not Sampled	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	Low Flow	
RADD Issued	03/05/2014	03/05/2014	03/06/2014	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	03/07/2014	03/07/2014	03/07/2014	
Sample Date																		
Comments	Dec 2013																	
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)	NA	U (10)	U (10)	
Benzene	5.0	U (5)	0.3 J (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)	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)	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)	NA	U (10)	U (10)	
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)	NA	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)	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)	U (5)	0.43 J (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)	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)	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)	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)	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)	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)	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)	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)	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)	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)	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)	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)	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)	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)	NA	0.15 J (2)	0.14 J (2)	
Location																		
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	MW-56-201403	MW-57-201403	
Laboratory Sample ID	60164418005	60164307001	60164418014	60165925001	60165925002	60165935002	60165706001	60164418009	60165962004	60164418010	60164418007	60165935004	60165935005	60164418011		Not Sampled	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	Low Flow	
Sample Date	03/06/2014	03/05/2014	03/06/2014	03/28/2014	03/28/2014	03/26/2014	03/27/2014	03/26/2014	03/06/2014	03/30/2014	03/06/2014	03/27/2014	03/27/2014	03/06/2014	03/27/2014	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 (2000)	27200 (20000)	U (20000)	22200 (20000)	U (20000)	83800 (20000)	20700										

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	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	03/06/2014	03/07/2014	03/07/2014
Comments	Dec 2013											
Volatile Organic Compounds												
Acetone	12000	U (10)	U (10)									
Benzene	5.0	U (5)	U (5)									
Bromoform	80	U (5)	U (5)									
2-Butanone	4900	U (10)	U (10)									
Carbon Disulfide	720	U (10)	U (10)									
Carbon Tetrachloride	5	U (5)	U (5)									
Chlorobenzene	100	U (5)	U (5)									
Chloroethane	21,000	U (10)	U (10)									
Chloroform	80	U (5)	U (5)									
Chloromethane	190	U (10)	U (10)									
1,1-Dichloroethane	2.4	U (2.4)	U (2.4)									
1,2-Dichloroethane	5.0	U (5)	U (5)									
1,1-Dichloroethene	7.0	1.6 J (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)	5.8 (5)	3.5 J (5)	
trans-1,2-Dichloroethene	100	0.35 J (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)									
Methylene Chloride	5.0	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)									
1,1,1-Trichloroethane	200	U (5)	U (5)									
1,1,2-Trichloroethane	5.0	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)	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										
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	03/06/2014	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)	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)									
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)	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								

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	NA	
MW-24^	4	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	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	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															

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

Location	Well Casing Diameter (inches)	Date Sampled	Water Level Prior to Purging (feet btoc)	Total Depth of Well Casing (feet)	Set Tubing Depth (feet)	Time Sampled	Water Level After Purging (feet btoc)	Purge Volume (gallons)	Purge Rate (mL/min)	Temperature (°C)	Specific Conductivity (µS/cm)	pH	DO (mg/L)	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Color	Sample ID
MW-58	0.75	1/14/2015	1.47	17.50	15.0	09:35	4.95	2	100	8.61	924	5	0.29	138.1	4.23	1.03	Cloudy	MW-58-201501
MW-60	0.75	1/13/2015	6.74	17.00	14.5	13:00	Dry	0.12	100	13.42	1193	6.91	3.49	181.9	149	0.08	Brown	MW-60-201501
MW-61	0.75	1/13/2015	8.04	15.50	13.0	16:00	Dry	0.13	100	15.53	604	6.53	3.06	94	48.3	0.11	Brown	MW-61-201501
MW-62	0.75	1/13/2015	5.12	20.50	18.0	11:20	7.50	2.5	100	14.01	649	5.50	1.77	-3	10.1	0.00	Clear	MW-62-201501
MW-63	0.75	1/13/2015	4.19	21.00	18.5	16:25	Dry	0.5	100	9.96	460	5.80	3.92	8.1		0.00	Very Cloudy	MW-63-201501
MW-65	2	1/13/2015	10.33	32.00	27.0	10:40	10.40	1.7	100	16.78	11520	11.74	6.97	211.6	5.26	0.09	Clear	MW-65-201501
MW-66	2	1/14/2015	4.50	17.60	15.1	10:20	4.92	0.5	100	11.99	785	6.07	3.20	10.9	5.98	0.02	Clear	MW-66-201501
MW-67	2	1/12/2015	4.05	14.60	9.6	14:51	8.00	1.5	100	10.72	578	6.86	5.78	130.1	282.00	0.00	Brown	MW-67-201501
MW-68	2	1/12/2015	9.06	24.00	19.0	14:10	6.07	1	100	11.81	1070	4.88	2.33	24.5	1.79	0.11	Clear	MW-68-201501
MW-70^	0.75	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	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	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	NA	
IW-79^	0.75	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
 ORP = Oxidation reduction potential

mL/min = Milliliters per minute
 mg/L = Milligrams per liter

DO = Dissolved oxygen

NTUs = Nephelometric turbidity units

°C = Degrees Celcius

NM = Not measured

Mv = Millivolts

µS/cm = Microsiemens per centimeter

^ = Well not sampled

-- = Color not noted

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

Tubing inlet depths based on estimated distance from total depth.

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

Location	ITMW-1	ITMW-7	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	DUP-04-201501	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	027MA038, 145440020, 145440019, 60186183021	027MA047, 145440022, 145440021, 60186183006	027MA063, 145440024, 145440023, 60186334011	027MA061, 145440026, 145440027, 60186334007	027MA056, 145440030, 145440029, 60186334001	027MA059, 145440032, 145440031, 60186183003	027MA044, 145440036, 145440035, 60186183002			
Sample Date																	
Sample Method																	
Comments																	
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)	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)	
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)	
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)	
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)	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)	
Carbon Tetrachloride	5	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)	
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)	
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)	
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)	
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)	18.5 (0.50)	U (0.50)	
Dib (0.50)	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)	
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	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)	
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)	
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)	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)	
trans-1,2-Dichloroethene	100	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (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)	
Methylene Chloride	5	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.0 (0.50)	1.1 (0.50)	U (0.50)	0.51 J (0.50)	U (0.50)	U (0.50)	1.6 (0.50)	U (0.50)	0.67 J (0.50)	0.61 J (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)	
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)	20.7 (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)	
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)	
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)	
Trichloroethene	5	22.7 (0.50)	34.7 (0.50)	89.6													

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

Location	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)	Remedial Action Levels per ADEQ RADD Issued Dec 2013	027MA013, 145440048, 145440047,	027MA066, 145450004, 145450003,	027MA043, 145450016, 145450015,	60186478002	027MA053, 145450017, 145450019,	60186478001	027MA014, 145450020, 145450019,	027MA060, 145450022, 145450025,	027MA015, 145450038, 145450037,	027MA065, 145460006, 145460005,	027MA033, 145460007, 145460009,	027MA057, 145460010, 145460011,	027MA058, 145460012, 145460013,	027MA048, 145460014, 145460011,	
Sample Date		60186097034	60186334015	60186183002	60186478028	60186097035	60186334005	60186097003	60186334014	60186097004	60186334014	60186097004	60186334015	60186334002	60186334003	60186183007
Sample Method		1/13/2015	1/14/2015	1/13/2015	01/19/2015	01/13/2015	01/18/2015	01/13/2015	01/13/2015	01/15/2015	01/13/2015	01/15/2015	01/13/2015	01/14/2015	01/14/2015	01/15/2015
Comments	Low Flow															
Volatile Organic Compounds	Field Duplicate															
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)
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)
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)	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)	U (0.50)	1.0 (0.50)	2.2 (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)
Bromomethane	7	U (2.5)	<u>36.6 (2.5)</u>	<u>22.5 (2.5)</u>	<u>34.9 (2.5)</u>	U (2.5)	<u>18.1 (2.5)</u>	<u>40.0 (2.5)</u>	U (2.5)	U (2.5)	3.0 J (2.5)	<u>12.3 (2.5)</u>	<u>25.9 (2.5)</u>	<u>32.4 (2.5)</u>	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)
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)
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)
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)
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)	0.65 J (0.50)	0.64 J (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	17.8 (0.50)	79.4 (0.50)
Chloromethane	190	0.79 J (0.50)	29.6 (0.50)	10.0 (0.50)	15.5 (0.50)	7.0 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)
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)
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)
1,1,1-Dichloroethene	7	U (0.50)	U (0.50)	U (0.50)	0.82 J (0.50)	U (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)
cis-1,2-Dichloroethene	70	U (0.50)	<u>126 (25.0)</u>	0.55 J (0.50)	13.9 (0.50)	U (0.50)	9.9 (0.50)	U (0.50)	U (0.50)	<u>1900 (50.0)</u>	<u>1190 (12.5)</u>	U (0.50)	1.8 (0.50)	U (0.50)	167 (0.50)	<u>128 (0.50)</u>
trans-1,2-Dichloroethene	100	U (0.50)	35.2 (0.50)	U (0.50)	1.5 (0.50)	0.83 J (0.50)	U (0.50)	16.8 (0.50)	U (0.50)	18.3 (0.50)	U (0.50)	U (0.50)	25.3 (0.50)	18.4 (0.50)	U (0.50)	U (0.50)
Methylene Chloride	5	U (0.50)	<u>23.8 (0.50)</u>	U (0.50)	U (0.50)	0.64 J (0.50)	U (0.50)	0.65 J (0.50)	U (0.50)	0.94 J (0.50)	U (0.50)	U (0.50)	53.2 (0.50)	20.4 (0.50)	U (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)	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)	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)
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)
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)
Trichloroethene	5	7.1 (0.50)	<u>2510 (25.0)</u>	20.2 (0.50)	12.9 (0.50)	1080 (5.0										

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

Location	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, 145460017, 60186097036	027MA026, 145460018, 145460019, 6018600008	027MA08, 145460020, 145460022, 145460021, 60186097013	027MA025, 60186097014	027MA022, 145440004, 145440003, 60186097009	027MA018, 145440008, 145440007, 60186097006	027MA017, 145440026, 145440025, 60186183004	027MA045, 145440033, 145440027, 6018600004	027MA04, 145440034, 145440038, 6018600001	027MA023, 145450002, 145450001, 60186097010	027MA055, 145450006, 145450005, 60186183031	027MA037, 145450010, 145450009, 60186183019	027MA034, 145450012, 145450011, 60186097008	027MA021, 145450010, 145450009, 60186097008		
Sample Date		1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/12/2015	1/12/2015	1/12/2015	1/12/2015	1/12/2015	1/12/2015	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
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)
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)
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)
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)
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)
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)
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)
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)
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)
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)
Chloromethane	190	U (0.50)	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)
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)
1,1-Dichloroethane	2.4	U (0.50)	U (0.50)	U (0.50)	U (0.50)	1.1 (0.50)	1.2 (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)
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)
1,1-Dichloroethene	7	U (0.50)	U (0.50)	U (0.50)	U (0.50)	3.0 (0.50)	3.1 (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)
cis-1,2-Dichloroethene	70	U (0.50)	U (0.50)	U (0.50)	31.5 (0.50)	31.0 (0.50)	2.3 (0.50)	5.7 (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)
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)
Methylene Chloride	5	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)	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)
Tetrachloroethene	5	U (0.50)	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)
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)
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)
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)
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	

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

Location	MW-99	IW-73	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, 145440036, 145440045, 60186183009	027MA036, 145450032, 145440031, 60186183018	027MA024, 145450036, 145450035, 60186097011	60186097012	027MA010, 145460024, 60186097033	027MA011, 145460025, 60186183024	027MA041, 145450046, 60186097023	027MA040, 145460026, 60186183023	027MA027, 145460004, 60186097020	027MA031, 145460004, 60186097016	027MA039, 145450048, 60186183022
Sample Date	2013	01/15/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	1/13/2015	
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				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)	110 (5.0)	88.0 (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)	
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)	
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)	11.2 (0.50)	4.0 (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)	38.2 (2.5)	9.7 (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)	
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)	
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)	
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)	
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)	
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)	2.4 (0.50)	1.0 (0.50)	
Dib (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)	
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)	
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)	
1,1-Dichloroethene	7	U (0.50)	2.2 (0.50)	U (0.50)	0.64 J (0.50)	U (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)	
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)	
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)	
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)	
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)	
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)	
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)	
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)	
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)	
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)	0.71 J (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)	
Manganese	NE	NM	1860 (5.0)	1230 (5.0)	NM	9.1 (5.0)	44.0 (5.0)</									

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	NA	
MW-24^	4	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	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.

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	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	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	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	NA	
IW-79^	0.75	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
 in inches
 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 RADD MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS (FOURTH QUARTER 2014)
 Whirlpool Corporation - Fort Smith, Arkansas

Location		ITMW-1	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-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	DUP-05-201410	ITMW-15-201410	ITMW-17-201410	ITMW-18-201410	ITMW-19-201410	ITMW-21-201410	IW-80-201410	MW-25-201410	
	Remedial Action Levels per ADEQ RADD Issued Dec 2013	137010007, 041LJ043, 137090010, 137090022, 137090014, 60180441010	137000003, 041LJ045, 041LJ028, 041LJ027, 041LJ046, 137090013, 60180441023	137010022, 041LJ029, 041LJ047, 041LJ030, 137090023, 137090015, 60180441014	137010018, 041LJ029, 041LJ030, 137090024, 137090016, 60180441028	137010016, 041LJ047, 041LJ030, 137090024, 137090016, 60180635001	137010014, 041LJ048, 041LJ031, 137090025, 137090016, 60180635001	137010019, 041LJ052, 041LJ031, 137090029, 137090017, 60180635005	137010021, 041LJ051, 137090028, 137090003, 60180635004	137010010, 041LJ036, 137090026, 137090009, 60180331004	137000013, 041LJ015, 041LJ049, 137080009, 60180635002	137010020, 041LJ036, 137090028, 137090009, 60180635004	137010010, 041LJ015, 041LJ049, 137090026, 60180331004	137000013, 041LJ015, 041LJ049, 137090026, 60180635002	137010024, 041LJ051, 137090028, 137090009, 60180635002	137000013, 041LJ015, 041LJ049, 137090026, 60180635002	137000013, 041LJ015, 041LJ049, 137090026, 60180635002	137000013, 041LJ015, 041LJ049, 137090026, 60180635002	137000013, 041LJ015, 041LJ049, 137090026, 60180635002	137000013, 041LJ015, 041LJ049, 137090026, 60180635002
Lab Sample ID(s)		10/15/2014	10/13/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/15/2014	10/16/2014	10/16/2014	10/16/2014	10/16/2014	10/16/2014	10/16/2014			
Sample Date		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 Method		Comments				Field Duplicate			Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate		Field Duplicate			
Volatile Organic Compounds																				
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)	0.51 J (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)	2.0 J (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)	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)			
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)			
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)	0.52 J (0.50)	0.54 J (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)	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)	5.0 J (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)	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)	1.5 J (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)	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)	3.4 J (0.50)	3.9 J (0.50)	5.8 (0.50)	U (0.50)	19.9 (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)			
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)	0.54 J (0.50)	1.0 J (0.50)	1.1 J (0.50)	U (0.50)	U (0.50)	13.9 (0.50)	1.1 J (0.50)	U (0.50)	595 J (0.50)			
Methylene Chloride	5.0	U (0.50)	U (0.50)	U (0.50)	0.88 J (0.50)	0.84 J (0.50)	0.61 J (0.50)	0.61 J (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)	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)	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)	0.82 J (0.50)	1.5 J (0.50)	2.7 J (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)	18.1 (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)	9.7 (0.50)			
1,1,2-Trichloroethane	5.0	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	U (0.50)	0.58 J (0.50)	0.92 J (0.50)	U (0.50)	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)			
Vinyl Chloride	2.0	U (0.50)	U (0.50)	1.8 J (

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
Remedial Action Levels per ADEQ RADD Issued Dec 2013	041LJ016, 137080010, 60180331005	137000014, 041LJ014, 137080008, 60180331003	137000016, 041LJ01, 137080001, 60180331004	137000007, 041LJ04, 137080004, 60180331002	041LJ013, 137080019, 60180331014	041LJ08, 137080018, 60180331011	041LJ07, 137080017, 60180331012	041LJ02, 137080002, 60180221002	041LJ06, 137080003, 60180221003	137000004, 137080014, 60180331009	137000021, 137080020, 60180331015	137010001, 137080020, 60180331010	137000009, 137080015, 60180331009	137000011, 137090002, 60180441008	137000012, 137090008, 60180441001	137000010, 137090001, 60180441001		
Lab Sample ID(s)	041LJ016, 137080010, 60180331005	137000014, 041LJ014, 137080008, 60180331003	137000016, 041LJ01, 137080001, 60180331004	137000007, 041LJ04, 137080004, 60180331002	041LJ013, 137080019, 60180331014	041LJ08, 137080018, 60180331011	041LJ07, 137080017, 60180331012	041LJ02, 137080002, 60180221002	041LJ06, 137080003, 60180221003	137000004, 137080014, 60180331009	137000021, 137080020, 60180331015	137010001, 137080020, 60180331010	137000009, 137080015, 60180331009	137000011, 137090002, 60180441008	137000012, 137090008, 60180441001	137000010, 137090001, 60180441001		
Sample Date	10/14/2014	10/14/2014	10/13/2014	10/14/2014	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	
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	
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)	23.1 (5.0)	15.9 (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)	
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)	9.6 (0.50)	2.3 J (0.50)	
Bromomethane	7.0	U (2.5)	<u>12.1 (2.5)</u>	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>58.5 (2.5)</u>	<u>15.3 (2.5)</u>	
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)	
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)	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)	11.3 (0.50)	13.9 (0.50)	
Dibenzofuran	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	5.0	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)	
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)	0.61 J (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)	0.98 J (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)	
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)	0.62 J (0.50)	2.9 J (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)	
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	5.0	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)	
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.															

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

Location ENVIRON Sample ID		MW-46R	MW-46R	MW-56	MW-57	MW-58	MW-71	RW-69
		MW-46R-201410	DUP-03-201410	MW-56-201410	MW-57-201410	MW-58-201410	MW-71-201410	RW-69-201410
	Remedial Action Levels per ADEQ RADD Issued Dec 2013	137000005, 041LJ054, 137090031, 60180635007		041LJ044, 137090021, 60180441021	041LJ055, 137090019, 60180441019	137010002, 041LJ033, 137090020, 60180441020	137000024, 041LJ019, 137080013, 60180331008	137000023, 041LJ018, 137080012, 60180331007
Lab Sample ID(s)		60180635011		60180441020		60180441020		60180331008
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)
Dehalococciodes (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

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 (°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
 in inches
 ORP oxidation reduction potential
 DO dissolved oxygen
 (°C) degrees Celcius
 mV millivolts
 ^ Wells 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 in field samples

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.

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

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 (°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
(°C)	degrees Celcius	(µS/cm)	microsiemens per centimeter
mV	millivolts	--	color not noted in field samples
^	Wells not sampled		

- 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.

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

TABLE 5
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS - 2ND QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location ENVIRON Sample ID Lab Sample ID(s):	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-38	MW-38	MW-25	ITMW-10	ITMW-7	ITMW-11	ITMW-1	ITMW-12	ITMW-13	ITMW-14	ITMW-15	ITMW-15	ITMW-17	ITMW-17	ITMW-17	ITMW-18
		MW-38-201405 60169284010, 121800010, 050LE037 Low Flow 05/14/2014 Field Duplicate	DUP1-201405 60169284021 121980004, 121800003 Low Flow 05/14/2014	MW-25-201405 60169379004, 121980001, 050LE051 Low Flow 05/15/2014	ITMW-10-201405 60169284003, 121980003, 050LE028 Low Flow 05/14/2014	ITMW-7-201405 60169379003, 121980003, 050LE050 Low Flow 05/14/2014	DUP-4-201405 60169379008 050LE031 Low Flow 05/13/2014	ITMW-1-201405 60169284019, 121800019, 050LE046 Low Flow 05/14/2014	ITMW-12-201405 60169284004, 121800004, 050LE044 Low Flow 05/14/2014	ITMW-13-201405 60169284017, 121800017, 050LE045 Low Flow 05/14/2014	ITMW-14-201405 60169284018, 121800018, 050LE044 Low Flow 05/14/2014	ITMW-15-201405 60169284017, 121800017, 050LE045 Low Flow 05/14/2014	DUP2-201405 60169379005, 121980005, 050LE052 Low Flow 05/15/2014	ITMW-17-201405 60169284025 121980005, 050LE052 Low Flow 05/15/2014	DUP-3-201405 60169379009 121980002, 050LE049 Low Flow 05/15/2014	ITMW-18-201405 60169379002, 121980002, 050LE049 Low Flow 05/15/2014	
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)	2.6 J (10)	2.4 J (10)	U (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)	0.21 J (5)	U (5)	0.43 J (5)	U (5)	0.11 J (5)	0.12 J (5)	0.11 J (5)	0.11 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)	0.95 J (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)	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)	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)	0.25 J (5)	0.28 J (5)	1 J (5)	0.97 J (5)	1.8 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)	U (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)	26.7 (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)	5.9 (5)	5.1 (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)	0.41 J (5)	1.1 J (5)	19.9 (5)	19.9 (5)
Methylene Chloride	5.0	U (5)	U (5)	U (5)	1.1 J (5)	U (5)	1.2 J (5)	U (5)	U (5)	U (5)	0.22 J (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)	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)	0.47 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)	NS	127 (5)	NS	29.4 (5)	NS
Monitored Natural Attenuation Parameters (Laboratory)																	
Acetic acid	NE	U (5000)	NS														

TABLE 5
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS - 2ND QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location ENVIRON Sample ID Lab Sample ID(s):	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						
		DUP-5-201405	60169379005	DUP-6-201405	60169379006	ITMW-21-201405	60169284016,	ITMW-9-201405	IW-80-201405	MW-32-201405	60169189006,	MW-33-201405	60169189007,	MW-34-201405	60169189008,	MW-35R-201405	60169189022,	MW-65-201405	IW-73-201405	IW-74-201405	IW-76-201405	IW-77-201405
		60169379007	121980001,	050LE048	050LE043	121800016,	121800002,	121970006,	121970007,	121970024,	121970008,	121970017,	121920018,	60169284014,	60169284005,	60169284006,	60169284007,	60169284008,	60169284009,	60169284010,		
Sample Method Sample Date Comments	Low Flow 05/15/2014 Field Duplicate	Low Flow 05/15/2014 Field Duplicate	Low Flow 05/15/2014	Low Flow 05/14/2014	Low Flow 05/14/2014	Low Flow 05/14/2014	Low Flow 05/14/2014	Low Flow 05/13/2014	Low Flow 05/14/2014	Low Flow 05/14/2014	Low Flow 05/14/2014	Low Flow 05/14/2014										
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)	U (10)	U (10)	2.7 J (10)	2 J (10)	U (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)	U (5)	U (5)	0.12 J (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)	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)	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)	0.19 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)	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)	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)	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)	U (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)	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)	0.93 J (5)	U (5)	U (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)	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)	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)	U (5)	0.39 J (5)	0.41 J (5)	U (5)	2.5 J (5)	U (5)	3.6 (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)	U (5)	U (5)	U (5)	U (5)	0.34 J (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)	U (5)	U (5)	U (5)	U (5)	0.3 J (5)		
Methylene Chloride	5.0	U (5)	0.57 J (5)	0.55 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	0.15 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (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)	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)	U (5)	U (5)	U (5)	U (5)	U (5)	0.31 J (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)	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)	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)	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)	0.56 J (2)	U (2)	0.56 J (2)	U (2)	0.56 J (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)																	
Acetylene	NE	NS	U (0.5)	NS	U (0.5)	U (0.5)	U (0.5)	U (0.5														

TABLE 5
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS - 2ND QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location ENVIRON Sample ID Lab Sample ID(s):	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-41	MW-46R	MW-56
		MW-41-201405 60169284020, 121800020, 05OLE047 Low Flow 05/14/2014	MW-46R-201405 60169284011, 121920022, 05OLE038 Low Flow 05/14/2014	MW-56-201405 60171206001
Sample Method Sample Date 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	<u>518 (50)</u>	<u>471 (50)</u>	<u>307 (25)</u>
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 CaCO ₃)	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

LF Laboratory Error. Sample was provided to the laboratory, Ia

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 ENVIRON Sample ID Lab Sample ID(s):	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
		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
		60171206002	60169057002, 121970019, 050LE02	60169189015, 121970014, 050LE020	60169189016, 121970015, 050LE021	60169057005, 121970023, 050LE05	60169189005, 121970005, 050LE011	60169189019, 121970024, 050LE08	60169189002, 121970025, 050LE06	60169057006, 121970022, 050LE04	60169057001, 121970020, 050LE09	60169057004, 121970003, 050LE027	60169189003, 121970018, 050LE027	60169189018, 121970026, 050LE07	60169189020, 121970001, 050LE07	60169189001, 121970025, 050LE07	
Volatile Organic Compounds																	
Acetone	12000	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)	0.29 J (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)	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)	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)	
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)	
Chlorobenzene	100	U (5)	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)	11.5 (5)	0.27 J (5)	
Chloroform	80	U (5)	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)	
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)	
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)	
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)	
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	0.48 J (5)	1.9 J (5)	1.4 J (5)	0.5 J (5)	U (5)	U (5)	U (5)	U (5)	0.57 J (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)	U (5)	U (5)	2.1 J (5)	5.3 (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)	
Methylene Chloride	5.0	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)	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)	
Tetrachloroethene	5.0	U (5)	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)	
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	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)	
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)	0.25 J (5)	U (5)	0.3 J (5)	0.18 J (5)	U (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)	
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)	
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)	
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)	
Bicarbonate Alkalinity	NE	23400 (20000)	23200 (20000)	39100 (20000)	12700 J (20000)	112000 (20000)	60600 (20000)	94700 (20000)	137000 (20000)	38900 (20000)	1						

TABLE 5
SUMMARY OF MONITORING WELL GROUNDWATER SAMPLE ANALYTICAL RESULTS - 2ND QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location ENVIRON Sample ID Lab Sample ID(s):	Remedial Action Levels per ADEQ RADD Issued Dec 2013	MW-36	MW-39	MW-40	MW-50	MW-60	MW-61	MW-62	MW-63	MW-66	MW-67	MW-68
		MW-36-201405 60169189004, 121970004, 050LE010 Low Flow 05/13/2014	MW-39-201405 60169189009, 121970009, 050LE015 Low Flow 05/13/2014	MW-40-201405 60169057003, 121970021, 050LE003 Low Flow 05/12/2014	MW-50-201405 60169189010, 121970010 Low Flow 05/13/2014	MW-60-201405 60169189011 Low Flow 05/13/2014	MW-61-201405 60169189012, 121970011, 050LE017 Low Flow 05/13/2014	MW-62-201405 60169284012, 121920021, 050LE039 Low Flow 05/14/2014	MW-63-201405 60169284013, 121920020, 050LE040 Low Flow 05/14/2014	MW-66-201405 60169189013, 121970012, 050LE018 Low Flow 05/13/2014	MW-67-201405 60169189014, 121970013, 050LE019 Low Flow 05/13/2014	MW-68-201405 60169284015, 121800015, 050LE042 Low Flow 05/14/2014
		Sample Method Sample Date 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-Dichlorethene	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-Dichlorethene	70	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	0.61 J (5)	U (5)	U (5)
trans-1,2-Dichlorethene	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)	U (2)	0.13 J (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)	0.029 (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)					
Hydrogen [nM]	NE	24 (0.6)	4.8 (0.6)	7.8 (0.6)	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 $\mu\text{g/L}$ except where noted.

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
(μ) Detection Limit

() Detection Limit
PADD Remedial Action Level

RADD Remedial Action Decision Document
ADEQ Arkansas Department of Environment

ADEQ Arkansas Department of Environmental Quality
ug/l micrograms per liter

$\mu\text{g/L}$ micrograms per Liter
 ml milliliters

ML milliliters
NS Not Sampled

LE Laboratory Error. Sample was provided.

LE Laboratory Error. Sam
NE Not Established

NE Not Established
Opposite wells

Onsite wells Offsite wells

Onsite Wells
Plume bound

Plume bound

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	ENVIRON Sample ID	ITMW-1	ITMW-1	ITMW-7	ITMW-8	ITMW-9	ITMW-10	ITMW-11	ITMW-12	ITMW-13	ITMW-14	ITMW-15	ITMW-15	ITMW-17	ITMW-18	ITMW-19	ITMW-21
		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	083L-G-27, 129020004, 129470010, 60174754003	083L-G-34, 129020011, 129470001, 60174754004	083L-G-32, 129020009, 129470002, 60174754012	083L-G-33, 129020010, 129020026, 60174844005	129470017, 083L-G-53, 129460008, 60174754006	129460007, 083L-G-50, 129460013, 60174844002	083L-G-29, 129020006, 129470008, 60174754007	083L-G-41, 129020016, 129470018, 60174754019	083L-G-28, 129460011, 129470004, 60174754020	083L-G-51, 129020005, 129470002, 60174844001	083L-G-49, 129020027, 129470011, 60174844003	083L-G-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	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	
Comments	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	Field Duplicate	
Volatile Organic Compounds																	
Acetone	12000	U (10)	24.6 (10)	U (10)	U (10)												
Bromodichloromethane	80	U (5)	U (5)	U (5)	U (5)												
Bromoform	80	U (5)	U (5)	U (5)	U (5)												
Bromomethane	7.0	U (7)	4.2 J (7)	U (7)	U (7)												
2-Butanone	4900	U (10)	U (10)	U (10)	U (10)												
Carbon Disulfide	720	U (10)	U (10)	U (10)	U (10)												
Chlorobenzene	100	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)												
Chloroform	80	U (5)	U (5)	U (5)	U (5)												
Chloroethylene	100	U (10)	U (10)	U (10)	U (10)												
Dibromoethane	80	U (5)	U (5)	U (5)	U (5)												
Dibromochloromethane	80	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)	1.8 J (2.4)	U (2.4)	U (2.4)	
1,2-Dichloroethane	5.0	U (5)	U (5)	U (5)	U (5)												
1,1-Dichloroethene	7.0	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)	5.1 (5)	5 J (5)	2.7 J (5)	22.9 (5)	21.8 (5)	U (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)	
trans-1,2-Dichloroethene	100	U (5)	22 (5)	0.58 J (5)	U (5)												
Methylene Chloride	5.0	U (5)	0.59 J (5)	U (5)	U (5)												
1,1,2,2-Tetrachloroethane	0.066	U (1)	3 (1)	U (1)	U (1)												
Tetrachloroethene	5.0	U (5)	0.64 J (5)	2.4 J (5)	1.6 J (5)	U (5)	0.56 J (5)	2.4 J (5)	2.7 J (5)	U (5)	U (5)						
Toluene	1000	U (5)	0.62 J (5)	0.59 J (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)												
1,1,2-Trichloroethane	5.0	U (5)	0.64 J (5)	0.69 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)	26.5 (5)	4 J (5)	1820 (50)	1850 (50)	2260 (250)	5380 (500)	13300 (500)	94 (5)
Vinyl Chloride	2.0	U (2)	0.54 J (2)	1.8 J (2)	5.9 (2)	13.6 (2)	U (2)	3.1 (2)	3 (2)	1.6 J (2)	0.96 J (2)						
Metals																	
Iron	NE	U (50)	NM	U (50)	30.1 (50)	NM	U (50)	236 (50)	26.5 J (50)	30 (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)	NM	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)	NM	0.5 U (0.5)	0.5 U (0.5)	0.5 U (0.5)						
Total Ammonium	NE	72300 (2000)	NM	12800 (2000)	38600 (2000)	NM	10400 (2000)	93400 (2000)	82300 (2000)	71800 (2000)	44300 (2000)	179000 (2000)	NM	14600 J (2000)	67600 (2000)	105000 (2000)	22300 (2000)
Bicarbonate Alkalinity	NE	72300 (2000)	NM	12800 (2000)	38600 (2000)	NM	10400 (2000)	93400 (2000)	82300 (2000)	71800 (2000)	44300 (2000)	179000 (2000)	NM	14600 (2000)	67600 (2000)	105000 (2000)	22300 (2000)
Ammonium	NE	100 (10)	NM	160 M1 (100)	U (100)	NM	104000 (2000)	934000 (2000)	823000 (2000)	718000 (2000)	443000 (2000)	1790000 (2000)	NM	14600 (2000)	67600 (2000)	105000 (2000)	22300 (2000)
Butyric acid	NE	72300 (2000)	NM	12800 (2000)	38600 (2000)	NM	104000 (2000)	934000 (2000)	823000 (2000)	718000 (2000)	443000 (2000)	1790000 (2000)	NM	14600 (2000)	67600 (2000)	105000 (2000)	22300 (2000)
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)	NM	730 (1000)	NM	1200 (1000)	670 J (1000)	670 J (1000)	670 J (1000)	670 J (1000)	NM	U (1000)	720 J (1000)	U (1000)	U (1000)
Carbonate Alkalinity (as CaCO3)	NE	U (2000)	NM	U (2000)	NM	U (2000)	NM	U (2000)	U (2000)	U (2000)	U (2000)	NM	U (2000)	U (2000)	U (2000)	U (2000)	
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)	150000 (100000)
2-Chloroethanol	NE	U (10000)	NM	U (10000)	NM	U (10000)	NM	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)	NM	25000 U (25000)	25000 U (25000)	25000 U (25000)	25000 U (25000)					
Nitrogen	NE	730 (100)	NM	2800 (100)	2030 (500)	NM	560 (200)	240 (100)	220 (100)	170 (100)	400 (100)	770 (100)	NM	110 (100)	270 (100)	1900 (100)	15 (100)
Nitrogen, Nitrate (As N)	NE	730 (100)	NM	2800 (100)	2030 (500)	NM	560 (200)	240 (100)	220 (100)	170 (100)	400 (100)	770 (100)	NM	110 (100)	270 (100)	1900 (100)	U (100)
pH (STD Units)	NE	6 (0.1)	NM	6 (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)	6.1 (0.1)	4.6 (0.1)	U (100)
Phosphates (total)	NE	U (30)	NM	U (30)	NM	U (30)	NM	U (30)	25 J (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)	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)	NM	10000 U (10000)	10000 U (10000)	10000 U (10000)	10000 U (10000)					
Sulfide (total)	NE	U (50)	NM	U (50)	NM	U (50)	NM	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)	20500 (2000)	7700 (1000)	7400 (1000)
Molecular Analyses																	
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	NM	U (0.5)	NM	U (0.5)	NM	U (0.5)	U (0.5)	U (0.5)	U (0.5)	NM	9 (0.1)	1.4 (0.1)	0.49 (0.1)	0.64 (0.1)	
Dehalococcoides (DHC) [cells/mL]	NE	7.8 (0.5)	NM	U (0.5)	NM	6.6 (0.5)											

