


2023 ANNUAL REPORT

Whirlpool Facility
Fort Smith, Arkansas

Prepared for:
Whirlpool Corporation

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Date:
February 2024

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RAMBOLL

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1 Introduction

On behalf of Whirlpool Corporation (Whirlpool), Ramboll Americas Engineering Solutions, Inc (Ramboll) has prepared this 2023 Annual Report (Report) for the former Whirlpool facility (Site) located at 6400 Jenny Lind Road in Fort Smith, Arkansas (see Figure 1). This Report summarizes the maintenance and remediation efforts by Whirlpool under the oversight of the Arkansas Division of Energy and Environment, Department of Environmental Quality (ADEQ) Office of Land Resources in 2023. This report was prepared in accordance with the Revised Groundwater Monitoring Plan (RGWMP) approved by the ADEQ in September 2016; the Remedial Action Decision Document (RADD) issued by the ADEQ on December 27, 2013, and revised in November 2015 (Revised RADD); and ADEQ comment letters along with Ramboll/Whirlpool responses to previous monitoring reports.

Semi-annual and annual groundwater and indoor air monitoring events were completed in April and October 2023. Activities conducted during this 2023 annual event included:

- Gauging groundwater elevations to determine hydraulic gradients at the Site;
- Collection of groundwater samples to determine Site-wide groundwater conditions;
- Collection of shallow groundwater samples to support the offsite indoor air analysis; and
- Collection of onsite indoor air and sub-slab samples from the former main Whirlpool warehouse building.

This report provides analytical data, results discussion, and an effectiveness assessment of on-going remedial programs based on environmental media samples collected during the 2023 annual event. The constituents of concern (COCs) evaluated during this annual event are listed in Table 1 and [trichloroethene (TCE)] is the primary COC.

In addition to annual monitoring activities, select wells were preemptively sampled for additional analytical parameters as a baseline event for proposed injection programs for the North Plume, East Plume, Neck Area, and Source Area. These additional analytical tests included volatile organic compounds (VOCs), dissolved gases and a series of biogeochemical parameters. Work plans for these proposed injection programs were submitted to ADEQ on December 19, 2023, and are currently under review. The results are discussed within this Report.

2 Site Background Information

The Site was first developed in 1961 by Norge Corporation as a refrigerator, icemaker, and gas/air conditioning manufacturing facility until it was acquired by Whirlpool in 1966. Facility activities included the manufacture of side-by-side household refrigerators, trash compactors and icemakers during Whirlpool's time of operations. Manufacturing operations ceased in 2012.

The Site formerly consisted of approximately 153 acres. The developed portion of the property consists of the former manufacturing facility (approximately 1,175,000 square feet [ft^2]), a former warehouse (approximately 622,000 ft^2) and ancillary buildings north of the former manufacturing building, including the former boiler room, water treatment plant and degreaser building. Whirlpool sold the warehouse and surrounding property on the southern portion of the Site in September 2014 to Harmon Arkansas Properties, LLC (Harmon), and sold the former manufacturing building and surrounding property (approximately 92 acres) in February 2017 to Phoenix Investors, LLC (Phoenix). Four tenants (Mars Petcare, Qualserv, Stryten, and MP Warehouse, Inc) currently conduct warehousing operations within the former manufacturing facility. Phoenix has demolished the ancillary buildings, added shipping docks for warehouse operations and improved asphalt and concrete pavement at locations surrounding the former manufacturing building.

Surrounding property use consists of residential areas located to the north of the property beyond Ingersoll Avenue, and commercial industrial properties located to the south, east and west. Undeveloped property (used for recreational purposes prior to the expansion of Ingersoll Avenue to the east) is also located to the east. The city's primary water source is the Frog Bayou Watershed. The water is stored in Lake Fort Smith; therefore, groundwater is not used as a potable water source for the city. Properties immediately north of the Site are subject to water use restrictions.

The combination of various investigation and monitoring activities and first-hand accounts from former workers have identified the primary source of TCE impacts at the Site are attributable to former degreasing operations performed in the degreaser building formerly located near the northwest corner of the existing building (Figure 2). Incidental releases of TCE have impacted a former linear drainage feature proximate to the former degreaser building and occurred via: (1) incidental drips onto the degreaser building floor from parts that were being washed with TCE, and (2) rinsing or cleaning of the degreaser building floor for general housekeeping purposes and the subsequent discharge of mop water through the overhead doors. These incidental releases occurred approximately 30-50 years ago.

Initial remediation activities were performed by Whirlpool in close consultation with and under the oversight of ADEQ. These activities included the imposition of a deed restriction on the Whirlpool property; 2014 and 2015 in-situ chemical oxidation (ISCO) injections in Areas 1, 2, and 3 (these areas are generally located at the exterior northwest corner of the existing building and extending north to the north side of Ingersoll Avenue) as well as in the neck area (area generally located east of the electric substation) to quickly reduce TCE concentrations in groundwater; and quarterly monitoring of groundwater for volatile organic compounds (VOCs) and natural attenuation parameters.

Subsequently, a series of investigation and remedial actions have been taken during years 2015 to 2020 that were generally aimed at refining the nature and extent of contamination and mitigating further offsite migration of Site COCs. Historical annual and semi-annual groundwater monitoring events and remedial efforts are summarized in the *Five-Year Technical Review Report* (Ramboll 2022a). Indoor air and sub-slab vapor monitoring began in 2016, the same year that ADEQ approved the RGWMP, and has since continued as part of semi-annual and annual monitoring events.

A Human Health Risk Assessment (HHRA) completed in January 2016 concluded that there are no unacceptable exposures for onsite commercial workers and there are no unacceptable exposures to offsite residents, routine workers, or utility maintenance workers. Semi-annual soil vapor, indoor air, and groundwater monitoring conducted since 2016 continues to demonstrate there are no unacceptable onsite and offsite exposure risks.

3 Annual Monitoring Activities

The 2023 annual monitoring event was performed during the week of October 16, 2023. Annual groundwater monitoring activities included physical inspection of each well, collection of water level measurements, collection of groundwater samples for analysis of VOCs via EPA Method 8260 in accordance with the RGWMP for all wells monitored, and geochemical and monitored natural attenuation (MNA) parameters for select wells. The 2013 RADD listed the COCs, RADD remedial action levels (RALs) (Table 1), and monitoring wells to be sampled during each groundwater monitoring event organized by plume (Table 2). Figures 3a and 3b show the locations of each well sampled. TCE is the primary COC at the Site. The COCs and additional geochemical parameters were analyzed to assess previous and recent remediation activities, as well as natural degradation of Site-related chlorinated compounds in groundwater to continue to assess the effectiveness of MNA as the remedy for the groundwater impacts at the Site.

The 2023 annual air monitoring event was performed during the week of October 16, 2023. Annual air monitoring activities included onsite and offsite vapor intrusion analyses consisting of the collection of sub-slab, ambient air, and indoor air onsite and the collection of shallow groundwater samples from vapor points and shallow wells offsite.

3.1 Well Inspection

On October 16, 2023, monitoring wells included in the water level gauging network were visually inspected. The results of this inspection event are included in Table 3. In summary, 48 wells were observed to have minor damage (e.g., broken or missing bolts) that require repair. Prior to the next sampling event, outstanding well issues will be addressed; however, it is expected that none of the issues identified will affect the quality of water samples collected from these identified monitoring wells.

Monitoring well ITMW-16 located near the source area was repaired in November 2023. The well casing was found to be intact and was repaired bringing the well back to the surface with new well completions. ITMW-16 was purged via air lifting to remove a minor amount of debris from the bottom of the well. After well repairs were complete, ITMW-16 was re-surveyed for top of casing elevation by an Arkansas-licensed surveyor.

3.2 Static Water Level Measurements

Static water levels were measured in a total of 120 monitoring wells to provide a current potentiometric surface to evaluate groundwater gradients and flow directions. During the well inspection on the morning of October 16, 2023, monitoring wells were opened to allow water levels to equilibrate to atmospheric conditions. After allowing time for atmospheric equilibration of groundwater levels, static water level measurements were collected using a electronic water level meters. 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 a phosphate free detergent (e.g., Alconox) mixed with distilled water, and then rinsing the probe and tape with distilled water prior to being wiped dry.

Static water level measurements are presented in Table 4 along with the water level measurements recorded during the April 2023 sampling event. Figure 4 provides a potentiometric map drawn based on groundwater elevations observed on October 16, 2023. Based on this most current potentiometric map, the hydraulic gradient is generally consistent with historical groundwater gradients with groundwater flow indicated toward the northeast, east, southeast, and southwest away from the source area (i.e., northwest exterior of the Site building).

While conducting well inspections on October 16, 2023, an unauthorized breach of site security was observed by Ramboll field staff within the southwestern portion of the onsite area. Representatives of the Site owners and authorities were promptly notified and well inspection/water level gauging activities were temporarily suspended until this area of the Site was cleared by authorities. As a result of this unexpected security issue, the following wells were unable to be gauged: MW-182, MW-186, MW-187, TMW-16, TMW-25, TMW-26, TMW-27, TMW-30, and TMW-32.

A linear interpolation of the hydraulic gradient within the between six groups of wells was performed to assess the varied groundwater flow directions and gradients at the Site as follows:

- South Plume:
    - MW-25R to ITMW-4: Southeast flow direction and a gradient of 0.0032 feet/foot; and
    - ITMW-5 to TMW-36: Southerly flow direction and a gradient of 0.0005 feet/foot.
- East Plume: MW-87 to MW-184 with a northeast flow direction and a gradient of 0.046 feet/foot;
- North Plume:
    - MW-58R to TMW-10: Northeast flow direction and a gradient of 0.012 feet/foot, and
    - MW-56R to MW-194: Easterly flow direction and a gradient of 0.0004 feet/foot.

Although the gradient remains relatively flat within the former Whirlpool property boundary (i.e., 0.002 feet/foot), the gradient steepens somewhat towards the property boundaries southwest of the Site building and northeast near Jenny Lind Road and Brazil Avenue. The southern gradient from just south of the building to the property boundary is very flat.

Groundwater elevations from shallow groundwater wells (MW-174 through MW-177) located along the north side of Jacobs Avenue and MW-178 (located immediately south of Ingersoll Avenue) were used to evaluate shallow horizontal gradient. Static water elevations along Jacobs Avenue decrease from west to east; from a high of 465.75 feet at MW-177 to a low of 459.55 feet at MW-174. The calculated shallow groundwater gradient west to east based on these two wells is 0.0082 feet/foot. Static water elevations in the deeper basal transmissive zone (BTZ) wells also generally decrease from west (MW-70, 462.95 feet) to east (MW-62R, 459.06 feet) with a resulting gradient of 0.0062 feet/foot. The highest shallow groundwater elevations were measured in the most up-gradient shallow well MW-178 (469.81feet). These

results suggest that the shallow groundwater horizontal flow gradient generally mimics the deeper groundwater flow gradient to the east/northeast based on the number and location of shallow groundwater monitoring wells available.

Groundwater elevations from shallow groundwater wells MW-174 through MW-178 were also compared to groundwater elevations from nearby deeper monitoring wells to evaluate vertical gradient. MW-175 is located approximately at the midpoint between deeper groundwater monitoring wells MW-46R and MW-56R, allowing the comparison of groundwater elevations at MW-175 to the average of the groundwater elevations at MW-46R and MW-56R. The vertical gradients are summarized in Table 5 and are shown on Figure 5. Based on this evaluation, observations based on the October 2023 groundwater elevations are as follows:

- Downward vertical gradient (-0.41 feet/foot) at the most up-gradient (i.e., southwestern) well grouping MW-178/MW-83;
- Downward gradient (-0.27 feet/foot) at MW-177/MW-70;
- Flat gradient (0.00 feet/foot) at MW-176/MW-46R;
- Downward gradient (-0.24 feet/foot) at MW-175/MW-46R and MW-56R; and
- Slight upward gradient (0.08 feet/foot) at the eastern most well pairing, MW-174/MW-63R.

Vertical gradients were generally consistent with historical gradients.

3.3 Groundwater Sampling

Following static water level measurement activities, groundwater sampling was performed in accordance with the RGWMP, as detailed in the following subsections. Sampling results and parameter readings collected during sampling were used for the assessment of the nature and extent of groundwater impacts and effectiveness of on-going remediation programs.

3.3.1 Methodology

Low flow groundwater sampling was performed via peristaltic pumps and dedicated polyethylene tubing. The tubing was placed at a depth within the well at the approximate 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 between 0.1 and 0.2 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 temporary container until transferred to the onsite water holding tank prior to proper offsite disposal.

Groundwater monitoring was performed for shallow monitoring wells in the North Plume (MW-175, MW-176, MW-178 and MW-179). These wells are screened to monitor shallow perched water and this data is used to assist in evaluating the potential for vapor intrusion from groundwater. Due to slow recovery rates, low-flow sampling techniques were not used at the shallow wells. If excessive drawdown occurred, these wells were purged dry once and then

allowed to recover prior to collection of the sample within 24 hours of purging dry. The data from these shallow wells is presented in Section 6 of this report.

Water quality parameters were measured via a water quality probe and flow-through cell. Instruments were calibrated daily prior to the start of sampling and 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 water quality parameters stabilized. Aquifer stabilization was considered obtained when three consecutive rounds of parameter readings met the following criteria.

- Temperature: +/- 1°C;
- Specific conductivity: +/- 3%;
- Dissolved oxygen (DO): +/- 10% for values greater than 0.5 milligrams per liter (mg/L);
- pH: Within +/- 0.1 standard units;
- Oxidation reduction potential (ORP): Within +/- 10 millivolts (mV); and
- Turbidity: +/- 10% for values greater than 10 Nephelometric Turbidity Units (NTU) or less than 10 NTU.

Table 6 presents a summary of results for measured field parameters for the 2023 annual event.

Groundwater samples were obtained by directly filling laboratory-provided sampling bottles from the peristaltic pump discharge. The VOC samples were collected in three 40 milliliter (mL) glass vials that contained hydrochloric acid preservative per standard procedures. Samples for assessing quality assurance/quality control (QA/QC) metrics were collected by alternately filling water sample and QA/QC sample bottles for each parameter. VOC sample bottles for both the water sample and the QA/QC sample were completely filled, purged of headspace, and sealed. 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 using the Microseeps gas stripping procedure (Microseeps 2014).

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

3.3.2 Monitoring Well Network

The RADD detailed the initial groundwater monitoring well network for assessment of contaminants within the BTZ. Since the implementation of the RADD a number of monitoring wells from the original monitoring network have been abandoned (e.g., due to city road or Site improvements) or reinstalled. Additional wells have been added to the sampling network over

time as a result of continued Site investigation activities. The groundwater monitoring network identified in the RGWMP is presented in Table 2.

In addition to the wells identified in the RADD and RGWMP, Whirlpool has agreed to sample additional wells as part of the BTZ monitoring program. The additional wells sampled during the 2023 annual sampling event are identified in the table below. Figure 3a and 3b present Site maps showing the locations of these wells. During the October 2023 groundwater monitoring event 95 wells were sampled as part of the annual BTZ groundwater sampling program including 32 wells denoted as North Plume wells, 14 wells as East Plume wells, and 49 wells as South Plume wells.

Plume Area	Additional Wells Sampled by Whirlpool			
North Plume	TMW-12	TMW-21	TMW-24	
	TMW-14	TMW-22R	TMW-29	
	TMW-20	TMW-23	TMW-35*	
East Plume	MW-200	MW-202	MW-205	TMW-34
South Plume	MW-198	MW-204	TMW-25	TMW-32
	MW-199	MW-206	TMW-26	TMW-36
	MW-201	TMW-16	TMW-27	TMW-36B
	MW-203	TMW-19	TMW-30	RW-1

*denotes a plume boundary well

In addition to the BTZ monitoring program, four shallow wells (MW-175, MW-176, MW-178, and MW-179) and three vapor points (VP-8, VP-12, and VP-14) screened above the BTZ were selected for groundwater sampling to support vapor intrusion analysis.

Monitoring Well MW-92 in the South Plume was sampled during the 2023 annual sampling event in order to obtain baseline groundwater analytical data prior to implementation of proposed injection programs.

3.3.3 Analytical Program

Site COCs to be monitored in the groundwater are defined within the RGWMP. COCs were analyzed to assess prior remediation activities in addition to the effectiveness of MNA as the remedy for the groundwater impacts at the Site. Groundwater monitoring activities included collection of groundwater samples for analysis of VOCs via EPA Method 8260 in accordance with the RGWMP.

Additional parameters were also selectively sampled and analyzed for to support on-going remedial program effectiveness evaluation. The additional water analysis includes methane (CH4), ethane, ethene, ferric iron, sulfate (Method 300.0), sulfide (Method SM 4500-S-2 D), nitrate (Method 300.0), acetylene, total organic carbon (TOC) (Method SM5310X), BAV1 vinyl chloride (VC) reductase, Dehalocaccoides (Dhc), tceA Reductase, VC reductase, and dissolved hydrogen (Method AM20GAX).