TABLE 5
SUMMARY OF MONITORING WELL GROUND WATER SAMPLE ANALYTICAL RESULTS - 3RD QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location	ENVIRON Sample ID	ITMW-21	IW-90	MW-25	MW-32	MW-33	MW-34	MW-35R	MW-38	MW-45	ITMW-2	ITMW-4	ITMW-6	ITMW-16	ITMW-20	IW-72	MW-22
	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-45-201407	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 over ADEQ RADD Issued Dec 2013	129470008, 083LG-54, 083LG-43, 129020030, 129460012, 129100007, 60174754025	129470009, 083LG-54, 083LG-43, 129020030, 129460012, 129100007, 60174844006	083LG-7, 129460006, 129100006, 129460012, 129470022	083LG-6, 129460006, 129100006, 129460012, 129470022	129460006, 129470024, 129460005, 129020028, 60174844004	083LG-26, 083LG-48, 083LG-44, 129020003, 129470006, 60174754023	083LG-35, 083LG-46, 083LG-41, 129020031, 129470016, 60174754036	083LG-25, 083LG-15, 083LG-16, 129020008, 129100015, 60174754001								
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	07/29/2014	07/29/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	07/30/2014	
Comments	Field Duplicate																
Volatile Organic Compounds																	
Acetone	12000	U (10)	195 (10)	537 (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)	2.7 (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 (5)	0.82 J (5)	U (5)	3.7 J (5)	U (5)	U (5)	1.8 J (5)	U (5)	U (5)	U (5)	U (5)	1.6 J (5)	U (5)	U (5)	
Bromomethane	7.0	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)	
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)	
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)	
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)	
Chloroform	80	U (5)	U (5)	21.0 (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)	
Chloroethylene	100	U (10)	0.62 J (10)	4.2 J (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)	
1,1-Dichloroethane	2.4	U (2.4)	U (2.4)	2.2 (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)	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)	
1,1-Dichloropropane	7.0	U (5)	U (5)	7.3 (5)	U (5)	2.1 J (5)	U (5)	U (5)	27.1 (5)	U (5)	U (5)	U (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)	
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)	
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)	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)	
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)	
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)	
1,1,1-Trichloroethane	200	U (5)	U (5)	2.3 (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)	
1,1,2-Trichloroethane	5.0	U (5)	U (5)	3.0 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)	
Trichloroethane	5.0	9.3 (5)	25.6 (5)	71700 (5000)	37.2 (5)	1600 (500)	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)	
Vinyl Chloride	2.0	U (2)	U (2)	230 (2)	U (2)	0.59 J (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)	
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)	4920 (5)	101 (5)	
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)	
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)	
Total Ammonia	NE	NM	206000 (2000)	81100 (2000)	8200 J (2000)	13600 J (2000)	7700 J (2000)	255000 (2000)	101000 (2000)	268000 (2000)	78800 (2000)	91400 (2000)	52800 (2000)	149000 (2000)	112000 (2000)	51700 (2000)	
Bicarbonate Alkalinity	NE	NM	202000 (2000)	81100 (2000)	8200 J (2000)	13600 J (2000)	7700 J (2000)	U (6000)	101000 (2000)	268000 (2000)	78800 (2000)	91400 (2000)	52800 (2000)	149000 (2000)	112000 (2000)	51700 (2000)	
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)	
Carbon Dioxide	NE	NM	32000 (32000)	528000 (32000)	0	0	0	0	277000 (32000)	242000 (32000)	193000 (32000)	734000 (32000)	222000 (32000)	210000 (32000)	365000 (32000)	365000 (32000)	
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)	530 J (1000)	
Carbonate Alkalinity (as CaCO3)	NE	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)	U (20000)	
Chloride	NE	NM	195000 (20000)	513000 (20000)	305000 B (50000)	194000 (10000)	268000 (20000)	274000 (50000)	19000 (10000)	305000 (50000)	153000 (20000)	9200 (1000)	142000 (10000)	1700 (1000)	107000 (10000)	224000 (20000)	14300 (10000)
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)	
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)	
Nitrogen	NE	NM	780 (100)	34 (100)	140 (100)	2000 (100)	350 (100)	1700 (100)	U (100)	850 (100)	850 (100)	U (100)	2700 M1 (100)	850 (100)	1800 (100)	1200 (100)	760 (100)
Nitrogen, Nitrate (As N)	NE	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)	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)	5.6 (0.1)	5.5 (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)	350 (30)	170 (30)	32 (30)	U (30)	310 (30)	U (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)	
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)	
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 (50)	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)	11 (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	0.068 (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)	0.068 (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)</td											

TABLE 5
SUMMARY OF MONITORING WELL GROUND WATER SAMPLE ANALYTICAL RESULTS - 3RD QUARTER 2014
Whirlpool Corporation: Fort Smith, AR

Location	ENVIRON Sample ID	MW-26		MW-27		MW-28		MW-29		MW-31		MW-33		MW-39		MW-40		MW-50		MW-60		MW-61		MW-62		MW-63		MW-64		MW-65		
		MW-26-201407	MW-27-201407	MW-28-201407	MW-29-201407	MW-31-201407	DUP-1-201407	MW-33-201407	MW-39-201407	MW-40-201407	MW-50-201407	MW-60-201407	MW-61-201407	MW-62-201407	MW-63-201407	MW-64-201407	MW-65-201407	MW-66-201407	MW-67-201407													
Lab Sample ID(s)	Remedial Action Levels per ADEQ RADD Issued Dec 2013	083LG-30, 129020007, 60174754016, 60174754017	083LG-38, 129020014, 129020023, 129460016, 60174754029	083LG-47, 129020015, 129470005, 60174754017	083LG-39, 129020013, 129470006, 60174754028	083LG-37, 129100017, 129460020, 60174754028	083LG-18, 129100009, 129460001, 60174754028	083LG-9, 129100004, 129460001, 60174754028	083LG-14, 129100004, 129460001, 60174754028	083LG-4, 129100004, 129460001, 60174754028	083LG-3, 129100003, 129460003, 60174754028	129460003, 083LG-13, 129100005, 60174754028	129460003, 083LG-17, 129100005, 60174754024	083LG-1, 129100001, 129460024, 60174754023	083LG-2, 129100002, 129460023, 60174754023																	
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	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	07/30/2014	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	07/28/2014	07/28/2014	07/28/2014	07/28/2014	07/28/2014	07/28/2014	07/28/2014	07/28/2014	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)	U (10)	U (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)	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)	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)	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)	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)	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)	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)	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)	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)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)				
Chloroethylene	100	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)	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)	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)	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)					
1,1-Dichloroethene	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)	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)	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)				
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)	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)	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)	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)	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)	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)	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)	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 (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)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (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)	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)	1500 (50)	237 (50)	2930 (50)	96.1 (50)	293 (50)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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)	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
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)	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)	5000 U (5000)	5000 U (5000)			
Acetylene	NE	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	NM	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)		
Total Alkalinity	NE	41700 (2000)	51700 (2000)	67100 (2000)	25500 (2000)	39400 (2000)	NM	17600 J (2000)	16500 J (2000)	210000 (2000)	419000 (2000)	120000 (2000)	40200 (2000)	53100 (2000)	108000 (2000)	40200 (2000)	53100 (2000)	120000 (2000)	40200 (2000)	53100 (2000)	108000 (2000)	40200 (2000)	53100 (2000)	108000 (2000)	40200 (2000)	53100 (2000)	108000 (2000)	40200 (2000)	53100 (2000)	108000 (2000)	40200 (2000)	53100 (2000)
Ammonium	NE	260 (100)	260 (100)	260 (100)	260 (100)	260 (100)	NM	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	37 J (100)	
Bicarbonate Alkalinity	NE	41700 (2000)	51700 (2000)	67100 (2000)	25500 (2000)	39400 (2000)	NM	17600 J (2000)	16500 J (2000)	210000 (2																						

TABLE 5
SUMMARY OF MONITORING WELL GROUND WATER SAMPLE ANALYTICAL RESULTS - 3RD QUARTER 2014
Whirlpool Corporation; Fort Smith, AR

Location ENVIRON Sample ID		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	
		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) RADD Issued Dec 2013	129460004, 083LG-24, 129100022, 129470012	083LG-12, 129020001, 129460010	083LG-23, 129100008, 129460014	083LG-8, 129100018, 129460014	083LG-20, 129020018, 1294754021	129460021, 083LG-42, 60174754026	129460022, 083LG-16, 129100020	083LG-21, 129100016	129460009, 083LG-22, 129100019	129460003, 083LG-10, 129100021	129460011, 083LG-11, 129100010	083LG-11, 083LG-10, 129100011	083LG-11, 083LG-10, 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	Low Flow	
Sample Date	07/23/2014	07/29/2014	07/29/2014	07/29/2014	07/29/2014	07/29/2014	07/29/2014	07/29/2014	07/29/2014	07/29/2014	07/29/2014	07/29/2014	07/29/2014	07/29/2014	
Comments															
Volatile Organic Compounds															
Acetone	12000	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)	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)	16.4 M (5)	1.2 J (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)	8.7 (7)	3.8 J (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)	
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)	0.8 J (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	U (5)	
Chloroethylene	100	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 (6)	U (5)	0.71 J (5)	U (6)	U (5)	U (6)	U (5)	U (6)	U (5)	U (6)	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)	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)	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)	0.74 J (5)	5.2 (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)	
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)	0.51 J (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)	
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 (40)	319 (26)	1540 (100)	480 (60)	511 (50)	472 (60)	516 (26)	308 (26)	399 (26)	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)	U (2)	U (2)	U (2)	U (2)	U (2)	U (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 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	NM	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	0.5 (0.5)	
Total Alkalinity	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)	14300 J (20000)	
Ammonium	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)	
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)	14300 J (20000)
Butyric acid	NE	5000 M (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	25000	366000	322000	256000	327000	NM	0	282000	272000	0	0	0	
Organic Carbon (total)	NE	U (1000)	1100 (1000)	U (1000)	1200 (1000)	U (1000)	U (1000)	NM	U (1000)	530 (1000)	U (1000)	U (1000)	640 J (1000)	640 J (1000)	
Carbonate Alkalinity (as CaCO ₃)	NE	U (2000)	U (2000)	U (2000)	U (2000)	U (2000)	U (2000)	NM	U (2000)	U (2000)	U (2000)	U (2000)	U (2000)	U (2000)	
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)	284000 (20000)
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)	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)	U (100)	U (100)	U (100)	U (100)	U (100)	NM	U (100)	47 J (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)	250 (30)	1600 (30)	NM	32 (30)	310 (30)	U (30)	U (30)	60 (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)	122000 (10000)	450000 (50000)	3400 (1000)	NM	690 J (1000)	4600 (1000)	3900 (1000)	1900 (1000)	2600 (1000)	2400 (1000)	2400 (1000)	
Molecular Analyses															
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	U (0.5)	4610 (0.5)	13.5 (0.5)	U (0.5)	0.9 (0.5)	NM	1.2 (0.5)	312 (1)	NA	6.8 (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)	NM	20.4 (0.5)	1769 (1)	NA	43.4 (0.5)	19.3 (0.5)	33.3 (0.5)		
toxC Reductase [cells/mL]	NE	0.2 J (0.5)	U (0.5)	2 (0.5)	0.8 (0.5)	1.6 (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)	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 ADEQ 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

**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.
 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 $4^{\circ}\text{C} \pm 2^{\circ}\text{C}$ (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
60192103	ITMW-18-201504	DUP-04-201504	Vinyl chloride	0.98 J*	1.2	20.18
			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.

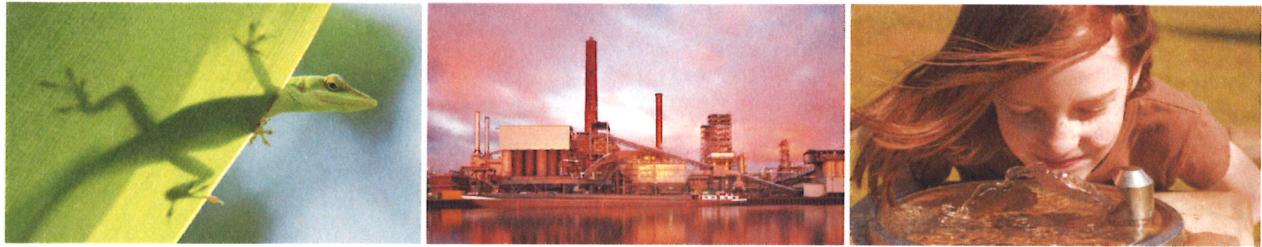
R = Rejected. The sample results are unusable due to the quality of the data generated.

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

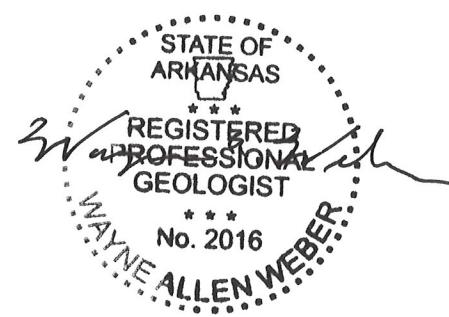


Table of Contents

	<u>Page</u>
1 Introduction	1
2 Soil Vapor Monitoring Point Installation and Sample Collection	2
2.1 Prior Installation of Soil Vapor Monitoring Points	2
2.2 Second Quarter 2015 Sampling	2
3 Results	4
3.1 Summary of Prior Assessment	4
3.2 Current Assessment	4
3.2.1 Parcel 1	4
3.2.2 Parcel 2	5
3.2.3 Parcel 3	5
3.2.4 Parcel 4	7
3.2.5 Parcel 5	7
4 Summary and Conclusion	9
5 References	10

LIST OF TABLES

- Table 1: Summary of Matrices Encountered and Sampled at Soil Vapor Monitoring Points
Table 2a: Second Quarter 2015 Groundwater VOC Data for Monitoring Wells in the Neighborhood
Table 2b: Second Quarter 2015 Groundwater VOC Data for Monitoring Well South of the Neighborhood
Table 3a: Second Quarter 2015 Water Data from Soil Vapor Monitoring Points
Table 3b: Second Quarter 2015 Soil Vapor Data
Table 4: Second Quarter 2015 Outdoor, Crawl Space and Indoor Air Data
Table 5: Upper-Bound Vapor Intrusion Risk Estimates Based on Second Quarter 2015 Groundwater Data in the Neighborhood
Table 6: Evaluation of VOCs in Soil Vapor and Water at Parcels in the Neighborhood
Table 7: Evaluation of VOCs in Soil Gas and Water at Parcel 5 (South of Neighborhood)

LIST OF FIGURES

- Figure 1: Locations of Former Vapor Monitoring Point (Abandoned in 2015)
- Figure 2: Shallow Monitoring Well and Vapor Point Locations (Installed in 2015)
- Figure 3: Offsite and Select Onsite Groundwater Monitoring Well Locations

LIST OF APPENDICES

- Appendix A: Laboratory Analytical Data
- Appendix B: Field Notes and Weather Data for April 2015
- Appendix C: Risk Calculations and Input Parameters
- Appendix D: Verification of Vapor Intrusion Calculations

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 RADD¹. 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 6×10^{-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 1×10^{-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 3×10^{-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 standard². 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 ($\mu\text{g}/\text{L}$). 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 $\mu\text{g}/\text{L}$ to 1 $\mu\text{g}/\text{L}$. MW-176 is located on Parcel 3 and the highest detected concentration of PCE was 0.14 $\mu\text{g}/\text{L}$, which is below the maximum contaminant level (MCL) of 5 $\mu\text{g}/\text{L}$.

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.

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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						
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)				
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)				
1,2-Dichloroethane	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)				
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 $\mu\text{g}/\text{m}^3$.
- 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

$\mu\text{g}/\text{L}$ = 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 $\mu\text{g}/\text{m}^3$.
- 2 Only analyzed chemicals with at least one detection in any water, soil vapor, or air sample are shown.

U = Not detected

$\mu\text{g}/\text{m}^3$ = 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
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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 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		7.5 ft bgs		12 ft bgs	
			MW-180		MW-178		MW-33R	
			Shallow Groundwater		Shallow Groundwater		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
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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.

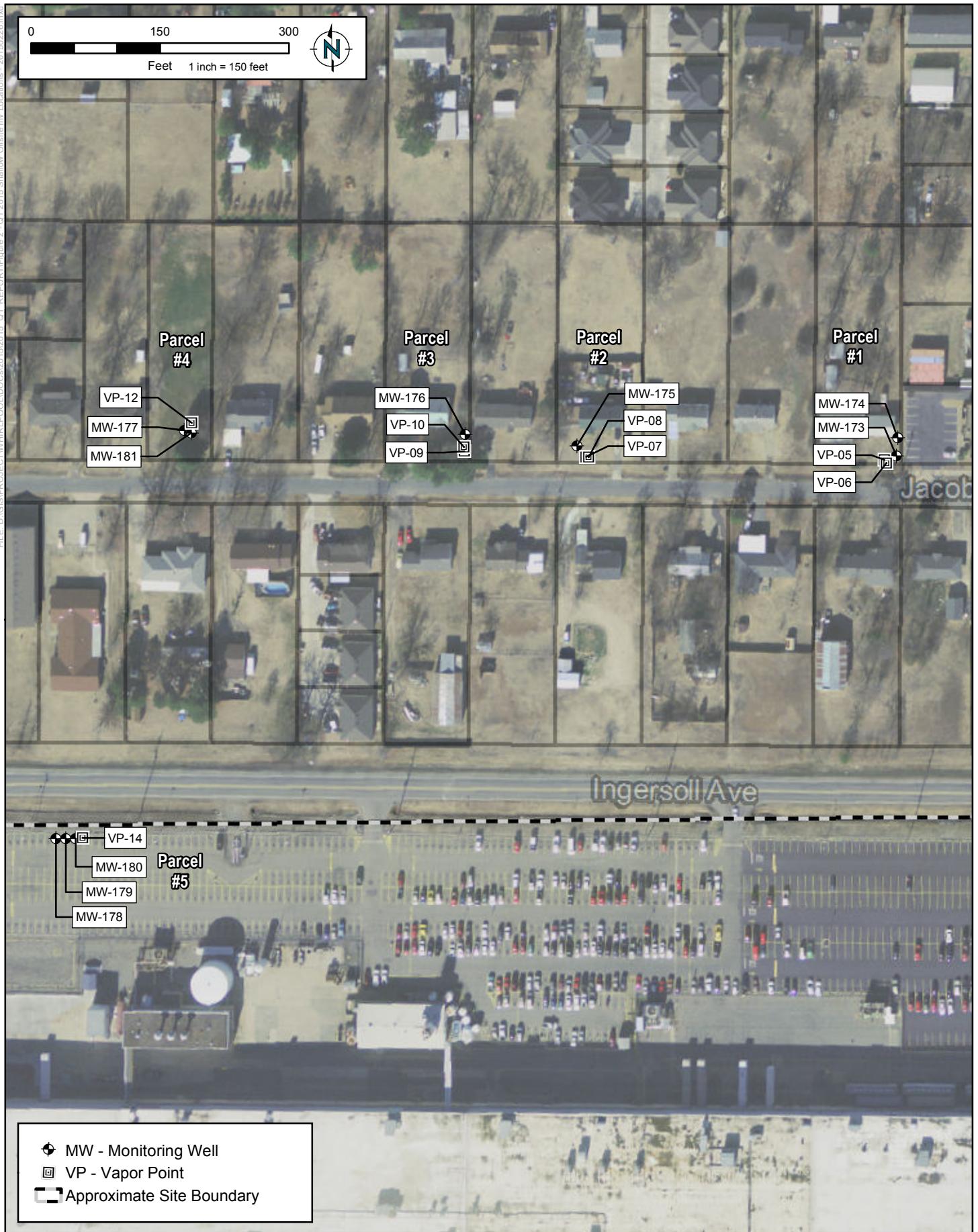
Risks based on concentrations measured in groundwater were calculated using the model derived by Johnson & Ettinger (1991), as discussed in Section 3.3.1 of the April 2013 Revised Risk Management Plan.

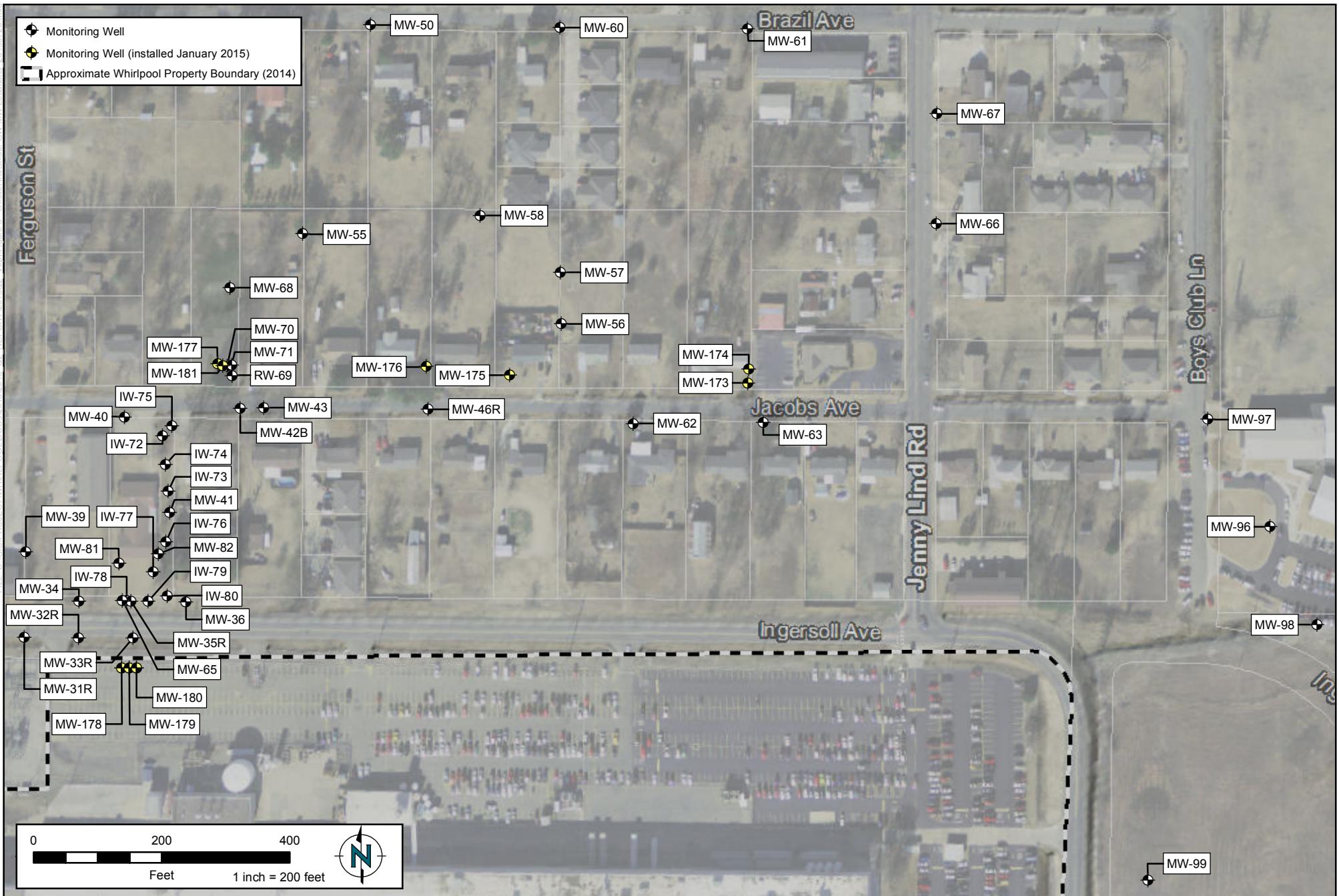
Risks based on concentrations measured in shallow groundwater were calculated using the same approach used for groundwater, except the depth was assumed to be the depth of the screen, as discussed in Section 3 of the Second Quarter 2015 Vapor Intrusion Report.

Cumulative cancer risk and HI estimates were below Arkansas Department of Environmental Quality (ADEQ)'s risk limits (1E-5 and 1, respectively).

Figures







Appendix A

Laboratory Analytical Data

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



REPORT OF LABORATORY ANALYSIS

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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

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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

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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

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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.

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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		

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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

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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

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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

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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

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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.

REPORT OF LABORATORY ANALYSIS

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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		

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt
WO# : 60191895


60191895

 Client Name: Enviro

Optional

 Courier: FedEx UPS VIA Clay PEX ECI Pace Other Client

Proj Due Date:

 Tracking #: 6262 7065 4472

 Pace Shipping Label Used? Yes No

Proj Name:

 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.

 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:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	Matrix: <u>WT</u>	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Exceptions: <u>VOA, Coliform, O&G, WI-DRO (water)</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed Lot # of added preservative
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
		16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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.

licensee

Section A

Required Client Information:

Section B

Required Projects

003200	
<p>Company: Enviroon Address: 1500 College Blvd., Ste 925 Town: Oakfield Park, KS 66210 Email To: WesterlyStreet@envirooncorp.com Phone: 913-535-5926 Requested Due Date/TAT:</p>	
<p>Report To: Wendy Stonestreet Copy To: Tammy Gleason Purchase Order No.: N/A Project Name: Fort Smith, AR Project Number:</p>	
<p>Attention: Tammy Gleason Company Name: Enviroon Address: 750 Monroe Ave. NW City: Grand Rapids State: Michigan, 49503 Reference: Project Manager: Manager: M.J. Walls Phone: 616-459-1144 Fax: 616-459-1145 Site Profile #: 7444 Site Location: AP STATE: MI</p>	
<p>REGULATORY AGENCY</p> <p><input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER</p> <p><input type="checkbox"/> UST <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER ADG &</p>	

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



REPORT OF LABORATORY ANALYSIS

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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

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60191896

Lab ID	Sample ID	Method	Analysts	Analytics Reported
60191896001	MW-176-201504	EPA 5030B/8260	PGH	38

REPORT OF LABORATORY ANALYSIS

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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.

REPORT OF LABORATORY ANALYSIS

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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	Analysis Method:	EPA 5030B/8260
QC Batch 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	

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REPORT OF LABORATORY ANALYSIS

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QUALITY CONTROL DATA

Project: FORT SMITH, AR

Pace Project No.: 60191896

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:	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	

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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.

REPORT OF LABORATORY ANALYSIS

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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		

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt

WO# : 60191896



60191896

Client Name: Enviro

Courier: FedEx UPS VIA Clay PEX ECI Pace Other Client

Tracking #: 6262 7065 4472

Pace Shipping Label Used? Yes No

Optional
Proj Due Date:
Proj Name:

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 CF-1.8
T-239 T-194Type 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:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	Matrix: WT	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Exceptions: VOA, Coliform, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed Lot # of added preservative
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
		17. List State:

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: 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.

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



REPORT OF LABORATORY ANALYSIS

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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

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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

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: FORT SMITH, AR
Pace Project No.: 60192014

Lab ID	Sample ID	Method	Analysts	Analytics Reported
60192014001	MW-175-201504	EPA 5030B/8260	PGH	38

REPORT OF LABORATORY ANALYSIS

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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.

REPORT OF LABORATORY ANALYSIS

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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

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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60192014

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: 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

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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

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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.

REPORT OF LABORATORY ANALYSIS

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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		

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt

WO# : 60192014



60192014

Client Name: EnviroCourier: FedEx UPS VIA Clay PEX ECI Pace Other Client Tracking #: _____ Pace Shipping Label Used? Yes No

Optional
Proj Due Date:
Proj Name:

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No Packing Material: Bubble Wrap Bubble Bags Foam None Other Thermometer Used: CF-1.8 / T-194Type of Ice: Wet Blue None Samples received on ice, cooling process has begun.Cooler Temperature: 0.3

Temperature should be above freezing to 6°C

Date and initials of person examining contents: PUY/16/15

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	<u>WT</u>	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Exceptions: <u>VOA</u> , Coliform, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	Lot # of added preservative
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> 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: MWDate: 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

Section A
Required Client Information:

Company: ENVIRON

Address: 1500 College Blvd. Ste 925

Oakland Park, KS 66210

Email To: wstonstruc@envirocorp.com

Phone: 413.553.5924

Fax:

Requested Due Date/TAT:

Section B
Required Project Information:

Report To: Wendy Stonestreet

Copy: Tammy Gleason

Purchase Order No.: NA

Project Name: Fort Smith, AR

Project Number:

Section C
Invoice Information:

Attention: Tammy Gleason

Company Name: ENIRON

REGULATORY AGENCY

Address: 250 Monroe Ave. NW Ste 500

Phone Quote: Michigan, 49503

Reference:

Project Manager:

Project Profile #444, line 1

Site Location:

STATE: AR

Request Analysis Filtered (Y/N)

Section D
Required Client InformationSAMPLE ID
(A-Z, 0-9, -, -)Sample IDs MUST BE UNIQUE
MIN-175-201504Matrix Codes
MATRIX / CODE

Drinking Water

Water

Waste Water

Product

Soil/Solid

Oil

Wipe

Air

Tissue

Other

Preservatives

COMPOSITE
STARTCOMPOSITE
END/GRABANALYSIS TEST
Y/N

X

SAMPLE TEMP AT COLLECTION

Zink Acetate & NaOH

BAK

TSP

HCl

X

HNO₃H₂SO₄

Unpreserved

OF CONTAINERS

3

Residual Chlorine (Y/N)

X

Regulatory Agency

NPDES

GROUND WATER

DRINKING WATER

RCRA

X OTHER

ADCO

Project Manager:

Project Profile #444, line 1

6/01/15 2015

Project No./Lab I.D.

N 3069 H

Date

Time

Accepted by / Affiliation

DATE

TIME

SAMPLE CONDITIONS

Y

6/01/15 0147 03

X

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

Y

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

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.

Samples intact
(Y/N)Received on
Temp in °CSealed Container
(Y/N)Received on
Temp in °C

SAMPLE NAME AND SIGNATURE

PRINT NAME OF SAMPLER:

SIGNATURE OF SAMPLER:

LUCY CROSS

JULY CROSS

DATE Signed
(MM/DD/YY):

4/15/15

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



REPORT OF LABORATORY ANALYSIS

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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

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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

REPORT OF LABORATORY ANALYSIS

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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.

REPORT OF LABORATORY ANALYSIS

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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 Analysis Method: EPA 5030B/8260

QC Batch 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.

REPORT OF LABORATORY ANALYSIS

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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		

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt

WO# : 60192016



60192016

Client Name: EnviroCourier: FedEx UPS VIA Clay PEX ECI Pace Other Client

Tracking #: _____

Pace Shipping Label Used? Yes No

Optional
Proj Due Date:
Proj Name:

Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No Packing Material: Bubble Wrap Bubble Bags Foamy None Other Thermometer Used: CF-1.1
T-239 / T-194Type of Ice: Wet Blue None Samples received on ice, cooling process has begun.Cooler Temperature: 0.3

Temperature should be above freezing to 6°C

Date and initials of person examining contents: PA 4/16/15

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	<u>WT</u>	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Exceptions: <u>VOA</u> , Coliform, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed Lot # of added preservative
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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: MWDate: 4/16/15



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
002950			
Section A Required Client Information: Company: ENviron Address: 1500 College Blvd, Ste 926 Oakland Park, FL 33321 Email To: WSTENSTRECH@ENVIRON.COM Phone: (713) 553-5926 Fax: Requested Due Date/TAT: 			
Section B Required Project Information: Report To: Copy to Tammy Glaser Tammy Glaser Purchase Order No.: NA Project Name: Fort Smith, AR Project Number: 7444, Line 1			
Section C Invoice Information: Attention: Tammy Glaser Company Name: ENviron Address: 1500 Monroe Ave, NW Grand Rapids Pace Quote Reference: Michigan, 49503 Pace Project Manager: MU Walls Pace Profile #: 7444, Line 1			
REGULATORY AGENCY <input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input checked="" type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER AR			
Site Location : AR STATE:			
Requested Analysis Filtered (Y/N) <input checked="" type="checkbox"/> B260 VOCs <input type="checkbox"/> <input checked="" type="checkbox"/> Analysis Test <input type="checkbox"/>			
Preservatives <input checked="" type="checkbox"/> BAK <input type="checkbox"/> <input checked="" type="checkbox"/> TSP <input type="checkbox"/> <input checked="" type="checkbox"/> HCl <input type="checkbox"/> <input checked="" type="checkbox"/> HNO ₃ <input type="checkbox"/> <input checked="" type="checkbox"/> H ₂ SO ₄ <input type="checkbox"/> <input checked="" type="checkbox"/> Unpreserved <input type="checkbox"/> # OF CONTAINERS : 3			
SAMPLE TEMP AT COLLECTION COLLECTED Matrix Codes MATRIX / CODE Drinking Water DW Waste Water WT Soil/Solid WW Oil SL Wipe OL Air WP Tissue AR Other TS OT COMPOSITE ENDGRAB COMPOSITE START MATRIX CODE (see valid codes to left) SAMPLE TYPE (G=GRAB C=COMP)			
Pace Project No./Lab I.D. 60192016 N 3DGAH b1 N + b2			
Sample ID (A-Z, 0-9, -) Sample IDs MUST BE UNIQUE ITEM #			
RELINQUISHED BY / AFFILIATION LUCY CROSS / ENVIRON 4/15/15 1900 Phenix			
ADDITIONAL COMMENTS ORIGINAL			
ACCEPTED BY / AFFILIATION LUCY CROSS / ENVIRON 4/16/15 1900 Phenix			
SAMPLE CONDITIONS DATE TIME DATE TIME 4/16/15 1900 03 4/15/2015 15			
SAMPLE NAME AND SIGNATURE LUCY CROSS LUCY CROSS DATE Signed 4/15/2015 SIGNATURE of SAMPLER: Lucy Cross DATE Signed (MM/DD/YY): 4/15/2015			
Received on Custody Seal Date (Y/N) Temp in °C Sealed/Colder (Y/N) Samples intact (Y/N)			
F-ALL-Q-020rev1, 15-May-2007			

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



REPORT OF LABORATORY ANALYSIS

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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

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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.