All water sampled collected from monitoring wells were analyzed for VOCs. However, only water sampled from monitoring wells MW-25R, MW-38, MW-50R, MW-58R, MW-87, MW-89, MW-95, MW-198, RW-69, IW-73, ITMW-9, TMW-10, and TMW-11 were analyzed for additional parameters. The natural attenuation assessment (MNA assessment) has been used to evaluate predominant electron acceptors, the variability of these electron acceptors, major nutrients, general groundwater quality, key microbial population and enzyme activities, and dissolved gasses as indicated in the 2016 RGWMP. The assessment includes evaluation of chemical, geochemical, and microbial lines of evidence.

In-situ chemical reduction (ISCR) treatment wells are wells located near treatment zones used to assess the effectiveness of ISCR to reduce TCE and breakdown constituents in each of the treatment zones. The ISCR treatment wells are analyzed to include VOCs, MEE, iron (total and ferric), sulfate, nitrate, TOC, dissolved organic carbon, chloride (Method 300.0), and volatile fatty acids (VFAs) (AM23G).

3.3.4 Groundwater Data Quality Assessment

A total of 95 groundwater samples as part of the BTZ groundwater sampling program and four shallow wells along with QA/QC samples were collected during the 2023 annual event. QA/QC samples included 11 field duplicate samples, five matrix spike/matrix spike duplicate (MS/MSD) samples, and five equipment blanks. Duplicate samples were taken at a frequency of one duplicate sample per 10 groundwater monitoring samples. Duplicate samples were collected from ITMW-20, ITMW-21, IW-78, MW-24, MW-96, MW-182, MW-184, MW-195, TMW-12, TMW-30, and TMW-35. An additional 7 groundwater samples were collected from shallow wells and vapor points to support the vapor intrusion analysis.

As 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 water levels during purging and stabilization prior to sampling and tube weights. Equipment rinsate blanks were collected after 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 MW-39R (EB-01-202310), ITMW-2R (EB-02-202310), RTMW-12 (EB-03-202310), MW-38 (EB-04-202310), and TMW-27 (EB-05-202310). The preservation and analysis of the equipment rinsate blanks were identical to those of the associated environmental samples.

VOC analytical data from all wells were validated in accordance with the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Review* (August 2014). The laboratory analytical reports for this annual sampling event are provided in Appendix B. A summary of analytical results (i.e., detected compounds) for this annual event are presented in Table 7. These tables include data qualifiers that have been assigned from the laboratory or from Ramboll's data validation. Appendix C provides Ramboll's data validation report for the October 2023 analytical results.

Field data was collected and validated according to the RADD, associated standard operating procedures (SOPs), and the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Review* (August 2014). The field data and documentation were evaluated against the following criteria, as appropriate.

- Samples were collected at the specified locations identified in the RGWMP and approved by the ADEQ in September 2016;
- Field instrumentation calibration and 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 field procedures.

All VOC (SW846 5030B/8260B) water analytical results were validated by a Ramboll Project Chemist (see Appendix C for the Data Validation Report). During the data validation process, data validation qualifiers were assigned to the results per the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Organic Methods Data Review* (OSWER 9355.0-136, EPA-540-R-2017-002, January 2017) and the USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Inorganic Methods Data Review* (OSWER 9355.0-135, EPA-540-R-2017-001, January 2017) 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. Appropriate data qualifiers have been added to analytical data provided in Table 7. Twenty (20) results for nitrogen (4 results), nitrate (4 results), nitrite (5 results), ethane (4 results), and ethene (3 results) were rejected for analyses that were performed outside 2x the method holding time. See Appendix C for further information regarding the rejected data.

3.4 Air Sampling

Ramboll performed an indoor air and sub-slab soil vapor monitoring events for the Site on October 17-18, 2023. The purpose of air sampling is to evaluate potential vapor intrusion to onsite workers from the TCE impacts in groundwater beneath the former Whirlpool building. Previous monitoring events are discussed in the *2022 Onsite Indoor Air and Sub-Slab Monitoring Report* (Ramboll 2022b). The November 2023 samples were collected and analyzed to evaluate current conditions which reflect renovations to the building completed by Phoenix.

3.4.1 Methodology

A walk-through of the building interior was performed by Ramboll to identify any materials that may impact air quality (i.e., solvent storage, fuel storage, maintenance chemicals, etc.) during sampling and to identify building features that might serve as preferential pathways for vapor intrusion (e.g., floor joints or cracks, below grade pits, etc.). The only potentially significant preferential pathways observed in the eastern portion of the building were construction joints in the concrete slab at various locations associated with slab placements over previous pits and truck bay dock leveler installations.

Indoor air sampling was conducted on October 17, 2023. Sampling was performed between 8:00am and 5:33pm CST (i.e., local Site time). The outside temperature ranged from approximately 40°F to 74°F; relative humidity ranged from 89% to 30%; and wind was from the north, northeast with a speed between 0 mph to 8 mph based on climate data from the National Weather Service at the Fort Smith Regional Airport Station located approximately 2 miles northeast of the Site (www.weather.gov, accessed January 8, 2024). During sample collection, the building ventilation system was operating, interior overhead doors were open, and exterior overhead doors and doorways were closed with exception to truck bays where loading and unloading activities were being conducted.

Indoor air samples were collected at breathing height (approximately 70 inches above the ground) over an 8-hour period. Samples were collected using certified clean stainless-steel Summa canisters provided by an accredited analytical laboratory using flow control regulators pre-set by the laboratory to collect an 8-hour time integrated sample. The canister ID, regulator ID, and initial canister pressure were logged at the beginning of sampling at each location. Initial canister negative pressures typically range from -22 inches mercury (in. Hg) to -30 in. Hg. upon receipt from the laboratory. Indoor and outdoor air samples were collected until the pressure remaining in the canister read between -0.5 and -8 in. Hg. After sample collection was complete, the regulators were closed on the respective canisters.

Sub-slab vapor sampling was conducted on October 18, 2023. Sampling was performed between approximately 8:00am and 4:05 pm CST (local Site time). Samples consist of approximate 15-minute samples collected at various times throughout the day when access was granted by the tenant. During the sub-slab vapor sampling event, the outside temperature ranged from 47°F to 80°F. On October 18, 2023, the wind was from the east, and ranged from 0 to 12 mph. There was no precipitation onsite or in the surrounding area. These times are based upon climate data from the National Weather Service at the Fort Smith Airport (www.weather.gov, accessed January 8, 2024).

Sub-slab vapor samples were collected after at least two liters of air were purged and tested for CH4, carbon dioxide (CO_2), and oxygen (O_2) content using a GEM 2000 multi-gas probe. Leak testing was conducted during purging and sampling. A shroud was placed over the sub-slab sample port, sampling train, and tubing connections to and from the Summa canister and helium was injected until the air in the shroud measured >15% helium using a helium detector. The helium detector was then used to measure the amount of helium in the sampling line. All helium measurements from the leak test were non-detect.

After the sampling train was determined to be adequately sealed, soil vapor samples were collected using certified clean stainless-steel Summa canisters provided by an accredited analytical laboratory using flow control regulators pre-set by the laboratory to collect an approximate 15-minute time integrated sample. The canister ID, regulator ID, and initial canister pressure were logged at the beginning of sampling at each location. Soil vapor samples were collected until the pressure remaining in the canister read between -3 and -15 in. Hg.

3.4.2 Air Sampling Network

Ramboll collected samples at 11 locations within Zones 1-6 as presented on Figure 6. Sampling points were chosen to assess indoor air quality throughout the building with an emphasis on locations above areas exhibiting the highest TCE concentrations in the groundwater plume underneath the building. One duplicate sub-slab sample was collected for the sampling event, as well as an outdoor, background air sample on October 17 and 18. The background air samples were collected from the parking area at the northeast property boundary in the vicinity of MW-89 (upwind of the building). These background water samples were collected at the same time as the indoor air samples and provide an evaluation of potential contributions from sources other than vapor intrusion.

3.4.3 Analytical Program

The canisters were submitted to Pace Analytics for analysis of TCE and associated breakdown products using USEPA Method TO-15 SIM.

3.4.4 Air Quality Data Assessment

An indoor air duplicate sample and sub-slab duplicate sample were collected during the sampling event. The indoor air and sub-slab duplicate samples were collected at location Z6-2 (Figure 6).

All VOC (TO-15) analytical results were validated by a Ramboll Project Chemist (see Appendix C for the Data Validation Report). 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 Data Review* (OSWER 9355.0-136, EPA-540-R-2017-002, January 2017) and USEPA *Contract Laboratory Program National Functional Guidelines for Superfund Inorganic Methods Data Review* (OSWER 9355.0-135, EPA-540-R-2017-001, January 2017) 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. Appropriate data qualifiers have been added to analytical data provided in Tables 9 and 10. The overall data quality assessment indicated that the data are usable for the intended purpose, with no data rejected.

4 Groundwater Results and Discussion

Groundwater analytical results for detected compounds from the October 2023 annual groundwater sampling event are summarized in Table 7 and compared to ADEQ RAL's. TCE analytical results and isoconcentration contours based on the October 2023 groundwater analytical data are presented on Figure 7. Appendix D provides a summary of current and historical groundwater concentrations for Site COCs. Appendix E provides a graphical summary of contaminant concentrations for representative wells upgradient, within, and downgradient of each plume treatment area.

Table 6 presents the groundwater field parameters for the annual event's MNA assessment. A summary of this field data is outlined below.

- Groundwater was generally considered to be anaerobic as water collected from 75 of 99 wells sampled were found to have DO concentrations less than 1 mg/L.
- ORP of groundwater ranged from –312.4 mV in TMW-24 (located in an ISCR treatment area) to a high of 520 mV in ITMW-6 (located south and down-gradient of the south side of the building). ORP readings were generally negative (< 0) in areas impacted by ISCR treatments, +100 to +300 mV in areas where no treatment has occurred, and zero to +300 mV where ISCO was performed in 2014 and 2015.
- pH of groundwater ranged from 4.68 standard units (SU) in MW-39R to 7.57 SU in TMW-14. In general, pH levels are in the range of 5-7.
- Temperature of groundwater ranged from 16.8°C to 28.1°C with many temperature measurements around 15°C to 21°C, which is a range that would support microbial growth in groundwater.

The chemical and geochemical data from the 2023 annual event did not vary greatly to the 2022 annual event (i.e., generally low DO [< 1 mg/L], ORP < 300 mV [negative ORP in ISCR areas], and slightly acidic to neutral pH).

To evaluate the stability of the plumes, a trend analysis was performed using the Mann-Kendall nonparametric test on onsite monitoring wells. The Mann-Kendall test is widely used for performing these tests and is described in detail in USEPA (2009) guidance for statistical tests in groundwater. The Mann-Kendall test is a non-parametric hypothesis test which, unlike a parametric t-test, makes no assumptions about the distribution of the data being evaluated (e.g., normality). The data values are evaluated as an ordered time series where each data value is compared to all subsequent data values.

A Mann-Kendall trend test was conducted using the datasets described in Section 3.3. The computation was performed using the USEPA's ProUCL software. Results from the Mann-

Kendall trend testing are provided within Table 8. The possible outcomes of the trend analysis are as follows[1]:

- No Trend. p-value greater than 0.05;
- Increasing. Test statistic S is positive and p-value <0.05; and
- Decreasing. Test statistic S is negative and p-value <0.05.

There are a few key notes regarding data preparation for the trend analysis:

- Only groundwater data from 2009 to the present was included in the trend evaluation, unless otherwise noted in plume specific discussions;
- For non-detects, one half of the sample quantitation limit was used to represent a numerical concentration; and
- Only wells with at least four detections of a tested analyte and where at least 10% of a contaminant data set contains detections were included in this trend evaluation.

The following subsections provide a summary and discussion of analytical results for the varies plume areas for the Site. Plume stability is also discussed for each plume area based on the Mann-Kendall analysis described above.

4.1 North Plume

The North Plume is located offsite north of Ingersoll Avenue and west of Jenny Lind Road. The North Plume is comprised of 32 monitoring wells (Table 2) that were sampled during the 2023 annual event. Six of these wells were sampled for natural attenuation parameters in accordance with the RGWMP, including MW-50R, MW-58R, TMW-10, TMW-11, IW-73, and RW-69. Additionally, six other wells were sampled for ISCR parameters in accordance with the RGWMP, including MW-61R, MW-194, TMW-10, TMW-11, TMW-21, and TMW-22R. ISCR injections in 2015 and 2018 have been performed to reduce TCE concentrations and maintain plume control at the north boundary and east boundary of the North Plume.

4.1.1 North Plume Analytical Results

The following table provides a synthesis of VOC and select biogeochemical results for the North Plume wells.

[1] Historical reports prior to the 2022 Annual Report used the 3TMO software package which performs an identical computation but had the potential to return three different classes of test results in addition to these listed here. These are not produced directly by the ProUCL Mann-Kendall package, but the qualitative results will be discussed in the subsequent sections:
- Stable – indicates results that did not show an increasing or decreasing trend and had a low coefficient of variance.
- <Practical Quantitation Limit (PQL) - 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.
- Non-Detect (ND) - Constituent has not been detected at the well during the time period analyzed.

Primary Site COCs*	No. Detects / No. Wells Sampled	RAL: No. Wells Exceed RAL	Maximum Detection
TCE	23 / 32	5 µg/L: 17	552 µg/L @ MW-56R
cDCE	22 / 32	70 µg/L: 0	37.8 µg/L @ TMW-22R
VC	10 / 32	2 µg/L: 4	21.0 µg/L @ TMW-22R

Select* Biogeochemical Parameters	Results Range
TOC	Non-detect to 3,100 µg/L
Ferrous Iron	Non-detect to 5,400 µg/L
Sulfate	1,500 µg/L to 16,000 µg/L
Acetylene	Non-detect in all wells
Ethane	Non-detect to 29.1 µg/L
Ethene	Non-detect to 17.9 µg/L
Methane	4.2 µg/L to 8,240 µg/L
Hydrogen	Non-detect to 0.87 nM
DHC	Non-detect to 58 cells/mL

Note:
* Table 7 provides results for all analytes
cells/mL Cells per milliliter
nM Nanomolar
µg/L Microgram per liter

4.1.2 Discussion of Results

VOC Discussion

The North Plume remains well defined and TCE results are generally consistent with previous events. Plume boundary wells MW-39R, MW-40R, MW-50R, MW-60R, MW-61R, MW-62R, MW-68, and MW-196 remain below TCE reporting criteria and RAL. Water collected from four plume boundary wells (MW-55R, MW-63R, MW-194, and MW-195) were reported to have a TCE concentrations above the RAL of 5 µg/L ranging from 5.6 µg/L at MW-195 to 26.9 µg/L at MW-55R. Nearby plume boundary wells (TMW-35, MW-50R, MW-68, and MW-196) provide lines of evidence (i.e., TCE non detect, or TCE detection < RAL) that assist to maintain a well-defined North Plume.

During the 2023 annual event, the highest concentration of TCE detected in groundwater samples from the North Plume wells was 552 µg/L collected from plume interior well MW-56R. This is a decrease from this well's maximum concentration of 902 µg/L in November 2018. TCE concentrations are lower up-gradient from MW-56R at MW-46R (288 µg/L). Some concentration variations are expected to occur within plume interior monitoring wells and monitoring will continue. There are sufficient down-gradient monitoring locations to evaluate plume conditions leading into and from the down-gradient treatment zone at the eastern extent of the North Plume (Figure 8).

Temporary monitoring wells (i.e., TMW wells) in the North Plume were previously installed to further delineate the north-eastern edge of the plume and were retained to provide on-going monitoring for the plume and ISCR treatment zones. As presented on Figure 7 and within Table 7, TCE concentrations in water from these wells provided further lines of evidence to define the North Plume boundary.

During the October 2023 groundwater sampling event cis-1,2-dichloroethene (cDCE), a degradation daughter product of TCE, was not detected in any North Plume well exceeding the RAL of 70 µg/L. VC, a degradation product of TCE and cDCE, was detected in water from only four monitoring wells (MW-57R, TMW-10, TMW-21, and TMW-22R) at concentrations greater than the RAL of 2 µg/L ranging from at 2.8 µg/L at MW-57R to 21 µg/L at TMW-22R. As shown on Figure 8, three of these wells (TMW-10, TMW-21, and TMW-22R) are located within the 2018 North Plume ISCR injection areas where a treatment area has been established to reductively dechlorinate TCE impacted groundwater.