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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		

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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

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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-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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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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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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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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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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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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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR

Pace Project No.: 60192139

QC Batch: MSV/68946

QC Batch Method: EPA 5030B/8260

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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QUALITY CONTROL DATA

Project: Whirlpool Fort Smith, AR
Pace Project No.: 60192139

QC Batch: MSV/68968 Analysis Method: EPA 5030B/8260
QC Batch 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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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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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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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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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.

REPORT OF LABORATORY ANALYSIS

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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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60192139

 Client Name: Enviro

 Courier: FedEx UPS VIA Clay PEX ECI Pace Other Client

Tracking #: _____

 Pace Shipping Label Used? Yes No

Optional

Proj Due Date:

Proj Name:

 Custody Seal on Cooler/Box Present: Yes No Seals intact: Yes No

 Packing Material: Bubble Wrap

 Bubble Bags

 Foam

 None

 Other

 Thermometer Used: EE-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: 5.1 / 5.5

Temperature should be above freezing to 6°C

Date and initials of person examining contents:

Chain of Custody present:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	sample label says mw-87 but COC
Pace containers used:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	read mw-85 collection date + time match
Containers intact:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	(4/16/15 1225)
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	Matrix: <u>WL</u>	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	14.
Exceptions: <u>VOA, Coliform, O&G, WI-DRO (water)</u>	<input type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed Lot # of added preservative
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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

CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: Environ	Report To: Wendy Stonestreet	Copy To: Tammy Gleason	Attention: Tammy Gleason	Company Name: Environ	
Address: 7500 College Blvd., Ste. 925 Overland Park, KS 66210	Purchase Order No.: NA	Address: 250 Monroe Ave. NW Grand Rapids Michigan, 49503	Project Number: MJ Walls	Reference: M.J. Walls	Project Profile #: 7444, line 1
Email To: wstonestreet@environtcord.com	Project Name: Fort Smith, AR	Manager: 	Site Location: AR	STATE: 	
Phone: 913-553-5926	Fax: 				
Requested Due Date/TAT:					
REGULATORY AGENCY					
<input type="checkbox"/> NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER <input type="checkbox"/> Adeq					
Requested Analysis Filtered (Y/N)					
<input checked="" type="checkbox"/> Residual Chlorine (Y/N) <input checked="" type="checkbox"/> CO2 Calc (Alkalinity +pH) <input checked="" type="checkbox"/> Sulfide <input checked="" type="checkbox"/> Total Phosphate (Pace Details) <input checked="" type="checkbox"/> Nitrate+Nitrite <input checked="" type="checkbox"/> Ammonia <input checked="" type="checkbox"/> Ferrous iron calc. (Send field Ferrous) <input checked="" type="checkbox"/> 6010-Iron/Mn <input checked="" type="checkbox"/> 8015 Chloroethanol (Pace Details) <input checked="" type="checkbox"/> Chloride, Surface <input checked="" type="checkbox"/> TOC <input checked="" type="checkbox"/> Alkalinity <input checked="" type="checkbox"/> 8260 VOCs <input checked="" type="checkbox"/> Preservatives <input checked="" type="checkbox"/> Analysis Test ↑ <input checked="" type="checkbox"/> Other Acrylic Acid <input checked="" type="checkbox"/> Na2S2O3 <input checked="" type="checkbox"/> NaOH <input checked="" type="checkbox"/> Methanol <input checked="" type="checkbox"/> HCl <input checked="" type="checkbox"/> HNO3 <input checked="" type="checkbox"/> H2SO4 <input checked="" type="checkbox"/> Unpreserved <input checked="" type="checkbox"/> # OF CONTAINERS <input checked="" type="checkbox"/> SAMPLE TEMP AT COLLECTION <input checked="" type="checkbox"/> MATRIX CODE (see valid codes to left)					
Section D Required Client Information		COLLECTED		Pace Project No./Lab ID.	
ITEM #	SAMPLE ID (A-Z, 0-9, -) Sample IDs MUST BE UNIQUE	Valid Matrix Codes MATRIX CODE DRINKING WATER WATER WASTE WATER PRODUCT SOLID OIL WIPE AIR OTHER OT TISSUE TS	DATE COMPOSITE START	TIME COMPOSITE END/GRAB	DATE 7 day hold 001 7 day hold 002 7 day hold 003 7 day hold 004 7 day hold 005 7 day hold 006 7 day hold 007 7 day hold 008 7 day hold 009 7 day hold 010 7 day hold 011 7 day hold 012
1	MW-83-201504 3C04H	4/15/16	13:50	3	
2	MW-84-201504	4/15/16	0845	3	
3	MW-174-201504 3C04H	4/15/16	14:30	3	
4	MW-95-201504	4/15/16	15:01	3	
5	MW-94-201504	4/15/16	13:10	3	
6	MW-180-201504	4/15/16	14:45	3	
7	MW-24-201504 3C04H	4/15/16	13:30	3	
8	MW-118-201504	4/15/16	14:15	3	
9	MW-85-201504	4/15/16	14:58	3	
10	MW-84-201504	4/15/16	13:46	3	
11	MW-02-201504	4/15/16	12:05	3	
12	MW-172-201504	4/15/16	0952	3	
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION		ACCEPTED BY / AFFILIATION	
Level IV data package required		Victoria Siegen	4/16/16 18:00	Victoria Siegen	4/17/16 10:21
		Environ			SS
		Victoria Siegen	4/17/16 10:20		
SAMPLE NAME AND SIGNATURE					
PRINT Name of SAMPLER: Victoria Siegen SIGNATURE of SAMPLER: Victoria Siegen					
Temp In °C 108 (Y/N) Cool(er) Sealed Yes (Y/N) Custody Sealed Yes (Y/N) Samples intact Yes (Y/N)					
Received on 4/16/16 F-ALL-Q-020rev.07, 15-Feb-2007					

*Important Note By signing this form you are accepting Pace's NET 30 day payment terms and agreeing to late charges of 1.5% per month for any invoices not paid within 30 days.



CHAIN-OF-CUSTODY / Analytical Request Document

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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.

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



REPORT OF LABORATORY ANALYSIS

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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

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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

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WP Vapor Sampling
Pace Project No.: 60192706

Lab ID	Sample ID	Method	Analysts	Analytics Reported
60192706001	VP-08-20150422	EPA 5030B/8260	PGH	38

REPORT OF LABORATORY ANALYSIS

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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.

REPORT OF LABORATORY ANALYSIS

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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

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QUALITY CONTROL DATA

Project: WP Vapor Sampling

Pace Project No.: 60192706

QC Batch:	MSV/69145	Analysis Method:	EPA 5030B/8260
QC Batch 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

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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	

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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.

REPORT OF LABORATORY ANALYSIS

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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		

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Sample Condition Upon Receipt

WO# : 60192706



60192706

Client Name: Environ

Courier: FedEx UPS VIA Clay PEX ECI Pace Other Client

Tracking #: _____

Pace Shipping Label Used? Yes No

Optional

Proj Due Date:

Proj Name:

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.

Cooler Temperature: 4.5

(circle one)

Date and initials of person examining contents: JB 4/24

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	Matrix: WT	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Exceptions: VOA, Califom, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed Lot # of added preservative
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
		16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> 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: Mrs. Fe (CPK)

Date: 4/6/15



CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:	
Company: ENVIRON Address: 7500 College Blvd #25 Overland Park, KS 66220 Email To: Wstonestreet@environcorp.com Phone: 866-711-1491 Requested Due Date/TAT: Standard		Report To: Tammy Gleason Copy To: tgleason@environcorp.com Purchase Order No.: Project Name: WP Vapor Sampling Project Number:		Attention: Company Name: Address: Pace Quote Reference: Pace Project Manager: Pace Profile #: Residual Chlorine (Y/N)	
				REGULATORY AGENCY <input type="checkbox"/> NPDES <input checked="" type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input checked="" type="checkbox"/> RCRA <input checked="" type="checkbox"/> OTHER ADEQ	
				Site Location STATE: AR	
				Requested Analysis Filtered (Y/N)	
				<input checked="" type="checkbox"/> Preservatives <input checked="" type="checkbox"/> V2O5 8260 <input checked="" type="checkbox"/> Analysits Test ↑	
				SAMPLE TEMP AT COLLECTION # OF CONTAINERS Unpreserved H2SO4 HNO3 HCl TSP BAK ZnK Acetate & NaOH Other	
				MATRIX CODE (see valid codes to left) Drinking Water DW Water WT Waste Water WW Product P Soil/Solid SL Oil OL Wipe WP Air AR Tissue TS Other OT	
				SAMPLE TYPE (G=GRAB C=COMP) COMPOSITE START COMPOSITE END/GRAB	
				ITEM #	
				DATE TIME DATE TIME TIME	
				WTG 4/22/15 1502	
SAMPLE ID (A-Z, 0-9, -,) Sample IDs MUST BE UNIQUE				ITEM #	
1 VP-08-20150422				1	
2				2	
3				3	
4				4	
5				5	
6				6	
7				7	
8				8	
9				9	
10				10	
11				11	
12		ADDITIONAL COMMENTS <i>Wendy Stonestreet Relinquished</i>		RELINQUISHED BY / AFFILIATION <i>Johnny Stonestreet</i>	
				DATE TIME ACCEPTED BY / AFFILIATION <i>4/24/15 1040 Johnny Stonestreet</i>	
				DATE TIME SAMPLE CONDITIONS <i>4/24/15 4:55 Y N Y</i>	
ORIGINAL		SAMPLER NAME AND SIGNATURE <i>Wendy Stonestreet</i>		PRINT Name of SAMPLER: Wendy Stonestreet	
				SIGNATURE of SAMPLER: <i>Johnny Stonestreet</i>	
				DATE Signed (MM/DD/YY): 4/22/15	
				Temp in °C Received on C Sealed/Cooler (Y/N) Custody (Y/N) Samples intact (Y/N)	
				F-ALL-Q-020rev.07, 15-May-2007	

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



REPORT OF LABORATORY ANALYSIS

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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

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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

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SAMPLE ANALYTE COUNT

Project: WP Vapor Sampling
Pace Project No.: 60192707

Lab ID	Sample ID	Method	Analysts	Analytics Reported
60192707001	VP-05-20150422	EPA 5030B/8260	PGH	38
60192707002	VP-06-20150422	EPA 5030B/8260	PGH	38

REPORT OF LABORATORY ANALYSIS

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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.

REPORT OF LABORATORY ANALYSIS

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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

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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

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QUALITY CONTROL DATA

Project: WP Vapor Sampling

Pace Project No.: 60192707

QC Batch: MSV/69145 Analysis Method: EPA 5030B/8260

QC Batch 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

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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	

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REPORT OF LABORATORY ANALYSIS

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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.

REPORT OF LABORATORY ANALYSIS

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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		

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt

WO# : 60192707



60192707

Client Name: EnvironCourier: FedEx UPS VIA Clay PEX ECI Pace Other Client

Tracking #: _____

Pace Shipping Label Used? Yes No

Optional

Proj Due Date: 5/6/15

Proj Name: _____

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 / T-194 CF-1.8Type of Ice: Wet Blue None Samples received on ice, cooling process has begun.Cooler Temperature: 4.5

(circle one)

Date and initials of person examining contents: JB 4/24

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses Matrix:	<u>WT</u>	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Exceptions: <u>VOA</u> Coliform, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed <input type="checkbox"/> Lot # of added preservative
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State:

Client Notification/ Resolution:

Copy COC to Client?

Y

/

Field Data Required?

Y

/

Person Contacted: _____

Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: CBCDate: 04/27/15



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: Microseeps		Section B Required Project Information: Report To: Tammy Gleason Copy To: Tggleason@envincorp.com		Section C Invoice Information: Attention: Company Name: Overland Park, KS id# 210 1500 College Blvd 1500 College Blvd, KS id# 210 Envirotest@envincorp.com Purchase Order No.: WP-7181491 Fax: 913-718-1491 Project Name: WP Vapor Sampling Project Number: Standard Requested Due Date/TAT: Standard																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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Codes MATRIX / CODE						Drinking Water Water Product Soil/Solid Oil Wipe Air Tissue Other						SAMPLE DATE TIME DATE TIME TIME						ITEM #						SAMPLE CODE						(A-Z, 0-9, -)						SAMPLE ID						Sample IDs MUST BE UNIQUE						#						ITEM #						SAMPLE CODE						(A-Z, 0-9, -)						SAMPLE ID						Sample IDs MUST BE UNIQUE						#						ITEM #						SAMPLE CODE						(A-Z, 0-9, -)						SAMPLE ID						Sample IDs MUST BE UNIQUE						#						ITEM #						SAMPLE CODE						(A-Z, 0-9, -)						SAMPLE ID						Sample IDs MUST BE UNIQUE						#						ITEM #						SAMPLE CODE						(A-Z, 0-9, -)						SAMPLE ID						Sample IDs MUST BE UNIQUE						#						ITEM #						SAMPLE CODE						(A-Z, 0-9, -)						SAMPLE ID						Sample IDs MUST BE UNIQUE						#						ITEM #						SAMPLE CODE						(A-Z, 0-9, -)						SAMPLE ID						Sample IDs MUST BE UNIQUE						#						ITEM #						SAMPLE CODE						(A-Z, 0-9, -)						SAMPLE ID						Sample IDs MUST BE UNIQUE						#						ITEM #						SAMPLE CODE						(A-Z, 0-9, -)						SAMPLE 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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



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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

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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

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SAMPLE ANALYTE COUNT

Project: WP Vapor Sampling
Pace Project No.: 60192708

Lab ID	Sample ID	Method	Analysts	Analytics Reported
60192708001	VP-12-20150422	EPA 5030B/8260	PGH	38

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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.

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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		

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QUALITY CONTROL DATA

Project: WP Vapor Sampling

Pace Project No.: 60192708

QC Batch:	MSV/69145	Analysis Method:	EPA 5030B/8260
QC Batch 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

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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	

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REPORT OF LABORATORY ANALYSIS

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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.

REPORT OF LABORATORY ANALYSIS

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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

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Sample Condition Upon Receipt

WO# : 60192708



60192708

Client Name: Enviro

Courier: FedEx UPS VIA Clay PEX ECI Pace Other Client

Tracking #: _____

Pace Shipping Label Used? Yes No

Optional

Proj Due Date: 5/16/15

Proj Name:

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.

Cooler Temperature: 4.5

(circle one)

Date and initials of person examining contents: JB 4/24

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	Matrix: WT	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Exceptions: VOA Coliform, O&G, WI-DRO (water)	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed Lot # of added preservative
Trip Blank present:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank lot # (if purchased):		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
		16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State:

Client Notification/ Resolution:

Copy COC to Client? Y / NField Data Required? Y / N

Person Contacted: _____

Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: CMC

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.

Section A Microseeps		Section B Required Project Information:		Section C Invoice Information:	
Required Client Information: Company: ENVIRON Address: 1500 College Blvd 925 Overland Park, KS 66210 Email To: wstonestreet@envirocorp.com Phone: (913) 814-9111 Fax: (913) 814-9111 Requested Due Date/TAT: Standard	Report To: Tammy Stonestreet Copy To: Tammy Stonestreet Purchase Order No.: Project Name: WP Vapor Sampling Project Number:	Attention: Company Name: Address: Phone Quote: Referrals: Pace Project Manager: Pace Profile #:	REGULATORY AGENCY <input type="checkbox"/> NPDES <input checked="" type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER <input type="checkbox"/> UST <input type="checkbox"/> RCRA	Site Location STATE: AR Site Profile: Phone: 479-2308 Fax: 479-2308 Residual Chlorine (Y/N)	Pace Project No./Lab ID. N (3) 1441 201
			Requested Analysis Filtered (Y/N)		
			<input checked="" type="checkbox"/> Preservatives <input checked="" type="checkbox"/> Analyses Test ↑ <input checked="" type="checkbox"/> B200 VOCs <input checked="" type="checkbox"/> Other <input checked="" type="checkbox"/> ZnK Acetate & NaOH <input checked="" type="checkbox"/> BAK <input checked="" type="checkbox"/> TSP <input checked="" type="checkbox"/> HCl <input checked="" type="checkbox"/> HNO ₃ <input checked="" type="checkbox"/> H ₂ SO ₄ <input checked="" type="checkbox"/> Cupperserved <input checked="" type="checkbox"/> # OF CONTAINERS <input checked="" type="checkbox"/> SAMPLE TEMP AT COLLECTION <input checked="" type="checkbox"/> COLLECTED <input checked="" type="checkbox"/> COMPOSITE END/GRAB <input checked="" type="checkbox"/> COMPOSITE START <input checked="" type="checkbox"/> MATRIX CODE (see valid codes to left) Drinking Water DW Water WT Waste Water WW Product P Soil/Solid SL Oil OL Wipe WP Air AR Tissue TS Other OT		
Section D Required Client Information		SAMPLE ID (A-Z, 0-9 / -) Sample IDs MUST BE UNIQUE	ITEM #	DATE	TIME
ITEM #		WTG422511001	WTG422511001	3	X
ADDITIONAL COMMENTS		RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION
ORIGINAL		Wendy Stonestreet	4/24/15	1040	Wendy Stonestreet
SAMPLE NAME AND SIGNATURE		PRINT NAME of SAMPLER: Wendy Stonestreet SIGNATURE of SAMPLER: Wendy Stonestreet			
Temp in °C		Received on _____ Custody Seal (Y/N) _____ Sealed Cooler (Y/N) _____ Samples intact (Y/N) _____			
F-ALL-Q-020rev.07, 15-May-2007		*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.			

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



REPORT OF LABORATORY ANALYSIS

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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

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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

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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

REPORT OF LABORATORY ANALYSIS

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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.

REPORT OF LABORATORY ANALYSIS

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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

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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

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QUALITY CONTROL DATA

Project: WP Vapor Sampling

Pace Project No.: 60192709

QC Batch:	MSV/69145	Analysis Method:	EPA 5030B/8260
QC Batch 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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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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QUALITY CONTROL DATA

Project: WP Vapor Sampling

Pace Project No.: 60192709

QC Batch:	MSV/69175	Analysis Method:	EPA 5030B/8260
QC Batch 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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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	MS		MSD		MS		MSD		% Rec Limits	RPD	Max RPD	Qual
		60192725001	Result	Spike Conc.	Spike Conc.	MS Result	MSD Result	% Rec	% Rec				
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		

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QUALITY CONTROL DATA

Project: WP Vapor Sampling

Pace Project No.: 60192709

Parameter	Units	MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1558991		1558992								
		60192725001	Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	Max RPD	Max RPD
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		

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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.

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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		

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Sample Condition Upon Receipt

WO# : 60192709



60192709

Client Name: Enviro

Optional

Courier: FedEx UPS VIA Clay PEX ECI Pace Other Client

Tracking #: _____

Pace Shipping Label Used? Yes No

Proj Due Date: 5/16/15

Proj Name:

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-194Type of Ice: Wet Blue None Samples received on ice, cooling process has begun.Cooler Temperature: 4.5

(circle one)

Date and initials of person examining contents: JB 4/24

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	6.
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	11.
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	Matrix: <u>WT</u>	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Exceptions: <u>VOA Coliform, O&G, WI-DRO (water)</u>	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No	Initial when completed Lot # of added preservative
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank lot # (if purchased): <u>4/8/15</u>		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	17. List State:

Client Notification/ Resolution:

Copy COC to Client? Y / NField Data Required? Y / N

Person Contacted: _____

Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: CBCDate: 04/07/15



CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
Company: ENVIRON Address: 7500 College Blvd 925 Overland Park, KS 66210 Email To: Wstonestreet@environment.com Phone: (816) 718-1491 Requested Due Date/TAT: Standard		Report To: Tammy Gleason Copy To: tgleason@environcorp.com Purchase Order No.: Project Name: <u>WT Vapor Sampling</u> Project Number: Fax:		Attention: Company Name: Address: Pace Quote Reference: Pace Project Manager: Pace Profile #:																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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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

Kelly Horiuchi

By Kelly Horiuchi at 12:18 pm, May 11, 2015

Kelly Horiuchi
Laboratory Director



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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.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.



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F: +1 805 526 7270
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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	CA01627201 4-4
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
Project ID: WP. KING Property AA Sampling / 3437470A Service Request: P1501720

Date Received: 4/28/2015
Time Received: 09:45

TO-15 - VOC SIM

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	
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

Page 1 of 1

Company Name & Address (Reporting Information)		Project Name WP·KING Property Air Sampling Project Number 3437470A										Comments e.g. Actual Preservative or specific instructions	
		P.O. # / Billing Information										ALS Contact: Kelly H. Analysis Method 55	
		SAMPLER INFORMATION										Project No. 510501720	
Client Sample ID		Sampler (Print & Sign) Wstressed@envioncorp.com										Comments e.g. Actual Preservative or specific instructions	
Email Address for Result Reporting		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				
Project Manager Tammy Gleason		① 4/22/2015	1714	AC01300	0A00013	-29" Hg	-2.5" Hg	6L	X				
Phone 816-718-1491		② 4/23/2015	1024	AS00877	FLA00854	-28" Hg	-5.0" Hg	6L	X				
Fax		③ 4/22/2015	1727	AS00D1703	0A01956	-29" Hg	-5.0" Hg	6L	X				
Report Tier Levels - please select												Tier I - Results (Default in not specified) <input checked="" type="checkbox"/> Tier II (Results + QC Summaries) <input checked="" type="checkbox"/> Tier III (Results + QC & Calibration Summaries) <input type="checkbox"/> Tier IV (Date Validation Package) 10% Surcharge <input type="checkbox"/>	
Relinquished by: (Signature) Wendy Stonestreet												Received by: (Signature) Foto	
Relinquished by: (Signature) Foto												Received by: (Signature) Z	
												Date: 4/24/15 Time: 12:00	
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												Cooler / Blank Temperature 89.5 °C	
												Project Requirements (MRLs, QAPP)	
												Chain of Custody Seal: (Circle) INTACT <input checked="" type="checkbox"/> BROKEN <input type="checkbox"/> ABSENT <input type="checkbox"/>	

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): _____

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: Environ International Corporation

Client Sample ID: Crawl Space-AA-20150422

Client Project ID: WP. KING Property AA Sampling / 3437470A

ALS Project ID: P1501720

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

Page 1 of 1

Client: Environ International Corporation

Client Sample ID: Indoor-AA-20150423

Client Project ID: WP. KING Property AA Sampling / 3437470A

ALS Project ID: P1501720

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

Page 1 of 1

Client: Environ International Corporation

Client Sample ID: Outdoor-AA-20150422

Client Project ID: WP. KING Property AA Sampling / 3437470A

ALS Project ID: P1501720

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

Page 1 of 1

Client: Environ International Corporation

Client Sample ID: Method Blank

Client Project ID: WP. KING Property AA Sampling / 3437470A

ALS Project ID: P1501720

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

Page 1 of 1

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		Toluene-d8		Bromofluorobenzene		Acceptance Limits	Data Qualifier
		% Recovered	% Recovered	% Recovered	% Recovered				
Method Blank	P150505-MB	88	98	115	115	70-130	70-130		
Lab Control Sample	P150505-LCS	89	97	116	116	70-130	70-130		
Crawl Space-AA-20150422	P1501720-001	89	101	104	104	70-130	70-130		
Indoor-AA-20150423	P1501720-002	90	100	102	102	70-130	70-130		
Outdoor-AA-20150422	P1501720-003	90	101	110	110	70-130	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

Page 1 of 1

Client: Environ International Corporation

Client Sample ID: Lab Control Sample

Client Project ID: WP. KING Property AA Sampling / 3437470A

ALS Project ID: P1501720

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	Result µg/m³	% Recovery	ALS	
		µg/m³			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.



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 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
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

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.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.



2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L14-2
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	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	CA01627201 4-4
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
Project ID: WP SG Sampling, Fort Smith 2nd Quarter / 3437470A Service Request: P1501723

Date Received: 4/28/2015
Time Received: 09:45

[Redacted]
TO-15 - VOC SIM

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	
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

**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.

		<u>Yes</u>	<u>No</u>	<u>N/A</u>
1	Were sample containers properly marked with client sample ID?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
2	Container(s) supplied by ALS ?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
3	Did sample containers arrive in good condition?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
4	Were chain-of-custody papers used and filled out?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
5	Did sample container labels and/or tags agree with custody papers?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
6	Was sample volume received adequate for analysis?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
7	Are samples within specified holding times?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
8	Was proper temperature (thermal preservation) of cooler at receipt adhered to?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
9	Was a trip blank received?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
10	Were custody seals on outside of cooler/Box?	Location of seal(s)? <u>sealing box, signature only NO date</u>		
	Sealing Lid?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Were signature and date included?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Were seals intact?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Were custody seals on outside of sample container?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>
	Location of seal(s)? _____			Sealing Lid?
				<input type="checkbox"/>
	Were signature and date included?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Were seals intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
11	Do containers have appropriate preservation , according to method/SOP or Client specified information?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Is there a client indication that the submitted samples are pH preserved?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Were VOA vials checked for presence/absence of air bubbles?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Does the client/method/SOP require that the analyst check the sample pH and <u>if necessary</u> alter it?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
12	Tubes: Are the tubes capped and intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
	Do they contain moisture?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>
13	Badges: Are the badges properly capped and intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>
	Are dual bed badges separated and individually capped and intact?	<input type="checkbox"/>	<input type="checkbox"/>	<input checked="" type="checkbox"/>

Explain any discrepancies: (include lab sample ID numbers):

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: Environ International Corporation

Client Sample ID: VP-07-20150423

Client Project ID: WP SG Sampling, Fort Smith 2nd Quarter / 3437470A

ALS Project ID: P1501723

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

Page 1 of 1

Client: Environ International Corporation

Client Sample ID: Method Blank

Client Project ID: WP SG Sampling, Fort Smith 2nd Quarter / 3437470A

ALS Project ID: P1501723

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

Page 1 of 1

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		Toluene-d8		Bromofluorobenzene		Acceptance Limits	Data Qualifier
		% Recovered	% Recovered	% Recovered	% Recovered				
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

Page 1 of 1

Client: Environ International Corporation

Client Sample ID: Lab Control Sample

Client Project ID: WP SG Sampling, Fort Smith 2nd Quarter / 3437470A

ALS Project ID: P1501723

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	Result µg/m³	% Recovery	ALS	
		µg/m³			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.



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 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

By Kelly Horiuchi at 12:14 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 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.

The results of analyses are given in the attached laboratory report. All results are intended to be considered in their entirety, and ALS Environmental (ALS) is not responsible for utilization of less than the complete report.

Use of ALS Environmental (ALS)'s Name. Client shall not use ALS's name or trademark in any marketing or reporting materials, press releases or in any other manner ("Materials") whatsoever and shall not attribute to ALS any test result, tolerance or specification derived from ALS's data ("Attribution") without ALS's prior written consent, which may be withheld by ALS for any reason in its sole discretion. To request ALS's consent, Client shall provide copies of the proposed Materials or Attribution and describe in writing Client's proposed use of such Materials or Attribution. If ALS has not provided written approval of the Materials or Attribution within ten (10) days of receipt from Client, Client's request to use ALS's name or trademark in any Materials or Attribution shall be deemed denied. ALS may, in its discretion, reasonably charge Client for its time in reviewing Materials or Attribution requests. Client acknowledges and agrees that the unauthorized use of ALS's name or trademark may cause ALS to incur irreparable harm for which the recovery of money damages will be inadequate. Accordingly, Client acknowledges and agrees that a violation shall justify preliminary injunctive relief. For questions contact the laboratory.



2655 Park Center Dr., Suite A
Simi Valley, CA 93065
T: +1 805 526 7161
F: +1 805 526 7270
www.alsglobal.com

ALS Environmental – Simi Valley

CERTIFICATIONS, ACCREDITATIONS, AND REGISTRATIONS

Agency	Web Site	Number
AIHA	http://www.aihaaccreditedlabs.org	101661
Arizona DHS	http://www.azdhs.gov/lab/license/env.htm	AZ0694
DoD ELAP	http://www.pjlabs.com/search-accredited-labs	L14-2
Florida DOH (NELAP)	http://www.doh.state.fl.us/lab/EnvLabCert/WaterCert.htm	E871020
Maine DHHS	http://www.maine.gov/dhhs/mecdc/environmental-health/water/dwp-services/labcert/labcert.htm	2014025
Minnesota DOH (NELAP)	http://www.health.state.mn.us/accreditation	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	CA01627201 4-4
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
Project ID: WP SG Sampling, Fort Smith 2nd Quarter / 3437470A Service Request: P1501724

Date Received: 4/28/2015
Time Received: 09:45

[Redacted]
TO-15 - VOC SIM

Client Sample ID	Lab Code	Matrix	Date Collected	Time Collected	Container ID	Pi1 (psig)	Pf1 (psig)	
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

Company Name & Address (Reporting Information)		Project Name		Comments e.g. Actual Preservative or specific instruction	
Phone (805) 526-7161 Fax (805) 526-7270	1 Day (100%) 2 Day (75%) 3 Day (50%) 4 Day (35%) 5 Day (25%) 10 Day-Standard	ALS Project No. 1501724	ALS Contact: Kelly H.		
ENVIRON 7500 College Blvd Ste 925 Duxland Park, 115 06210	WIP SG Sampling, Fort Smith 2nd Quarter	P.O. # / Billing Information	Analysis Method		
Project Manager Tamara Glaser	Phone 816.718.1491	Email Address for Result Reporting Wistonestreet@environcorp.com	Sampler (Print & Sign) Wendy Stonestreet		
Laboratory ID Number	Date Collected	Time Collected	Canister ID (Bar code # - AC, SC, etc.)	Flow Controller ID (Bar code # - FC #)	Canister Start Pressure "Hg
1P-09-20150423	4/23/15	1710	SSC00298	443608 0A01620	-28.5" Hg -5.0" Hg 6L X
Report Tier Levels - please select					
Tier I - Results (Default if not specified) <input checked="" type="checkbox"/> Tier II (Results + QC Summaries) <input checked="" type="checkbox"/>	Tier III (Results + QC & Calibration Summaries)		EDD required <input checked="" type="checkbox"/> No	Project Requirement (MRLs, QAPP)	
Tier IV (Data Validation Package) 10% Surcharge		Type: <input checked="" type="checkbox"/> EQUIS	Units: <input checked="" type="checkbox"/> INTEGRITY <input checked="" type="checkbox"/> BROKEN		Chain of Custody Seal: (Circle) ABSENT
Reinquished by: (Signature) Wendy Stonestreet	Date: 4/23/15	Time: 1200	Received by: (Signature) Florence	Date: 4/28/15	Time: 0911
Relinquished by: (Signature) Florence	Date: 4/28/15	Time: 0911	Received by: (Signature) Wendy Stonestreet	Date: 4/28/15	Time: 0911

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): _____

ALS ENVIRONMENTAL

RESULTS OF ANALYSIS

Page 1 of 1

Client: Environ International Corporation

Client Sample ID: VP-09-20150423

Client Project ID: WP SG Sampling, Fort Smith 2nd Quarter / 3437470A

ALS Project ID: P1501724

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

Page 1 of 1

Client: Environ International Corporation

Client Sample ID: Method Blank

Client Project ID: WP SG Sampling, Fort Smith 2nd Quarter / 3437470A

ALS Project ID: P1501724

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

Page 1 of 1

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		Toluene-d8		Bromofluorobenzene		Acceptance Limits	Data Qualifier
		% Recovered	% Recovered	% Recovered	% Recovered				
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

Page 1 of 1

Client: Environ International Corporation

Client Sample ID: Lab Control Sample

Client Project ID: WP SG Sampling, Fort Smith 2nd Quarter / 3437470A

ALS Project ID: P1501724

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	Result µg/m³	% Recovery	ALS	
		µg/m³			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

~~10:30 AM~~

Whirlpool (2nd Quarter)
Fit Smith, AR 4/13/15

- 10:30 - Arrived on-site. Head H is S
- 100 - Pulled up with Justice S & topic - plugs off of all on-site wells except for the North - start in the North parking lot.
- 1005 - After all J-plugs were off we went back to the DT in S, MD on each well. We also took PID readings. See data log per Wherry S.
- 1100 - Went off-site to warehouse to get new filters, then changed at Hotel in off-lunch.
- 1230 - Got back on-site & calibrated VCS & other sampling equipment.
- 1415 - Loaded equipment into truck [MWS: 22]
- 1455 - Began taking parameter measurements. Ran pump @ 175 ml/min because it worked turn off & tried to blow it down any time it
- 1640 - Reached stabilization & got sample bottles ready

Larry (con)

105°5' Wards Whirlpool (2nd Quarter)
Rain Ft. Smith, AR 4.13-15

1745 - Took samples.

1715 - Completed Sampling, packed up equipment & drove back to building room.

1730 - Helped pack sample & unloaded equipment.

1800 - Left site for the day.

VOCs
closure

Whirlpool (2nd Quarter)

Ft. Smith, AR 4.14-15

130 - Arrived On-Site. Calibration sheet per USF. See calibration sheet per U.S. EPA Storestreet.

100 - Filled H.C. S metering. Discussed speeding, cuts, trees, making sure people in neighborhood don't get upset about being on their property. Govt - Mobile need to first off-site well, [REDACTED]. Wendy had me sample all VOCs off-gas today.

1016 - Set up equipment & started taking readings.

0954 - Well ran dry after 20 mins of pumping. Moved to next well, [REDACTED] while waiting for current well to recharge.

0924 - Set up equipment & began taking readings.

0952 - Well ran dry after pumping for 20 mins.

1006 - Went back to [REDACTED] to get sample & test static test. [REDACTED] to start on benzene. Got samples at 10:15. Decided to start on the synergistic discharge.

July 1995

207 Whirlpool
Clover Fort Smith, AR 4.14-15

1120 - Arrived at Scruggins residence. Unlocated equipment [miv-174].

1125 - Got set up on well [miv-174].

1128 - Started pumping.

1128 - Stabilized after 35 mins of pumping. Turned iron sample from repair shop (0.80).

1128 - Took samples. [miv-173].

1122 - Moved to other well on Scruggins property, [miv-173]. Where the cover of the well, the bailing was filled to top with storm water. Scoped water out of well casing.

1230 - Took 4-plug off well & noticed that water was up to the rim of the well. Water had gotten into the well. I pumped well dry & waited come back later in day to check recharge.

1245 - Let site to get lunch.

1330 - Came back to well [miv-173]. No water had recharge at this time. Braced down equipment & moved back to [miv-181] on

4/14/15 Whirlpool
Fort Smith, AR

4.14-15 (cont'd)

1540 - Was finally able to get samples, but not enough water to use. Only one reading available. Who id commercial gas? S. to get VOC's from well on-site & let [miv-177] recharge over-night. Mob to baller fit & sample bottles.

1620 - Arrived at [miv-23] Set up equipment.

1620 - Began pumping.

1702 - Pummeted stub line & got bottles ready.

1715 - Loaded equipment & headed to hotel room.

1730 - Helped back up loaders & moved out VOC's for VOC's from residential property. 1830 - Left site for the day.

1335 - Sampled MVR-70 @ 1445. Took our to skin lace. Lucy Cross

Friday
4/15/15
Whirlpool Ft Smith, AR

0630 - Arrived on-site. Began calibrating VSI. See Calibration Sheet per Wendy Jc. S.

0700 - Had Health Jc. Say stas & loaded equipment. Able to first well for VOCs, MW-175.

0815 - Arrived on-site & set up equipment. Began pumping. During pump, I got Perleida's kit & Asobic alum bottles from Lucy M. because my specific conductivity was in the 7,000s & pH in upper 7s. Tested for permanganate, 4 drops of purple water. Reading was negative.

0857 - Took VOC samples.

* Note: Owners of house stand on porch & watched me the entire time!

0915 - Loaded car & drove back to pumped well [MW-173] to try a bit samples.

Lucy Cross

90° F
clear

1040 - Arrived at MW-173. Took DTs reading & well had only recharged 16 oct water. Called Wendy S. & she recommended not bringing but try c only get samples. 0943 - Was able to get VOC samples. Was not able to get ferrans 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 & began taking readings. 1102 - Still lined up the 30 mins. 1132 - Took samples.

1145 - Took samples.

1200 - Finished getting samples loaded vehicle with equipment to dump & wash & drop off samples.

1230 - Flew in to get me lunch & sit down & go to next well, IT MW-13.

Lucy Cross

Lucy Cross

102°F Whirlpool 4/15/15
Ft. Smith, AR

63°V whirlpool 4/15/15
Ft. Smith, AR
1830- Left site for the day.

1305- Arrived at Timucua. Added tubing + needed tube weight.

1326- Began taking reading at 1400- Well stabilized. Well is known to be "hot". Took several readings. Added 5 drops of

purge water w/ 25 ml of DI water = Negative for percolate.

1430- Took sample.

1500- Dumped Purge water & dropped off samples in boiler room.

1533- Arrived at least well for the day. IT MW- 17. This well is also known to be "hot".

1548- Began taking reading at 1614- Stabilized after 25 minutes

Task percolate test: 4 drops purge water + 25 ml DI Water: DN 1640

Did not take acidic Acia samples.

1630- Took sample.

1700- Packed up equipment & headed to hotel room. Helped load cooler & fill out COC.

Jury nose

Davy Cross

July 16, 1974 Whitpool
Ft. Smith, AR. 41° 15' S 95° 15' W

10:30 - Arrived on-site & began
calibrating YS 1 See calibration
sheet per Wendy S.

10:00 - Had ~~had~~ Health &
Safety meeting Discussed threat
& cold stress fitting of 80°F today

10:30 - Loading car with equipment
& mob to first well,
[MW-172]

10:45 - Arrived at well, added
tubing with tub weight. Well
had very soft bottom & became
extremely turbid after adding
tubing.

08:44 - Began taking readings.
09:44 - Had to purge for 1 hour
due to turbidity. Took
pensulfate test: 4 drops (200) x
25 ml D1 water = 4.2 = 810 ppm
took asorbic acid samples.

10:52 - Took Samples.

10:00 - Loaded equipment & mob
to [MW-02]

10:44 - Arrived at well. Added
tubing & weight.

12° F whirlpool
S 95° 15' W
Ft. Smith, AR

10:56 - Very soft bottom. Well became
very turbid at beginning of purging.
10:56 - Began taking readings.
11:56 - Had to purge for 1 hour due
to high turbidity.
Tested for pensulfate: 3 drops (3x)
 $4.2 = 1,260 \text{ ppm}$: Took
asorbic acid samples.

12:05 - Took samples
12:20 - Loaded vehicle & mob
to next well.

12:34 - Arrived at well [MW-03].
Added tubing with weight.
13:00 - Began taking readings.
13:30 - Stabilized after 30 mins.
Tested for phosphate: 5 drops (100)
 $= 2,800 \text{ ppm}$ took asorbic acid
samples.

13:40 - Took samples
14:00 - Walked equipment to
last well, [MW-05].
14:55 - Left site to get gas & soda
from gas station. Take Valley
Set up my well.
14:26 - Took first readings.

Jung Case

1 80°F

Wind pool 4001 4001 15

Pt Smith, WA
1451 - Well stabilized after
25 minutes. Tether for penul-
tate: (4,200 ppm) - Took Ascorbic
acid samples.

1456 - Took samples.
1520 - Loaded vehicle & mob
to Pololu 100m.

1545 - Let cleaned & unloaded
all equipment from car.

Tuned in a dozen logs.

1605 - Helped pack coolers,

1630 - Rachel & I took all
trash & two empty boxes to
dumpster.

1645 - Left site to check out of
mobile & head home.

Lacy was

411515
Ft. Smith, AR
Location 20

WILHELM

Slope: 2nd Quarter Groundwater Sampling

1650 At boiler room to pack up
1830 ENVIRON offsite

A hand-drawn graph illustrating a market equilibrium. The vertical axis represents Price (P) and the horizontal axis represents Quantity (Q). A downward-sloping demand curve and an upward-sloping supply curve intersect at a point labeled "Equilibrium". The intersection point is marked with a small circle. The vertical distance from the equilibrium to the P-axis is labeled "Price". The horizontal distance from the equilibrium to the Q-axis is labeled "Quantity".

Ft. Smith, AR 41101-3074

Project Name: Whirlpool
Scope: 2nd Quarter Groundwater Sampling

1650 At boiler room to pack up
1630 ENVIRON offsite

D630 ENVIRON onsite
Personnel: J. Shumpf, J. Myers,
L. Cross, L. Merton, W. Stonestreet,
T-House - Knight; R. Lafioire, N. Sieglen
Weather: foggy, 60s-70s,

1. complete 2nd Quarter Sampling

DRAFT Circular 2004-1

0700 Hes M3

0725 Dave

卷之三

Sparta

to 1180 m (see & see
for more details)

Stability and reading

DRY end BILGE

DB4S Collect [mu: 84-201504] for VOC's

Persulfate = 7000 - Switched NOAs to no occurrence in association with

ANSWER AT MATH WORKSHEET

$$D\bar{N}W = 3:1$$

0918 Start purge. Set purge rate to 100 ml/min (see log for

Stabilization readings

22 Location: Ft. Smith, AR Date: 4/16/15

Prepared by: Univipool

Scope: 2nd Quarter Groundwater Sampling

0940 well purged dry, about 2.8L
Purged. Will return later to
collect sample.

0955 Arrive at MW-180

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
100 mL/min (see log for
purge readings)

1129 Final purge, about 5.2L purged
1130 Collected (MW-24 - 201504) for
VOCs. Persulfate = 1,400 - switch VDAs

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: Univipool

Scope: 2nd Quarter Groundwater Sampling

1238 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 VDAs
for preservative ascorbic acid

1405 arrive at MW-180

DTW = 4.09'

1415 Collect (MW-180 - 201504)

Persulfate = 210 - switched VDAs
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)

At Boiler Room to pack up
1710 Envirocon office
~~Univipool~~

4/13/15

OB27 opened plug on MW180
Some water in well

OB28 opened MW178
Some water in well

OB39 opened plug on ~~MW116~~¹¹⁶
1MW-116

OB44 MW-99 DTW 8.10'
TD 22.55'

OB56 MW-98 DTW 12.46'
TD 19.52'

OB01 MW-96 DTW 8.24'
TD 14.32'

OB13 MW87 DTW 11.12 Water in
TD 26.7 well

OB16 MW91 DTW 9.87
TD 25.55

Rite in the Rain

4/13/15

1018

MW 34

DTW 11.6'

TD 23.46'

⑩ 1023 MW 83 DTW 11.46'

TD 26.53'

1028 RMW 180 DTW 3.56'

TD 6.78'

some wtr in well

1031 MW 178 DTW ~~7.51~~ 3.46'

TD ~~3.61~~ 7.77'

little wtr in well

1038 Thmille DTW 14.72'

TD ~~8.45~~ RL

34.06'

1042 MW 24 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

Rite in the Rain.

4/16/15

0822 Water being pumped
From MW179 is murky
(green/brownish)

0832 Water being pumped
From MW179 is rusty
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 Whirlpool, Ft Smith AR April 16, 2015
- 1520 - Begin to pack coolers and prepare COCs. Next 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 Stonesheet & Victoria Siegeln. Coolers shipped.
- 1640 - Clean & organize Boiler room. Remove garbage to dumpster.
- 1800 - ENVIRON off site.

WES

100° Cloudy

WES

WES

April 17, 2015 Whirlpool, Ft Smith AR

730 - Wendy Stonesheet on-site. Spoke to Tamara HK about activities via phone for day.

- 745 - Began to unpack Summa canisters.
 - Weather is cloudy, with chance of rain.
- 820 - Hardly dropped off sample pump.
- 825 - Summa canisters are labeled "Ambient".
 - Assembled summas and flow controller assembly
- Summa AS00877 has regulator FCA00877
 - Summa AC01300 has regulator FCA00619.
 - During assembly conducted the "shut in" test for both units.
- 834 - AC01300/FCA00969 - Check initial pressure: -29" Hg - Flow controller failed cannot get tight seal. Changed flow controller to 8 hour. Flow controller is OA00613 AS00877/FCA00877 - passed
- 910 - Lucy cross on-site,
- 1000 - MOB to KING property
- 1010 - Opened 24 liter canister A 500877/FCA00877.
 - 28" Hg.

April 17, 2015

100° Cloudy WES

100° Cloudy WES

100° Cloudy WES

Wendy Stonesheet

Wendy Stonesheet

no rainning

- Whirlpool, Ft. Smith AR Wts. April 22, 2015
1020 - Check Pid reading under home.
Opened Summa AC01300/DN000013.
Initial Vacuum - 29" Hg.
1025 - Did ght in test on Summa SC01703
Regulator DPA0185E. - PASSED
- 1031 - Opened Summa SC01703 at 103L¹ - 29 1/4" 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. Burged well
for 5 minutes. No break in water from.
- 1401 - Collect Sample VP-06-20150422
- 1409 - Set up at well VP-05.
- Check well forever. Well has water in
vapor line, although not continuous
collect sample VP-05-20150422. Very hard to purge.
- 1422 - MOB to VP-07. Checked line for water.
Line is clear.
- 1448 - Checked VP-08 for water in line. Line
has water in line.
- Wendy Stensrud

- 61° Cloudy Whirlpool Ft. Smith AR Wts. April 22, 2015
1502 - Since water in line is sporadic,
collected sample VP-09-20150422
- 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 at loc.
- 1700 - MOB to KINIS Property.
- 1710 - Checked outdoor AA. -6" Hg. Diesel
truck running nearby.
- 1714 - Closed crawl space Summa AC01300. -2.5" Hg.
- Wendy Stensrud

APR 22, 2015

16°C Cloudy
Whirlpool, Fort Smith AR WES April 22, 2015
1730 - MOB to Boiler Room onsite to drop off
Summa canisters. Pack Summa canisters.
1745 - ENVIRON off-site.

54°C Cloudy

Whirlpool, Fort Smith AR WES April 23, 2015
b10 - Wendy Stonesstreet on-site
b11 - Weather is light rain & cloudy.
b15 - Load vehicle for vapor sampling.
b20 - MOB to VP-14 to set up summa
canister.

- b21 - Arrive at VP-14. Begin to assemble
Sampling train.
- Performed shut in test on canister
SC1062 and regulator 090393
- 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 end, 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 Stonesstreet

- 59 °C cloudy Whirlpool, Fort Smith AR NWS April 23, 2015
- 807 - Begin set up on VP-09
- Begin to assemble sampling train.
 - Performed shut-in test. Passed.
 - Canister: SSC00298
 - Regulator: DAD1620
 - 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.
 - Checked on the 24 hour summa located inside the King residence. Vacuum read -6.5" Hg.
 - MOB to VP-07. to begin set-up.
 - Begin to assemble sampling train.
 - Performed shut in test. Passed.
 - Canister: SC00301.
 - Regulator: DAD281
 - Performed Helium leak test.
 - He in shroud 31.2%

100% cloudy

- Whirlpool, Fort Smith AR NWS April 23, 2015
- 835 (cont.) - He in sampling train = 0 ppm.
- removed three volumes of air using vacuum pump.
 - Once well was evacuated opened all valves.
 - Opened summa canister.
 - MOB to boiler room to get equipment.
 - MOB to King property to check on 24 hour summa.
- 1044 - Closed summa. Indoor canister at the King property. Final Vacuum read is -5.5" Hg.
- 1045 - Return to boiler room to pack summa and fill out Cols.
- 1130 - Off site for lunch
- Picked up field supplies for boiler room.
 - 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 Schmitz

Wendy Schmitz

WES
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 aspirations, discarded expired sample bottles. Organized supplies. Took out garbage.

1530 - 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 summer at 1610.

- Cleared up at well and MOB to Boiler room after checked water in line.

1620 - Packed summaries for shipping and prepared COC.

1700 - MOB to VP-07

1710 - Closed summer. Final vacuum reading -5.0" Hg. Cleared up at well.

1720 - Returned to VP-14 to attempt to take water sample with pump. Water was surprise. Could not fill VP.

Alfred Stowell

WES
Whirlpool, Fort Smith AR WES April 23, 2015

9° Cloudy

April 23, 2015

1410 - MOB to VP-07. Vacuum reading = -12.9" Hg.

" MOB to Boiler room.

1425 - Cleaned Boiler room, checked sample bottle aspirations, discarded expired sample bottles. Organized supplies. Took out garbage.

1530 - MOB to VP-14. No change in vacuum.
- MOB to VP-09. Vacuum reading = -6.5" Hg.

- MOB to VP-07. ENVIRON off-site.

- Removed the final amount of
garbage to take to the onsite trash
bin.

- Cleaned and covered shipping
area. Packed vehicles.

Alfred Stowell

ENVIRON - VAPOR MONITORING PORT SAMPLING

ENVIRON - VAPOR MONITORING PORT SAMPLING

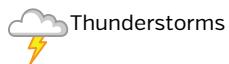
Weather History for KFSM - April, 2015

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	2	3	4
			Actual: 79° 61° 0.01 in Average: 70° 45° 0.13 in	Actual: 78° 59° 0.00 in Average: 70° 45° 0.13 in	Actual: 75° 50° T in Average: 70° 46° 0.12 in	Actual: 65° 39° 0.00 in Average: 71° 46° 0.12 in
5	6	7	8	9	10	11
Actual: 65° 39° 0.00 in Average: 71° 46° 0.12 in	Actual: 77° 55° 0.00 in Average: 71° 47° 0.13 in	Actual: 82° 60° 0.00 in Average: 72° 47° 0.13 in	Actual: 84° 61° 0.00 in Average: 72° 47° 0.14 in	Actual: 85° 56° 0.03 in Average: 72° 47° 0.14 in	Actual: 71° 47° 0.00 in Average: 72° 48° 0.14 in	Actual: 79° 48° 0.00 in Average: 73° 48° 0.14 in
12	13	14	15	16	17	18
Actual: 81° 50° 0.00 in Average: 73° 48° 0.14 in	Actual: 67° 59° 2.52 in Average: 73° 49° 0.13 in	Actual: 64° 56° 0.02 in Average: 74° 49° 0.14 in	Actual: 70° 57° 0.29 in Average: 74° 49° 0.14 in	Actual: 79° 57° 0.00 in Average: 74° 50° 0.14 in	Actual: 82° 62° T in Average: 74° 50° 0.14 in	Actual: 75° 61° 0.38 in Average: 75° 50° 0.15 in
19	20	21	22	23	24	25
Actual: 77° 54° 0.17 in Average: 75° 51° 0.14 in	Actual: 67° 46° 0.00 in Average: 75° 51° 0.15 in	Actual: 73° 44° T in Average: 75° 51° 0.15 in	Actual: 69° 50° 0.05 in Average: 75° 52° 0.15 in	Actual: 65° 54° T in Average: 76° 52° 0.16 in	Actual: 64° 55° 0.07 in Average: 76° 52° 0.15 in	Actual: 84° 55° T in Average: 76° 53° 0.16 in
26	27	28	29	30		
Actual: 79° 56° 0.00 in Average: 76° 53° 0.16 in	Actual: 68° 53° 0.02 in Average: 77° 53° 0.16 in	Actual: 61° 50° 0.63 in Average: 77° 54° 0.16 in	Actual: 79° 45° 0.00 in Average: 77° 54° 0.16 in	Actual: 80° 49° 0.00 in Average: 77° 54° 0.17 in		

Calendar Legend



'?' denotes
'chance of'



Appendix C

Risk Calculations and Input Parameters

Contents:

- C.1 Toxicity Values
- C.2 Physical and Chemical Properties
- C.3 Soil Moisture Profile for Residential Building (Slab-on-Grade) for Risk Calculations for Groundwater in Monitoring Wells
- C.4 Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater in Monitoring Wells
- C.5 Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater in the Neighborhood
- C.6 Soil Moisture Profile for Residential Building (Slab-on-Grade) at Soil Vapor Monitoring Point VP-5 (Parcel 1)
- C.7 Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Water at VP-5 (Parcel 1)
- 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)
- C.9 Soil Moisture Profile for Residential Building (Slab-on-Grade) at Soil Vapor Monitoring Point VP-6 (Parcel 1)
- C.10 Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Water at VP-6 (Parcel 1)
- 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)
- 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)
- C.13 Soil Moisture Profile for Residential Building (Slab-on-Grade) at Soil Vapor Monitoring Point VP-8 (Parcel 2)
- C.14 Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Water at VP-8 (Parcel 2)
- 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)
- 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)

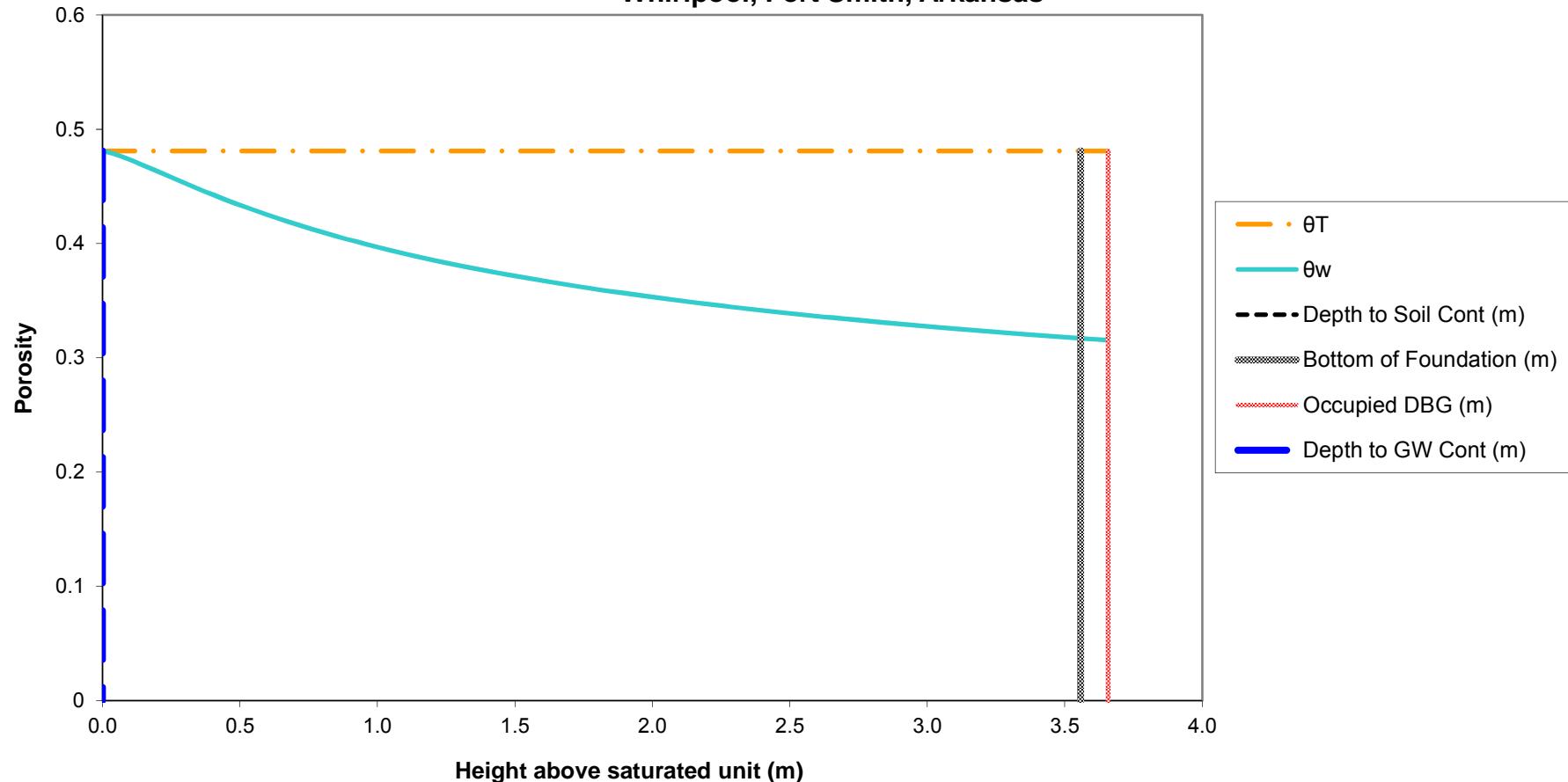
- C.17 Soil Moisture Profile for Residential Building (Slab-on-Grade) at Soil Vapor Monitoring Point VP-10 (Parcel 3)
- C.18 Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Water at VP-10 (Parcel 3)
- C.19 Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Water at VP-10 (Parcel 3)
- C.20 Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-177 (Parcel 4)
- C.21 Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-177 (Parcel 4)
- 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)
- C.23 Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-71 (Parcel 4)
- C.24 Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-71 (Parcel 4)
- 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)
- C.26 Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-180 (Parcel 5)
- C.27 Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-180 (Parcel 5)
- 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)
- C.29 Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-178 (Parcel 5)
- C.30 Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-178 (Parcel 5)
- 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)
- C.32 Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-33R (Parcel 5)
- C.33 Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-33R (Parcel 5)
- 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)

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/m ³)-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.

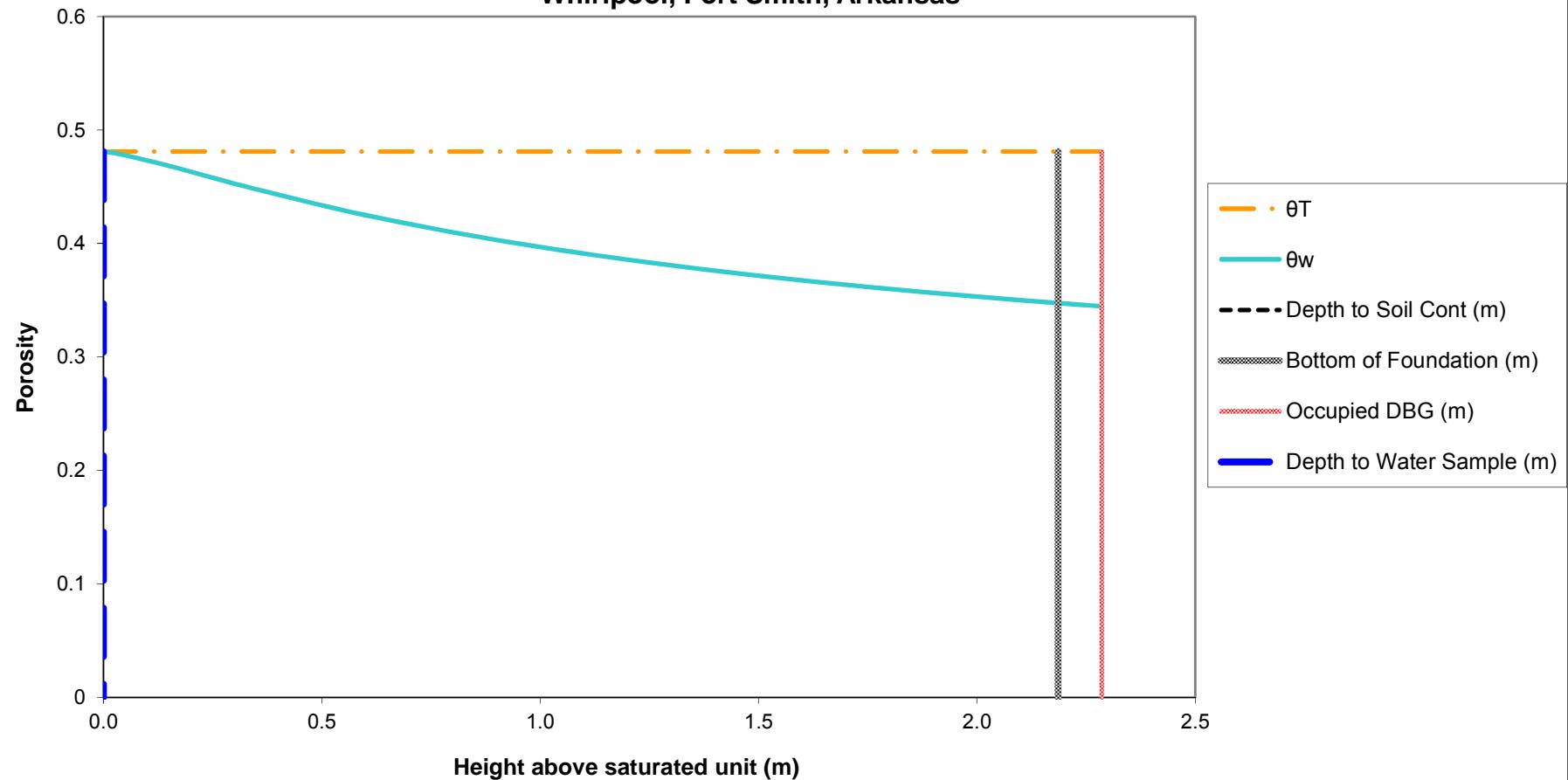
**Attachment C.4: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade)
due to Vapor Intrusion from Groundwater in Monitoring Wells**
Whirlpool, Fort Smith, Arkansas

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 _o	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											
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.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**

Chem Group	Chemical	CASRN	Carc Class	ADAF	C_{gw} (mg/L)	$C_{building}$ (mg/m ³)	Cancer			Noncancer	
							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
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.											
								Cumulative Risk:	2E-06	HI:	4E-01

**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.

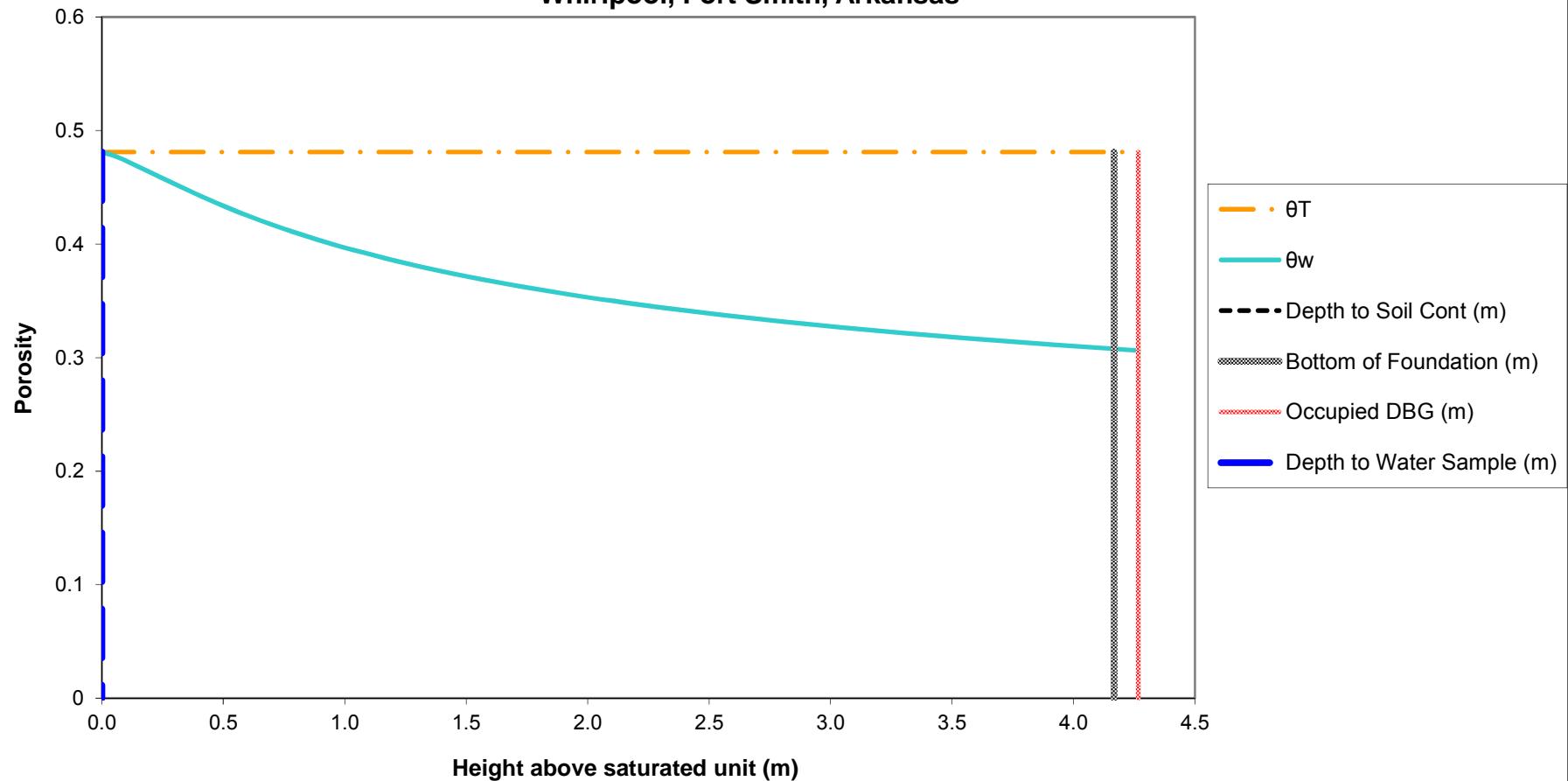
**Attachment C.7: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade)
due to Vapor Intrusion from Water at VP-5 (Parcel 1)**
Whirlpool, Fort Smith, Arkansas

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 _o	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	P _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·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**

Chem Group	Chemical	CASRN	Carc Class	ADAF	C_{gw} (mg/L)	$C_{building}$ (mg/m ³)	Cancer			Noncancer	
							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.

**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 _o	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											
SCS Soil texture class											
Crack Soil											
Sand											
Bulk density											
kg/L ρ _b 1.66											
Total porosity											
L/L-soil θ _T 0.375											
Water-filled porosity											
L/L-soil θ _w 0.054											
Air-filled porosity											
L/L-soil θ _a 0.321											
Residual saturation											
L/L-soil θ _r 0.053											
Hydraulic conductivity											
cm/s K 7.4E-03											
Dynamic viscosity of water											
g/cm-s μ _w 0.01307											
Density of water											
g/cm ³ ρ _w 1.0											
Gravitational acceleration											
cm/s ² g 980.7											
Intrinsic permeability											
cm ² k 9.9E-08											
Relative saturation											
unitless S _e 0.003											
van Genuchten N											
unitless N 3.177											
van Genuchten M											
unitless M 0.685											
Relative air permeability											
unitless k _{rg} 0.998											
Permeability to vapor											
cm ² k _v 9.90E-08											
Distance from building foundation to source											
m L _{T-gw} 4.17											
Bldg foundation thickness											
m L _{crack} 0.1											
Bldg foundation length											
m 10.00											
Bldg foundation width											
m 10.00											
Bldg occupied height											
m 2.44											
Bldg occupied volume											
m ³ 244.00											
Occupied depth below ground											
m 0.0											
Bldg area for vapor intrusion											
m ² A _B 100.0											
Ratio of A _{crack} to A _B											
η 4E-04											
Area of cracks											
m ² A _{crack} 4E-02											
Air exchange rate											
hour ⁻¹ ach 0.45											
Building ventilation rate											
m ³ /day Q _{bldg} 2.64E+03											
Pressure difference between outdoors-indoors											
kg/m·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.											