Biogeochemical and Microbiological Discussion

Hydrogen analysis was performed on groundwater from six monitoring wells within the North Plume. Two of these wells were within the treatment zones established during the 2018 ISCR injections and four monitoring wells from within and adjacent to the North Plume interior. Groundwater collected from monitoring well TMW-10 within the treatment area contained hydrogen concentrations (1.8 nM) supportive of a sulfate reducing environments and reductive dechlorination (USEPA, 1998).

Hydrogen in groundwater collected from three wells within and adjacent to the North Plume interior contained concentrations approximately, or greater than, 1 nM (MW-50R at 1.4 nM, MW-58R at 0.87 nM, and RW-69 at 5.1 nM) which are supportive of a sulfate reducing environment and reductive dechlorination (USEPA, 1998).

Microbial testing was performed on groundwater from six monitoring wells within the North Plume. Two of these wells were within the treatment zones established during the 2018 ISCR injections and four monitoring wells were from within and adjacent to the North Plume interior upgradient of the treatment area. Groundwater from within the treatment area at monitoring wells TWM-10 and TMW-11 contained Dhc concentrations 58 and 57.8 cells/mL, respectively. These moderate concentrations of Dhc when paired with detections of vcrA indicate that complete reductive dichlorination of TCE to ethene may still occur in the treatment zone.

Groundwater from within and adjacent to the North Plume interior (i.e., upgradient of the North Plume treatment area) contained a moderate concentration of Dhc at IW-73 (27.9 cell/mL), low concentrations at MW-50R (1.4 cells/mL) and RW-69 (1.8 cells/mL) and was non-detect at MW-58R. All four of these locations were non-detect for vcrA while one well near the upgradient edge of the North Plume (IW-73) contained a low concentration of the BAV1 VC reductase. The interior of the North Plume upgradient of the 2018 treatment area contains low levels of microbial populations which suggests that reductive dechlorination of TCE is still possible, but additional lines of evidence are needed to support this conclusion. Additional discussions of

terminal electron acceptors, TOC, and VFAs are discussed in Section 5.2 in support of the ISCR effectiveness evaluation.

4.1.3 North Plume Stability

In the North Plume Wells, 27 wells had Mann-Kendall trend tests performed as five wells had insufficient data to perform a trend test. Of the wells that were analyzed, the majority showed decreasing or no trend results for TCE:

- Increasing: Six wells (~19%);
- Decreasing: 15 wells (~47%);
- No Trend: Six wells (~19%); and
- Not Calculated" Five wells (~16%).

There are approximately 13 monitoring wells that are within or adjacent to the leading edge of the North Plume (MW-60R, MW-61R, MW-63R, MW-194, MW-195, TMW-10, TMW-11, TMW-12, TMW-14, TMW-21, TMW-22R, TMW-23, and TMW-24). Of these monitoring wells, eight demonstrate decreasing TCE trends, two with no trend, and three with increasing TCE trends. The wells with increasing trends are MW-61R, TMW-23, and MW-195. The October 2023 TCE concentrations for MW-61R (1.7 µg/L) was less than the contaminant RAL (5 µg/L) and MW-195 (5.6 µg/L) was just over the contaminant RAL. TMW-23 is located upgradient of the 2018 injection areas and groundwater from this area has not yet traveled through the treatment area.

Based on Mann-Kendall analysis of wells along the leading edge of the North Plume and supported by on-going remediation through the 2018 ISCR program, this plume demonstrates stability and has not further expanded toward the northeast.

Three monitoring wells comprise the lagging edge to the North Plume (IW-77, IW-78, and MW-82). These three locations demonstrate either decreasing TCE trends or no trend. Across Ingersoll Avenue the two closest South Plume wells to the North Plume demonstrate a decreasing TCE trend at MW-83 and no trend at MW-27. These Mann-Kendall results support that prior remediation efforts at the Site have maintained a separation between the North and South Plumes.

4.2 East Plume

The East Plume consists of groundwater impacts along the eastern property boundary extending from the southeast dock area of the property northward to the northeast parking lot (Figure 7). The East Plume includes 14 monitoring wells that were sampled during the 2023 annual event. Two of these wells (MW-87 and MW-89) were sampled for natural attenuation parameters in accordance with the RGWMP. Additionally, three other wells were sampled for ISCR parameters in accordance with the RGWMP, including MW-91, MW-99, and TMW-34.

ISCR injections in 2019 were previously performed within the northeastern portion of the East Plume to reduce TCE concentrations and maintain plume control in this area. A limited scale (i.e., only four injection points) injection program was installed in 2018 within the southeastern portion of the East Plume down-gradient of MW-185.

4.2.1 East Plume Analytical Results

The following table provides a synthesis of VOC and select biogeochemical results for the East Plume wells.

Primary Site COCs	No. Detects / No. Wells Sampled	RAL: No. Wells Exceed RAL	Maximum Detection
TCE	12 / 14	5 µg/L: 7	582 µg/L @ MW-205
cDCE	10 / 14	70 µg/L: 2	122 µg/L @ MW-205
VC	2 / 14	2 µg/L: 0	0.90 µg/L @ MW-205

Select* Biogeochemical Parameters	Results Range
TOC	Non-detect to 6,000 µg/L
Ferrous Iron	Non-detect to 3,500 µg/L
Sulfate	2,600 µg/L to 14,600 µg/L
Acetylene	Non-detect in all wells
Ethane	Non-detect to 2.7 µg/L
Ethene	Non-detect to 1.7 µg/L
Methane	5.6 µg/L to 8,290 µg/L
Hydrogen	1.1 nM to 2.3 nM
Dhc	0.2 cells/ML to 1.5 cells/ML

Note:
* Table 7 provides results for all analytes
cells/mL cells per milliliter
nM nanomolar
µg/L microgram per liter

4.2.2 Discussion of Results

VOC Discussion

The East Plume well concentrations at MW-185, TMW-34, and MW-205 remain generally consistent with recent events. Plume boundary wells MW-96, MW-97, MW-98, MW-183R, and MW-184 remain below TCE reporting criteria and RAL. Groundwater monitoring data show that the East Plume boundaries have extended east of TMW-34. A work plan was submitted to the ADEQ on June 1, 2022, and subsequently approved on July 5, 2022, for an additional investigation east of Jenny Lind Road and will be completed upon receipt of an executed offsite property access agreement. A work plan was submitted to the ADEQ on December 19, 2023, for implementation of a new ISCR treatment area that will be installed across the eastern boundary of the Site building. This work plan is currently under review by ADEQ at the time this report was submitted.

During the 2023 annual event, the highest concentration of TCE detected in groundwater samples from the East Plume wells was 582 µg/L collected from plume interior well MW-205. The TCE concentration detected at MW-87 was 257 µg/L, which is a decrease from the high of 839 µg/L in 2016. Some concentration variations are expected to occur within the plume interior monitoring wells and monitoring will continue.

During the October 2023 groundwater sampling event cDCE, a degradation daughter product of TCE, was detected in two East Plume wells exceeding the RAL of 70 µg/L (107 µg/L at MW-91 and 122 µg/L at MW-205). VC, a degradation product of TCE and cDCE, was not detected in water from any monitoring wells at concentrations greater than the RAL of 2 µg/L.

Additional discussions of terminal electron acceptors, TOC, and VFAs are discussed in Section 5.2 in support of the ISCR effectiveness evaluation.

Biogeochemical and Microbiological Discussion

Hydrogen analysis was performed on groundwater from two monitoring wells (MW-87 and MW-89) within the East Plume adjacent to the northeastern treatment zone established during the 2018 ISCR injections. Groundwater collected from these monitoring wells contained hydrogen concentrations (1.1 nM and 2.3 nM, respectively) supportive of a sulfate reducing environment and reductive dechlorination (USEPA, 1998).

Microbial testing was also performed on groundwater from these two monitoring wells (MW-87 and MW-89) within the East Plume adjacent to the northeastern treatment zone established during the 2018 ISCR injections. Groundwater from these wells contained only low concentrations of Dhc at MW-87 (0.2 cells/mL) and MW-89 (1.5 cells/mL) and were non-detect for vcrA. The East Plume, upgradient and adjacent to the 2018 southeastern treatment area, contains low levels of microbial populations which suggests that reductive dechlorination of TCE is still possible within this area, but additional lines of evidence are needed to support this conclusion. Additional discussions of terminal electron acceptors, TOC, and VFAs are discussed in Section 5.2 in support of the ISCR effectiveness evaluation.

4.2.3 East Plume Stability

In the East Plume Wells, 12 wells had Mann-Kendall trend tests performed as two wells had insufficient data to perform a trend test. Of the wells that were analyzed, the majority showed increasing or no trend results:

- Increasing – seven wells (~50%);
- Decreasing – four wells (~29%);
- No Trend – one well (~7%); and
- Not Calculated – two wells (~14%).

Out of the 12 wells that had sufficient data sets to run Mann-Kendall, seven wells were found to demonstrate increasing TCE trends. Based on this analysis the East Plume demonstrates a potentially expanding plume. Work plans were submitted to the ADEQ on June 1, 2022, for

additional investigation east of Jenny Lind Road and will be completed upon receipt of an executed offsite property access agreement.

4.3 South Plume

The South Plume is comprised of groundwater impacts onsite south of Ingersoll Avenue, south of the main warehouse building and extending offsite toward the southwest (Figure 7). The South Plume includes 49 monitoring wells that were sampled during the 2023 annual event. Five wells in the South Plume were sampled for laboratory and natural attenuation parameters in accordance with the RGWMP, including ITMW-9, MW-25R, MW-38, MW-95, and MW-198. Additionally, four wells in the South Plume were sampled for ISCR parameters in accordance with the RGWMP, including TMW-19, TMW-25, TMW-36, and TMW-36B. ISCR Injections in 2018 and 2020 have been performed to reduce TCE concentrations and obtain control of the South Plume along strategic areas of the South Plume boundary.

4.3.1 South Plume Analytical Results

The following table provides a synthesis of VOC and select biogeochemical results for the South Plume wells.

Primary Site COCs*	No. Detects / No. Wells Sampled	RAL: No. Wells Exceed RAL	Maximum Detection
TCE	41 / 49	5 µg/L: 35	62,300 µg/L @ RW-1
cDCE	39 / 49	70 µg/L: 6	55,700 µg/L @ RW-1
VC	16 / 49	2 µg/L: 5	389 µg/L @ RW-1

Select* Biogeochemical Parameters	Results Range
TOC	Non-detect to 12,800 µg/L
Ferrous Iron	Non-detect to 7,500 µg/L
Sulfate	860 µg/L to 1,780,000 µg/L
Acetylene	Non-detect to 0.99 µg/L
Ethane	Non-detect to 35.4 µg/L
Ethene	Non-detect to 13.5 µg/L
Methane	Non-detect to 4,130 µg/L
Hydrogen	Non-detect to 10.9 nM
Dhc	Non-detect in all wells

Note:
* Table 7 provides results for all analytes
cells/mL cells per milliliter
nM nanomolar
µg/L microgram per liter

4.3.2 Discussion of Results

VOC Discussion

The South Plume remains fairly well defined with the exception of the Site building interior where there are a limited number of wells. TCE results are generally consistent with previous events. Notable observations for the South Plume area are discussed herein.

Monitoring wells ITMW-20, ITMW-2R, MW-22, MW-26, MW-28, MW-29, MW-84, MW-186, MW-192, MW-197, MW-201, TMW-25, TMW-27, and TMW-36B remain below TCE reporting criteria and RAL, and provide a boundary on the western, southern, and most of the northern extent of the South Plume.

During the 2023 annual event, the highest concentrations of TCE were detected in groundwater within the source area at monitoring wells MW-95 and MW-198 and recovery well RW-1 (44,300 µg/L, 31,400 µg/L, and 62,300 µg/L, respectively). As a whole, concentrations within the source area remain relatively consistent with recent historical fluctuations in the magnitude of detections.

Approximately 100 feet south of the property boundary, and south of the 2020 ISCR treatment area, TCE was detected in groundwater at MW-203 at 330 µg/L. However, groundwater analyzed from monitoring well MW-201 (south and slightly east of MW-203) remains non-detect for TCE. The 2020 ISCR treatment zone at the south property boundary was installed to address additional impacts to offsite groundwater.

Offsite to the southwest, TCE was detected in groundwater at MW-199 at 93.1 µg/L. This is a decrease from the well's maximum concentration of 101 µg/L in April 2023 and is generally consistent with historical concentrations.

During the October 2023 groundwater sampling event cDCE, a degradation daughter product of TCE, was detected in six wells exceeding the RAL of 70 µg/L. The wells with cDCE exceeding the RAL were ITMW-9, ITMW-18, MW-25R, MW-95, MW-198, and RW-1. These wells are within or near to the source area.

VC, a degradation product of TCE and cDCE, was detected in water from only five monitoring wells at concentrations greater than the RAL of 2 µg/L. The wells with VC exceeding the RAL were ITMW-9, MW-25R, MW-95, MW-198, and RW-1. All five of these wells are located within or near to the source area. These elevated results for cDCE and VC provide a line of evidence that reductive dechlorination is occurring within the source area and the ISCR treatment area.

A work plan was submitted on June 1, 2022, to ADEQ and subsequently approved on July 5, 2023, by ADEQ to address comments from the agency regarding installation of additional down-gradient South Plume (down-gradient of MW-199 and MW-203) boundary monitoring wells. This additional investigation is anticipated to be completed in 2024 in concert with additional investigations within the East Plume.

Biogeochemical and Microbiological Discussion

Hydrogen analysis was performed on groundwater from four monitoring wells within the South Plume. Three of these wells (MW-38, MW-95, and MW-198) are within or nearby to the source area and the fifth (ITMW-9) is downgradient on the south side of the Site building. Groundwater collected from MW-38 and MW-198 were non-detect. Hydrogen analysis from ITMW-9 (10.9 nM) and MW-95 (0.51 nM) support a reducing environment and reductive dechlorination.

Microbial testing was performed on groundwater from five monitoring wells within the South Plume. Four of these wells (MW-25R, MW-38, MW-95, and MW-198) were within or nearby to the source area and the fifth (ITMW-9) is downgradient on the south side of the Site building. Groundwater from these wells was non-detect for concentrations of Dhc and vcrA/BAV1 vinyl chloride reductases. The absence of microbial populations indicates that groundwater conditions in these wells are not currently supporting microbial driven reductive dechlorination.

Additional discussions of terminal electron acceptors, TOC, and VFAs are discussed in Section 5.2 in support of the ISCR effectiveness evaluation.

4.3.3 South Plume Stability

In the South Plume Wells, 42 wells had Mann-Kendall trend tests performed as seven wells had insufficient data to perform a trend test. Of the wells that were analyzed, the majority showed a mix increasing or decreasing results for TCE:

- Increasing – 15 wells (~31%);
- Decreasing – 17 wells (~35%);
- No Trend – 10 wells (~20%); and
- Not Calculated – seven wells (~14%).

Of the eight wells with the greatest TCE concentrations in or near to the source area four wells (ITMW-18, ITMW-19, MW-25R, and MW-93) demonstrate decreasing trends, three monitoring wells (MW-38, MW-95, and MW-198) have no trend, and RW-1 has too few data points to run Mann-Kendall.

Along the southern leading edge of the South Plume there are 8 monitoring wells with sufficient data to run Mann-Kendall analysis. Of these seven wells (MW-187, MW-188, MW-189, MW-190, MW-191, MW-203, and TMW-19) demonstrate an increasing TCE trends and one well (TMW-36) demonstrates no trend.

Based on this analysis the South Plume demonstrates a potentially expanding plume. A work plan was submitted on June 1, 2022, to ADEQ to address comments from the agency regarding installation of additional downgradient plume boundary monitoring wells. This additional investigation in the areas near MW-190, MW-203, and MW-199 are anticipated to be completed in 2024 in concert with additional investigations within the East Plume area.

5 ISCR Remedial Effectiveness

Four ISCR injection events (October 2015, August 2018, December 2019, and October 2020) have been performed at the Site. Each ISCR injection event was performed in accordance with the respective action plan or work plan and approvals received from the ADEQ UIC Program (Inventory Requirements for Authorized by Rule Class V Wells as described in 40 CFR 144.84).

The ISCR technology employed during each of these events combines abiotic chemical reduction and anaerobic bioremediation for the treatment of chlorinated VOCs in groundwater. These physical, chemical, and biological processes combine to produce a reducing environment in the treated saturated zone to stimulate complete dechlorination of TCE and daughter products to non-toxic end breakdown products. ISCR reagents are typically effective for a timeframe of multiple years.

5.1 ISCR Injection Background

A complete history of the four ISCR injection events have been detailed in prior annual reports, however a brief overview is provided herein:

- **September to October 2015 (North Plume).** This event was the pilot component of the final remedy for groundwater defined by the 2015 RADD for the Site (Figure 8).[2] Injections consisted of 4,844 gallons of ISCR reagents including ProvectIR-40™ [40% by weight zero valent iron (ZVI), magnesium oxide, and Dhc inoculum. Reagents were distributed across three treatment zones north the Site between Brazil Avenue and Jacobs Avenue west of Jenny Lind Road and comprised of a total of 44 temporary direct push injection points.
- **July to August 2018 (North Plume and South Plume).** This event consisted of injecting 21,874 gallons of ISCR reagents distributed across three areas of the Site, including 65 temporary injection points adjacent to the 2015 ISCR injection area (Figure 8), 64 temporary points within the southwestern area of the Site (Figure 9), and four points in the southeastern area of the Site (Figure 10). ISCR reagents for this event included ZVI, nutrients, hydrolyzed kelp, calcium propionate, sodium sulfite, Provect-IR™, yeast extract, vitamin B12, vitamin B2, and red yeast rice.
- **December 2019 (East Plume).** This event consisted of injecting 5,760 gallons of ISCR reagents distributed across 37 temporary injection points within the northeast corner parking lot of the Site (Figure 11). ISCR reagents for this event included ZVI, nutrients, hydrolyzed kelp, calcium propionate, sodium sulfite, Provect-IR™, Provect AMR compound, yeast extract, magnesium hydroxide, vitamin B12, and vitamin B2.
- **October 2020 (South Plume).** This event consisted of injecting 6,300 gallons of ISRC reagent distributed across 23 temporary injection points along the south property boundary in the vicinity of TMW-36 (Figure 12). ISCR reagents for this event included ZVI, nutrients, hydrolyzed kelp, calcium propionate, sodium sulfite, Provect-IR™,

[2] The 2015 RADD specified ISCO and/or ISCR for groundwater treatment.

Provect AMR compound, yeast extract, magnesium hydroxide, vitamin B12, and vitamin B2.

The ISCR reagents for the 2019 and 2020 injection events were adjusted based on results from the 2015 and 2018 injection events for pH control, decreasing CH4 generation, enhancement of abiotic degradation, and longevity of the bioremediation treatment zones.

Innovative Environmental Technologies, Inc (IET) provided materials, equipment, and personnel to inject the ISCR reagents and assisted Ramboll personnel in monitoring the progress of each of the four injection events.

5.2 ISCR Monitoring Results

Table 6 provides a summary of groundwater field parameter measurements during the October 2023 groundwater sampling event. Table 7 and Appendix D provide a summary of current and historical groundwater concentrations for Site COCs. Appendix E provides a graphical summary of contaminant concentrations for representative wells upgradient of, within, and downgradient of each plume treatment area. Based on review of the field measurements and analytical data provided within these tables, the following assessments have been prepared for the ISCR treatment zones across the Site. Each plume area and the status of the respective treatment area is discussed herein.

5.2.1 North Plume

Monitoring wells MW-61R, MW-194, TMW-10, TMW-11, TMW-21, and TMW-22/22R are located within or adjacent and down-gradient to the north treatment zone. Installation of the north treatment zones were completed in stages with an initial pilot study in 2015 and then an expanded treatment area in 2018. Analytical data for this treatment area can be summarized as follows:

- Biogeochemical data:
    - Iron concentration within all monitoring wells (MW-61R, MW-194, TMW-10, TMW-11, TMW-21, and TMW-22/22R) initially increased post injection as a result of ZVI within the injected reagent, and concentrations remain elevated through the October 2023 monitoring event.
    - TOC concentrations increased within MW-194, TMW-10, TMW-11, TMW-21, and TMW-22/22R to a maximum of 13.4 mg/L, 2,240 mg/L, 13.2 mg/L, 3,930 mg/l, and 161 mg/L, respectively, by November 2018 or April 2019. Organic carbon concentrations have dropped since reaching peak concentrations at these well locations and in October 2023 TOC concentrations ranged from non-detect to 3.1 mg/L.
    - Nitrate concentrations in groundwater were all non-detect, which is suggestive that reducing conditions exist within the treatment zone.
    - Sulfate concentrations in groundwater have generally been <25 mg/L and have been mostly consistent concentrations at each monitoring well.

  - VFAs (e.g., acetic acid, butyric acid, and propionic acid) are an intermediate degradation product that are generated during biodegradation of Site COCs. VFAs were generated/increased during early post injection monitoring events; however, analytical results from later post injection monitoring events through to October 2023 show a decreasing trend of detections, or non-detects for previously detected VFAs.
  - ORP field data measured during the October 2023 groundwater sampling event ranged from -312.4 mV to 520 mV. The drop in ORP from TMW-23 (-18.30 µS/cm) to TMW-10/TMW-11 (-128.5 mV and -142.3 mV) as groundwater has flowed into the treatment zone is a positive indicator that the treatment zone is effectively creating a reducing environment. Similarly, ORP field data measure during groundwater sampling MW-57R (upgradient of treatment area) was +187.5 mV while monitoring well TMW-22R within the treatment area was -91.10 mV. Negative ORP values are generally indicative of conditions capable of reductive dechlorination and ORP values less than -100 mV are stronger evidence still.

- VOC data:
  - TCE concentrations in groundwater collected from TMW-10, TMW-11, TMW-21, and TMW-22/22R have been reduced by approximately 96% since each well's respective baseline sampling event.
  - As shown in Appendix E, groundwater analytical trends at MW-61R show an increasing trend prior to each injection event performed within the North Plume (e.g., 2015 and 2018). After each injection event groundwater concentrations from within MW-61R have shown significant reductions in TCE (86% and 92%, respectively).
  - cDCE concentrations in groundwater at all monitoring wells briefly increased as TCE was degraded to a temporary peak concentration within one year of initial injections followed by a period of decreasing concentrations. In the case of TMW-10 and TMW-11, cDCE experienced two temporary peaks following the 2015 and 2018 injection events.
  - VC concentrations in groundwater at TMW-10, TMW-11, TMW-21, and TMW-22/22R briefly increased as TCE and cDCE were degraded to a temporary peak concentration followed by a period of decreasing concentrations. Groundwater from MW-61R has mostly been non-detect for VC but has been detected in groundwater since October 2021. However, all detections of VC since October 2021 have been below the RAL of 2 µg/L. Groundwater collected from MW-194 has been non-detect for VC since baseline sampling in July 2018.
  - Detectable concentrations of ethene and ethane have been observed in groundwater during many post injection monitoring events. The detections of ethene and ethane are not as high as ideally desired (typically <3 µg/L), however detections of these analytes do demonstrate that complete biodegradation of Site COCs is occurring.

- Based on lower detectable concentrations of biodegradation breakdown products (e.g., cDCE, VC, and ethene/ethane) and based on continued elevated iron concentrations, abiotic degradation of Site COCs is likely complimenting on-going bioremediation processes.

Analytical data collected within the North Plume treatment area suggests that a remediation treatment zone was successfully established and that a reducing environment still exists that is capable of complete reductive dechlorination and abiotic degradation of Site COCs. Graphs within Appendix E provide time series graphs demonstrating establishment and on-going remediation trends for Site COCs. Biogeochemical data, including recently reduced TOC and VFA concentrations, suggests that the treatment zone is running low on carbon and energy sources. It is warranted at this time to consider another dose of bioremediation reagent to compliment continued abiotic degradation before the carbon source has been completely exhausted. A remediation work plan was submitted on December 19, 2023 to ADEQ for the North Plume area for another round of injections to maintain the effectiveness of this treatment area to control of this plume. This work plan is currently under review by ADEQ at the time this report was submitted.

A work plan was submitted to the ADEQ on December 19, 2023 for implementation of a new ISCR treatment area that will be installed across the eastern boundary of the Site building.

5.2.2 East Plume

A limited scale ISCR injection event was installed in 2018 with TMW-34 installed as a down-gradient monitoring well and MW-185 as an up-gradient. Northeast bioremediation treatment zones were established adjacent to MW-91 and MW-99 during the December 2019 ISCR injection event. Analytical data for each treatment area can be summarized as follows:

- Biogeochemical data:
  - Iron concentrations within the down-gradient well TMW-34 initially increased by an order of magnitude post injection as a result of ZVI within the injected reagent, and concentrations remain elevated through the October 2023 Monitoring Event. Iron concentrations initially increased by three orders of magnitude at MW-91 and MW-99 post injection as a result of ZVI within the injected reagent, and concentrations remain elevated through the October 2023 monitoring event.
  - TOC concentrations at TMW-34 initially increased from 0.72 mg/L in November 2018 to 3 mg/L in April 2019; however, concentrations have decreased to 0.56 mg/L by October 2019 and have mostly remained low since and were non-detect in October 2023. TOC concentrations initially increased to 225 mg/L at MW-91 and 4,590 mg/L at MW-99 during the initial post injection event in May 2020; however, concentrations have steadily decreased since that time to 3.6 mg/L and 6 mg/L, respectively, during the October 2023 monitoring event.
  - Nitrate and sulfate concentrations have not substantively decreased in groundwater collected from TMW-34 since initial injection in 2018. Nitrate has been reduced at MW-91 and MW-99 to non-detect, which is suggestive of

reducing conditions have been established within the northeast treatment zone. Sulfate has been reduced at both monitoring wells to approximately 5.5 mg/L, which is suggestive of highly reducing conditions having been established within the northeast treatment zone.

- Limited detections of VFAs have been detected in groundwater collected from TWM-34 since the 2018 injections. VFAs were produced/increased during the 2020 post injection monitoring events at MW-91 and MW-99, however, analytical results from the October 2023 monitoring event show significant decreased detections, or non-detects for previously detected VFAs. The exceptions are lactic and formic acid. Lactic acid was detected in both monitoring wells for the first time in October 2021 and formic acid was detected in both wells for the first time in October 2022 and October 2023.
- ORP field data measured during groundwater sampling at TMW-34 and MW-185 were -9.1 mV and +163 mV, respectively. Negative ORP values are generally indicative of conditions capable of reductive dechlorination. The drop in ORP from MW-185 to TMW-34 as groundwater has flowed through the treatment zone is a positive indicator that the treatment zone is effectively creating a reducing environment. Similarly, ORP field data measured during groundwater sampling MW-87 (upgradient of treatment area) was +143 mV while monitoring wells downgradient of the treatment area (MW-91 and MW-99) were –105 mV and -135 mV, respectively. Negative ORP values are generally indicative of conditions capable of reductive dechlorination and ORP values less than -100 mV are stronger evidence still.

- VOC data:
  - TCE and cDCE concentrations in groundwater collected from TWM-34 have steadily increased from the initial November 2018 baseline sampling event through to the most recent sampling event in October 2023 (TCE – 7.4 µg/L to 147 µg/L and cDCE – 1.5 µg/L to 24.3 µg/L). TCE has been reduced in groundwater approximately 70% at MW-91 and by 99.5% at MW-99.
  - VC has been non-detect in groundwater sampled from TMW-34 and MW-99 since the baseline samples collected in November 2018 and December 2019, respectively.
  - Detectable concentrations of ethene and ethane were initially observed in groundwater during the 2018 and 2019 sampling events at TMW-34; however, both ethene and ethane were not detected in October 2023. During the October 2023 sampling event ethane and ethene were detected in MW-91, while ethane only was detected in MW-99. The detections of ethene and ethane are not as high as ideally desired (generally 2.7 µg/L or lower); however, detections of these analytes do demonstrate that complete biodegradation of Site COCs is occurring.
  - TCE and cDCE increasing trends in groundwater collected from MW-185 have been observed during the same November 2018 to October 2023 timeframe as with TMW-34 (TCE – 11.7 µg/L to 177 µg/L and cDCE – 1.4 µg/L to 88.5 µg/L).

- Based on the lower detectable concentrations of biodegradation breakdown products (e.g., cDCE from MW-99, VC at both MW-91 and MW-99, and ethene/ethane at MW-99) and based on continued elevated iron concentrations at both MW-91 and MW-99, abiotic degradation of Site COCs is likely complimenting on-going bioremediation processes.

Analytical data collected within the East Plume treatment areas suggests that an initial remediation treatment zone was successfully established and that a reducing environment still exists that is capable of complete reductive dechlorination and abiotic degradation of Site COCs. Graphs within Appendix E provide time series graphs demonstrating establishment and on-going remediation trends for Site COCs. Biogeochemical data, including recently reduced TOC and VFA concentrations, suggests that the treatment zones are running low on carbon and energy sources. It is warranted at this time to consider another dose of bioremediation reagent to compliment continued abiotic degradation before the carbon source has been completely exhausted. A work plan was submitted to ADEQ on December 19, 2023, for implementation of a new ISCR treatment area that will be installed across the eastern boundary of the Site building. This work plan is currently under review by ADEQ at the time this report was submitted.

5.2.3 South Plume

TMW-36 and TMW-36B are located directly adjacent to and down-gradient of the southwest corner of the October 2020 ISCR injection area. TMW-16, TMW-26, TMW-32, and MW-186 are located within or adjacent and down-gradient to a southwest treatment zone. TMW-25 is adjacent to, but up-gradient of, the most up-gradient southwest treatment zone. TMW-36B was non-detect for all chlorinated VOCs from October 2020 through October 2023, therefore discussions below will mostly focus on TMW-36 and additional wells to the southwest. Analytical data for this treatment area can be summarized as follows:

- Biogeochemical data:
  - Iron concentrations initially increased by two orders of magnitude at TMW-36 between October 2020 and October 2021 (<50 µg/L to 3,490 µg/L) as a result of ZVI within the injected reagent and has since further increased to 5,910 µg/L in October 2023. Iron concentrations within monitoring wells TMW-16, TMW-25, TMW-26, TMW-32, and MW-186 initially increased by at least three orders of magnitude post injection as a result of ZVI within the injected reagent, and concentrations remain elevated through the October 2023 monitoring event.
  - TOC concentrations did not substantively change post injection and only increased at TMW-36 from 0.37 mg/L to 0.68 mg/L from October 2020 to October 2021. In October 2023 the TOC concentration increased to 1.5 mg/L. TOC concentrations increased within TMW-16, TMW-25, TMW-26, and MW-186 to at least 2,980 mg/L by November 2018. Organic carbon concentrations have dropped since initial installation of these treatment zones at these well locations and in October 2023 TOC concentrations ranged from 3.8 mg/L to 12.8 mg/L. At TMW-32, TOC increased initially to 4.8 mg/L by November 2018 and has since dropped to 0.92 mg/L by October 2023.

- Nitrate was reduced in groundwater at TMW-36 from 16.7 mg/L in October 2020 to 0.29 mg/L in October 2021, which is suggestive that reducing conditions have been established within the treatment zone. Nitrate concentrations in groundwater at TMW-16, TMW-25, TMW-26, TMW-32, and MW-186 have either dropped to, or have always been, <1 mg/L or are now non-detect, which is suggestive that reducing conditions have been established within the treatment zone.
- Sulfate was reduced in groundwater at TMW-36 from 56.8 mg/L in October 2020 to 15.3 mg/L in October 2021 and remained lower at 13.1 mg/L in October 2023, which is suggestive that strongly reducing conditions were established within the treatment zone. Sulfate concentrations in groundwater at TMW-16, TMW-25, TMW-26, and MW-186 had dropped to and mostly remained <20 mg/L through October 2023, which is suggestive that strongly reducing conditions have been established within the treatment zone within these areas.
- ORP field data measured during groundwater sampling at TMW-36 were -0.7mV. ORP field data measured during the October 2023 groundwater sampling event at TMW-16, TMW-25, TMW-26, and MW-186 were ranged from –108.7 mV to –290.3 mV. An ORP measurement of groundwater sampled from TMW-32 in October 2023 was approximately –51.3 mV. Negative ORP values are generally indicative of conditions capable of reductive dechlorination and ORP values less than -100 mV are stronger evidence still.

- VOC data:
  - TCE concentration was initially reduced in groundwater at TMW-36 from 389 µg/L in October 2019 to 11.3 µg/L in April 2021. However, groundwater concentrations of TCE in four of the last five sampling events have been approximately 100 µg/L. At TMW-16, TMW-25, TMW-26, and MW-186 TCE has been reduced in groundwater an average of 98% from the baseline sampling event.
  - cDCE concentrations in groundwater from TMW-36 were mostly stable at concentrations <10 µg/L from the baseline October 2019 monitoring event through April 2021. However, since the October 2021 sampling event cDCE has demonstrated an apparent temporary increased concentration to a max of 81.5 µg/L in October 2022 and down to 60.5 µg/L in October 2023. cDCE concentrations in groundwater at monitoring wells to the southwest briefly increased to a temporary peak concentration by April 2019 or October 2019 before decreasing to near baseline concentrations or lower. Temporary increased concentrations in cDCE within bioremediation treatment areas is most likely a result as TCE degradation.
  - VC concentrations in groundwater from TMW-36 have mostly been stable at concentrations ranging from non-detect to 0.4 µg/L from the baseline October 2019 monitoring event through October 2023. VC concentrations in groundwater at monitoring wells to the southwest briefly increased as TCE and cDCE was

degraded to a temporary peak concentration by October 2019 or May 2020 before decreasing to near baseline concentrations or lower.