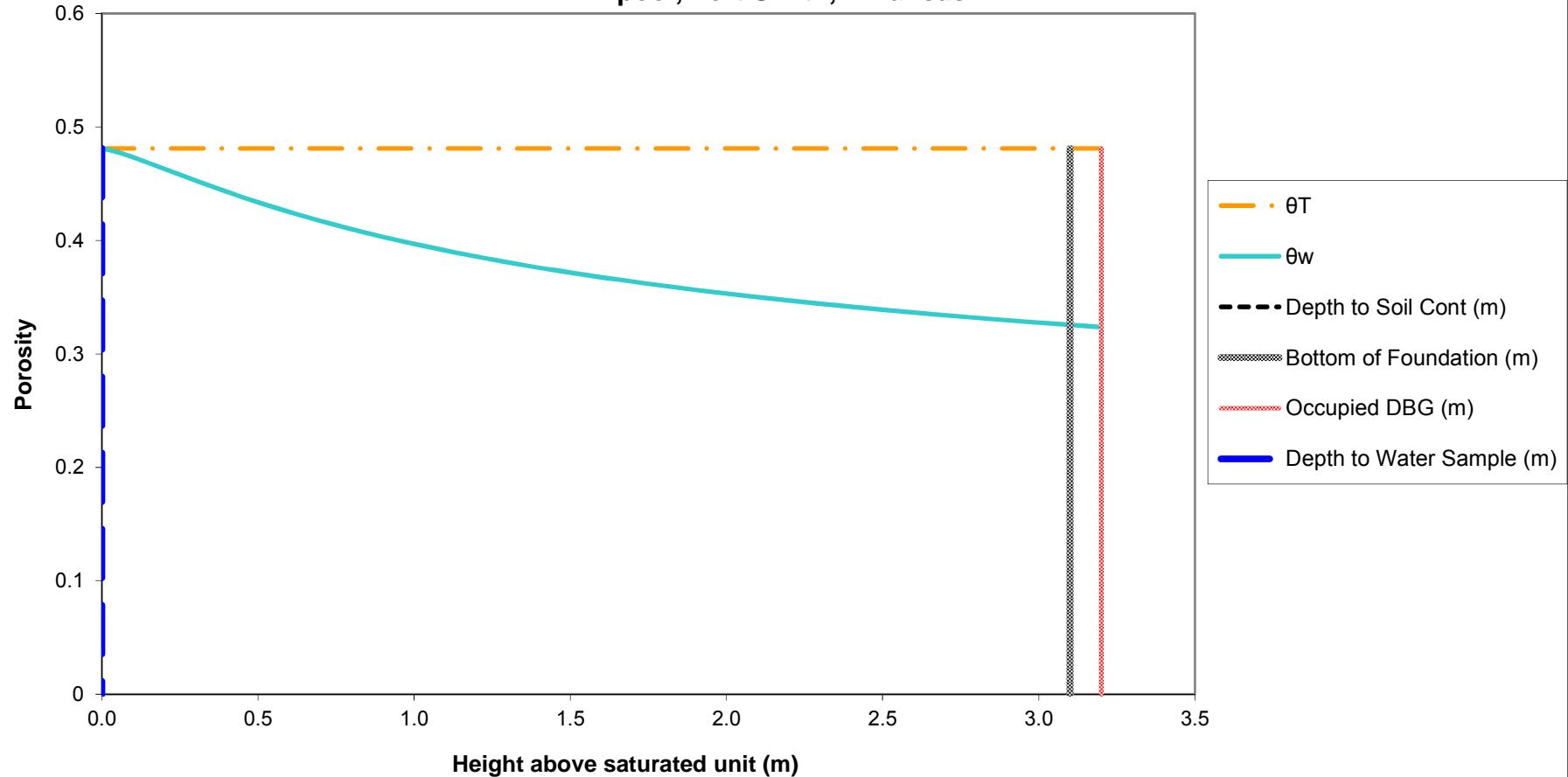
**Attachment C.11: Cancer Risk and Hazard Index Calculations for Vapor Intrusion
into a Residential Building (Slab-on-Grade) from Water at VP-6 (Parcel 1)
Whirlpool, Fort Smith, Arkansas**

Chem Group	Chemical	CASRN	Carc Class	ADAF	C_{gw} (mg/L)	$C_{building}$ (mg/m ³)	Cancer			Noncancer	
							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**

Chem Group	Chemical	CASRN	Carc Class	ADAF	C_{sv} (mg/m ³)	$C_{building}$ (mg/m ³)	Cancer			Noncancer		
							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 attenuation 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.

**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 _{effT} (m ² /day)	α _{soil}	α _{slab}	α _o	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	P _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-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·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 D _{effT} 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.											

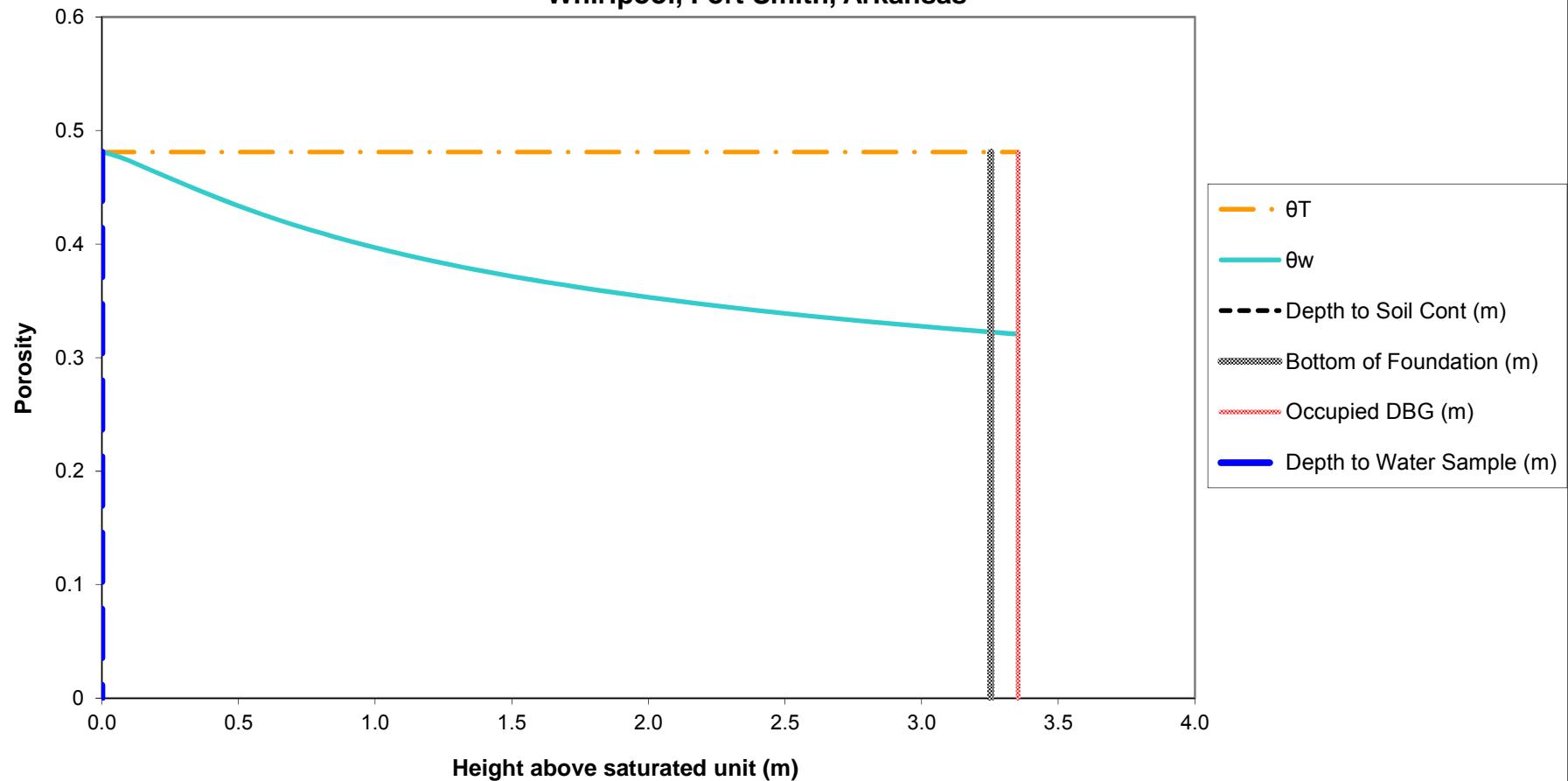
**Attachment C.15: Cancer Risk and Hazard Index Calculations for Vapor Intrusion
into a Residential Building (Slab-on-Grade) from Water at VP-8 (Parcel 2)
Whirlpool, Fort Smith, Arkansas**

Chem Group	Chemical	CASRN	Carc Class	ADAF	C_{gw} (mg/L)	$C_{building}$ (mg/m ³)	Cancer			Noncancer	
							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:	
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**

Chem Group	Chemical	CASRN	Carc Class	ADAF	C_{sv} (mg/m ³)	$C_{building}$ (mg/m ³)	Cancer			Noncancer	
							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 attenuation 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.

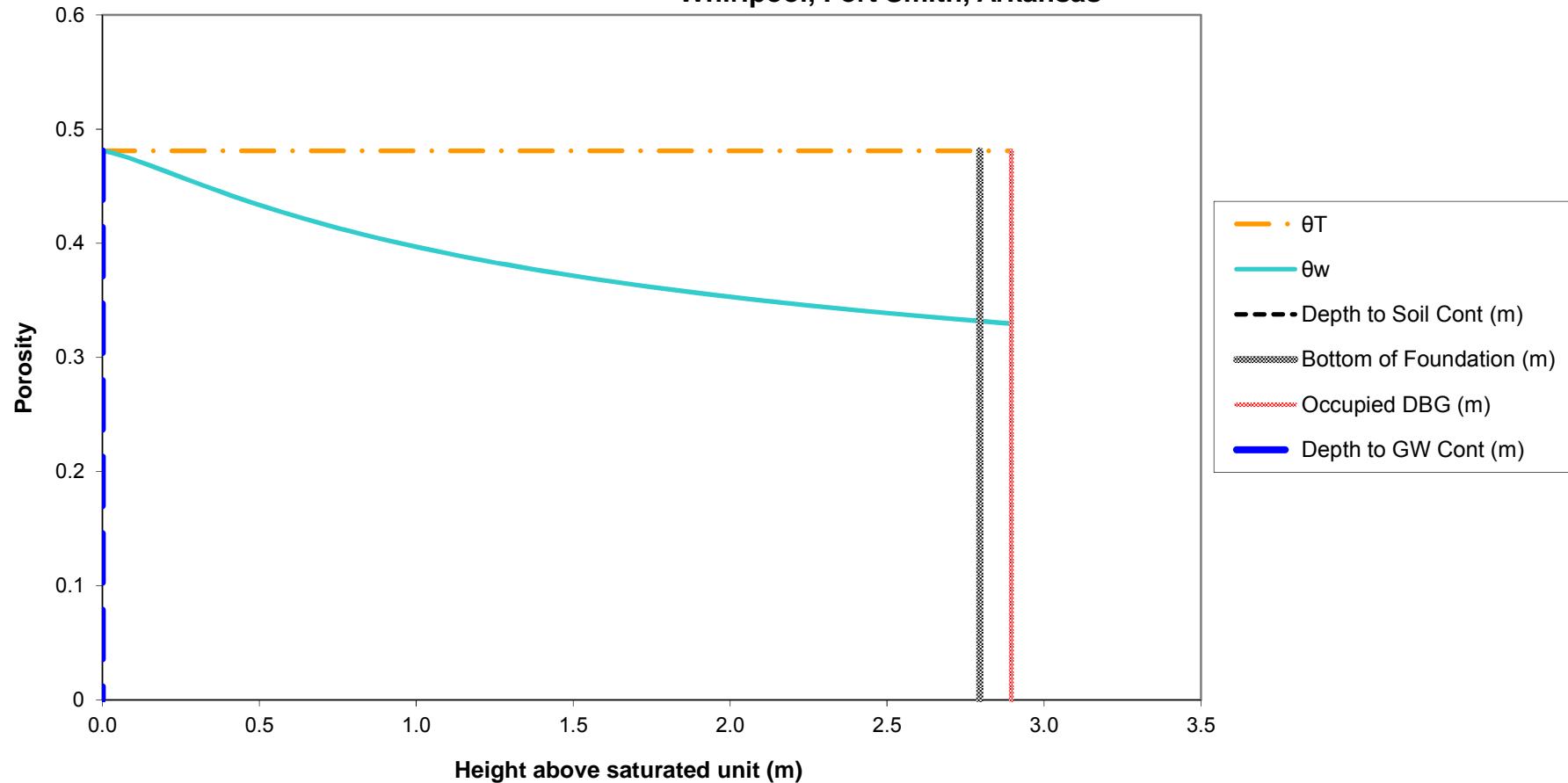
**Attachment C.18: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade)
due to Vapor Intrusion from Water at VP-10 (Parcel 3)**
Whirlpool, Fort Smith, Arkansas

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 _o	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	P _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-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·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**

Chem Group	Chemical	CASRN	Carc Class	ADAF	C_{gw} (mg/L)	$C_{building}$ (mg/m ³)	Cancer		Noncancer		
							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.

**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)**

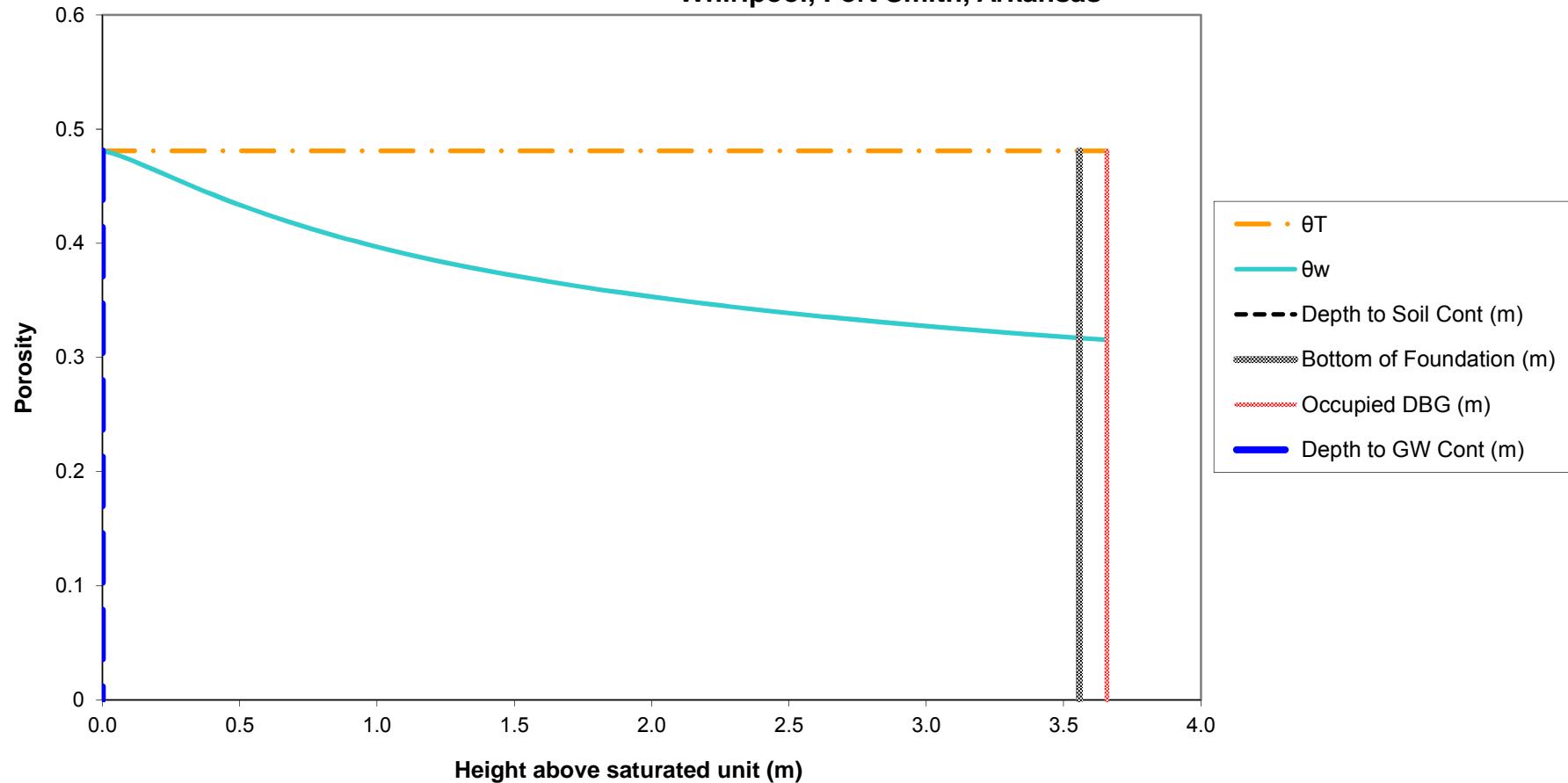
Whirlpool, Fort Smith, Arkansas

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_o	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											
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·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**

Chem Group	Chemical	CASRN	Carc Class	ADAF	C_{gw} (mg/L)	$C_{building}$ (mg/m ³)	Cancer		Noncancer	
							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.

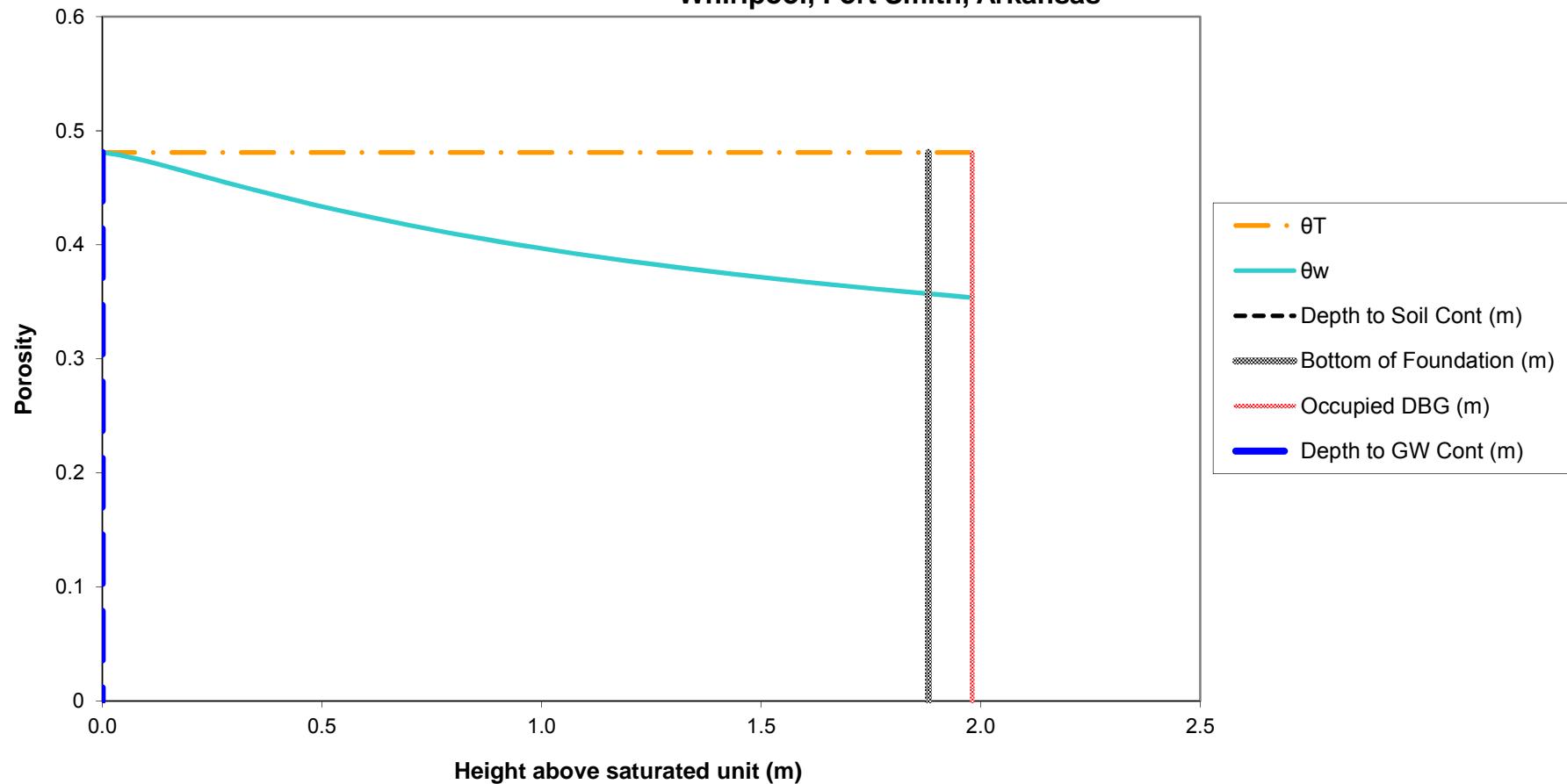
**Attachment C.24: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade)
due to Vapor Intrusion from Groundwater at MW-71 (Parcel 4)**
Whirlpool, Fort Smith, Arkansas

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 _o	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											
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**

Chem Group	Chemical	CASRN	Carc Class	ADAF	C_{gw} (mg/L)	$C_{building}$ (mg/m ³)	Cancer		Noncancer			
							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)**

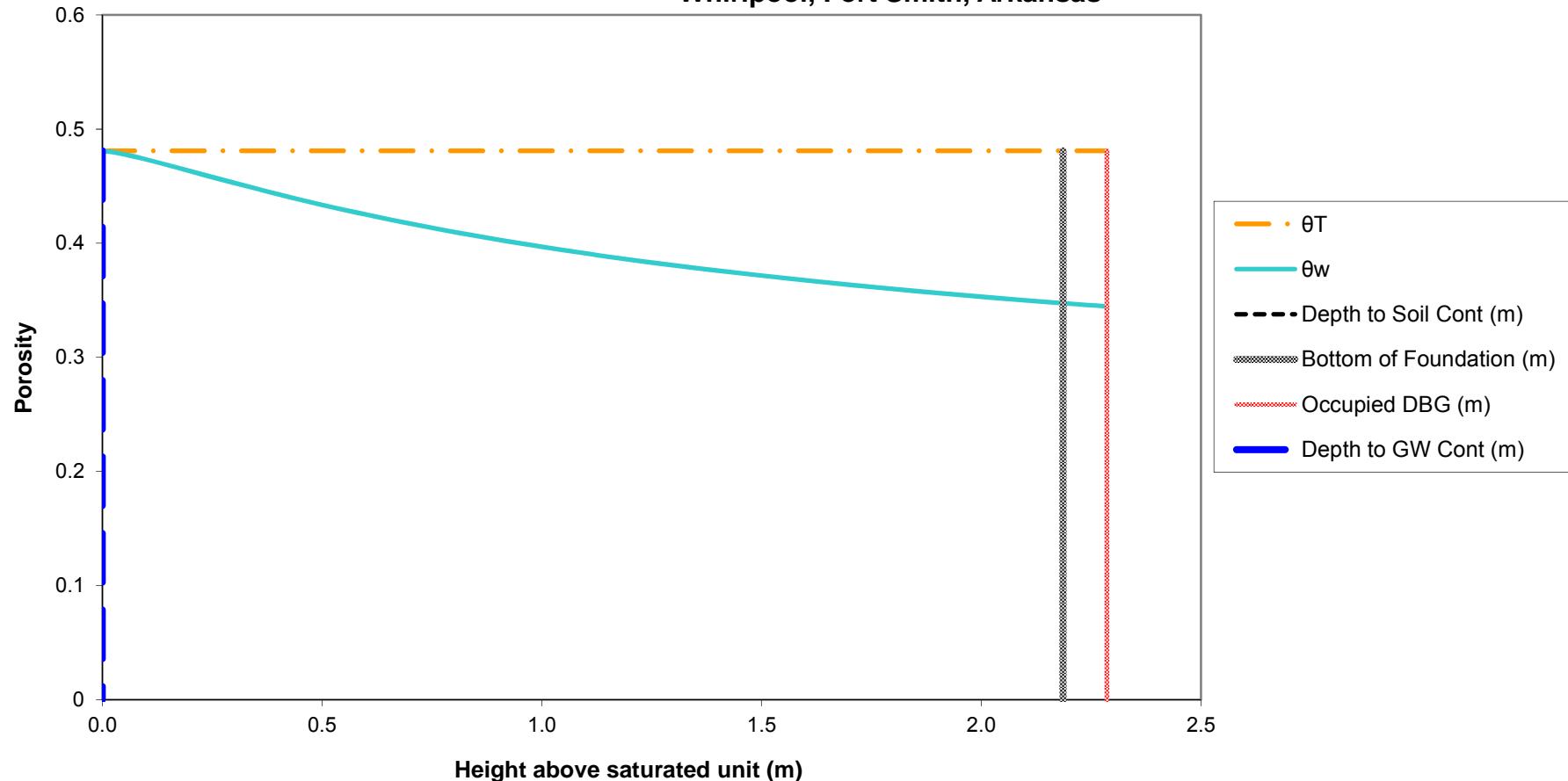
Whirlpool, Fort Smith, Arkansas

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_o	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											
	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 D _{eff} ^T 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**

Chem Group	Chemical	CASRN	Carc Class	ADAF	C_{gw} (mg/L)	$C_{building}$ (mg/m ³)	Cancer			Noncancer	
							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.

**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)**

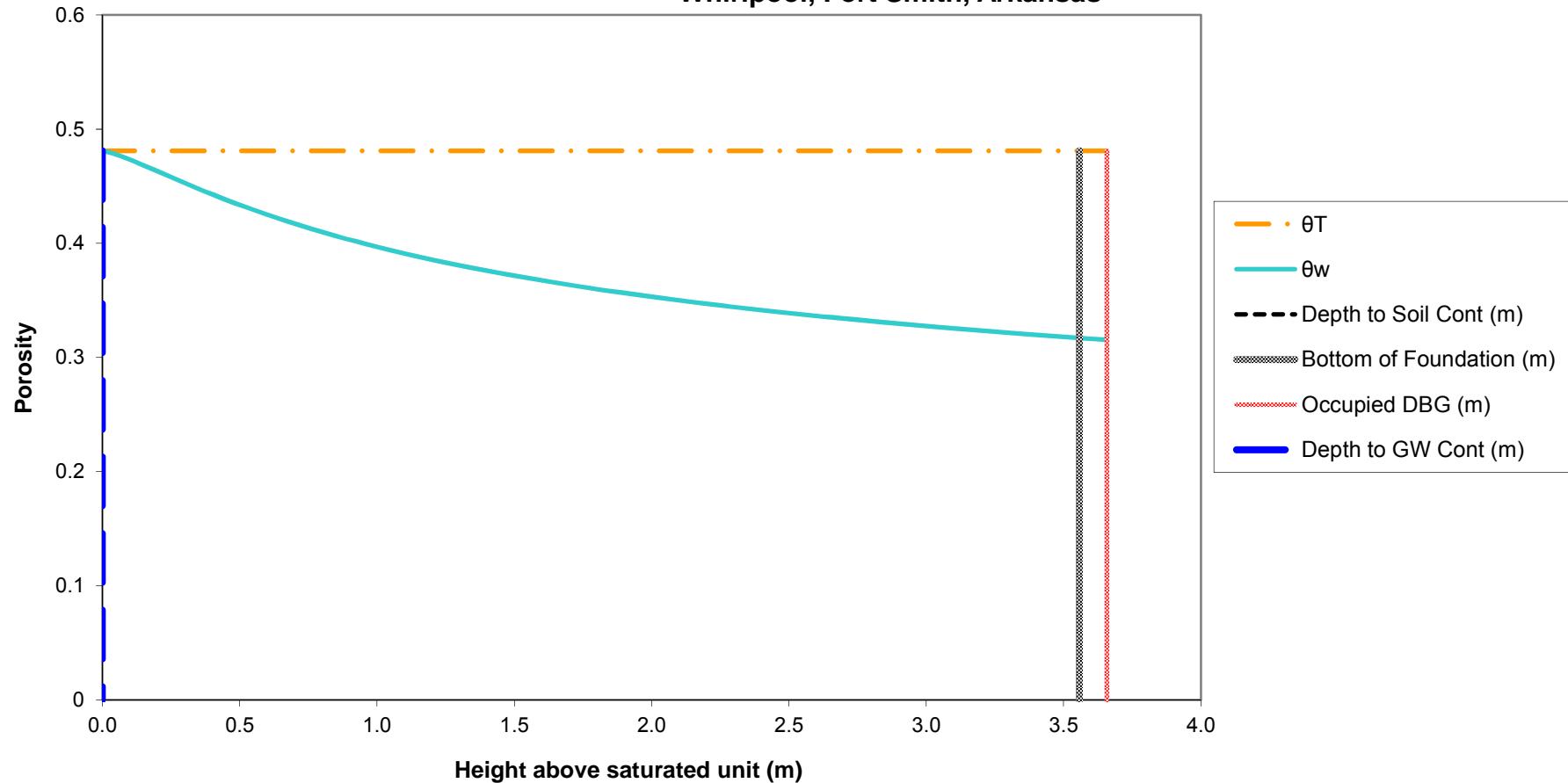
Whirlpool, Fort Smith, Arkansas

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_o	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											
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·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 D _{eff} ^T 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**

Chem Group	Chemical	CASRN	Carc Class	ADAF	C_{gw} (mg/L)	$C_{building}$ (mg/m ³)	Cancer			Noncancer	
							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.

**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 _o	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											
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	m ²	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.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**

Chem Group	Chemical	CASRN	Carc Class	ADAF	C_{gw} (mg/L)	$C_{building}$ (mg/m ³)	Cancer		Noncancer			
							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 ($2.57 \times 10^{-3} \text{ mg/m}^3$) 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 5.3×10^{-6} and 1.2 , respectively, which are the same or essentially the same as the values of 5.9×10^{-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																			
1.	A	B	C	D	E	F	G	H	I	J	K	L	M	N	O	P	Q		
2.	GW-ADV		CALCULATE RISK-BASED GROUNDWATER CONCENTRATION (enter "X" In "YES" box)																
3.	Version 3.1; 02/04		YES																
4.	<input type="button" value="Reset to Defaults"/>		OR																
5.																			
6.																			
7.																			
8.			YES		<input checked="" type="checkbox"/>														
9.																			
10.																			
11.																			
12.																			
13.																			
14.																			
15.																			
16.																			
17.	ENTER		ENTER																
18.	Initial groundwater		Chemical																
19.	Chemical		Initial																
20.	CAS No.		groundwater																
21.	(numbers only,		conc.,																
22.	no dashes)		C_w																
23.	(ug/L)																		
24.																			
25.																			
26.																			
27.																			
28.																			
29.																			
30.																			
31.	ENTER		ENTER		ENTER		ENTER		ENTER		ENTER		ENTER		ENTER				
32.	Stratum A SCS soil type		Stratum A soil dry bulk density, ρ_d^A		Stratum A soil total porosity, n^A		Stratum A soil water-filled porosity, θ_w^A		Stratum B SCS soil type		Stratum B soil dry bulk density, ρ_d^B		Stratum B soil total porosity, n^B		Stratum B soil water-filled porosity, θ_w^B		Stratum C SCS soil type		
33.	<input type="button" value="MORE ↓"/>		<input type="button" value="Lookup Soil Parameters"/>		<input type="button" value="cm³/cm³"/>		<input type="button" value="cm³/cm³"/>		<input type="button" value="Lookup Soil Parameters"/>		<input type="button" value="cm³/cm³"/>		<input type="button" value="cm³/cm³"/>		<input type="button" value="cm³/cm³"/>		<input type="button" value="cm³/cm³"/>		
34.																			
35.																			
36.																			
37.																			
38.	S		1.66		0.375		0.054		SIC		1.38		0.481		0.216				
39.																			
40.	ENTER		ENTER		ENTER		ENTER		ENTER		ENTER		ENTER		ENTER		ENTER		
41.	Enclosed space floor thickness, L_{enc}		Soil-bldg. pressure differential, ΔP		Enclosed space floor length, L_s		Enclosed space floor width, W_s		Enclosed space height, H_s		Floor-wall seam crack width, w		Indoor air exchange rate, ER		Average vapor flow rate into bldg.				
42.	<input type="button" value="MORE ↓"/>		<input type="button" value="cm (g/cm·s²)"/>		<input type="button" value="cm (cm)"/>		<input type="button" value="cm (cm)"/>		<input type="button" value="cm (cm)"/>		<input type="button" value="cm (cm)"/>		<input type="button" value="1/h)"/>		<input type="button" value="OR"/>				
43.																			
44.																			
45.																			
46.																			
47.																			
48.																			
49.																			
50.	ENTER		ENTER		ENTER		ENTER		ENTER		ENTER		ENTER		ENTER		ENTER		
51.	Averaging time for carcinogens, AT_{10}		Averaging time for noncarcinogens, AT_{10c}		Exposure duration, ED		Exposure frequency, EF		Target risk for carcinogens, TR		Target hazard quotient for noncarcinogens, THQ								
52.	<input type="button" value="MORE ↓"/>		<input type="button" value="yr"/>		<input type="button" value="yr"/>		<input type="button" value="days/yr)"/>		<input type="button" value="unitless)"/>		<input type="button" value="unitless)"/>								
53.																			
54.																			
55.																			
56.																			
57.																			
58.																			
59.																			
60.																			
	END															Used to calculate risk-based groundwater concentration.			