- Detectable concentrations of ethene and ethane have been observed in groundwater during prior sampling events at TMW-36, although these analytes were non-detect during the October 2023 monitoring event. Ethene and ethane have been detected within monitoring wells to the southwest, although not as high as ideally desired (generally 5 µg/L or lower); however, detections of these analytes do demonstrate that complete biodegradation of Site COCs is occurring.
- Based on the lower detectable concentrations of biodegradation breakdown products (e.g., limited detections of cDCE, VC, ethane and ethene) and based on elevated iron concentrations during the October 2023 sampling event, abiotic degradation of Site COCs is likely complimenting on-going bioremediation processes.

Analytical data collected within the South Plume treatment area suggests that an initial remediation treatment zone was successfully established and that reducing environments exist that are capable of complete reductive dechlorination and abiotic degradation of Site COCs. Graphs within Appendix E provide time series graphs demonstrating establishment and on-going remediation trends for Site COCs. Recent TCE concentration increases in October 2021 and into 2023, coupled with increased sulfate concentrations, may indicate greater concentrations of contaminants have more recently been traveling through the South Plume treatment area. The increased cDCE concentrations during the same time period indicate that the South Plume treatment area is continuing to remediate TCE impacted groundwater as it travels through the area. Biogeochemical data, including reduced TOC and VFA concentrations, suggests that the treatment zones are running low on carbon and energy sources. It is warranted at this time to consider another dose of bioremediation reagent to compliment continued abiotic degradation before the carbon source has been completely exhausted.

5.3 ISCR Summary

An ISCR treatment zone remedy has been installed within five areas of the Site: north (two injections), northeast, southeast, south, and southwestern. In general, analytical data collected from the various treatment areas indicate that remediation treatment zones were successfully established and reducing environments still exist that are capable of complete reductive dechlorination and abiotic degradation of Site COCs.

The southeast treatment area was a limited scale injection program. Site COCs within this area of the Site have been observed to be steadily increasing within the up-gradient south treatment zone monitoring well MW-185 since 2018. Evidence of remediation of Site COCs has been observed in water collected from down-gradient monitoring well TMW-34 based on transformation of biogeochemical parameters and detection of TCE bioremediation breakdown products.

Work plans for the North Plume, East Plume, and Source Area were submitted to the ADEQ on December 19, 2023, for implementation of either a new ISCR treatment areas or retreatment to

existing treatment areas to maintain or establish plume control. These work plans were still under review by ADEQ at the time this report was submitted.

6 Vapor Intrusion Results and Discussion

6.1 Onsite Vapor Intrusion Evaluation

As discussed in Section 3.4, the purpose of the onsite air and sub-slab vapor sampling is to evaluate potential vapor intrusion to onsite workers as a result of TCE impacts in groundwater beneath the former Whirlpool building.

Monitoring data to assess potential for vapor intrusion for the onsite building was assessed in April and November 2015. The onsite building has been renovated by the current owner, Phoenix, to facilitate future use for warehousing purposes. The building renovation included removal of equipment, filling of former pits, interior painting, and subdividing the interior of the building. Since Phoenix's completion of renovations additional vapor intrusion sampling events have been conducted from 2019 to 2023 (Ramboll 2019, Ramboll 2021a, Ramboll 2021b, Ramboll 2022b).

6.1.1 Onsite Indoor Air

The onsite indoor air sampling results are summarized in Table 9. The following compounds were detected in indoor air samples in November 2023: Benzene, carbon tetrachloride, chloroform, chloromethane, 1,4-dichlorobenzene (1,4-DCB), 1,2-dichloroethane (1,2-DCA), cDCE, trans-1,2-DCE, ethyl benzene, tetrachloroethene (PCE), and TCE. TCE was detected in all 11 air samples collected within Zones 1-6, however only four of these locations reported TCE in air above USEPA and ADEQ indoor air screening levels. TCE concentrations detected in indoor air ranged from 0.281 – 5.19 micrograms per cubic meter of air (µg/m^3) (compared to the USEPA industrial indoor air screening level of 0.88 µg/m^3 based on a hazard index [HI] of 0.1). No other analytes from the air analysis were found to exceed USEPA and ADEQ indoor air screening levels.

Trans-1,2-DCE was detected in both the outdoor/background air samples collected on November 1-2, 2022.

The screening levels used in this evaluation are conservative and are not intended to represent action levels.

6.1.2 Onsite Sub-Slab Vapor

The onsite sub-slab vapor sampling results are summarized in Table 10. The following compounds were detected in at least one sub-slab soil vapor sample in November 2023: 1,1-dichloroethane (1,1-DCA), PCE, 1,1,1-trichloroethane (1,1,1-TCA), TCE, and VC. 1,1-DCA, PCE, TCE, and VC were detected at concentrations exceeding the USEPA sub-slab vapor screening level concentrations (assuming the USEPA's default attenuation factor of 0.03). 1,1-DCA exceeded its respective screening level at sample location 6-1; PCE at sample locations 2-1, 3-2, and 6-1; TCE at sample locations 2-1, 3-1, 3-2, 4-1, 4-2, 5-1, 5-2, Zone 5 Office, and 6-1; and VC at sample location 3-1.

Based on these results, the presence of TCE underneath the building floor may be contributing to indoor air TCE concentrations.

6.1.3 Risk Estimates for Onsite Vapor Intrusion

In the initial screening process detected indoor air constituent concentrations were compared to non-carcinogenic screening levels based on a target hazard quotient of 0.1 to account for additive effect of multiple contaminants resulting in a TCE indoor air screening level of 0.88 $\mu g/m^3$ for the industrial worker. Results of the indoor air sampling indicated that 4 of 13 samples exceeded the indoor air screening level in November 2023. In accordance with USEPA guidance (USEPA 2015a and 2015b), risk estimates were calculated for the onsite worker in each zone of the building to evaluate potential for increased risk from vapor intrusion. USEPA's equations for inhalation exposure, default exposure parameters (Table 11), and toxicity values (Table 12) were used for this evaluation.

Risks for the onsite worker for each building sampling location are presented in Table 13. The cumulative lifetime cancer risk estimated for exposure to constituents in indoor air ranged from 4E-07 to 2E-06; these values are all below the USEPA cumulative cancer target of 1E-04. The cumulative HI for exposure to constituents indoors in November 2023 ranged between 0.07 and 0.5. These values are below the USEPA target HI of 1.

6.1.4 Summary of Onsite Indoor Air and Sub-Slab Vapor Evaluation

The indoor air data indicate a potential complete exposure pathway due to vapor intrusion into the building. Of the detected constituents, only TCE exceeded its respective indoor air screening level; however, cumulative risk estimates for the onsite worker were below or within ADEQ acceptable range of non-cancer hazard and cancer target values. These results do not indicate health risks from indoor exposures under current operating conditions.

6.2 Offsite Vapor Intrusion Evaluation

In 2012, the potential for vapor intrusion from groundwater into residential buildings in the neighborhood north of the Site were evaluated using multiple lines of evidence in a HHRA. This was initially 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. In January 2016, the risk assessment was updated with the monitoring data collected after the 2013 risk assessment (Ramboll Environ 2016a). The use of multiple lines of evidence in these risk assessments is consistent with USEPA's recommendations in its 2015 vapor intrusion guidance documents (USEPA 2015a and 2015b).

Monitoring data collected during the 2023 annual sampling event from shallow groundwater monitoring wells and vapor monitoring points are used to evaluate vapor intrusion in residential buildings in the neighborhood. This assessment is in accordance with the methods and assumptions described in the 2013 and 2016 risk assessment reports. Groundwater, soil vapor, crawl space air, and indoor air have been monitored since 2014 to assess the potential for

vapor intrusion in the neighborhood north of the Site and the onsite building. These sampling events include four quarterly monitoring events in 2014 and 2015, and semi-annual monitoring events from 2016-2023.

Data collected in previous sampling events has showed that TCE vapor intrusion from groundwater is not indicative of a public health concern. These findings, based on multiple lines of evidence involving the evaluation of groundwater, soil vapor, crawl space air, and indoor air data, corroborate the original groundwater vapor intrusion modeling results which indicate vapor intrusion from groundwater is not occurring at levels that would present a public health concern. The results from the current sampling event will be discussed below.

6.2.1 Summary of Sampling for Offsite Vapor Intrusion

The most recent groundwater samples for vapor intrusion assessment were collected on October 17-19, 2023, in accordance with the RGWMP, section "Shallow Groundwater Monitoring for Vapor Intrusion Assessment" and Table 1 (Ramboll Environ 2016b); each of these samples is discussed in this section. Groundwater samples for vapor intrusion assessment[3] were collected from monitoring wells MW-175, MW-176, MW-178, and MW-179, which are located at two parcels (Parcels 2 and 3) in the neighborhood and at one parcel (Parcel 5) south of the neighborhood. Soil vapor sampling was attempted at associated soil vapor monitoring points VP-7, VP-8, VP-9, VP-10, and VP-14. Water was encountered in all these soil vapor monitoring points. The sampling was performed following USEPA and industry standard methods.

Soil vapor sampling was also attempted at VP-12 (at Parcel 4). Although Parcel 4 is not included for vapor intrusion assessment in the RGWMP (Ramboll Environ 2016b), data from this location are evaluated in this assessment.

Perched water filled the vapor monitoring points VP-7, VP-8, VP-9, VP-10, VP-12, and VP-14 and water from these monitoring points could not be completely purged from the sampling train. An attempt was made to collect a water sample from each of these vapor points, per the sampling modifications discussed in the *Second Quarter 2014 Soil Vapor Monitoring/Vapor Intrusion Report* (Environ 2014b). A water sample was collected from VP-8, VP-12, and VP-14. Neither an air sample nor a water sample was able to be retrieved from locations VP-7, VP-9, and VP-10 due to insufficient water after purging.

Information regarding the installation of the vapor monitoring points can be found in the *Fourth Quarter 2015 Soil Vapor Monitoring and Vapor Intrusion Assessment Report* (Ramboll Environ 2015). The field procedures used during the soil vapor sampling attempts 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); the sampling attempts on October

[3] According to the RGWMP (Ramboll 2016c), MW-55R (in Parcel 6) is sampled for purposes other than vapor intrusion assessment. Parcel 6 is no longer included for vapor intrusion assessment.

17-19, 2023, were not preceded by at least five consecutive days with less than 0.1 inches of rain. Precipitation data for October 2023 are provided in Appendix F.

6.2.2 Risk Assessment Results

Three sources of water data were used to evaluate potential offsite vapor intrusion risks. First, groundwater data from monitoring wells, injection wells, and temporary monitoring wells in the North Plume with screened intervals above 20 feet below ground surface (bgs) collected during the 2023 annual sampling event were evaluated. This includes all wells in the North Plume shown in Table 7 except for wells screened below 20 ft bgs: MW-87, MW-89, MW-91, MW-96, and MW-97. Second, groundwater data from shallow monitoring wells which were installed at Parcels 2, 3, and 5 as summarized on Table 14. Figures 3A and 3B show the locations of the groundwater monitoring wells included in Table 14. Third, perched water data from soil vapor points sampled during the 2023 annual sampling event were evaluated and these sampling results are also included on Table 14.

The maximum detected groundwater concentrations among the monitoring wells in the neighborhood that were sampled in October 2023 are summarized in Table 15. These concentrations were used to calculate upper-bound risk estimates for potential vapor intrusion from groundwater into residences in the neighborhood. This calculation was performed using the approach in Section 6.5.2 of the ADEQ-approved RRMP and in the 2016 risk assessment. The calculation of and input parameters for these risk estimates are included as Appendix G. As shown in Table 15, the calculations resulted in upper-bound cumulative cancer risk and non-cancer HI estimates of $2x10^{-6}$ and 0.4, respectively. These risk estimates are below the ADEQ's risk management limits (RMLs) of 10^{-4} and 1, respectively, for reasonable maximum exposure (RME) risks (ADEQ 2005). The calculations for risk estimates discussed in this section are included in Appendix G. Toxicity values used in the risk calculations are current as of December 2023.

Soil vapor monitoring points and nearby groundwater monitoring wells were installed at five parcels in January 2015 and one additional parcel in June 2015 to provide additional lines of evidence to evaluate the potential for vapor intrusion from groundwater. Where soil vapor data could not be collected but perched water samples could be collected from the soil vapor monitoring points, data from these samples were used to confirm the conclusions of the groundwater vapor intrusion risk assessment.

The following sections describe the evaluation of groundwater, soil vapor, and perched water data from the co-located vapor points and monitoring wells at each of the three parcels sampled for vapor intrusion assessment in April 2021 per the RGWMP (Ramboll Environ 2016b). Perched water data from Parcel 4 are also evaluated, even though Parcel 4 was excluded from the vapor intrusion assessment (Ramboll Environ 2016b).

Parcels in the Neighborhood: Parcels 2, 3, and 4

Parcel 2

At Parcel 2, vapor intrusion risks were estimated based on the groundwater data from MW-175, and VP-8 based upon the approach discussed above for groundwater. A synthesis of the upper-bound cumulative cancer risk and non-cancer HI estimates for groundwater water are below. Table 16 provides a more complete summary of these results.

Sampling Location	Depth to Water (feet bgs)	Upper-bound Cumulative Cancer Risk	Non-Cancer HI
MW-175	12	$5x10^{-7}$	0.1
VP-8	10.5	$2x10^{-8}$	0.004

In previous sampling events, soil vapor concentrations from VP-7 were used to calculated upper-bound risk estimates. However, no sample was collected from VP-7 during this sampling event.

These risk estimates are all within ADEQ's RMLs for RME risks. Additionally, these results confirm that vapor intrusion from groundwater does not pose an unacceptable risk at Parcel 2. Only perched water data were evaluated at Parcel 2 because a soil vapor sample could not be collected from the vapor monitoring points at this Parcel.

Parcel 3

At Parcel 3, vapor intrusion risks were estimated based on the groundwater data from MW-176 and the approach discussed above for groundwater. As shown in Table 16, the upper-bound cumulative cancer risk and non-cancer HI estimates for groundwater at MW-176 are 2×10^{-6} and 0.2, respectively, which are well within the ADEQ's RMLs for RME risks.

In previous sampling events, soil vapor concentrations from VP-9 were used to calculated upper-bound risk estimates. However, no sample was collected from VP-9 during this sampling event. Since the concentrations of Site COCs at MW-176 have not varied greatly relative to historic observations, risk estimates from these two locations are sufficient evidence that quantitative risks at this parcel are within the ADEQ's risk management targets. The following paragraphs in this section describe multiple lines of evidence collected during previous sampling rounds.

The highest TCE concentration at VP-9 was detected in 2015. In November 2015, TCE was detected at a concentration of 1,200 $\mu g/m^3$ in the vapor at VP-9. Because of the large increase in the TCE soil vapor concentration in November 2015, outdoor, crawl space, and indoor air samples were collected at Parcel 3 on November 4 and 5, 2015. As discussed in Section 3.2.1.3 of the *Fourth Quarter 2015 Soil Vapor Monitoring and Vapor Intrusion Assessment Report*, the low TCE concentrations detected in the outdoor (< 0.034 μ/m^3), crawl space (< 0.062 $\mu g/m^3$), and indoor air (< 0.032 $\mu g/m^3$) samples were determined to not be associated

with groundwater conditions related to the Site (Ramboll Environ 2015). The absence of detectable plume-related concentrations in the air data indicated an incomplete vapor intrusion pathway from the groundwater plume. This determination is the same as that based on the outdoor, crawl space, and indoor air data collected at Parcel 3 in April 2015 (all TCE concentrations were below detection limits of 0.039 µg/m^3 or less) at the request of the resident (when VP-9 had a TCE vapor concentration of 0.25 µg/m^3).

The findings from the November 2015 vapor intrusion assessment are still considered to be valid. Since the current TCE soil vapor sampling location at VP-9 is water-flooded, vapor diffusion is expected to be much slower in this location than in November 2015 when air sampling data demonstrated that the vapor intrusion pathway from groundwater did not actually exist. A summary of TCE concentrations at Parcel 3 in all media (groundwater, soil gas, crawl space, indoor air, and outdoor air) can be found on Table 17.

Although the upper-bound risk estimates for soil vapor from VP-9 have sometimes been higher than the risk estimates based on the perched water data from VP-10, they 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 applying the USEPA's generic attenuation factor to 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 substantial attenuation due to the approximately 5 feet of silty clay between the soil vapor sample depth and ground surface. Accounting for such attenuation would result in risk estimates for VP-9 that are substantially lower than those shown in Table 16.