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, D _a (cm ² /s)	Diffusivity in water, D _w (cm ² /s)	Henry's law constant at reference temperature, H (atm-m ³ /mol)	Henry's law constant reference temperature, T _R (°C)	Enthalpy of vaporization at the normal boiling point, ΔH _{v,b} (cal/mol)	Normal boiling point, T _b (°K)	Critical temperature, T _c (°K)	Organic carbon partition coefficient, K _{oc} (cm ³ /g)	Pure component water solubility, S (mg/L)	Unit risk factor, URF (μg/m ³) ⁻¹	Reference conc., RfC (mg/m ³)
5											
6											
7											
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

1	A	B	C	D	E	F	G	H	I	J	K	L	M	N
2														
3			Stratum A soil air-filled porosity,	Stratum B soil air-filled porosity,	Stratum C soil air-filled porosity,	Stratum A effective total fluid saturation, S_{te}	Stratum A soil intrinsic permeability, k_i	Stratum A soil relative air permeability, k_g	Stratum A soil effective vapor permeability, k_v	Thickness of capillary zone, L_{cz}	Total porosity in capillary zone, n_{cz}	Air-filled porosity in capillary zone, $\theta_{a,cz}$	Water-filled porosity in capillary zone, $\theta_{w,cz}$	Floor- wall seam perimeter, X_{crack}
4	Exposure duration, τ (sec)	Source- building separation, L_T (cm)	θ_a^A (cm^3/cm^3)	θ_a^B (cm^3/cm^3)	θ_a^C (cm^3/cm^3)									
5														
6														
7														
8														
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														
14	Area of Bldg. ventilation rate,	enclosed space below grade,	Crack- to-total area ratio,	Crack depth below grade,	Enthalpy of vaporization at ave. groundwater temperature,	Henry's law constant at ave. groundwater temperature,	Henry's law constant at ave. groundwater temperature,	Vapor viscosity at ave. soil temperature,	Stratum A effective diffusion coefficient, D^{eff}_A	Stratum B effective diffusion coefficient, D^{eff}_B	Stratum C effective diffusion coefficient, D^{eff}_C	Capillary zone effective diffusion coefficient, D^{eff}_{cz}	Total overall effective diffusion coefficient, D^{eff}_{τ}	Diffusion path length, L_d
15														
16														
17														
18	$Q_{building}$ (cm^3/s)	A_b (cm^2)	η (unitless)	Z_{crack} (cm)	ΔH_{ts} (cal/mol)	H_{rs} (atm- m^3/mol)	H'_{rs} (unitless)	μ_{rs} ($\text{g}/\text{cm}\cdot\text{s}$)						
19														
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														
24														
25	Convection path length,	Source vapor conc.,	Average vapor flow rate into bldg.,	Crack effective diffusion coefficient, D^{crack}	Area of crack, A_{crack}	Exponent of equivalent foundation Pelet number, $\exp(Pe^f)$	Infinite source indoor attenuation coefficient, a	Infinite source bldg. conc.,						
26														
27														
28	L_p (cm)	C_{source} ($\mu\text{g}/\text{m}^3$)	r_{crack} (cm)	Q_{sol} (cm^3/s)	(cm^2/s)									
29														
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

Chem Group	Chemical	CASRN	Carc Class	C _{gw} (mg/L)	C _{bldg} (L-water/m ³)	C _{air} (mg/m ³)	Cancer			Noncancer	
							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

You are here: [EPA Home](#) [Mid-Atlantic Risk Assessment](#) Regional Screening Table - User's Guide

User's Guide (June 2015)

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-specific 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 \(1996 and 2002\)](#).

Table of Contents

- Home Page
- User's Guide
- What's New
- FAQ
- Equations
- Calculator
- Generic Tables
- Contact Us

- 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.

$$\text{Hazard Index} = \left[\left(\frac{\text{conc}_x}{\text{SL}_x} \right) + \left(\frac{\text{conc}_y}{\text{SL}_y} \right) + \left(\frac{\text{conc}_z}{\text{SL}_z} \right) \right]$$

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.

$$\begin{aligned} CAF_o(0.804) &= \frac{\text{CSF}_o \left(\frac{3.7 \times 10^{-2} \text{ mg}}{\text{Kg} \cdot \text{day}} \right)^{-1} \text{ NHL+Liver oral slope factor}}{\text{CSF}_o \left(\frac{4.6 \times 10^{-2} \text{ mg}}{\text{Kg} \cdot \text{day}} \right)^{-1} \text{ Adult-based oral slope factor}} \\ MAF_o(0.202) &= \frac{\text{CSF}_o \left(\frac{9.3 \times 10^{-3} \text{ mg}}{\text{Kg} \cdot \text{day}} \right)^{-1} \text{ Kidney oral slope factor}}{\text{CSF}_o \left(\frac{4.6 \times 10^{-2} \text{ mg}}{\text{Kg} \cdot \text{day}} \right)^{-1} \text{ Adult-based oral slope factor}} \\ \\ CAF_i(0.756) &= \frac{\text{IUR} \left(\frac{3.1 \times 10^{-6} \mu\text{g}}{\text{m}^3} \right)^{-1} \text{ NHL+Liver unit risk estimate}}{\text{IUR} \left(\frac{4.1 \times 10^{-6} \mu\text{g}}{\text{m}^3} \right)^{-1} \text{ Adult-based unit risk estimate}} \\ MAF_i(0.244) &= \frac{\text{IUR} \left(\frac{1 \times 10^{-6} \mu\text{g}}{\text{m}^3} \right)^{-1} \text{ Kidney unit risk estimate}}{\text{IUR} \left(\frac{4.1 \times 10^{-6} \mu\text{g}}{\text{m}^3} \right)^{-1} \text{ Adult-based unit risk estimate}} \end{aligned}$$

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 replacement 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.

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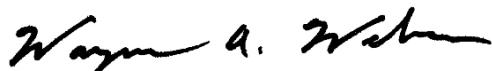
If you have any further questions or comments, please feel free to contact us.

Yours sincerely,



Michael F. Ellis, PE
Principal

D +1 314 590 2967
M +1 314 229 5617
mellis@environcorp.com



Wayne Weber, PG, PE
Manager

D +1 314 590 2973
M +1 314 680 5025
wweber@environcorp.com

LIST OF ATTACHMENTS

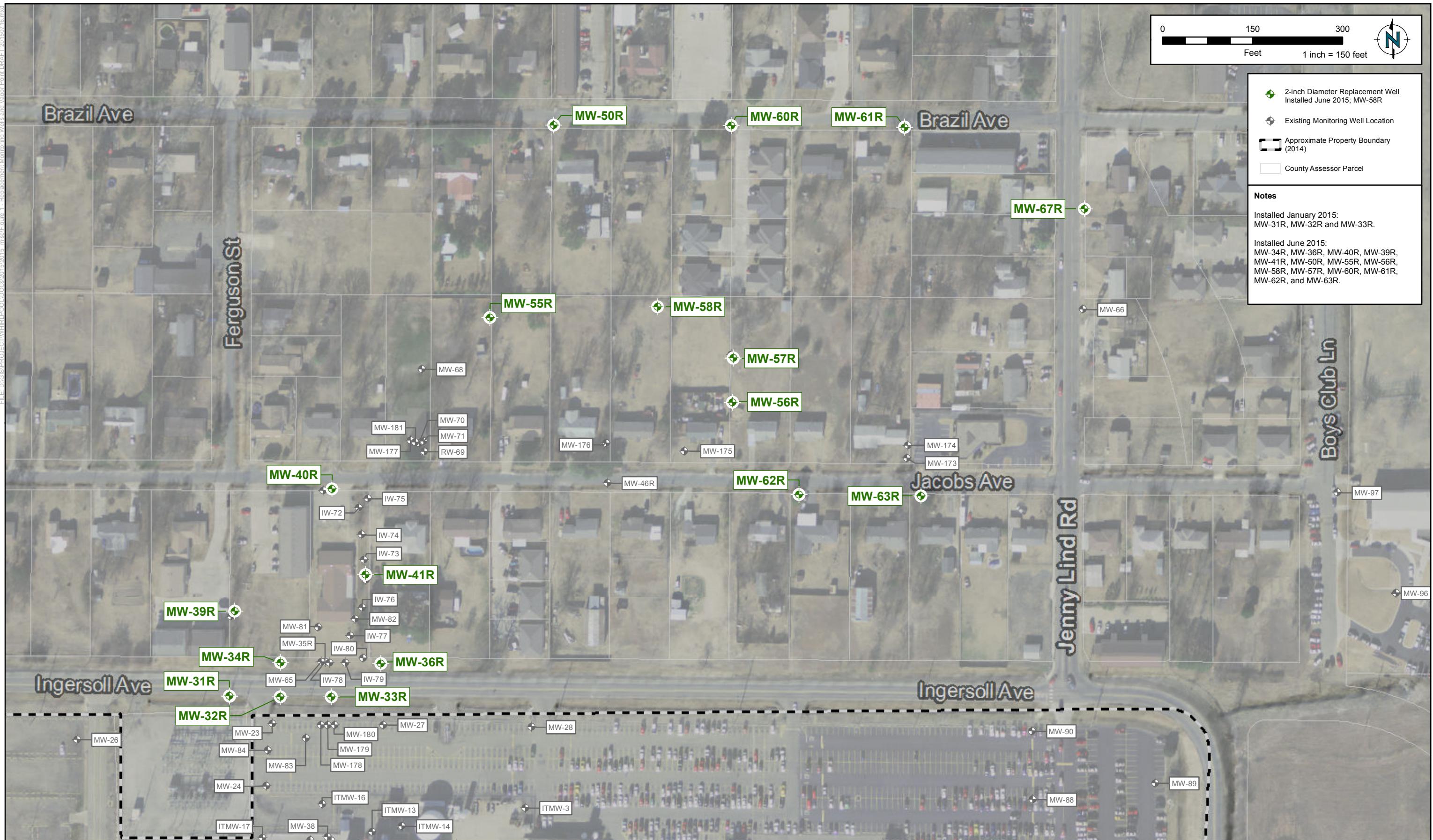
- Table 1: Monitoring Well Construction Details – Replacement Wells
- Figure 1: Location of Replacement Monitoring Wells
- Appendix A: Replacement Well Construction Logs
- Appendix B: Waste Manifest Documentation

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

FIGURE



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				
<u>Well Construction:</u> Blank Casing: Sch. 40 PVC 2 Inch 0 FT to 20 FT Screen: Sch. 40 2 Inch 0.010 PVC 20 FT to 30 FT Annular Fill: Cement Grout 0 FT to 16 FT Bentonite 16 FT to 19 FT Sand 19 FT to 30 FT							Borehole Dia.: 6 inches	Total Depth: 30.0 feet		
Project Number: 3433244A Project Name: Whirlpool Corporation Remarks: Lithology from MW-31 drilling log dated 01/04/2001.										
Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description			
								Water Level		
475		4				SM	SILTY SAND, DARK BROWN, SLIGHTLY MOIST, SOFT, ORGANIC RICH WITH GRASS AND ROOTLETS			
						CL	SILTY SAND, MEDIUM BROWN, MOIST, SOFT, ROCKS UP TO 0.75 INCHES IN DIAMETER PRESENT			
		5				SM	SILTY CLAY, GRAYISH BROWN, SLIGHTLY MOIST, FIRM, SOME IRON NODULES AND ORANGE STREAKING PRESENT			
		4				CL	SILTY SAND, BLACK, DRY, GRAVEL AND ROCK INCLUSIONS UP TO 1 INCH IN DIAMETER ARE PRESENT			
							SILTY CLAY, SILTY CLAY GRADING TO CLAY, MEDIUM BROWN, MOIST, FIRM, MASSIVE			
470		10				GC	GRAVEL, MEDIUM BROWN, MOIST, LOOSE, SOFT, MIXTURE WITH ROCKS UP TO 1 INCH IN DIAMETER			
		4				SM	SILTY SAND, MEDIUM BROWN, MOIST, LOOSE, SOFT, ROCK INCLUSIONS UP TO 1 INCH IN DIAMETER			
						CL	SILTY CLAY, MEDIUM BROWN GRADING TO REDDISH BROWN AT 11 FEET, MOIST, FIRM, GRAY AND RED INCLUSIONS PRESENT BEGINNING AT 11 FEET			
465		15				GC	GRAVEL, MEDIUM BROWN, LOOSE, WET, WITH ROCKS UP TO 0.5 INCHES IN DIAMETER			
		4				CL	SILTY CLAY, MEDIUM BROWN, WET, FLUFFY, WITH ROCK INCLUSIONS UP TO 0.5 INCHES IN DIAMETER			
						GC	SILTY CLAY, REDDISH BROWN WITH GRAY AND ORANGE STREAKING, MOIST, FIRM, MASSIVE			
		20				CL	GRAVEL, MEDIUM BROWN, LOOSE			
		4					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			
460		25				GC	SILTY CLAY, MEDIUM REDDISH BROWN, MOIST, LOOSE			
		4				CL	GRAVEL, MEDIUM BROWN, MOIST, LOOSE			
							SILTY CLAY, MEDIUM REDDISH BROWN, MOIST, SOFT, LOOSE			
455		30					SANDY CLAY, LIGHT BROWN, MOIST, SOFT			
		2				GC	SILTY CLAY, REDDISH LIGHT BROWN, FIRM, WITH ROCK INCLUSIONS UP TO 0.5 INCHES IN DIAMETER			
						CL	SANDY CLAY, LIGHT BROWN, WET, SOFT, SOME GRAVEL PRESENT			
450							OTHER, REDDISH, DRY, BRITTLE, IRON-RICH MATERIAL			
							SHALE, GRAY, SLIGHTLY MOIST, FIRM, WEATHERED			
445										

RAMBOLL ENVIRON
1807 Park 270 Drive Suite 320, St. Louis, MO 63146

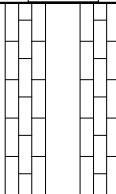
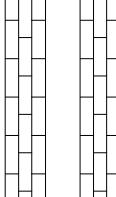
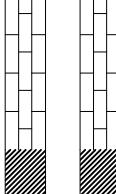
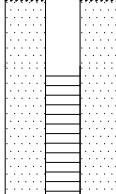
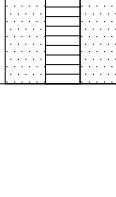
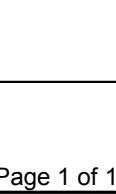
Site ID: MW-32R	Date(s): 1/16/2015
Location: Fort Smith, Arkansas	
Logged By: M. Eddings	Checked By: W. Weber

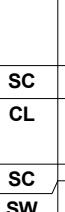
Contractor:	Walker-Hill Environmental	Purpose:	Monitoring Well
Drilling Method:	Sonic	GS Elevation:	475.82 ft amsl
Sampling Method:	HSA Continuous Sampler	TOC Elevation:	475.50 ft amsl
<u>Well Construction:</u>		Borehole Dia.:	6 inches
Blank Casing:	Sch. 40 PVC 2 Inch	Total Depth:	30.5 feet
Screen:	Sch. 40 2 Inch 0.010 PVC	Project Number:	3433244A
Annular Fill:	Cement Grout Bentonite Sand	Project Name:	Whirlpool Corporation
		Remarks:	

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
475							TOPSOIL COARSE GRAVEL FILL		Flush Mount
470	5					CL	SILTY CLAY, RED BROWN, MOTTLED, FIRM, PLASTIC, MOIST		
465	5						SILTY CLAY, RED BROWN, MOTTLED, SLIGHTLY SANDY, FINE GRAIN, SLIGHTLY FIRM, MOIST		
460	10						SILTY CLAY, BROWN, OCCASIONAL ORGANIC NODULES, FIRM, SLIGHTLY PLASTIC, MOIST		
455	15								
450	20					SC CL	CLAYEY SAND, RED BROWN, FINE TO MEDIUM GRAIN, WELL ROUNDED, MOIST		
445	25						SILTY CLAY, LIGHT BROWN, WITH GRAVEL, FINE TO MEDIUM GRAIN, VERY MOIST		
445	30					GC	SILTY CLAY, RED BROWN, SLIGHTLY SANDY, FINE TO COARSE GRAIN, SLIGHTLY MOIST		
445	30	5.5					CLAYEY GRAVEL, RED BROWN, SILTY, FINE TO COARSE GRAIN, DRY		
445	30						SHALE		

Page 1 of 1

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
<u>Well Construction:</u> Blank Casing: Sch. 40 PVC 2 Inch 0 FT to 19 FT Screen: Sch. 40 2 Inch 0.010 PVC 19 FT to 29 FT Annular Fill: Cement Grout 0 FT to 15 FT Bentonite 15 FT to 17 FT Sand 17 FT to 29 FT							Borehole Dia.: 6 inches	Total Depth: 29.0 feet
							Project Number: 3433244A	
							Project Name: Whirlpool Corporation	
							Remarks:	
Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	
							Water Level	Well Construction Flush Mount
470	5	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	
							CLAYEY SILT, REDDISH BROWN, SOME GRAVEL, STIFF, SLIGHTLY PLASTIC, WET	
465	10	5				CL	SILTY CLAY, STRONG BROWN, SOME GRAVEL, STIFF, SLIGHTLY PLASTIC, MOIST	
							SILTY CLAY, STRONG BROWN TO LIGHT BROWN, SOME GRAY, STIFF, PLASTIC, DRY	
460	15	5				ML	SILTY CLAY, BROWN, WEAK, SLIGHTLY PLASTIC, VERY MOIST	
							SILTY CLAY, VERY DARK BROWN, WITH DARK GRAY TO BLACK, GRAVELLY, WEAK, PLASTIC, MOIST	
455	20	4.5				CL	SILT, TAN TO REDDISH BROWN, GRAY TO LIGHT GRAY SAND LENSES, VERY FINE GRAIN, FRIABLE, DRY	
							SILTY CLAY, REDDISH BROWN TO LIGHT GRAY, FRIABLE, STIFF, DRY	
450	25	4				SM	SAND, STRONG BROWN, VERY FINE GRAIN, ROUND TO SUBROUND, SOME SILT, LIGHT GRAY, FRIABLE, SLIGHTLY MOIST	
							SP	
445	30					ML	SAND, DARK BROWN, FINE GRAIN, SOME MEDIUM GRAIN, SUBROUND TO ROUND, MOIST	
							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	
							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	
							SHALE, BLACK TO DARK GRAY, SLIGHTLY WEATHERED, SOME LAMINATIONS	

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 Bentonite Sand			0 FT to 17.5 FT 17.5 FT to 19.5 FT 19.5 FT to 28.5 FT			Remarks:			
Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction Flush Mount
470	5			0		MH	Topsoil, dark brown, with root hairs, moist Clayey Silt, light brown, with gray mottling, with black nodules, trace gravel, fine, subrounded, stiff, slightly plastic, moist		
465	5			0		CL	Silty Clay, yellow brown, with gray mottling, trace black nodules, stiff, plastic, moist		
460	10			0			Silty Clay as above, with sand, fine, increasing silt		
455	15			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		
450	20			0			Silty Clay as above, occasional gravel, fine, subrounded, wet		
445	25			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		
440	3.5			0		CL MH MH	Sand and Gravel, red brown, with silty clay, fine to coarse sand, fine to coarse gravel, subrounded, soft, cohesive, wet Silty Clay, red brown, with sand, fine to coarse, with gravel, fine to coarse, subrounded, very stiff, cohesive, moist		
440	0.9						Clayey Silt, red brown, hard laminated, dry Clayey Silt as above, with weathered shale Shale, very dark gray, hard, laminated, dry		

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				
<u>Well Construction:</u> Blank Casing: Sch. 40 PVC 2 Inch 0 FT to 20 FT Screen: Sch. 40 2 Inch 0.010 PVC 20 FT to 29 FT Annular Fill: Cement Grout 0 FT to 16 FT Bentonite 16 FT to 18 FT Sand 18 FT to 29 FT							Borehole Dia.: 6 inches	Total Depth: 29.0 feet		
							Project Number: 3433244A			
							Project Name: Whirlpool Corporation			
							Remarks:			
Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description			
470	5			0		MH	Topsoil, dark brown, with root hairs, moist Clayey Silt, yellow brown, with red brown mottling, occasional gravel, fine, subrounded, slightly stiff, slightly plastic, moist			
465	5			0		CL	Clayey Silt as above, with sand, fine			
460	10			0		CL	Silty Clay, red brown, with gray mottling, with black nodules, stiff, plastic, moist, increasing silt with depth			
455	15			0		SC	Silty Clay, red brown, with gray mottling, with sand, fine, stiff, plastic, moist, increasing silt with depth			
450	20			0		CL	Clayey Sand, yellow brown, with silt, fine sand, cohesive, wet			
445	25			0		SC	Sandy Clay, yellow brown and red brown, with gray mottling, with silt, trace black nodules, fine sand, slightly stiff, slightly plastic, moist			
440	30			0		SW	Clayey Sand, yellow brown and red brown, with gray mottling, trace black nodules, fine sand, soft, cohesive, moist			
440	34			0		GC	Sand, red brown, trace clay, fine to medium sand, occasional coarse sand, occasional gravel, fine, subrounded, loose, wet			
440	38			0		MH	Sand and Gravel, red brown, with silty clay, fine to medium sand, occasional coarse sand, fine to coarse gravel, subrounded, stiff, cohesive, moist			
440	42			0		CL	Clayey Silt, yellow brown, trace black nodules, hard, slightly plastic (crumbles when dry), laminated, dry			
440	46			0		CL	Clayey Silt as above, with weathered shale			
440	50			0		GC	Shale, very dark gray, hard, laminated, dry			

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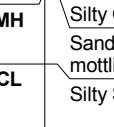
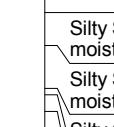
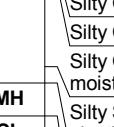
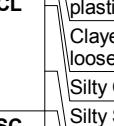
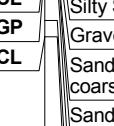
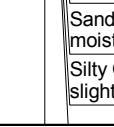
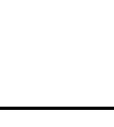
Site ID: MW-39R	Date(s): 6/29/2015
Location: Fort Smith, Arkansas	
Logged By: N. Zurweller	Checked By: W. Weber

Contractor:	Walker-Hill Environmental	Purpose:	Monitoring Well
Drilling Method:	Sonic	GS Elevation:	475.05 ft amsl
Sampling Method:	Direct Push (2003)	North:	369428.77
Well Construction:		Borehole Dia.:	6 inches
Blank Casing:	Sch. 40 PVC 2 Inch	Total Depth:	29.5 feet
Screen:	Sch. 40 2 Inch 0.010 PVC	Project Number:	3433244A
Annular Fill:	Cement Grout Bentonite Sand	Project Name:	Whirlpool Corporation
		Remarks:	Lithology from MW-39 drilling log dated 07/14/2003.

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction Flush Mount
470	4			0	CL SM	Silty Clay, grayish brown, occasional rootlets, occasional shale, 1/2" diameter, black, hard, dry			
	5			0	CL	Silty Sand to Sandy Silt, pale brown, abundant rootlets, stiff, crumbly, moist to dry			
465	4			0	CL	Silty Sandy Clay, pale brown, with red brown mottling, occasional iron nodules, 1/2" diameter, occasional rootlets, slightly plastic to crumbly, moist			
	10			0	CL	Silty Sandy Clay, strong brown to orange, with dark brown mottling, occasional pale brown, abundant iron nodules, firm, moist to dry			
460	4			0	SC CL	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			
	15			0	SC	Silty Clay, pale brown, dark brown, and orange mottled, occasional calcareous nodules, 1/2" - 1" diameter, stiff to soft, moist			
455	4			0	SC	Silty Clay, strong brown, with pale brown, minor dark brown, firm to hard, crumbly to plastic, moist			
	20			0	CL SC CL	Silty Clay, strong brown, minor pale gray, abundant dark brown mottling, abundant calcareous and iron nodules, 1/4" diameter, hard, crumbly, moist			
450	4			0	SC	Silty Sandy Clay, strong brown, minor pale gray, abundant dark brown mottling, stiff to firm, plastic, moist			
	25			0	CL	Clayey Silty Sand, strong brown, with abundant dark brown mottling, abundant calcareous nodules, 1/4" - 1/2" diameter, stiff, crumbly, moist			
445	4			0	SC	Silty Sandy Clay, strong brown, with pale brown, minor dark brown mottling, stiff, slightly plastic, moist			
	1.5			0	CL	Silty Clayey Sand, brown to strong brown, minor dark brown mottling, soft to firm, slightly crumbly, moist to wet			
445	30				CL	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			
					SW	Silty Clay, red brown, occasional dark brown mottling, hard, plastic, moist			
					CL	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			
					SC	Silty Sandy Clay, strong brown, stiff to firm, plastic, moist			
					CL	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)			
					CL	Gravelly Sandy Clay to Clayey Sand, strong brown, with pale gray mottling, with quartzite gravel, fine, hard, crumbly, moist			
					SW	Silty Gravelly Clayey Sand, brown, with quartzite gravel, fine, saturated			
					CL	Gravelly Sandy Clay to Clayey Sand, strong brown, with pale gray mottling, with quartzite gravel, fine, hard, crumbly, wet to saturated			
					CL	Gravelly Sand, strong brown, with quartzite gravel, fine to coarse, medium to coarse sand, dense, saturated			
					CL	Silty Clay, brown to brownish gray, stiff to hard, plastic, moist to wet,			

Page 1 of 2

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
435	40						grades to fissile shale at base Shale, gray, with occasional brown mottling along fractures, fissile, weathered		
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				
<u>Well Construction:</u> Blank Casing: Sch. 40 PVC 2 Inch 0 FT to 18.5 FT Screen: Sch. 40 2 Inch 0.010 PVC 18.5 FT to 28.5 FT Annular Fill: Cement Grout 0 FT to 14.5 FT Bentonite 14.5 FT to 16.5 FT Sand 16.5 FT to 28.5 FT							Borehole Dia.: 6 inches	Total Depth: 28.5 feet		
							Project Number: 3433244A			
							Project Name: Whirlpool Corporation			
							Remarks: Lithology from MW-40 drilling log dated 07/14/2003.			
Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description			
							Water Level	Well Construction Flush Mount		
470	4	4		0		CL	Silty Sandy Clay, gray, abundant rootlets, soft, crumbly, dry to damp			
				0		ML	Weathered Shale, black to dark gray, with silt, soft, crumbly, fissile			
465	5	4		0		CL	Silty Sandy Clay, strong brown, black, and gray mottled, abundant rootlets, firm, plastic, wet			
				0		MH	Sandy Silt, brown, occasional dark brown mottling, soft, crumbly, saturated			
460	10	4		0		CL	Silty Clay, brown, occasional dark brown mottling, soft, crumbly, saturated			
				0			Silty Clayey Silt, brown and strong brown, occasional dark brown mottling, soft, wet to saturated			
455	15	4		0		CL	Silty Sandy Clay, strong brown, gray mottling, stiff to hard, plastic, moist			
				0		MH	Silty Sandy Clay, strong brown, occasional pale gray mottling, stiff to hard, moist			
450	20	4		0		CL	Silty Clay, pale brown, soft, wet			
				0			Silty Clay, gray, occasional strong brown mottling, stiff, plastic, moist			
445	25	4		0		CL	Silty Clay, strong brown, occasional gray to pale gray mottling, stiff, plastic, moist			
				0			Silty Sandy Clay, strong brown, occasional dark brown mottling, firm, plastic moist			
440	30	0.5		0		GM	Silicate Sandy Silt, strong brown, with sand coarse, with gravel, fine, soft, loose wet to water saturated			
				0		SC	Silty Clay, strong brown and pale gray, stiff to hard			
440	30	0.5		0		CL	Silty Sandy Clay, strong brown, occasional pale gray mottling, stiff, slightly crumbly to plastic, moist			
				0			Silty Sandy Clay, strong brown, with gray mottling, stiff, plastic, wet			
440	30	0.5		0		GM	Silicate Clayey Sand, strong brown to brown, with gravel, fine, dense, wet to water saturated			
				0		GC	Silty Sandy Clay, strong brown, with gray mottling, stiff, plastic, wet			
440	30	0.5		0		CL	Silicate Sandy Gravel, fine, loose to flowing, water saturated, grades to clayey gravel			
				0		SM	Clayey Gravel, stiff, crumbly, wet to water saturated			
440	30	0.5		0		CL	Gravelly Clay, strong brown, fine, hard, plastic, wet to moist			
				0		GP	Silicate Sandy Gravel, strong brown to brown, fine, dense, water saturated			
440	30	0.5		0		CL	Gravelly Silty Sand, strong brown, fine, dense, crumbly water saturated			
				0			Sandy Clay, strong brown, with very pale gray mottling, with gravel, fine to coarse, hard, crumbly, moist to wet			
440	30	0.5		0		CL	Sandy Gravel, brown to strong brown, fine, hard, dense, wet			
				0			Sandy Silty Clay, pale gray, with strong brown mottling, stiff to hard, plastic, moist			
440	30	0.5		0		CL	Silty Clay, strong brown to orange, with occasional gray mottling, fissile to slightly blocky texture (weathered shale)			

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
435	40						Shale, gray, hard, slightly crumbly, fissile, moist		
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				
<u>Well Construction:</u> Blank Casing: Sch. 40 PVC 2 Inch 0 FT to 13 FT Screen: Sch. 40 2 Inch 0.010 PVC 18 FT to 28 FT Annular Fill: Cement Grout 0 FT to 14 FT Bentonite 14 FT to 16 FT Sand 16 FT to 28 FT							Borehole Dia.: 6 inches	Total Depth: 28.0 feet		
Project Number: 3433244A Project Name: Whirlpool Corporation Remarks: Lithology from MW-41 drilling log dated 07/15/2003.										
Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description			
								Water Level		
								Well Construction Flush Mount		
470		4		0		CL	Silty Clay, gray, abundant rootlets, occasional iron nodules, firm, plastic to slightly crumbly, moist			
465		5		0			Silty Clay, gray, with orange mottling, abundant rootlets, occasional iron nodules up to 1/4" diameter, firm to stiff, plastic, moist			
460		4		0			Silty Sandy Clay, brown, with gray mottling, slightly plastic to slightly crumbly, moist			
455		10		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			
450		4		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			
445		15		0			Silty Clay, pale brown, with strong brown and gray mottling, hard, plastic, moist, soft and sandy at 7' bgs			
440		20		0			Silty Clay, gray and strong brown mottled, soft, plastic, wet			
440		25		0			Silty Sand, brown, abundant dark gray grain, medium grained, loose to flowing, saturated			
440		30		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			
440		31		0			Silty Clay, pale gray, occasional orange to strong brown mottling, hard, plastic, moist			
440		32		0			Silty Clay as above, occasional iron nodules up to 18" diameter			
440		33		0			Silty Clay as above, with pale gray, sandy			
440		34		0		SM CL GC GM	Sand to Silty Sand, strong brown, minor pale brown mottling, medium, dense, saturated			
440		35		0			Gravelly Silty Sandy Clay, strong brown, fine to coarse gravel, hard, crumbly, moist to wet			
440		36		0			Silty Sandy Clayey Gravel, strong brown, fine to coarse gravel, medium sand, dense, crumbly, saturated			
440		37		0			Silty Sandy Gravel, strong brown, fine to coarse gravel, coarse sand, dense, crumbly, saturated			
440		38		0			Silty Sandy Gravel, strong brown, fine gravel, dense, saturated			
440		39		0			Silty Clay and Shale, strong brown, to orange grading to dark gray to black, fissile, moist (logged from cuttings)			
440		40		0						

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			
<u>Well Construction:</u> Blank Casing: Sch. 40 PVC 2 Inch 0 FT to 13 FT Screen: Sch. 40 2 Inch 0.010 PVC 13 FT to 18 FT Annular Fill: Cement Grout 0 FT to 9 FT Bentonite 9 FT to 11 FT Sand 11 FT to 18 FT							Borehole Dia.: 6 inches	Total Depth: 18.0 feet
							Project Number: 3433244A	
							Project Name: Whirlpool Corporation	
							Remarks: Lithology from MW-50 drilling log dated 11/13/2003.	
Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	
								Water Level
							Well Construction Flush Mount	
460	3						No Recovery, sediment to soft	
455	5	4					Clayey Silt, dark brown, abundant rootlets, trace gravel, fine, non-plastic, damp	
							Silty Clay, brown, red and pale brown mottled, with some yellowish red, with rootlets, stiff, slightly plastic, damp	
450	10	4					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	
							Silty Clay, brown and pale brown mottled, soft, plastic, dry to damp, with a parting of clayey silt, yellowish red, loose	
445	15	4					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	
							Silty Clay, brown, with trace yellowish red mottling, plastic, wet	
440	20	2.6					Clay, reddish brown, stiff, plastic, damp	
							Silty Clay, gray, stiff to firm, slightly plastic, damp, with lamination of silty clayey sand, yellowish red, trace iron concretions, non-plastic	
435	25						Clay, yellowish red, very stiff, plastic, moist, becoming hard towards base, decreasing moisture towards base	
							Gravelly Clay, red and dark brown mottled, abundant gravel, fine, abundant iron and black staining, very dense, hard, damp to moist	
430	30						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	
							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	
							Clay, dark gray, hard, plastic, weathered, fissile to shale at 17.8' bgs	

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 Bentonite Sand		0 FT to 15 FT 15 FT to 17 FT 17 FT to 21 FT					Remarks: Lithology from MW-55 drilling log dated 11/17/2004.			
Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description		Water Level	Well Construction Flush Mount
-465				37.9		MH CL	Clayey Silt, dark brown, abundant root hairs and organic debris, loose, moist, strong pine odor Silty Clay, grayish 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 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 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 Silty Clay, medium to dark gray, with orange and light brown mottling, soft, plastic, moist Silty Clay, medium to dark gray, with orange and light brown mottling, soft, plastic, moist 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 Sandy Clay, light gray, with orange mottling, occasional sand veins, soft, plastic, moist Silty Clay, red light brown, very soft, plastic, moist Silty Sandy Clay, grayish light brown, rare silt veins, very soft, plastic, moist Sandy Silty Clay, light gray, with orange and gray medium brown, occasional silt veins, stiff, plastic, moist Sandy Clay, orange, with light gray and medium brown mottling, very soft, slightly plastic, moist			
-460	5	4				CL				
-455	10	4				SC CL				
-450	15	4				SM CL				
-445	20	1		0						
-435	25									
-435	30									

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								

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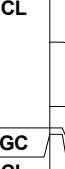
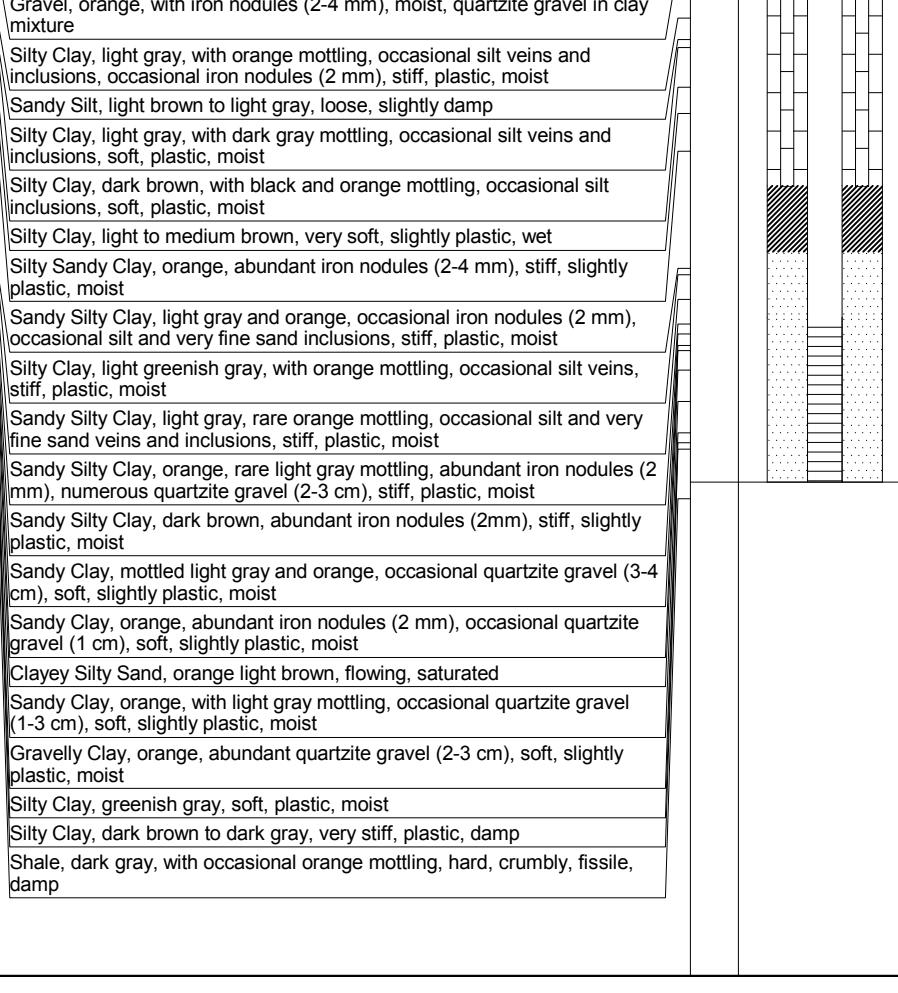
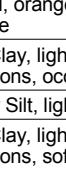
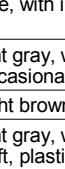
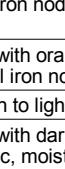
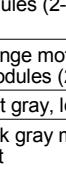
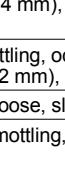
Site ID: MW-56R	Date(s): 6/25/2015
Location: Fort Smith, Arkansas	
Logged By: N. Zurweller	Checked By: W. Weber

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
<u>Well Construction:</u>	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 Bentonite Sand	0 FT to 14 FT 14 FT to 16 FT 16 FT to 20 FT	Remarks: Lithology from MW-56 drilling log dated 11/18/2004.