Using multiple lines of evidence that include crawl space and indoor air data, the past four years of assessment results do not indicate vapor intrusion from groundwater is posing an unacceptable risk at Parcel 3.

Since the shallow groundwater at Parcel 3 has had the highest TCE concentrations in the plume under the neighborhood, the 2015 crawl space and indoor air results at Parcel 3 also provide a relevant line of evidence for other residential properties in the neighborhood overlying the plume. As shown in Appendix D showing the historical data, the highest TCE concentrations in shallow groundwater in the neighborhood since 2015 were at MW-176 and VP-10, which are located at Parcel 3. Since the crawl space and indoor air data at Parcel 3 do not show evidence of a complete vapor intrusion pathway, it is reasonable to expect the same findings at properties where TCE concentrations in shallow groundwater are lower.

Parcel 4

At Parcel 4, vapor intrusion risks were estimated based on the perched water data from VP-12 and the approach discussed above for groundwater with the depth to water used as 12.5 feet bgs. As shown in Table 16, all soil vapor concentrations in VP-12 were non-detects and therefore, no upper-bound cumulative cancer risk and non-cancer HI estimates from groundwater at VP-12 were calculated; this is equivalent to zero cumulative cancer risk and non-cancer HI. These non-detect results from VP-12 confirm that vapor intrusion from

groundwater does not pose an unacceptable risk at Parcel 4. Only perched water data were evaluated at Parcel 4 because a soil vapor sample could not be collected from the vapor monitoring point at this location.

South of Neighborhood – Parcel 5

Parcel 5 is a vacant non-residential property located south of Ingersoll Avenue and the residential neighborhood. Risk estimates for potential vapor intrusion from groundwater into residential buildings were estimated based on the data collected at this parcel. Groundwater vapor intrusion risks were calculated using the groundwater data from MW-178, MW-179, and VP-14, and the approach discussed above for groundwater. As shown in Table 15, the upper-bound cumulative cancer risk and non-cancer HI estimates from groundwater at MW-179 are 1x10-7 and 3x10-2, respectively, which are below ADEQ's RMLs for RME risks; the upper-bound cumulative cancer risk and non-cancer HI estimates from groundwater at MW-178 are 1x10-9 and 3x10-4, respectively, which are below ADEQ's RMLs for RME risks; the upper-bound cumulative cancer risk and non-cancer HI estimates from groundwater at VP-14 are 8x10-8 and 2x10-2, respectively, which are below the ADEQ's RMLs for RME risks.

In previous monitoring events, vapor intrusion risk was also calculated using groundwater data from MW-33R as an additional line of evidence. However, MW-33R was abandoned during the 2016 annual event due to road construction. No sample was collected at this sampling point in the 2023 annual sampling event.

The results from MW-178, VP-14, and MW-179 confirm that vapor intrusion from groundwater would not pose an unacceptable risk if there was a residence at Parcel 5.

6.2.3 Summary of Sampling for Offsite Vapor Intrusion

The results from the current sampling event confirm the results from prior sampling events:

- Risk estimates for vapor intrusion from groundwater in the neighborhood are below the ADEQ's and USEPA's RMLs;
- Risk estimates for vapor intrusion from shallow monitoring wells and perched water samples from vapor monitoring points are below ADEQ's and USEPA's RMLs; and
- The concentrations of COCs in groundwater at Parcel 3 confirm that the 2015 data from outdoor, crawl space, and indoor air sampling still provide a line of evidence demonstrating that vapor intrusion from groundwater has not been occurring.

7 Summary and Conclusions

Ramboll performed the semi-annual, annual groundwater, and indoor air monitoring events in April and October 2023. The monitoring events were conducted to collect groundwater and air samples for analytical testing for VOCs in accordance with the RGWMP to assess the nature and extent of groundwater impacts and effectiveness of on-going remediation programs.

The 2023 annual groundwater monitoring event was completed in October 2023. The groundwater flow conceptual Site model can be categorized as three primary plume fronts with distinct characteristics (i.e., North Plume, East Plume and South Plume). The results of the annual groundwater monitoring event for each plume indicate the following:

- The North Plume is characterized by:
  - A north-northeast potentiometric gradient that is flat in the south portion of the North Plume but steepens to the north-northeast.
  - Analytical data, plume stability tests, and the on-going remediation through the 2018 ISCR program support the conclusion that the North Plume is stable.
  - Previous injections in 2015 and 2018 have successfully established a reducing environment that still exists and is capable of complete reductive dechlorination and abiotic degradation of Site COCs.
  - Groundwater analyzed from monitoring wells within the North Plume treatment area have shown TCE reduction with temporary cDCE and VC increases and detectable concentrations of ethene and ethane.
- The East Plume is characterized by:
  - A relatively flat easterly potentiometric gradient.
  - Concentrations within the East Plume have been steadily increasing and plume stability tests demonstrate a potentially eastward expanding plume.
  - The treatment area within the southeastern portion of the East Plume had a limited scale injection program installed in 2018. Evidence of remediation of Site COCs has been observed in water collected from down-gradient monitoring well TMW-34, which shows transformation of biogeochemical parameters and detection of TCE bioremediation breakdown products.
  - Previous injections within the northeastern portion of the East Plume in 2019 have successfully established a reducing environment that still exists and is capable of complete reductive dechlorination and abiotic degradation of Site COCs.
- The South Plume is characterized by:
  - A relatively flat southerly potentiometric gradient that eventually fans out toward the southeast and southwest.
  - TCE concentrations within the source area remain relatively consistent with some historical fluctuation in the magnitude of detections.

- Plume stability tests along the leading edge of the South Plume demonstrates a potentially expanding plume toward the south and southwest.
- Previous injections in 2018 have successfully established a reducing environment that still exists and is capable of complete reductive dechlorination and abiotic degradation of Site COCs.
- Previous injections in 2020 have successfully established a reducing environment that still exists and is capable of complete reductive dechlorination and abiotic degradation of Site COCs.
- Groundwater analyzed from monitoring wells within the South Plume treatment area have shown TCE reduction with a recent increase in cDCE and detectable concentrations of ethane. It is anticipated that the recent increase in cDCE is a result of ongoing TCE reduction in groundwater and the increase will only be temporary, as observed in other treatment areas.

Vapor intrusion monitoring continues to identify that risk estimates for vapor intrusion from the groundwater plume in the neighborhood are below the ADEQ's RMLs of 10^{-4} and 1 for cumulative cancer risk and non-cancer hazards, respectively.

The indoor air data indicate a potential complete exposure pathway due to vapor intrusion into the building. Of the detected constituents, only TCE exceeded the respective conservative indoor air screening level based on a HI of 0.1; however, cumulative risk estimates for the onsite worker were below or within the ADEQ's acceptable range of non-cancer hazard and cancer target values. These results do not indicate health risks from indoor exposures under current operating conditions.

The investigation and monitoring activities at the Site have not identified any complete exposure pathways in the residential area (i.e., direct exposure, consumption, or vapor intrusion). Given the current deed restrictions for the Whirlpool property and impacted offsite properties, there is no unacceptable risk to human health or the environment. Deed restrictions precluding the use of groundwater and access agreements to facilitate future investigation or monitoring, if required, apply where groundwater impacts have been characterized in the residential area.

Monitoring at the Site will continue in accordance with the RGWMP with the next groundwater monitoring event planned to occur in Spring 2024.

8 References

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Tables

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

Constituent of Concern	Remedial Action Level (µg/L)[1]
Acetone	12,000[2]
Benzene	5.0
Bromodichloromethane	80
Bromoform	80
Bromomethane	7.0[2]
2-Butanone	4,900[2]
Carbon Disulfide	720[2]
Carbon Tetrachloride	5.0
Chlorobenzene	100
Chloroethane	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
µg/L = Micrograms per liter
(1) = Maximum Contamination Level, or MCL (USEPA, May 2013)
(2) = USEPA Tapwater Screening Level (No applicable MCL)

TABLE 2
REVISED GROUNDWATER MONITORING PLAN WELL NETWORK
Whirlpool Facility - Fort Smith, Arkansas

North Plume Wells			
MW-39R*	MW-58R	MW-194*	TMW-10
MW-40R*	MW-60R*	MW-195*	TMW-11
MW-46R	MW-61R*	MW-196*	
MW-50R*	MW-62R*	RW-69	
MW-55R*	MW-63R*	IW-73	
MW-56R	MW-68*	IW-77	
MW-57R	MW-82	IW-78	

East Plume Wells			
MW-87	MW-96*	MW-99*	MW-185
MW-89	MW-97*	MW-183R*	
MW-91	MW-98*	MW-184*	

South Plume Wells			
MW-22*	MW-83	MW-189	ITMW-9
MW-24	MW-84	MW-190	ITMW-10
MW-25R	MW-93	MW-191	ITMW-18
MW-26*	MW-95	MW-192	ITMW-19
MW-27*	MW-182	ITMW-1R	ITMW-20*
MW-28*	MW-186	ITMW-2R*	ITMW-21
MW-29*	MW-187	ITMW-5	
MW-38	MW-188	ITMW-7	

Notes:

* denotes a plume boundary well

TABLE 3
MONITORING WELL INSPECTION
Whirlpool Facility - Fort Smith, Arkansas

Well ID	October 2023 Well Condition and Notes	Comments
ITMW-1R	no issues	NA
ITMW-2R	no issues	NA
ITMW-4	no issues	NA
ITMW-5	no issues	NA
ITMW-6	casing bent*	NA
ITMW-7	no issues	NA
ITMW-9	no issues	NA
ITMW-10	no issues	NA
ITMW-11	missing bolts	NA
ITMW-12	no issues	NA
ITMW-12R	missing 2 bolts	NA
ITMW-15	no issues	NA
ITMW-16	Broken at surface*	NA
ITMW-18	no issues	NA
ITMW-19	no issues	NA
ITMW-20	no issues	NA
ITMW-21	no issues	NA
IW-72	missing 1 bolt	NA
IW-73	no issues	NA
IW-74	no issues	NA
IW-75	missing 1 bolt	NA
IW-76	no issues	NA
IW-77	missing 1 bolt	NA
IW-78	missing 1 bolt	NA
IW-79	no issues	NA
IW-80	missing 1 bolt	NA
MW-22	no issues	NA
MW-23	no issues	NA
MW-24	no issues	NA
MW-25	no issues	NA
MW-26	no issues	NA
MW-27	no issues	NA
MW-28	no issues	NA
MW-29	no issues	NA
MW-30	no issues	NA
MW-34R	no issues	NA
MW-35R	missing bolts	NA
MW-36R	missing 1 bolt	NA
MW-37	no issues	NA
MW-38	no issues	NA
MW-39R	no issues	NA
MW-40R	no issues	NA
MW-41R	missing 2 bolts	NA
MW-46R	protective casing broken	NA
MW-50R	missing 2 bolts	NA
MW-55R	missing 2 bolts	NA
MW-56R	no issues	NA
MW-57R	missing 1 bolt	NA
MW-58R	no issues	NA
MW-60R	no issues	NA
MW-61R	missing 1 bolt	NA
MW-62R	no issues	NA
MW-63R	missing 1 bolt	NA
MW-65R	missing 2 bolts	NA
MW-68	missing 1 bolt	NA
MW-70	no issues	NA
MW-71	missing 1 bolt	NA
RW-1	no issues	NA
RW-69	no issues	NA
MW-81	no issues	NA
MW-82	missing 1 bolt	NA
MW-83	no issues	NA
MW-84	no issues	NA
MW-85R	missing bolts	NA
MW-87	missing bolts	NA
MW-88	no issues	NA
MW-89	well pad crooked	NA
MW-90	no issues	NA

Well ID	October 2023 Well Condition and Notes	Comments
MW-91	no issues	NA
MW-92	no issues	NA
MW-93	no issues	NA
MW-94	missing bolts	NA
MW-95	no issues	NA
MW-96	no issues	NA
MW-97	no issues	NA
MW-98	no issues	NA
MW-99	no issues	NA
MW-172	no bolts	NA
MW-173	missing 2 bolts	NA
MW-174	no issues	NA
MW-175	missing 1 bolt	NA
MW-176	missing 1 bolt	NA
MW-177	missing bolts	NA
MW-178	no issues	NA
MW-179	no issues	NA
MW-180	no issues	NA
MW-181	missing bolts	NA
MW-182	missing 1 bolt	NA
MW-183R	missing 1 bolt	NA
MW-184	no issues	NA
MW-185	no issues	NA
MW-186	no issues	NA
MW-187	no issues	NA
MW-188	no issues	NA
MW-189	no issues	NA
MW-190	no issues	NA
MW-191	missing bolts	NA
MW-192	no issues	NA
MW-193	no issues	NA
MW-194	missing 3 bolts	NA
MW-195	no issues	NA
MW-196	no issues	NA
MW-197	bolts sheared to well tab	NA
MW-198	missing bolts	NA
MW-199	bolts sheared to well tab	NA
MW-200	missing bolts	NA
MW-201	no issues	NA
MW-202	bolts sheared to well tab	NA
MW-203	no issues	NA
MW-204	missing bolts	NA
MW-205	no issues	NA
MW-206	no issues	NA
IW-101	no issues	NA
IW-132	missing cover	NA
IW-134	no issues	NA
IW-147	no issues	NA
IW-115	missing 1 bolt	NA
TMW-10	no issues	NA
TMW-11	no issues	NA
TMW-12	no issues	NA
TMW-14	missing bolts	NA
TMW-16	no issues	NA
TMW-19	1 bolt missing	NA
TMW-20	missing 2 bolts	NA
TMW-21	no issues	NA
TMW-22R	missing 1 bolt	NA
TMW-23	no issues	NA
TMW-24	missing 3 bolts	NA
TMW-25	no issues	NA
TMW-26	no issues	NA
TMW-27	no issues	NA
TMW-29	missing 2 bolts	NA
TMW-30	no issues	NA
TMW-32	no issues	NA
TMW-34	missing 1 bolt	NA
TMW-35	no issues	NA
TMW-36	no issues	NA
TMW-36B	no issues	NA

Notes:

NA: Not Applicable

* Repaired November 2023

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TABLE 4
SUMMARY OF MONITORING WELL STATIC WATER LEVEL MEASUREMENTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Coordinates		TOC Elevation (feet)	Ground Surface (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)	Maximum Static Water Elevation (Since Oct 2012)	Maximum Elevation Date	Minimum Static Water Elevation (Since Oct 2012)	Static Water Elevation (feet)			
														4/17/2023		10/16/2023	
	Easting (feet)	Northing (feet)												DTW	GW Elevation	DTW	GW Elevation
ITMW-1[4]	591383	368913	476.93	NA	460.43	446.68	13.75	16.50	30.25	16.50 - 30.25	463.92	10/5/2015	460.53	NA	NA	NA	NA
ITMW-1R	591378	368921	473.82	NA	NA	NA	10.00	NA	NA	19.00 - 29.00	NA	NA	NA	13.28	460.54	12.65	461.17
ITMW-2[4]	591189	369021	474.97	NA	462.22	447.77	14.45	12.75	27.20	12.75 - 27.20	465.92	10/14/2013	461.87	NA	NA	NA	NA
ITMW-2R	591244	369072	474.84	NA			5.00			26.50-31.50	NA	NA	NA	Dry/Blocked	NA	Dry/Blocked	NA
ITMW-3[4]	591306	369075	474.72	NA	464.07	449.27	14.80	10.65	25.45	10.65 - 25.45	467.17	10/14/2013	460.27	NA	NA	NA	NA
ITMW-4	591251	368208	478.19	NA	459.99	445.99	14.00	18.20	32.20	18.20 - 32.20	466.85	1/12/2015	459.49	18.55	459.64	18.51	459.68
ITMW-5	590982	368205	474.29	NA	454.39	444.64	9.75	19.90	29.65	19.90 - 29.65	460.31	10/18/2021	450.13	14.62	459.67	14.69	459.6
ITMW-6	590923	367970	483.04	NA	461.39	446.89	14.50	21.65	36.15	21.65 - 36.15	466.20	1/12/2015	454.06	23.35	459.69	22.54	460.5
ITMW-7	590546	368323	481.95	NA	460.05	445.05	15.00	21.90	36.90	21.90 - 36.90	463.65	7/20/2015	457.98	20.31	461.64	20.86	461.09
ITMW-9	591256	368146	481.90	NA	461.95	448.45	13.50	19.95	33.45	19.95 - 33.45	463.29	10/5/2015	455.60	22.43	459.47	22.45	459.45
ITMW-10	590978	368157	480.84	NA	458.19	447.24	10.95	22.65	33.60	22.65 - 33.60	463.17	7/20/2015	457.64	21.19	459.65	21.27	459.57
ITMW-11	590978	369040	474.07	NA	458.82	445.37	13.45	15.25	28.70	15.25 - 28.70	465.82	10/1/2012	459.11	11.97	462.1	11.67	462.4
ITMW-12[4]	590998	369007	476.67	NA	461.67	446.67	15.00	15.00	30.00	15.00 - 30.00	466.49	1/12/2015	462.07	11.96	464.71	NA	NA
ITMW-12R	591015	369004	474.32	NA	NA	NA	10.00	NA	NA	20.00 - 30.00	NA	NA	NA	NA	NA	12.74	461.58
ITMW-13[4]	591047	369052	477.79	NA	463.79	448.79	15.00	14.00	29.00	14.00 - 29.00	465.10	7/20/2015	462.09	NA	NA	NA	NA
ITMW-14[4]	591098	369056	477.30	NA	462.50	447.80	14.70	14.80	29.50	14.80 - 29.50	468.88	10/14/2013	461.08	NA	NA	NA	NA
ITMW-15	590944	369043	474.50	NA	459.50	444.50	15.00	15.00	30.00	15.00 - 30.00	465.41	10/1/2012	462.36	11.42	463.08	11.12	463.38
ITMW-16	590967	369100	478.79	NA	461.79	446.79	15.00	17.00	32.00	17.00 - 32.00	468.22	1/12/2015	462.49	NA	NA	NA	NA
ITMW-17	590864	369051	477.90	NA	461.90	446.90	15.00	16.00	31.00	16.00 - 31.00	466.20	10/14/2013	462.17	NM	NA	NM	NA
ITMW-18	590976	368955	473.55	NA	458.55	443.55	15.00	15.00	30.00	15.00 - 30.00	465.03	7/20/2015	458.99	NA	NA	11.00	462.55
ITMW-19	590890	368961	476.25	NA	460.25	445.25	15.00	16.00	31.00	16.00 - 31.00	465.94	1/12/2015	462.15	13.77	462.48	13.61	462.64
ITMW-20	590370	369042	477.87	NA	463.87	448.87	15.00	14.00	29.00	14.00 - 29.00	465.23	7/20/2015	462.80	14.47	463.4	14.82	463.05
ITMW-21	590629	368898	476.52	NA	460.52	445.52	15.00	16.00	31.00	16.00 - 31.00	465.12	7/20/2015	461.27	13.33	463.19	13.61	462.91
MW-22	591853	368913	473.93	NA	459.93	444.93	15.00	14.00	29.00	14.00 - 29.00	464.24	10/5/2015	460.86	12.5	461.43	11.85	462.08
MW-23	590892	369238	475.80	NA	461.80	446.80	15.00	14.00	29.00	14.00 - 29.00	465.50	1/12/2015	462.40	13.04	462.76	12.89	462.91
MW-24	590876	369134	476.39	NA	458.39	443.39	15.00	18.00	33.00	18.00 - 33.00	465.35	7/20/2015	462.41	13.62	462.77	13.48	462.91
MW-25[4]	590743	369006	476.89	NA	459.89	444.89	15.00	17.00	32.00	17.00 - 32.00	465.37	7/20/2015	462.46	NA	NA	NA	NA
MW-25R	590747	368986	472.59	NA	NA	NA	5.00	NA	NA	25.00 - 30.00	NA	NA	NA	9.84	462.75	10.51	462.08
MW-26	590566	369230	478.05	NA	459.55	444.55	15.00	18.50	33.50	18.50 - 33.50	465.56	7/20/2015	463.10	14.37	463.68	14.64	463.41
MW-27	591077	369226	475.42	NA	460.42	445.42	15.00	15.00	30.00	15.00 - 30.00	465.33	7/20/2015	462.39	12.74	462.68	12.56	462.86
MW-28	591324	369209	470.49	NA	457.49	442.49	15.00	13.00	28.00	13.00 - 28.00	465.20	7/20/2015	458.86	8.16	462.33	7.86	462.63
MW-29	590181	368371	474.91	NA	458.91	443.91	15.00	16.00	31.00	16.00 - 31.00	468.30	1/12/2015	461.94	NA	NA	12.70	462.21
MW-30	590579	368432	478.99	NA	457.99	442.99	15.00	21.00	36.00	21.00 - 36.00	467.41	1/12/2015	461.03	16.61	462.38	17.96	461.03
MW-31[4]	590824	369286	476.03	NA	458.53	448.53	10.00	17.50	27.50	17.50 - 27.50	464.73	10/13/2014	460.52	NA	NA	NA	NA
MW-31R	590823	369288	475.73	NA	455.73	445.73	10.00	20.00	30.00	20.00-30.00	465.13	7/20/2015	463.93	NM	NA	NM	NA
MW-32[1,4]	590909	369279	475.68	NA	458.68	448.68	10.00	17.00	27.00	17.00 - 27.00	464.74	10/13/2014	462.59	NA	NA	NA	NA
MW-32R	590908	369282	475.50	NA	455.00	445.00	10.00	20.50	30.50	20.50-30.50	465.09	7/20/2015	463.94	NM	NA	NM	NA
MW-33[1,4]	590994	369276	474.88	NA	459.08	449.08	10.00	15.80	25.80	15.80 - 25.80	464.76	10/13/2014	462.50	NA	NA	NA	NA
MW-33R	590993	369277	474.60	NA	455.60	445.60	10.00	19.00	29.00	19.00 - 29.00	465.19	7/20/2015	463.97	NM	NA	NM	NA
MW-34[1,4]	590932	369336	474.29	NA	454.79	444.79	10.00	19.50	29.50	19.50 - 29.50	464.81	10/13/2014	462.68	NA	NA	NA	NA
MW-34R	590911	369339	475.05	NA	453.55	446.55	7.00	21.50	28.50	21.50 - 28.50	466.25	7/20/2015	462.97	12.08	462.966	11.95	463.096
MW-35R[3]	590994	369333	473.87	NA	454.37	444.37	10.00	19.50	29.50	19.50 - 29.50	465.32	7/20/2015	462.33	11.07	462.8	10.97	462.9
MW-36[1,4]	591079	369329	473.30	NA	461.30	446.30	15.00	12.00	27.00	12.00 - 27.00	464.85	10/13/2014	462.71	NA	NA	NA	NA
MW-36R	591078	369328	472.98	NA	452.98	443.98	9.00	20.00	29.00	20.00-29.00	465.27	7/20/2015	462.25	10.26	462.718	10.16	462.818
MW-37	590972	369028	473.57	NA	458.57	443.57	15.00	15.00	30.00	15.00 - 30.00	465.39	7/20/2015	462.35	10.93	462.64	11.22	462.35
MW-38	590960	369040	474.60	NA	459.60	444.60	15.00	15.00	30.00	15.00 - 30.00	465.39	7/20/2015	462.35	11.84	462.76	11.09	463.51
MW-39[1,4]	590833	369421	475.46	NA	455.96	445.96	10.00	19.50	29.50	19.50 - 29.50	465.00	1/12/2015	461.61	NM	NA	NM	NA
MW-39R	590840	369429	475.41	NA	450.91	445.91	5.00	24.50	29.50	24.50 - 29.50	466.10	7/20/2015	462.56	12.85	462.56	12.48	462.93
MW-40[1,4]	590998	369622	473.35	NA	455.60	445.60	10.00	17.75	27.75	17.75 - 27.75	464.76	10/13/2014	455.04	NA	NA	NA	NA
MW-40R	591013	369624	473.09	NA	454.59	444.59	10.00	18.50	28.50	18.50 - 28.50	465.29	7/20/2015	462.31	10.27	462.82	10.19	462.9
MW-41[1,4]	591061	369469	472.09	NA	453.34	443.34	10.00	18.75	28.75	18.75 - 28.75	464.45	10/13/2014	462.63	NA	NA	NA	NA
MW-41R	591061	369478	471.84	NA	453.84	443.84	10.00	18.00	28.00	18.00 - 28.00	465.13	7/20/2015	462.21	9.18	462.66	9.1	462.74
MW-46R	591472	369609	465.79	NA	449.19	444.19	5.00	16.60	21.60	16.60 - 21.60	464.88	7/20/2015	457.50	3.29	462.495	3.14	462.645
MW-50[4]	591415	370213	463.11	NA	455.11	445.11	10.00	8.00	18.00	8.00 - 18.00	459.81	10/13/2014	453.92	NA	NA	NA	NA
MW-50R	591415	370210	462.65	NA	449.65	444.65	5.00	13.00	18.00	13.00 - 18.00	459.51	10/18/2021	452.67	5.78	456.868	3.4	459.248
MW-55[1,4]	591291	369893	465.50	NA	450.00	445.00	5.00	15.50	20.50	15.50 - 20.50	463.06	10/14/2013	461.59	NA	NA	NA	NA
MW-55R	591291	369895	465.30	NA	446.30	444.30	2.00	19.00	21.00	19.00 - 21.00	465.06	7/20/2015	462.02	2.49	462.808	2.49	462.808
MW-56[1,4]	591687	369730	463.22	NA	448.72	443.72	5.00	14.50	19.50	14.50 - 19.50	462.55	10/13/2014	456.49	NA	NA	NA	NA
MW-56R	591687	369732	463.17	NA	445.17	443.17	2.00	18.00	20.00	18.00 - 20.00	462.47	7/20/2015	459.03	2.46	460.712	3.29	459.882

TABLE 4
SUMMARY OF MONITORING WELL STATIC WATER LEVEL MEASUREMENTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Coordinates		TOC Elevation (feet)	Ground Surface (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)	Maximum Static Water Elevation (Since Oct 2012)	Maximum Elevation Date	Minimum Static Water Elevation (Since Oct 2012)	Static Water Elevation (feet)			
														4/17/2023		10/16/2023	
	Easting (feet)	Northing (feet)												DTW	GW Elevation	DTW	GW Elevation
MW-57[1,4]	591690	369811	462.90	NA	448.90	443.90	5.00	14.00	19.00	14.00 - 19.00	461.14	4/13/2015	457.65	NA	NA	NA	NA
MW-57R	591693	369806	462.92	NA	447.92	442.92	5.00	15.00	20.00	15.00 - 20.00	462.26	7/20/2015	458.68	2.35	460.57	3.25	459.67
MW-58[1,4]	591570	369907	462.71	NA	450.21	445.21	5.00	12.50	17.50	12.50 - 17.50	462.71	7/28/2014	461.01	NA	NA	NA	NA
MW-58R	591571	369898	465.98	NA	451.98	446.98	5.00	14.00	19.00	14.00 - 19.00	464.68	7/20/2015	461.64	3.63	462.35	3.65	462.33
MW-60[1,4]	591710	370193	460.85	NA	448.85	443.85	5.00	12.00	17.00	12.00 - 17.00	458.07	10/13/2014	452.38	NA	NA	NA	NA
MW-60R	591710	370193	460.66	NA	450.16	445.16	5.00	10.50	15.50	10.50 - 15.50	459.65	10/18/2021	455.11	5.26	455.4	1.93	458.73
MW-61[1,4]	592003	370175	459.61	NA	449.11	444.11	5.00	10.50	15.50	10.50 - 15.50	453.32	7/28/2014	448.21	NA	NA	NA	NA
MW-61R	591999	370175	459.31	NA	448.81	443.81	5.00	10.50	15.50	10.50 - 15.50	456.38	10/5/2015	451.85	5.55	453.76	4.71	454.6
MW-62[1,4]	591791	369569	464.33	NA	448.83	443.83	5.00	15.50	20.50	15.50 - 20.50	464.03	1/12/2015	456.68	NA	NA	NA	NA
MW-62R	591790	369572	464.19	NA	449.19	444.19	5.00	15.00	20.00	15.00 - 20.00	461.72	7/20/2015	457.49	5.48	458.71	5.13	459.06
MW-63[1,4]	591994	369560	463.87	NA	447.87	442.87	5.00	16.00	21.00	16.00 - 21.00	461.43	10/13/2014	455.05	NA	NA	NA	NA
MW-63R	591993	369559	463.94	NA	448.94	443.94	5.00	15.00	20.00	15.00 - 20.00	462.29	7/20/2015	458.53	5.41	458.53	3.94	460
MW-65R	590980	369335	473.91	NA	454.41	444.41	10.00	19.50	29.50	19.50 - 29.50	473.57	1/12/2015	462.38	11.04	462.87	10.97	462.94
MW-66	592280	369855	462.05	NA	449.45	444.45	5.00	12.60	17.60	12.60 - 17.60	460.24	7/20/2015	446.54	NM	NA	NM	NA
MW-67	592291	370027	459.01	NA	449.41	444.41	5.00	9.60	14.60	9.60 - 14.60	458.42	7/28/2014	449.31	NM	NA	NM	NA
MW-67R	592291	370022	459.16	NA	447.16	442.16	5.00	12.00	17.00	12.00 - 17.00	458.96	7/20/2015	456.44	NM	NA	NM	NA
MW-68	591173	369815	469.81	NA	455.81	445.81	10.00	14.00	24.00	14.00 - 24.00	465.23	7/20/2015	462.36	6.9	462.91	6.87	462.94
RW-69[3]	591170	369678	470.89	NA	455.89	445.89	10.00	15.00	25.00	15.00 - 25.00	468.47	4/17/2023	462.00	2.42	468.47	8.3	462.59
MW-70	591162	369693	471.53	NA	NA	NA	NA	NA	NA	NA	465.33	7/20/2015	462.12	7.71	463.82	8.58	462.95
MW-71	591170	369695	471.35	NA	NA	NA	NA	NA	NA	NA	465.35	7/20/2015	462.36	8.51	462.84	8.41	462.94
IW-72[3]	591056	369590	471.65	NA	456.65	446.65	10.00	15.00	25.00	15.00 - 25.00	465.19	7/20/2015	462.11	8.96	462.69	8.89	462.76
IW-73	591060	369503	471.48	NA	NA	NA	NA	NA	NA	NA	465.29	7/20/2015	462.38	8.66	462.82	8.57	462.91
IW-74[2,3]	591058	369545	472.06	NA	457.06	447.06	10.00	15.00	25.00	15.00 - 25.00	465.26	7/20/2015	462.30	9.31	462.75	9.21	462.85
IW-75	591072	369605	472.17	NA	NA	NA	NA	NA	NA	NA	465.36	7/20/2015	462.37	9.35	462.82	9.26	462.91
IW-76	591050	369426	472.26	NA	NA	NA	NA	NA	NA	NA	465.17	7/20/2015	462.21	9.62	462.64	9.51	462.75
IW-77[2,6]	591027	369380	473.01	NA	453.01	443.01	10.00	20.00	30.00	20.00 - 30.00	465.37	7/20/2015	462.41	10.15	462.86	10.09	462.92
IW-78	590984	369338	473.49	NA	NA	NA	NA	NA	NA	NA	465.38	7/20/2015	461.77	10.68	462.81	10.56	462.93
IW-79	591018	369335	473.84	NA	NA	NA	NA	NA	NA	NA	465.39	7/20/2015	462.39	11	462.84	10.85	462.99
IW-80[2,3]	591047	369343	473.30	NA	453.30	443.30	10.00	20.00	30.00	20.00 - 30.00	465.21	7/20/2015	462.28	10.61	462.69	10.49	462.81
IW-101	590930	369201	475.70	NA	452.80	447.80	5.00	22.90	27.90	22.90 - 27.90	464.66	1/6/2016	462.59	13.11	462.59	13.11	462.59
IW-115	591007	369344	473.41	NA	454.31	449.31	5.00	19.10	24.10	19.10 - 24.10	472.99	4/12/2021	462.38	10.82	462.59	10.82	462.59
IW-129	590989	368977	473.54	NA	448.99	443.99	5.00	24.55	29.55	24.55 - 29.55	463.08	5/12/2014	463.08	NM	NA	NM	NA
IW-130	590924	369186	475.58	NA	452.20	447.28	5.00	23.38	28.30	23.38 - 28.38	463.20	5/12/2014	463.20	NM	NA	NM	NA
IW-131	591006	369339	473.37	NA	453.65	448.65	5.00	19.72	24.72	19.72 - 24.72	463.21	5/12/2014	463.21	NM	NA	NM	NA
IW-132	590835	369040	475.49	NA	NA	NA	5.00	NA	NA	23.00 - 28.00	NA	NA	NA	12.95	462.54	12.95	462.54
IW-134	590885	369037	474.22	NA	NA	NA	5.00	NA	NA	23.00 - 28.00	NA	NA	NA	11.62	462.6	11.62	462.6
IW-147	590782	368993	473.13	NA	NA	NA	5.00	NA	NA	20.00 - 25.00	NA	NA	NA	10.56	462.57	10.56	462.57
MW-81	591039	369406	473.54	NA	453.54	448.54	5.00	20.00	25.00	20.00 - 25.00	465.33	7/20/2015	462.35	10.75	462.79	10.65	462.89
MW-82	590977	369395	473.60	NA	452.60	447.60	5.00	21.00	26.00	21.00 - 26.00	465.35	7/20/2015	462.36	10.8	462.8	10.63	462.97
MW-83	590946	369211	475.48	NA	453.48	448.48	5.00	22.00	27.00	22.00 - 27.00	465.25	7/20/2015	462.32	12.82	462.66	12.65	462.83
MW-84	590882	369194	475.53	NA	451.53	446.53	5.00	24.00	29.00	24.00 - 29.00	466.39	1/6/2016	462.23	12.92	462.61	12.89	462.64
MW-85[4]	590760	369018	474.41	NA	449.41	444.41	5.00	25.00	30.00	25.00-30.00	465.21	7/20/2015	462.24	NA	NA	NA	NA
MW-85R	590769	369015	472.34	NA	NA	NA	5.00	NA	NA	24.50 - 29.50	NA	NA	NA	9.77	462.57	9.67	462.67
MW-86[4]	590767	368995	473.19	NA	450.19	445.19	5.00	23.00	28.00	23.00-28.00	465.10	7/20/2015	462.19	NA	NA	NA	NA
MW-87	592269	368835	470.78	NA	453.78	443.78	10.00	17.00	27.00	17.00 - 27.00	460.91	10/5/2015	457.59	13.12	457.66	12.96	457.82
MW-88	592151	369043	468.89	NA	450.89	440.89	10.00	18.00	28.00	18.00 - 28.00	462.85	10/5/2015	457.50	11.39	457.5	8.66	460.23
MW-89	592357	369059	466.91	NA	451.91	441.91	10.00	15.00	25.00	15.00 - 25.00	459.23	10/5/2015	456.30	10.6	456.31	10.5	456.41
MW-90	592157	369157	466.71	NA	451.71	441.71	10.00	15.00	25.00	15.00 - 25.00	463.26	10/5/2015	458.71	7.79	458.92	5.41	461.3
MW-91	592371	368830	468.90	NA	453.90	443.90	10.00	15.00	25.00	15.00 - 25.00	460.19	10/5/2015	456.33	12.16	456.74	12.02	456.88
MW-92	590778	368921	473.74	NA	453.74	443.74	10.00	20.00	30.00	20.00 - 30.00	465.29	7/20/2015	462.30	11.08	462.66	10.91	462.83
MW-93	590908	368894	477.81	NA	452.81	442.81	10.00	25.00	35.00	25.00 - 35.00	465.12	7/20/2015	462.10	15.34	462.47	15.21	462.6
MW-94	591015	368903	477.86	NA	452.86	442.86	10.00	25.00	35.00	25.00 - 35.00	464.97	7/20/2015	461.93	15.66	462.2	15.44	462.42
MW-95	590981	368821	477.63	NA	452.63	442.63	10.00	25.00	35.00	25.00 - 35.00	465.01	7/20/2015	461.95	15.33	462.3	15.14	462.49
MW-96	592775	369354	457.83	NA	447.83	442.83	5.00	10.00	15.00	10.00 - 15.00	453.93	10/16/2023	449.11	8.01	449.82	3.9	453.93
MW-97	592687	369527	459.43	NA	447.93	442.93	5.00	11.50	16.50	11.50 - 16.50	451.44	10/22/2019	448.41	9	450.43	8.89	450.54
MW-98	592840	369198	461.62	NA	446.62	441.62	10.00	15.00	20.00	15.00 - 20.00	451.64	10/22/2019	449.16	11.59	450.03	12.36	449.26
MW-99	592554	368814	466.80	NA	448.30	443.30	5.00	18.50	23.50	18.50 - 23.50	459.89	7/20/2015	456.67	10.08	456.72	9.75	457.05
MW-172	590858	369002	472.94	NA	454.94	444.94	10.00	18.00	28.00	18.00 - 28.00	465.27	7/20/2015	461.26	10.34	462.6	10.18	462.76
MW-173	591973	369624	463.56	NA	458.56	457.56	1.00	5.00	6.00	5.00 - 6.00	463.41	10/5/2020	457.61	1.49	462.07	1.5	462.06