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction Flush Mount
460	1.7				NA		No Recovery, extremely wet conditions		
455	5					CL	Silty Sandy Clay, grayish medium brown, with orange mottling, soft, plastic, moist		
450	4						Silty Sandy Clay, dark gray, with occasional light gray mottling, occasional very fine sand and silt inclusions, stiff, plastic, moist		
445	10						Silty Sandy Clay, dark gray, with light gray mottling, occasional very fine and silt inclusions, occasional iron nodules (1-2 mm), stiff, plastic, moist		
440	4						Silty Clay, light gray, with dark gray mottling, occasional silt veins, occasional iron nodules (2 mm), stiff, plastic, moist		
435	15						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		
430	4						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		
	20						Silty Sandy Clay, orange, with light gray mottling, occasional iron nodules (2-4 mm), occasional silt and very fine sand veins, stiff, plastic, moist		
	1						Sandy Clay, light brown, with orange and black mottling, with gravel, abundant iron nodules (1 mm - 1 cm), stiff, slightly plastic, moist		
	5						Sandy Clay, light brown, with orange and black mottling, stiff, plastic, moist		
	25						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		
	30						Silty Sand, orange light brown, loose, wet		
	35						Clayey Sand, orange, abundant quartzite gravel (1 cm), occasional iron nodules (2 mm), loose, wet		
	40						Sandy Clay, orange, abundant quartzite gravel (1-2 cm), abundant iron nodules (2 mm), stiff, slightly plastic, wet		
	45						Sandy Clay, orange, abundant quartzite gravel (1 cm), stiff, slightly plastic, wet		
	50						Clayey Sand, light brown, loose, saturated		
	55						Gravelly Clay, orange, abundant quartzite gravel (1-3 cm), abundant iron nodules (2 mm-1 cm), stiff, moist		
	60						Sandy Clay, red light brown, very soft, slightly plastic, saturated		
	65						Gravelly Clay, orange, abundant iron nodules (2 mm), stiff, slightly plastic, moist		
	70						Silty Sandy Clay, orange, with light and medium gray mottling, very stiff, plastic, moist		
	75						Shale, dark gray, with occasional orange mottling, hard, fissile, crumbly, damp		

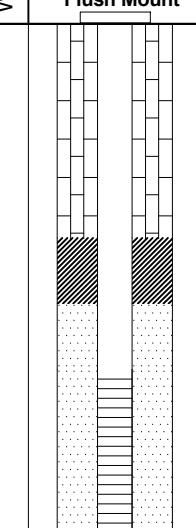
Page 1 of 1

RAMBOLL ENVIRON
1807 Park 270 Drive Suite 320, St. Louis, MO 63146

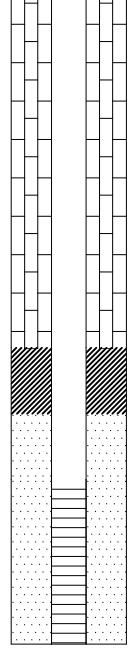
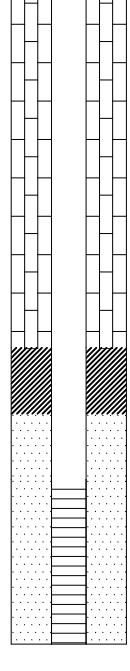
							Site ID: MW-57R	Date(s): 6/25/2015		
							Location: Fort Smith, Arkansas			
							Logged By: N. Zurweller	Checked By: W. Weber		
Contractor: Walker-Hill Environmental				Purpose: Monitoring Well						
Drilling Method: Sonic				GS Elevation: 463.16 ft amsl			TOC Elevation: 462.92 ft amsl			
Sampling Method: Direct Push (2004)				North: 369805.80			East: 591693.01			
<u>Well Construction:</u>				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 Bentonite Sand				0 FT to 11 FT 11 FT to 13 FT 13 FT to 20 FT			Remarks: Lithology from MW-57 drilling log dated 11/18/2004.			
Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description		Water Level	Well Construction Flush Mount
460	4	4		0		CL GC CL ML	Silty Sandy Clay, medium brown, occasional iron nodules (2 mm), very soft, plastic, saturated			
							Silty Sandy Clay, light to medium brown, with orange mottling, very fine, stiff, plastic, moist			
							Sandy Clay, medium brown, with orange mottling, very fine, stiff, plastic, slightly damp			
							Gravel, orange, with iron nodules (2-4 mm), moist, quartzite gravel in clay mixture			
	5	4	0		CL SC CL	Silty Clay, light gray, with orange mottling, occasional silt veins and inclusions, occasional iron nodules (2 mm), stiff, plastic, moist				
						Sandy Silt, light brown to light gray, loose, slightly damp				
						Silty Clay, light gray, with dark gray mottling, occasional silt veins and inclusions, soft, plastic, moist				
						Silty Clay, dark brown, with black and orange mottling, occasional silt inclusions, soft, plastic, moist				
	455	10	4	0		CL SC CL	Silty Clay, light to medium brown, very soft, slightly plastic, wet			
							Silty Sandy Clay, orange, abundant iron nodules (2-4 mm), stiff, slightly plastic, moist			
							Sandy Silty Clay, light gray and orange, occasional iron nodules (2 mm), occasional silt and very fine sand inclusions, stiff, plastic, moist			
							Silty Clay, light greenish gray, with orange mottling, occasional silt veins, stiff, plastic, moist			
	450	15	4	0		SC CL SC	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			
							Sandy Silty Clay, dark brown, abundant iron nodules (2mm), stiff, slightly plastic, moist			
							Sandy Clay, mottled light gray and orange, occasional quartzite gravel (3-4 cm), soft, slightly plastic, moist			
445	20	0.5	0		CL SC CL	Sandy Clay, orange, abundant iron nodules (2 mm), occasional quartzite gravel (1 cm), soft, slightly plastic, moist				
						Clayey Silty Sand, orange light brown, flowing, saturated				
						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				
440	25	0	0		CL SC CL	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				
						435	30	0	0	
430										

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				
<u>Well Construction:</u> Blank Casing: Sch. 40 PVC 2 Inch 0 FT to 14 FT Screen: Sch. 40 2 Inch 0.010 PVC 14 FT to 19 FT Annular Fill: Cement Grout 0 FT to 10 FT Bentonite 10 FT to 12 FT Sand 12 FT to 19 FT							Borehole Dia.: 6 inches	Total Depth: 19.0 feet		
Project Number: 3433244A Project Name: Whirlpool Corporation Remarks: Lithology from MW-58 drilling log dated 11/19/2004.										
Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description			
460	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			
455	5	4		0		CL	Silty Sandy Clay, medium brown, with occasional orange mottling, occasional iron nodules (2 mm), very soft, plastic, saturated			
450	10	4		0		CL	Silty Sandy Clay, dark brown, with red mottling, occasional silt and sand veins and inclusions, very fine, soft, plastic, moist			
445	15	4		0		SC	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			
440	20	3		0		SM	Silty Clay, light greenish gray, occasional silt and sand veins and inclusions, very fine, occasional iron nodules (2 mm-1 cm), stiff, plastic, moist			
435	25			0		CL	Sandy Clay, orange, abundant iron nodules (2-4 mm), occasional quartzite gravel (1 cm), stiff, plastic, moist			
430	30			0		SC	Sandy Clay, light gray, with orange and black mottling, stiff, slightly plastic, moist			
				0		CL	Clayey Sand, light gray, with orange and black mottling, dense, 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-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				
<u>Well Construction:</u> Blank Casing: Sch. 40 PVC 2 Inch 0 FT to 10.5 FT Screen: Sch. 40 2 Inch 0.010 PVC 10.5 FT to 15.5 FT Annular Fill: Cement Grout 0 FT to 6.5 FT Bentonite 6.5 FT to 8.5 FT Sand 8.5 FT to 15.5 FT							Borehole Dia.: 6 inches	Total Depth: 15.5 feet		
Project Number: 3433244A Project Name: Whirlpool Corporation Remarks: Lithology from MW-60 drilling log dated 04/04/2005.										
Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description			
								Water Level		
460		4		0		CL	Sandy Clay, dark brown, minor yellow red mottling, abundant root and root hairs, very soft, plastic, moist			
455		5		3.3		SC	Sandy Clay, dark brown, occasional root hairs, very soft, slightly plastic, damp			
450		4		0		CL	Clayey Sand, brown, loose, saturated			
445		10		0		CL	Sandy Clay, brown, occasional iron nodules (2 mm), very soft, plastic, very moist			
440		15		0		CL	Sandy Clay, occasional iron nodules (2 mm), very soft, slightly plastic, saturated			
435		20		0		CL	Sandy Clay, mottled light gray, yellow red, and red brown, occasional iron nodules (2 mm), stiff, slightly plastic, very moist			
430		25		0		CL	Sandy Clay, red brown, abundant iron nodules (2 mm), stiff, plastic, moist			
430		30		0		CL	Sandy Clay, mottled light gray, yellow red and red brown, occasional iron nodules (2 mm), stiff, slightly plastic, very moist			
				0		CL	Sandy Clay, red brown, abundant iron nodules (2 mm), stiff, plastic, moist			
				0		CL	Sandy Clay, gray brown, very soft, slightly plastic, saturated			
				0		CL	Sandy Clay to Clayey Sand, dark grayish brown, minor yellow red mottling, abundant iron nodules (2 mm), abundant coarse sand, stiff, slightly plastic, damp			
				0		CL	Sandy Clay to Clayey Sand, mottled yellow red, and greenish gray, abundant iron nodules (2 mm), abundant coarse sand, stiff, very slightly plastic, damp			
				0		CL	Sandy Clay, mottled yellow red, light gray and light brown, occasional iron nodules (2 mm), stiff, slightly plastic, moist			
				0		CL	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			
				0		CL	Shale, dark gray, minor yellow red mottling, hard, slightly damp, fissile, weathered			

 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					
<u>Well Construction:</u>				Borehole Dia.: 6 inches	Total Depth: 15.5 feet						
Blank Casing: Sch. 40 PVC 2 Inch				0 FT to 10.5 FT							
Screen: Sch. 40 2 Inch 0.010 PVC				10.5 FT to 15.5 FT							
Annular Fill: Cement Grout Bentonite Sand				0 FT to 6.5 FT	Project Number: 3433244A						
				6.5 FT to 8.5 FT	Project Name: Whirlpool Corporation						
				8.5 FT to 15.5 FT	Remarks: Lithology from MW-61 drilling log dated 04/04/2005.						
Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description				
								Water Level			
							Well Construction Flush Mount				
455	4			0		CL	Sandy Clay, dark brown, abundant root hairs, very soft, slightly plastic, very soft, moist				
				0			Sandy Clay, brown, slightly plastic, very soft, occasional root hairs, moist				
450	5	4		76			Sandy Clay, mottled yellow red and brown, occasional iron nodules (2mm), occasional quartzite gravel (2 cm), soft, very slightly plastic, damp				
				83			Sandy Clay, red brown, abundant iron nodules (2-4 mm), stiff, very slightly plastic, damp				
445	10	4		254			Sandy Clay, yellow red, with minor light brown mottling, occasional iron nodules (2-4 mm), stiff, very slightly plastic, slightly damp				
				763			Sandy Clay, red brown, abundant iron nodules (2-4 mm), stiff, very slightly plastic, damp				
440	15	4		524			Sandy Clay, mottled yellow red and light gray, soft, slightly plastic, slightly damp				
				757		SC	Sandy Clay, red brown, abundant iron nodules (2-4 mm), stiff, very slightly plastic, damp				
435	20					CL	Sandy Clay, red brown, very soft, slightly plastic, saturated				
							Gravelly Sandy Clay, with gravel (quartzite 1-2 cm), soft, slightly plastic, damp				
430	25						Silty Clay, light brown, stiff, slightly plastic, damp				
							Gravelly Clay, yellow brown, abundant quartzite (1-3 cm), soft, plastic, damp				
425	30						Sandy Clay, yellow brown, occasional iron nodules (2 mm), occasional quartzite (2 mm-1 cm), soft, slightly plastic, damp				
							Clayey Sand, coarse-grained sand, occasional quartzite (1-2 cm), loose, saturated				
							Silty Clay, yellow red, stiff, slightly plastic, damp				
							Shale, dark gray, with minor yellow red mottling, hard, fissile, slightly damp				

 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					
<u>Well Construction:</u>				Borehole Dia.: 6 inches	Total Depth: 20.0 feet						
Blank Casing: Sch. 40 PVC 2 Inch				0 FT to 15 FT							
Screen: Sch. 40 2 Inch 0.010 PVC				15 FT to 20 FT							
Annular Fill: Cement Grout				0 FT to 11 FT	Project Number: 3433244A						
Bentonite				11 FT to 13 FT	Project Name: Whirlpool Corporation						
Sand				13 FT to 20 FT	Remarks: Lithology from MW-62 drilling log dated 04/04/2005.						
Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description				
								Water Level			
								Well Construction Flush Mount			
460	1	1		0		CL	Silty Clay, dark brown with minor yellowish-red mottling, abundant root hairs, loose, moist, poor recovery				
							Silty Clay, dark brown, occasional root hairs, very soft, plastic, moist				
							Silty Clay, brown with occasional yellow red mottling, trace root hairs, very soft, plastic, moist				
							Silty Clay, brown with occasional yellow red mottling, very soft, plastic, wet				
455	5	4		0		CL	Silty Clay, brown with occasional red mottling, very soft, plastic, moist				
							Silty Clay, brown with occasional red mottling, very soft, plastic, moist				
							Silty Clay, brown with occasional yellow red mottling, occasional light brown silt to very fine sandy veins and inclusions, stiff, slightly plastic, damp				
							Silty Clay, brown with occasional red mottling, very soft, plastic, moist				
450	10	4		0		SC	Silty Sandy Clay, brown with occasional yellow red and light brown, occasional silt and very fine sand veins, mottling, stiff, slightly plastic, damp				
							Silty Sandy Clay, light gray with occasional yellow red mottling, occasional silt and very fine sand veins, stiff, slightly plastic, damp				
							Silty Sandy Clay, mottled light gray and yellow red, occasional iron nodules (1-3 mm), stiff, slightly plastic, damp				
							Silty Sandy Clay, mottled light gray and yellow red, stiff, slightly plastic, damp				
445	15	4		0		CL	Sandy Clay, yellow red with minor light gray mottling, abundant iron nodules (2-4 mm), stiff, very slightly plastic, damp				
							Sandy Gravelly Clay, yellow red, abundant iron nodules (2-4mm), abundant quartzite (1 cm), stiff, very slightly plastic, damp				
							Silty Sandy Clay, mottled yellow red, light gray and dark gray, soft, plastic, damp				
							Sandy Gravelly Clay, yellow red, abundant iron nodules (2-4mm), abundant quartzite (1 cm), stiff, very slightly plastic, damp				
440	20	1		0		SC	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				
							Gravelly Clayey Sand, mottled light brown and yellow red, with clay, abundant quartzite (1-3 cm), loose, damp				
							Sandy Clay, brown, very soft, slightly plastic, saturated				
435	25						Shale, dark gray, hard, fissile, slightly damp				
430	30										

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 Bentonite Sand		0 FT to 11 FT 11 FT to 13 FT 13 FT to 20 FT		Remarks: Lithology from MW-63 drilling log dated 04/05/2005.						
Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description		Water Level	Well Construction Flush Mount
460	2			0		MH CL	Clayey Silt, brown, minor yellowish red mottling, abundant root hairs, loose, moist Silty Clay, brown, rare root hairs, soft, plastic, moist Silty Sandy Clay, soft, very slightly plastic, saturated Sandy Clay, brown, occasional red mottling, soft, plastic, moist Sandy Clay, brown, occasional yellow red mottling, soft, plastic, moist No Recovery Sandy Clay, brown, with minor red mottling, soft, plastic, moist Sandy Clay, brown, minor yellow red mottling, very soft, very slightly plastic, saturated Sandy Clay, mottled brown, gray, and yellow red, soft, plastic, moist Sandy Clay, mottled brown, gray, and yellow red, stiff, plastic, moist Sandy Clay, mottled gray and yellow red, soft, plastic, moist Sandy Clay, yellow red, minor brown mottling, hard, plastic, damp Sandy Clay to Clayey Sand, yellow red, minor light brown mottling, abundant sand, coarse, stiff, very slightly plastic, damp			
455	5	4		0		MH CL				
450	10	2.5		0		MH CL				
445	15	2.5		0		MH CL				
440	20	1.5		0		SC CL	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 Sandy Clay, yellow red, occasional quartzite (1-3 cm), stiff, slightly plastic, damp Clayey Sand, light brown, occasional quartzite (2-5 mm), loose, damp Silty Clay, yellow red, hard, becoming fissile, slightly plastic, damp Shale, dark gray, hard, fissile, very slightly damp			
435	25									
430	30									

 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			
<u>Well Construction:</u> Blank Casing: Sch. 40 PVC 2 Inch 0 FT to 12 FT Screen: Sch. 40 2 Inch 0.010 PVC 12 FT to 17 FT Annular Fill: Cement Grout 0 FT to 8 FT Bentonite 8 FT to 10 FT Sand 10 FT to 17 FT							Borehole Dia.: 6 inches	Total Depth: 17.0 feet
							Project Number: 3433244A	
							Project Name: Whirlpool Corporation	
							Remarks: Lithology from MW-67 drilling log dated 03/29/2006.	
Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	
455	4					CL	Silty Sandy Clay, dark brown, abundant rootlets, firm, slightly crumbly, moist, saturated from 3-4' bgs	
455	5						Silty Sandy Clay, pale gray, black and red mottling, occasional rootlets, occasional gravel, fine, firm, moist, slightly crumbly	
450	4						Silty Sandy Clay, pale gray, red mottling, firm, slightly crumbly, moist	
450	10						Silty Sandy Clay, pale gray, black and red mottling, occasional gravel, fine, firm, slightly crumbly, moist	
445	4						Gravelly Clay, red, fine to coarse gravel, firm, crumbly, moist	
445	15						Gravelly Clay, brown, fine to coarse gravel, firm, crumbly, moist	
440	20						Clay (weathered shale), black, with very pale brown silt lenses, firm, fissile, moist	
435	25							
430	30							
425								

APPENDIX B
Waste Manifest Documentation



American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

Non-Hazardous Waste Manifest

504250

D/u

Generator

Generator's Name: Whirlpool Corp
 Mailing Address: 6400 Jenny Lane Rd
Ft Smith, OK
 Point of Generation
 Address: Same
 City _____ State _____ Zip _____
 Contact: Nick 636-579-6583
 Name _____ Phone _____

Manifest
 Job No. MW 233W PC02
 Bill to Name: ERS
 Address: 1105 10th, Peoria, IL 61016
 City Tulsa State OK Zip 74106
 Contact: Kew Dickworth 918 832-8888
 Name _____ Phone _____

Common Name of Waste Material

Purge water
Flame
Drum

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.

Kew Dickworth
 Generator Authorized Agent Name

J. Bennett
 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. I 53734 State: OK
 USDOT No. 75510

I hereby certify that the above material was picked up at the generator site listed above.

Virginia Smith 7-3-15
 Driver Signature Ship Date

I hereby certify that the above named material was delivered without incident to the destination listed below.

Virginia Smith 7-3-15
 Driver Signature Delivery Date

Destination

American Environmental Landfill, Inc.
 212 N. 177th W Ave.
 Sand Springs, OK 74063

Phone: (918) 245-7786
 Fax: (918) 245-7774
 Permit No: 3557021

I hereby certify that the above named material has been accepted and to the best of my knowledge the foregoing is accurate.

Name of Authorized Agent

Signature

Receipt Date



American Environmental Landfill, Inc.

Leading the Industry in Environmental Compliance

Virginia S.

Non-Hazardous Waste Manifest

504532

Truck

Generator

Generator's Name: Whirlpool Corp
 Mailing Address: 16400 Jenny Lane Rd
 Ft Smith ARK
 City _____ State _____ Zip _____
 Point of Generation Address: Same
 City _____ State _____ Zip _____
 Contact: Mike 636-519-6883
 Name _____ Phone _____

Common Name of Waste Material

Soil Borings

Manifest Job No. MW233WPC01
 Bill to Name: ERS
 Address: 1105 North Peoria
Tulsa OK 74106
 City _____ State _____ Zip _____
 Contact: Kevin Duckworth 918-632-8688
 Name _____ Phone _____

Container No.	Type	Total Quantity	Unit
<u>Railcar</u>	<u>10yd</u>	<u>4.1BT</u>	

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

John Snider
Signature

7-3-15
Shipment Date

Transporter

Transporter Name: ERS
 Address: 1105 North Peoria
 City, State Zip: Tulsa OK 74106

Driver Name (Print): Virginia Smith
 Tag No. _____ State: OK
 USDOT No. _____

I hereby certify that the above material was picked up at the generator site listed above.

I hereby certify that the above named material was delivered without incident to the destination listed below.

X
Driver Signature

Ship Date

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.

Name of Authorized Agent

Signature

7-6-15
Receipt Date

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 ($\mu\text{g}/\text{kg}$) or 0.010 milligrams per kilograms (mg/kg), which is less than the ADEQ remedial action level of 0.129 mg/kg¹. The soil boring lithology is presented in the well construction log provided in Appendix A. The soil analytical report is included as Appendix B.

¹ADEQ remedial action level based on site-specific risk based protection of groundwater soil screening level (Risk Evaluation Report June 2007)
1/3

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.

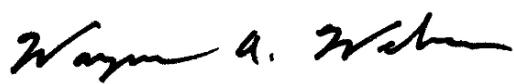
Yours sincerely,



Michael F. Ellis, PE

Principal

D +1 314 590 2967
M +1 314 229 5617
mellis@environcorp.com



Wayne Weber, PG, PE

Manager

D +1 314 590 2973
M +1 314 680 5025
wweber@environcorp.com

LIST OF ATTACHMENTS

- Figure 1: Location of MW-182
- Appendix A: Monitoring Well Construction Log
- Appendix B: Pace Analytical Report for Soil Samples

FIGURE



APPENDIX A
Monitoring Well Construction Log

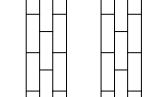
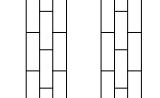
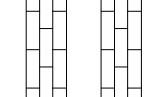
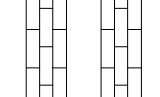
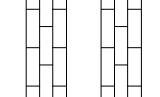
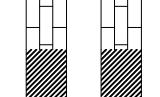
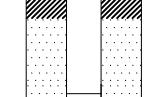
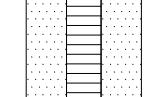
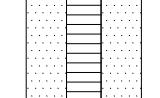
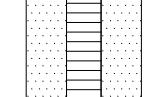
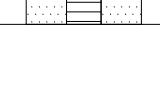
RAMBOLL ENVIRON
1807 Park 270 Drive Suite 320, St. Louis, MO 63146

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
Sampling Method:	Sonic	North:	367899.51
Well Construction:		Borehole Dia.:	6 inches
Blank Casing:	Sch. 40 PVC 2 Inch	Total Depth:	31.0 feet
Screen:	Sch. 40 2 Inch 0.010 PVC	Project Number:	3433244A
Annular Fill:	Cement Grout Bentonite Sand	Project Name:	Whirlpool Corporation
		Remarks:	

Elevation (ft)	Depth (ft)	Recovery (feet)	Sample No.	PID (ppm)	Graphic Log	USCS Code	Material Description	Water Level	Well Construction
470	5	5	MW-182 11.5FT	0			Topsoil, light brown, with root hairs, loose, dry Silty Fill, light brown, with gravel, coarse, subangular, loose, dry		
465	10	5		0		MH	Gravel Fill, very dark brown, with silt, coarse, subangular, loose, dry		
460	15	5		0		CL	Clayey Silt, yellow brown, with light gray and red brown mottling, trace gravel, fine, subrounded, trace black nodules, slightly stiff, slightly plastic, moist		
455	20	5		12		MH	Clayey Silt, red brown, with light gray mottling, trace black nodules, trace sand, fine, slightly stiff, plastic, moist		
450	25	5		11.8		CL	Silty Clay, yellow brown, with light gray mottling, trace black nodules, stiff, plastic to slightly plastic, moist		
445	30	1		0.8		MH	Clayey Silt, yellow brown, with gray mottling, trace black nodules, with sand, fine, soft, slightly plastic, moist		
				0.1		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		
				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		
				0			Silty Clay, red brown, with sand, medium to coarse, with gravel, fine to coarse, slightly stiff, cohesive, moist		
			0		MH	Clayey Silt, yellow brown, trace gravel, fine, subrounded, hard, laminated, dry			
							Shale, very dark gray, hard, laminated, dry		

Page 1 of 1

APPENDIX B
Pace Analytical Report for Soil Samples

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



REPORT OF LABORATORY ANALYSIS

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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

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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

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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

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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.

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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

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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

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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

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QUALITY CONTROL DATA

Project: FORT SMITH, AR

Pace Project No.: 60197312

QC Batch:	MSV/70386	Analysis Method:	EPA 8260
QC Batch 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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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	MS		MSD		MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
		60197255032	Result	Spike Conc.	Spike Conc.						
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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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60197312

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		1594454		1594455														
Parameter	Units	MS		MSD		MS		MSD		MS		MSD		% Rec	Limits	RPD	Max RPD	Max Qual
		60197255032	Result	Spike Conc.	Spike Conc.	Result	MSD	Result	% Rec	MSD % Rec	MSD % Rec	MSD % Rec	MSD % Rec					
1,1-Dichloroethane	ug/kg	ND	104	104	117	104	113	104	101	31-128	12	32	32	32	32	32	32	
1,1-Dichloroethene	ug/kg	ND	104	104	113	99.3	109	96	38-128	13	35	35	35	35	35	35	35	
1,2-Dichloroethane	ug/kg	ND	104	104	108	96.7	104	93	22-143	11	31	31	31	31	31	31	31	
1,2-Dichloropropane	ug/kg	ND	104	104	106	94.7	102	91	22-131	11	32	32	32	32	32	32	32	
2-Butanone (MEK)	ug/kg	ND	519	518	546	491	104	94	11-136	11	41	41	41	41	41	41	41	
2-Hexanone	ug/kg	ND	519	518	568	505	109	97	10-152	12	43	43	43	43	43	43	43	
4-Methyl-2-pentanone (MIBK)	ug/kg	ND	519	518	552	492	106	95	10-144	11	39	39	39	39	39	39	39	
Acetone	ug/kg	ND	519	518	576	508	109	96	10-144	12	42	42	42	42	42	42	42	
Benzene	ug/kg	ND	104	104	112	99.5	108	96	32-137	12	27	27	27	27	27	27	27	
Bromodichloromethane	ug/kg	ND	104	104	106	96.1	102	93	16-139	10	34	34	34	34	34	34	34	
Bromoform	ug/kg	ND	104	104	98.4	86.3	95	83	10-146	13	39	39	39	39	39	39	39	
Bromomethane	ug/kg	ND	104	104	114	106	110	102	10-138	8	48	48	48	48	48	48	48	
Carbon disulfide	ug/kg	ND	104	104	103	91.3	99	88	28-141	12	34	34	34	34	34	34	34	
Carbon tetrachloride	ug/kg	ND	104	104	107	96.0	103	93	32-137	11	34	34	34	34	34	34	34	
Chlorobenzene	ug/kg	ND	104	104	93.4	83.3	90	80	12-133	11	34	34	34	34	34	34	34	
Chloroethane	ug/kg	ND	104	104	115	101	111	97	12-137	13	35	35	35	35	35	35	35	
Chloroform	ug/kg	ND	104	104	110	98.4	106	95	25-132	11	32	32	32	32	32	32	32	
Chloromethane	ug/kg	ND	104	104	95.1	85.8	92	83	10-156	10	41	41	41	41	41	41	41	
cis-1,2-Dichloroethene	ug/kg	ND	104	104	104	91.9	101	89	27-132	13	34	34	34	34	34	34	34	
cis-1,3-Dichloropropene	ug/kg	ND	104	104	105	93.3	101	90	10-138	12	33	33	33	33	33	33	33	
Dibromochloromethane	ug/kg	ND	104	104	102	91.6	99	88	5-142	11	36	36	36	36	36	36	36	
Ethylbenzene	ug/kg	ND	104	104	93.9	84.3	90	81	18-149	11	28	28	28	28	28	28	28	
Methylene chloride	ug/kg	ND	104	104	110	97.5	106	94	15-137	12	35	35	35	35	35	35	35	
Styrene	ug/kg	ND	104	104	90.7	81.4	87	78	10-146	11	39	39	39	39	39	39	39	
Tetrachloroethene	ug/kg	ND	104	104	93.2	82.9	90	80	22-131	12	32	32	32	32	32	32	32	
Toluene	ug/kg	ND	104	104	101	89.6	97	86	26-141	12	28	28	28	28	28	28	28	
trans-1,2-Dichloroethene	ug/kg	ND	104	104	111	98.7	106	95	33-125	11	32	32	32	32	32	32	32	
trans-1,3-Dichloropropene	ug/kg	ND	104	104	108	96.0	104	93	10-135	11	36	36	36	36	36	36	36	
Trichloroethene	ug/kg	ND	104	104	187	163	180	158	29-132	13	32 M1	32 M1	32 M1	32 M1	32 M1	32 M1	32 M1	
Vinyl chloride	ug/kg	ND	104	104	110	97.4	106	94	28-139	12	34	34	34	34	34	34	34	
Xylene (Total)	ug/kg	ND	312	311	272	245	87	79	11-154	11	33	33	33	33	33	33	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

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QUALITY CONTROL DATA

Project: FORT SMITH, AR

Pace Project No.: 60197312

QC Batch:	MSV/70530	Analysis Method:	EPA 8260
QC Batch 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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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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QUALITY CONTROL DATA

Project: FORT SMITH, AR
Pace Project No.: 60197312

QC Batch:	PMST/10882	Analysis Method:	ASTM D2974
QC Batch 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	

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

This report shall not be reproduced, except in full,

without the written consent of Pace Analytical Services, Inc..

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.

REPORT OF LABORATORY ANALYSIS

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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		

REPORT OF LABORATORY ANALYSIS

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Sample Condition Upon Receipt

WO# : 60197312



60197312

Client Name: Environ

Optional

Courier: FedEx UPS VIA Clay PEX ECI Pace Other Client

Proj Due Date:

Tracking #: 8047 3340 6957Pace Shipping Label Used? Yes No

Proj Name:

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
1-239 / -262Type of Ice: Wet Blue None Samples received on ice, cooling process has begun.
(circle one)Cooler Temperature: 3.1Date and initials of person examining contents: JB 6/27

Temperature should be above freezing to 6°C

Chain of Custody present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	1.
Chain of Custody filled out:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	2.
Chain of Custody relinquished:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	3.
Sampler name & signature on COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	4.
Samples arrived within holding time:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	5.
Short Hold Time analyses (<72hr):	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	6. <u>Kits</u>
Rush Turn Around Time requested:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	7.
Sufficient volume:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	8.
Correct containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace containers used:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	9.
Containers intact:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	10.
Unpreserved 5035A soils frozen w/in 48hrs?	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	11. <u>356117</u>
Filtered volume received for dissolved tests?	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	12.
Sample labels match COC:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Includes date/time/ID/analyses	Matrix: <u>9L</u>	13.
All containers needing preservation have been checked.	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
All containers needing preservation are found to be in compliance with EPA recommendation.	<input type="checkbox"/> Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> N/A	14.
Exceptions: VOA, Coliform, O&G, WI-DRO (water)	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	Initial when completed <input type="checkbox"/> Lot # of added preservative
Trip Blank present:	<input checked="" type="checkbox"/> Yes <input type="checkbox"/> No <input type="checkbox"/> N/A	
Pace Trip Blank lot # (if purchased): <u>020915-7</u>		15.
Headspace in VOA vials (>6mm):	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	
		16.
Project sampled in USDA Regulated Area:	<input type="checkbox"/> Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> N/A	17. List State: <u>AR</u>

Client Notification/ Resolution:

Copy COC to Client? Y / N

Field Data Required? Y / N

Person Contacted: _____

Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: Colleen Olynyk

Date: 06/29/2015



CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:		Section B Required Project Information:		Section C Invoice Information:																																																																																																				
Company: Environ	Report To: Wendy Stonestreet	Copy To: Tamara Gleason	Attention: Tamara Gleason	Company Name: Envirocorp.com	REGULATORY AGENCY																																																																																																			
Address: 7500 College Blvd., Ste. 925	Purchase Order No.: tggleason@envirocorp.com	Address: Overland Park, KS 66210	NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER	NPDES <input type="checkbox"/> GROUND WATER <input type="checkbox"/> DRINKING WATER	OTHER _____																																																																																																			
Email To: wstonestreet@envirocorp.com	Project Name: Fort Smith, AR	Phone: 913-553-5926 Fax: Requested Due Date/TAT: Standard	Site Quote Reference: Pace Project Manager: Pace Profile #: 7444 water, 7709 soil	UST <input type="checkbox"/> RCRA <input type="checkbox"/>	STATE: AR																																																																																																			
Residual Chlorine (Y/N) _____																																																																																																								
Requested Analysis Filtered (Y/N) _____																																																																																																								
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F-ALL-Q-020rev.07, 15-Feb-2007

*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.

Custody Sealed
Loc (Y/N)

Custody Sealed
Custodian (Y/N)

Temp In °C
Received on _____

Samples intact
(Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: *Nick Zurawler*

SIGNATURE of SAMPLER: *Zurawler*

DATE Signed (MM/DD/YY): *6/26/15*

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 Ingwersoll 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, Ingwersoll Avenue, and Ferguson Street (as if it extended all the way to Ingwersoll Avenue).

Ms. Tammie Hynum

August 13, 2015

Page 2

- (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)

Ms. Tammie Hynum
August 13, 2015
Page 3

- (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



STATUS OF RESIDENTIAL PROPERTY DEED RESTRICTION

Exhibit A

1400 Brazil 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 James Westpfahl (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 10th day of March, 2015.

James Westpfahl

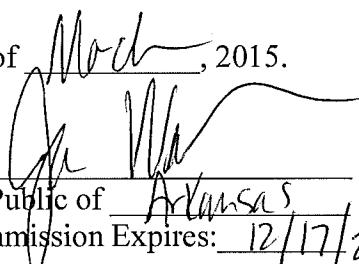


STATE OF ARKANSAS)
COUNTY OF Sebastian)

ACKNOWLEDGMENT

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.



Notary Public of Arkansas
My Commission Expires: 12/17/2023

[Notary Seal]

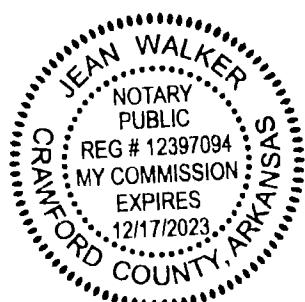


EXHIBIT A
Legal Description

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



* 2 0 1 5 F - 1 0 9 4 5 3 *

2015F-10945

Certificate of Record

FORT SMITH DISTRICT

SHARON SPRINGS, ARKANSAS

SHARON SPRINGS 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").

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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.

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 - (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, Sharon 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.

Sharon 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



* 2 0 1 5 F - 1 0 9 4 6 3 *

2015F-10946

Certificate of Record

FORT SMITH DISTRICT

VENTURE PROPERTY, ARKANSAS

CHARLES BROOKS, CLERK & RECORDER

08/05/2015 03:19:55PM

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, GRANTEEES, 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, Sharon 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.

Sharon Kaye Redding
Notary Public of Crawford County
My Commission Expires: Mar 19, 2023

[Notary Seal]

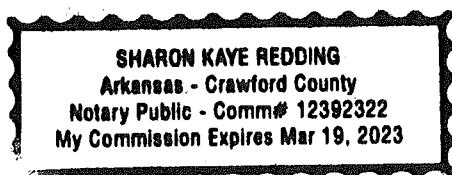


EXHIBIT A
Legal Description

**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

STATE OF ARKANSAS)
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 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)
COUNTY OF Sebastian)

ACKNOWLEDGMENT

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]

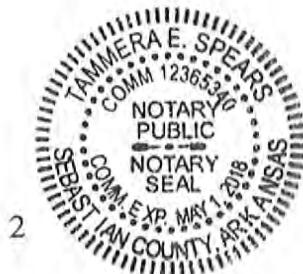


EXHIBIT A
Legal Description

Lot Four (4), Block "E", Brazil and Jacobs Homesite Acres, Sebastian County, Arkansas.

Exhibit E

1600 Brazil 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 Sam Reith (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, GRANTEEES, 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



STATE OF ARKANSAS)
COUNTY OF Pulaski)

ACKNOWLEDGMENT

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: 1/15/19

[Notary Seal]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 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, GRANTEEES, 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 27 day of March, 2015.



EDDIE D. JAMISON

STATE OF ARKANSAS

)

ACKNOWLEDGMENT

COUNTY OF Sebastian

)

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]



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

STATE OF ARKANSAS)
 COUNTY OF SEBASTIAN)

) DECLARATION OF COVENANTS, 06/02/2015 01:16:37PM
) CONDITIONS AND RESTRICTIONS Fee: 25.00 Pages: 3

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, GRANTEEES, 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

)

COUNTY OF Sebastian

)

ACKNOWLEDGMENT

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]

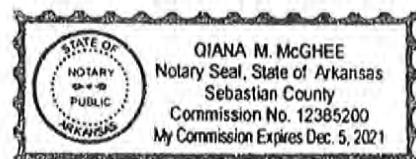


EXHIBIT A
Legal Description

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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 Ronnie Threet Revocable 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

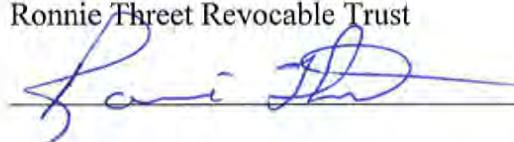
include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

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

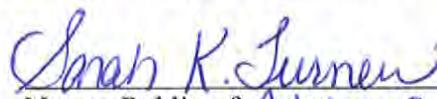


STATE OF ARKANSAS)
COUNTY OF Sebastian)

ACKNOWLEDGMENT

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]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 Alan & Natasha Taylor (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.

Natasha Taylor

Natasha Taylor

Alan Taylor

Alan Taylor

STATE OF ARKANSAS)
COUNTY OF Sebastian)

ACKNOWLEDGMENT

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: 12/17/23

[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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 Alan & Natasha Taylor (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

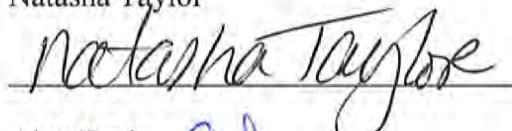
include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

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 10th day of March, 2015.

Natasha Taylor



Alan Taylor



STATE OF ARKANSAS

COUNTY OF Sebastian)

) ACKNOWLEDGMENT

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 10th day of March, 2015.



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 Alan & Natasha Taylor (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.

Natasha Taylor



Alan Taylor

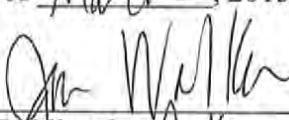


STATE OF ARKANSAS)
COUNTY OF Sebastian)

ACKNOWLEDGMENT

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.



Notary Public of Arkansas
My Commission Expires: 12/17/2023

[Notary Seal]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 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



Alan Taylor



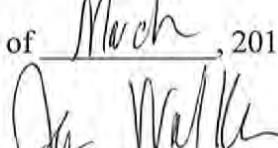
STATE OF ARKANSAS

COUNTY OF Sebastian)

ACKNOWLEDGMENT

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.


Notary Public of Arkansas
My Commission Expires: 12/17/2023

[Notary Seal]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 Alan & Natasha Taylor (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 10th day of March, 2015.

Natasha Taylor

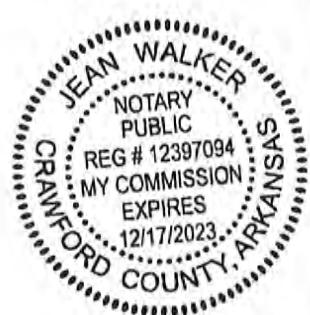
Alan Taylor

STATE OF ARKANSAS
COUNTY OF Sebastian)

ACKNOWLEDGMENT

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 10th day of March, 2015.



Jean Walker
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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 Alan & Natasha Taylor (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

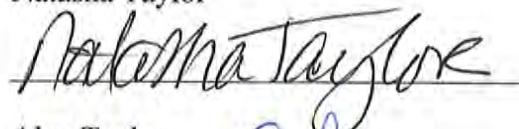
include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

NOTICE: This Property is subject to Declaration of Covenants, Conditions and Restrictions recorded at the Register of Deeds of Sebastian County in Book ___, Page ___.

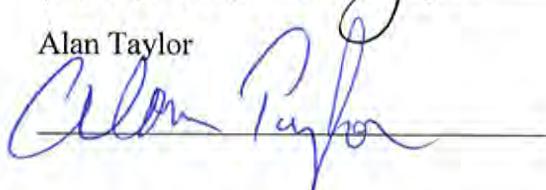
5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration 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.

Natasha Taylor



Alan Taylor



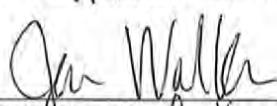
STATE OF ARKANSAS

COUNTY OF Sebastian)

) ACKNOWLEDGMENT

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 11th day of March, 2015.


Notary Public of Arkansas
My Commission Expires: 12/17/2023

[Notary Seal]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 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, GRANTEEES, 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

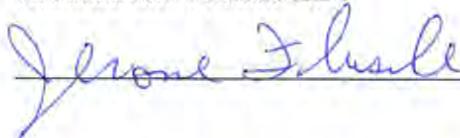
include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

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



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]

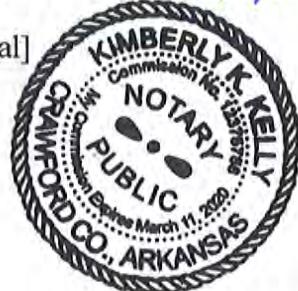


EXHIBIT A
Legal Description

LOT TEN (10), BLOCK "E" OF BRAZIL & JACOBS HOMESITE ACRES, AS SHOWN BY PLAT
FILED MAY 31, 1947.

Exhibit P

1900 Brazil Avenue

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 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

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



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]

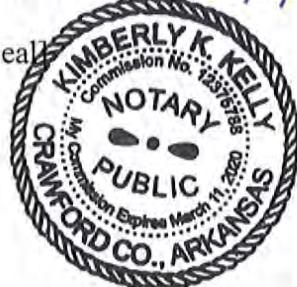


EXHIBIT A
Legal Description

Lot 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

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").

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

2015F-04690

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)
COUNTY OF Sebastian)
ACKNOWLEDGMENT

I, LINDA K. MILLS PAW (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. Mills Paw
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

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,
 COUNTY OF SEBASTIAN) 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

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



STATE OF ARKANSAS)
COUNTY OF Pulaski)

ACKNOWLEDGMENT

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: 10/15/19

[Notary Seal]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 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, GRANTEEES, 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 19th day of March, 2015.



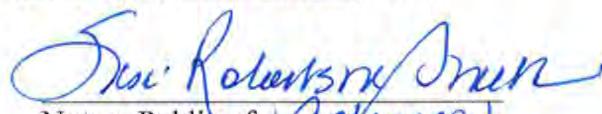
DAN HONG AND PHUONG NGUYEN

STATE OF ARKANSAS)
COUNTY OF Sebastian)

ACKNOWLEDGMENT

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 09-2022

[Notary Seal]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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").

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, GRANTEEES, 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

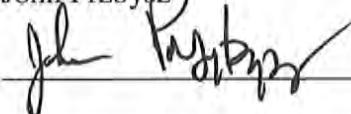
include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

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 17 day of March, 2015.

John Przbysz



STATE OF ARKANSAS

)
COUNTY OF Sebastian)

ACKNOWLEDGMENT

I, Alicia Triplett (Notary Public for the State of Arkansas), do hereby certify that John Przbysz 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]

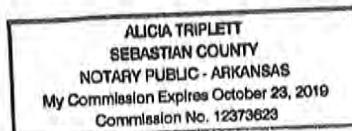


EXHIBIT A
Legal Description

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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 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

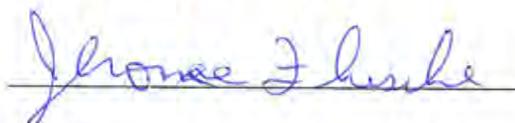
include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

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



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]

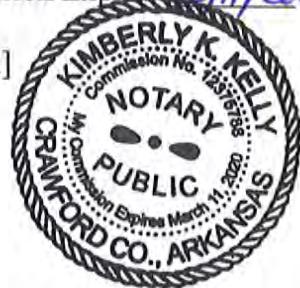


EXHIBIT A
Legal Description

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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 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

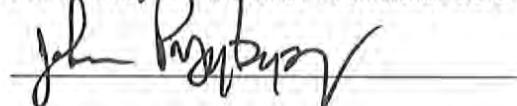
include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

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



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]

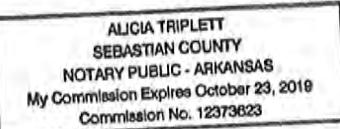


EXHIBIT A
Legal Description

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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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").

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, GRANTEEES, 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

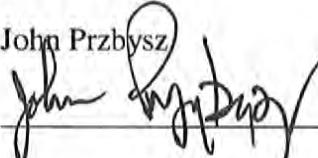
3/25

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)

COUNTY OF Sebastian)

ACKNOWLEDGMENT

I, Alicia Triplett (Notary Public for the State of Arkansas), do hereby certify that John Przbysz 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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 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

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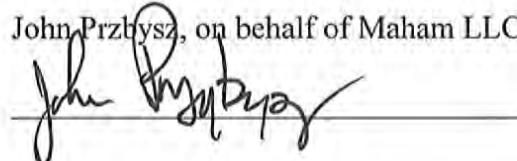
include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

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 17 day of March, 2015.

John Przbysz, on behalf of Maham LLC



STATE OF ARKANSAS

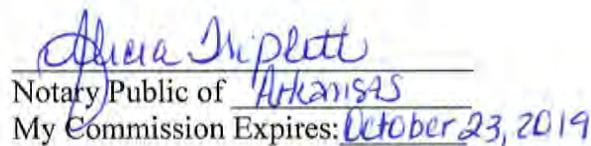
)

ACKNOWLEDGMENT

COUNTY OF Sebastian)

I, Alicia Triplett (Notary Public for the State of Arkansas), do hereby certify that John Przbysz 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]

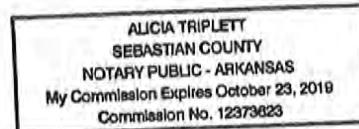


EXHIBIT A
Legal Description

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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 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, GRANTEEES, 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

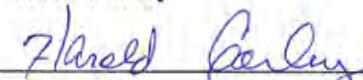
include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

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 17th day of March, 2015.

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.



Notary Public of Arkansas

My Commission Expires: 10/15/2019

[Notary Seal]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 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

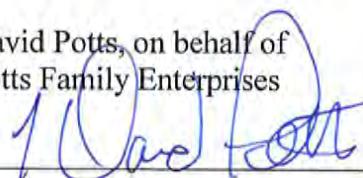
include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

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

COUNTY OF Sebastian)

ACKNOWLEDGMENT

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]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 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, GRANTEEES, 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



STATE OF ARKANSAS

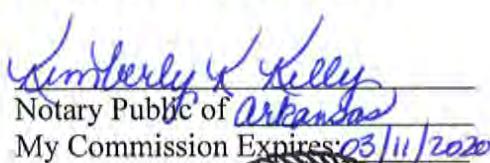
)

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 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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 Rockie and Barbara Hamm (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, GRANTEEES, 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 ___.

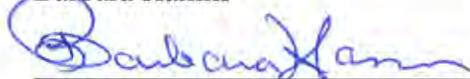
5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration 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 26th day of March, 2015.

Rockie Hamm



Barbara Hamm



STATE OF ARKANSAS

)

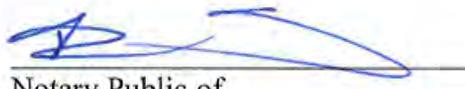
ACKNOWLEDGMENT

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: _____

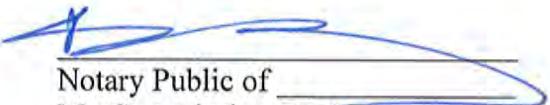


STATE OF ARKANSAS)
COUNTY OF Washington)

) 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]



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

STATE OF ARKANSAS)
) **DECLARATION OF COVENANTS,
 COUNTY OF SEBASTIAN) 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 Rockie and Barbara Hamm (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 26 day of March, 2015.

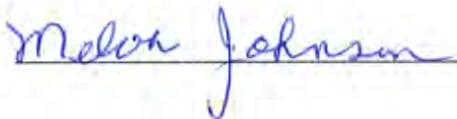
Perry Johnson



Barbara Hamm



Melva Johnson



Rockie Hamm



STATE OF ARKANSAS

)

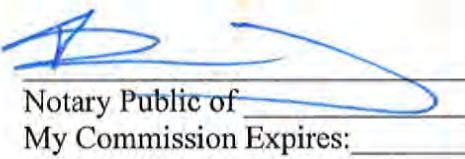
ACKNOWLEDGMENT

COUNTY OF Washington

)

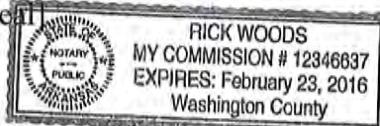
I, Rick Woods (Notary Public for the State of Arkansas), do hereby certify that Perry Johnson personally appeared before me this day and acknowledged the due execution of the foregoing instrument.

Witness my hand and official seal, this the 26 day of March, 2015.



Notary Public of _____
My Commission Expires: _____

[Notary Seal]



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: _____

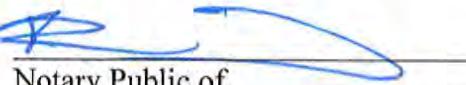


STATE OF ARKANSAS)
COUNTY OF Washington)

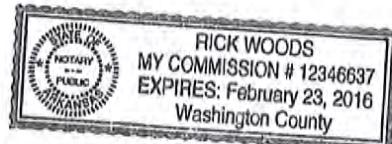
ACKNOWLEDGMENT

I, Rick Woods (Notary Public for the State of Arkansas), do hereby certify that
Rockie Hammer 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]



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.

Rick Woods
Notary Public of _____
My Commission Expires: _____

[Notary Seal]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 Neal Morrison and Suzanne Morrison Holloway (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 14th day of March, 2015.

Neil Morrison



Suzanne Morrison Holloway



STATE OF ARKANSAS

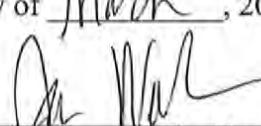
)

COUNTY OF Sebastian)

) ACKNOWLEDGMENT

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 14th day of March, 2015.



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 Barbara Wilkinson (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.

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: 1/15/2019

[Notary Seal]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 Mance & Ethel Fowler (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

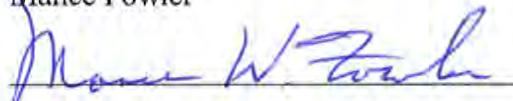
include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

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.

Mance Fowler



Ethel

Wayne 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]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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

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

Sam Reith

STATE OF ARKANSAS)
COUNTY OF Pulaski)

ACKNOWLEDGMENT

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: 10/15/2019

[Notary Seal]



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.

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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

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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 ___.

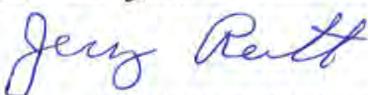
5. This Declaration shall bind and restrict the Property for a period of years extending until the clean up goals established by the Department or a successor governmental agency are met and the Department determines that the restrictions set forth herein are no longer required, at which time this Declaration 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 17th day of March, 2015.

Sam Reith, on behalf of
Reith Properties LLC

STATE OF ARKANSAS

COUNTY OF Pulaski)

ACKNOWLEDGMENT

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.


Notary Public of Arkansas
My Commission Expires: 10/15/2019

[Notary Seal]



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.

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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, GRANTEEES, 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 17th day of March, 2015.

Jerry Reith
Jerry Reith

Sam Reith, on behalf of
Reith Properties LLC



STATE OF ARKANSAS)
COUNTY OF Pulaski)

ACKNOWLEDGMENT

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]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 Carolyn Nichols (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

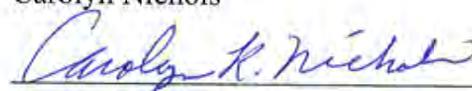
include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

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.

Carolyn Nichols



STATE OF ARKANSAS

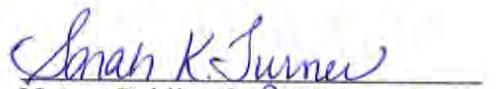
)

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.



Notary Public of Arkansas
My Commission Expires: 12-15-2019

[Notary Seal]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 Rayma Watts (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
5 day of May, 2015.

Rayma Watts
RAYMA WATTS

TEXAS
STATE OF ARKANSAS)
COUNTY OF BOWIE)

ACKNOWLEDGMENT

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.

Christopher M. McGee
Notary Public of TEXAS
My Commission Expires: 11-28-15

[Notary Seal]

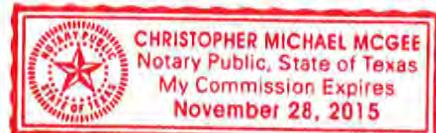


EXHIBIT A

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

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

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)
COUNTY OF Crawford)

ACKNOWLEDGMENT

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.

Brandie Wingfield
Notary Public of Arkansas
My Commission Expires: Oct. 23, 2024

[Notary Seal]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 Raymond Flowers (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.

Raymond 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: 10/15/2019

[Notary Seal]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 Harry Edmund Smith (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.

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]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 Mary Winters (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.

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 10th day of March, 2015.

Sarah K. Turner
Notary Public of Arkansas
My Commission Expires: 12/15/2019

[Notary Seal]



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

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").

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 _____ day of _____, 2015.

*Junior P. Winters
Jane E. Regina Winters*

JUNIOR P. and JANE WINTERS

STATE OF ARKANSAS)
COUNTY OF Sebastian)

) ACKNOWLEDGMENT

I, LINDA MILLSPOW 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 P. Millspow
Notary Public of _____
My Commission Expires: Sept 3, 2015

[Notary Seal]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 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, GRANTEEES, 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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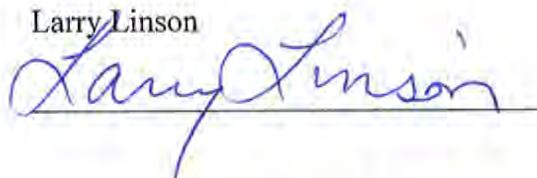
include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

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 16th day of March, 2015.

Larry Linson



STATE OF ARKANSAS)
COUNTY OF Sebastian)

ACKNOWLEDGMENT

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.



Notary Public of Arkansas
My Commission Expires: 12/17/2023

[Notary Seal]



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 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)
COUNTY OF Sebastian)

ACKNOWLEDGMENT

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]



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



* 2 0 1 4 F - 0 9 3 2 9 3 *

2014F-09329

Certificate of Record

FORT SMITH DISTRICT

SHARON SPRINGS, ARKANSAS

SHARON SPRINGS CO CLERK & RECORDER

07/10/2014 01:53:36PM

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 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, GRANTEEES, 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 . 2014 F - 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 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]

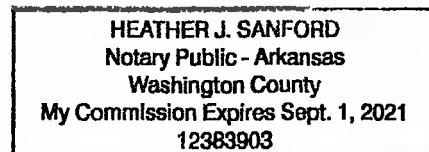


EXHIBIT A
Legal Description

Lot 10, Block H, Brazil & Jacob's Homesite Acres now an addition to the City of Fort Smith,
Arkansas.

Exhibit RR

1805 Jacobs Avenue

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 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

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

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 Kelly
Notary Public of Arkansas
My Commission Expires: 03/11/2020

[Notary Seal]

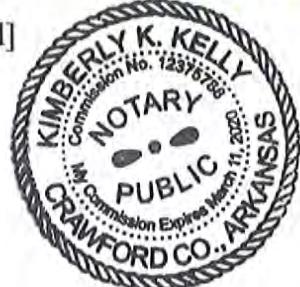


EXHIBIT A
Legal Description

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.

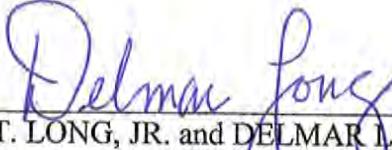
1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.
2. Contaminated groundwater under the Property shall not be extracted, 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.


OSCAR T. LONG, JR. and DELMAR LONG

STATE OF ARKANSAS)
COUNTY OF Crawford)

ACKNOWLEDGMENT

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.


Notary Public of Crawford
My Commission Expires: 2-8-2024

[Notary Seal]

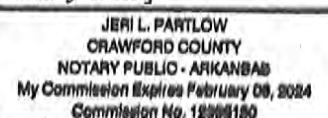


EXHIBIT A
Legal Description

Lot 11, Block H, Brazil & Jacob's Homesite Acres, as shown by plat filed May 31, 1947.

Exhibit TT

1809 Jacobs Avenue



* 2 0 1 4 F - 0 4 4 8 9 5 *

2014F-04489

Certificate of Record

FORT SMITH DISTRICT

SEBASTIAN COUNTY, ARKANSAS

SHARON BROOKS, CO. CLERK & RECORDER

04/08/2014 11:07:19AM

STATE OF ARKANSAS

)

**DECLARATION OF COVENANTS,
CONDITIONS AND RESTRICTIONS**

COUNTY OF SEBASTIAN

)

Fee: 35.00 Pages: 5

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, GRANTEEES, 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. MILSPAW (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. Milspaw
Notary Public of _____
My Commission Expires: Sept 3, 2015

[Notary Seal]



ARTHUR R. SCROGGINS, JR.

Arthur R. Scroggins Jr.

STATE OF ARKANSAS

)
COUNTY OF Sebastian

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ACKNOWLEDGMENT

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]

CAROL SCROGGINS

Carol Scroggins

STATE OF ARKANSAS

)
COUNTY OF Sebastian

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ACKNOWLEDGMENT

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]

MARIE SCROGGINS

marie Scroggins

STATE OF ARKANSAS)

COUNTY OF Sebastian)

) ACKNOWLEDGMENT

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 Aug., 2014.

Linda K. Millspaw
Notary Public of _____
My Commission Expires: Sept 3, 2015

[Notary Seal]

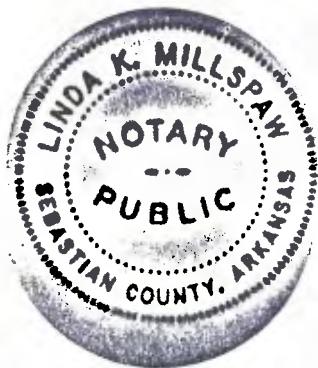


EXHIBIT A
Legal Description

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.

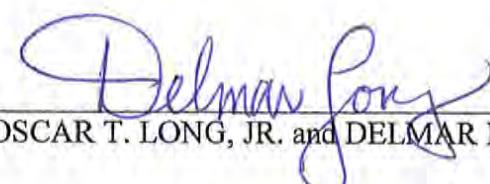
1. The Property has groundwater within or beneath it that has been determined by the Arkansas Department of Environmental Quality (the "Department") to be contaminated with trichloroethylene ("TCE"), making it unsafe for consumptive uses.
2. Contaminated groundwater under the Property shall not be extracted, 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.


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.


Notary Public of Crawford
My Commission Expires: 2-8-2024

[Notary Seal]

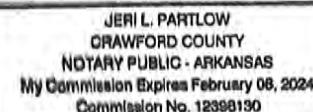


EXHIBIT A
Legal Description

Lot 12, Block H, Brazil & Jacob's Homesite Acres, as shown by plat filed May 31, 1947.

Exhibit VV

1904 Jacobs Avenue



* 2 0 1 5 F - 1 0 6 7 5 3 *

2015F-10675

Certificate of Record

FORT SMITH DISTRICT

ARKANSAS

SUPERIOR COURT & RECORDER

07/31/2015 02:35:58PM

Fee: 25.00 Pages: 3

STATE OF ARKANSAS

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COUNTY OF SEBASTIAN

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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

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

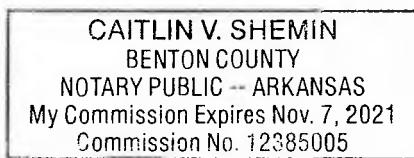
Glenda Wilson

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.



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

STATE OF ARKANSAS)
) DECLARATION OF COVENANTS,
COUNTY OF SEBASTIAN) 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 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]

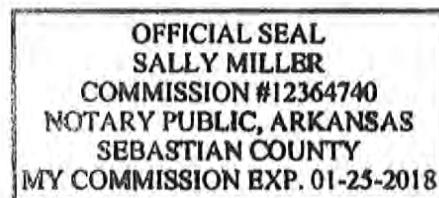


EXHIBIT A
Legal Description

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



* 2 0 1 5 F - 0 9 1 9 6 3 *

2015F-09196

Certificate of Record

FORT SMITH DISTRICT

SEBASTIAN COUNTY, ARKANSAS

CLERK & RECORDER

07/02/2015 04:16:28PM

Fee: 25.00 Pages: 3

STATE OF ARKANSAS

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**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 Shirley Rieder (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 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]

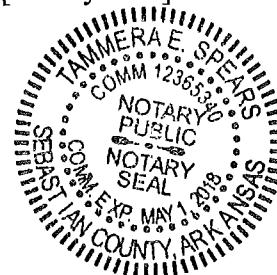


EXHIBIT A
Legal Description

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



* 2 0 1 5 F - 0 9 0 2 5 3 *

2015F-09025

Certificate of Record

FORT SMITH DISTRICT

SEBASTIAN COUNTY, ARKANSAS

CLERK & RECORDER

STATE OF ARKANSAS

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**DECLARATION OF COVENANTS
CONDITIONS AND RESTRICTIONS**

COUNTY OF SEBASTIAN

06/30/2015 12:55:02PM
Fee: 25.00 Pages: 3

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, GRANTEEES, 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

m.s.

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 June, 2015.



Mark Gamble

ACKNOWLEDGMENT

STATE OF ARKANSAS)
COUNTY OF Sebastian)

I, Juli 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 City
My Commission Expires: 2-11-2023

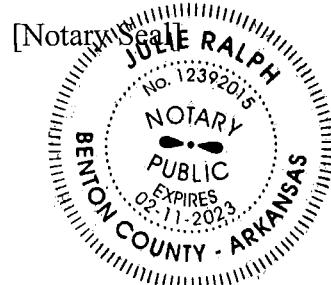


EXHIBIT A
Legal Description

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.

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Exhibit ZZ

5921 Ferguson Street

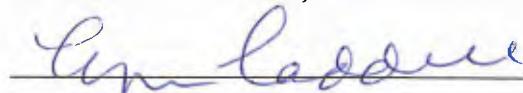
include the following notice on all deeds, mortgages, plats, or any legal instruments used to convey any interest in the Property (failure to comply with this paragraph does not impair the validity or enforceability of this Declaration):

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

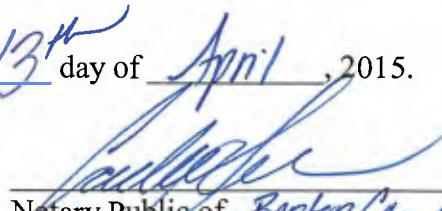


STATE OF ARKANSAS)
COUNTY OF Benton)

) ACKNOWLEDGMENT

I, Caitlin Shemin (Notary Public for the State of Arkansas), do hereby certify that Caryn Cadell 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.


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

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]

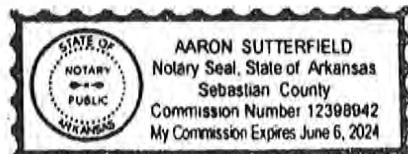


EXHIBIT A
Legal Description

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 ($\mu\text{g/L}$)	Estimated Avg. Max. Concentration Assumed to be Present Throughout the Respective Section of Plume ($\mu\text{g/L}$)	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 ($\mu\text{g/L}$)	Estimated Avg. Max. Concentration Assumed to be Present Throughout the Respective Section of Plume ($\mu\text{g/L}$)	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