TABLE 4
SUMMARY OF MONITORING WELL STATIC WATER LEVEL MEASUREMENTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Coordinates		TOC Elevation (feet)	Ground Surface (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)	Maximum Static Water Elevation (Since Oct 2012)	Maximum Elevation Date	Minimum Static Water Elevation (Since Oct 2012)	Static Water Elevation (feet)			
														4/17/2023		10/16/2023	
	Easting (feet)	Northing (feet)												DTW	GW Elevation	DTW	GW Elevation
MW-174	591976	369644	463.45	NA	452.45	451.45	1.00	11.00	12.00	11.00 - 12.00	461.85	5/11/2020	457.67	2.67	460.78	3.9	459.55
MW-175	591603	369655	464.17	NA	450.67	449.67	1.00	13.50	14.50	13.50 - 14.50	464.17	10/22/2019	460.25	2.76	461.41	1.76	462.41
MW-176	591474	369675	465.24	NA	452.24	451.24	1.00	13.00	14.00	13.00 - 14.00	464.66	7/20/2015	461.99	2.76	462.48	2.6	462.64
MW-177	591148	369698	471.50	NA	462.50	461.50	1.00	9.00	10.00	9.00 - 10.00	469.97	1/6/2016	461.78	5.15	466.35	5.75	465.75
MW-178	590973	369232	475.40	NA	468.40	467.40	1.00	7.00	8.00	7.00 - 8.00	472.05	5/2/2016	467.79	4.17	471.23	5.59	469.81
MW-179	590984	369232	475.39	NA	463.39	462.39	1.00	12.00	13.00	12.00 - 13.00	473.98	11/13/2018	462.70	8.7	466.69	8.85	466.54
MW-180	590996	369231	475.32	NA	469.32	468.32	1.00	6.00	7.00	6.00 - 7.00	471.93	5/2/2016	467.30	4.9	470.42	5.28	470.04
MW-181	591156	369695	471.87	NA	465.87	464.87	1.00	6.00	7.00	6.00 - 7.00	469.57	5/11/2020	456.87	4.47	467.4	Dry	NA
MW-182	590403	367900	474.64	NA	453.64	443.64	10.00	21.00	31.00	21.00 - 31.00	461.60	10/5/2015	459.39	14.88	459.762	NM	NA
MW-183[4]	592664	369246	462.42	462.87	447.42	442.42	5.00	15.00	20.00	15.00-20.00	452.22	4/25/2017	450.11	NA	NA	NA	NA
MW-183R	592672	369248	462.43	462.67	449.43	444.43	5.00	13.00	18.00	13.00 - 18.00	452.23	10/22/2019	448.68	12.55	449.88	13.16	449.27
MW-184	592646	369023	465.58	NA	446.58	441.58	5.00	19.00	24.00	19.00 - 24.00	458.42	10/5/2015	451.20	9.96	455.617	9.75	455.827
MW-185	592256	367995	473.86	NA	453.86	443.86	10.00	20.00	30.00	20.00 - 30.00	465.81	10/16/2023	458.90	14.8	459.062	8.05	465.812
MW-186	590124	367716	469.80	NA	451.80	441.80	10.00	18.00	28.00	18.00 - 28.00	457.78	4/12/2021	451.25	13.13	456.674	NM	NA
MW-187	590249	367588	477.42	NA	453.42	443.42	10.00	24.00	34.00	24.00 - 34.00	459.21	5/2/2016	457.42	19.18	458.24	NM	NA
MW-188	590646	367509	481.09	NA	455.09	445.09	10.00	26.00	36.00	26.00 - 36.00	462.10	10/5/2015	459.11	21.59	459.5	21.98	459.11
MW-189	590860	367666	485.50	NA	454.50	444.50	10.00	31.00	41.00	31.00 - 41.00	462.83	10/5/2015	459.41	25.84	459.66	26.02	NA
MW-190	591325	367745	481.29	NA	454.29	444.29	10.00	27.00	37.00	27.00 - 37.00	463.27	10/5/2015	459.38	21.75	459.536	21.85	459.436
MW-191	591662	367732	476.85	NA	453.85	443.85	10.00	23.00	33.00	23.00 - 33.00	463.37	10/5/2015	459.27	17.39	459.458	17.44	459.408
MW-192	592078	367679	475.33	NA	454.33	444.33	10.00	21.00	31.00	21.00 - 31.00	463.42	10/5/2015	459.10	16.01	459.317	16.06	459.267
MW-193[4]	592312	370289	455.26	NA	447.76	442.76	5.00	7.50	12.50	7.50-12.50	453.76	5/2/2016	451.25	NA	NA	NA	NA
MW-194	592161	369791	462.47	NA	451.47	441.47	10.00	11.00	21.00	11.00 - 12.00	459.62	10/5/2020	457.03	5.12	457.35	4.2	458.27
MW-195	592185	370025	459.36	NA	446.36	441.36	5.00	13.00	18.00	13.00 - 18.00	458.66	10/22/2019	455.78	2.95	456.41	1.9	457.46
MW-196	592217	370132	457.63	NA	447.63	442.63	5.00	10.00	15.00	10.00 - 15.00	454.92	10/5/2020	452.30	4.18	453.45	3.21	454.42
MW-197	589986	367744	466.81	NA	NA	NA	10.00	NA	NA	15.00 - 25.00	NA	10/1/2012	NA	11.49	455.322	11.99	454.822
MW-198	590776	368982	473.08	NA	NA	NA	10.00	NA	NA	19.00 - 29.00	NA	10/1/2012	NA	10.6	462.48	10.46	462.62
MW-199	589597	367542	463.09	NA	NA	NA	10.00	NA	NA	12.00 - 22.00	NA	10/1/2012	NA	9.16	453.93	9.45	453.64
MW-200	592704	368850	467.57	NA	NA	NA	10.00	NA	NA	15.20 - 25.20	NA	10/1/2012	NA	11.01	456.56	10.87	456.7
MW-201	591200	367185	481.07	NA	NA	NA	10.00	NA	NA	26.00 - 36.00	NA	10/1/2012	NA	21.5	459.57	21.76	459.31
MW-202	592660	368637	468.16	NA	NA	NA	10.00	NA	NA	14.20 - 24.20	NA	10/1/2012	NA	10.52	457.64	10.41	457.75
MW-203	591032	367411	483.51	NA	NA	NA	5.00	NA	NA	32.00 - 37.00	NA	10/1/2012	NA	23.92	459.59	24.16	459.35
MW-204	590580	367991	481.31	NA	NA	NA	10.00	NA	NA	26.00 - 36.00	NA	10/1/2012	NA	21.23	460.08	21.62	459.69
MW-205	592101	368133	474.66	NA	NA	NA	10.00	NA	NA	10.00 - 20.00	NA	10/1/2012	NA	15.45	459.211	15.47	459.191
MW-206	590376	367378	476.43	NA	NA	NA	10.00	NA	NA	10.00 - 20.00	NA	10/1/2012	NA	17.53	458.899	18.26	458.169
TMW-10	591973	370113	460.75	NA	450.25	445.25	5.00	10.50	15.50	10.50 - 15.50	455.62	10/5/2020	454.82	5.6	455.148	4.02	456.728
TMW-11	591956	370078	460.20	NA	449.70	444.70	5.00	10.50	15.50	10.50 - 15.50	464.13	10/5/2020	462.48	4.82	455.377	3.17	457.027
TMW-12[5]	591873	369860	464.19	461.63	454.19	444.19	10.00	10.00	20.00	10.00 - 20.00	454.55	4/12/2021	453.64	4.79	459.4	NM	NA
TMW-13[4]	592083	369870	460.10	460.27	447.10	442.10	5.00	13.00	18.00	13.00-18.00	457.31	10/18/2021	456.56	NA	NA	NA	NA
TMW-14	591873	369736	461.89	462.46	450.89	440.89	10.00	11.00	21.00	11.00 - 21.00	460.36	10/5/2020	459.31	2.78	459.11	NM	NA
TMW-15[4]	592032	369683	465.32	465.40	452.32	442.32	10.00	13.00	23.00	13.00-23.00	458.35	10/18/2021	457.64	NA	NA	NA	NA
TMW-16	590180	367791	469.87	469.54	451.87	441.87	10.00	18.00	28.00	18.00 - 28.00	460.24	4/12/2021	453.88	11.81	458.06	NM	NA
TMW-17[4]	590856	367810	484.05	483.74	451.55	441.55	10.00	32.50	42.50	32.50-42.50	460.87	10/5/2020	459.69	NA	NA	NA	NA
TMW-18[4]	590672	367598	478.79	478.54	453.79	443.79	10.00	25.00	35.00	25.00-35.00	458.29	10/5/2020	453.53	NA	NA	NA	NA
TMW-19[5]	590841	367571	484.99	485.26	451.99	441.99	10.00	33.00	43.00	33.00 - 43.00	458.43	10/5/2020	453.72	25.41	459.58	25.5	459.49
TMW-20	592210	369929	460.57	460.27	449.07	442.07	7.00	11.50	18.50	11.50 - 18.50	460.98	10/5/2020	459.19	3.93	456.64	2.93	457.64
TMW-21	592082	369959	460.01	460.26	450.01	440.01	10.00	10.00	20.00	10.00 - 20.00	457.59	4/25/2017	457.59	2.32	457.69	3.23	456.78
TMW-22[4]	591985	369997	460.82	461.05	448.82	441.82	7.00	12.00	19.00	12.00-19.00	461.47	10/22/2019	458.78	NA	NA	NA	NA
TMW-22R	591992	369990	460.71	461.15	447.21	442.21	5.00	13.50	18.50	13.50 - 18.50	457.58	4/25/2017	457.58	2.82	457.89	3.65	457.06
TMW-23[5]	591874	370019	461.68	462.22	447.68	442.68	5.00	14.00	19.00	14.00-19.00	458.78	10/22/2019	456.48	NA	NA	3.67	458.01
TMW-24[5]	592006	369808	461.15	461.46	449.15	442.15	7.00	12.00	19.00	12.00-19.00	459.53	4/25/2017	459.53	2.63	NA	3.71	457.44
TMW-25	590283	367848	473.14	473.41	452.64	442.64	10.00	20.50	30.50	20.50 - 30.50	459.45	4/25/2017	459.45	14.84	458.3	NM	NA
TMW-26	590115	367763	472.10	469.47	454.10	444.10	10.00	18.00	28.00	18.00 - 28.00	460.37	10/5/2020	459.35	15.11	456.99	NM	NA
TMW-27	590091	367871	467.45	468.03	451.45	441.45	10.00	16.00	26.00	16.00 - 26.00	458.77	10/5/2020	456.53	10.46	456.99	NM	NA
TMW-28[4]	590092	367956	468.27	468.85	451.27	441.27	10.00	17.00	27.00	17.00-27.00	459.17	10/22/2019	456.78	NA	NA	NA	NA
TMW-29	592211	369848	462.19	462.56	450.19	443.19	10.00	12.00	19.00	12.00 - 19.00	NA	10/1/2012	NA	10.09	452.1	9.03	453.16
TMW-30	590113	367737	469.37	469.77	450.87	448.87	10.00	18.50	20.50	18.50 - 20.50	459.70	10/5/2020	457.06	13.22	456.15	NM	NA
TMW-32	590048	367787	466.9	467.07	450.40	440.40	10.00	16.50	26.50	16.50 - 26.50	459.25	10/5/2020	456.16	11	455.9	NM	NA
TMW-34	592334	368003	471.37	471.64	450.37	445.37	5.00	21.00	26.00	21.00 - 26.00	460.29	10/5/2020	457.44	12.56	458.81	12	459.37

TABLE 4
SUMMARY OF MONITORING WELL STATIC WATER LEVEL MEASUREMENTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Coordinates		TOC Elevation (feet)	Ground Surface (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)	Maximum Static Water Elevation (Since Oct 2012)	Maximum Elevation Date	Minimum Static Water Elevation (Since Oct 2012)	Static Water Elevation (feet)			
														4/17/2023		10/16/2023	
	Easting (feet)	Northing (feet)												DTW	GW Elevation	DTW	GW Elevation
TMW-35	591121	369924	473.37	469.70	455.37	450.37	5.00	18.00	23.00	18.00 - 23.00	459.10	4/12/2021	457.64	10.41	462.96	10.59	462.78
TMW-36	590884	367543	485.35	NA	NA	NA	5.00	NA	NA	36.00 - 41.00	457.06	10/22/2019	455.66	25.82	459.53	26.05	459.3
TMW-36B	590885	367548	485.35	485.77	449.35	444.35	5.00	36.00	41.00	25 - 31	NA	10/5/2020	NA	28.71	456.64	26	459.35

Notes:

TOC = Top of casing
NA = Not available
NM = Not measured
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
4 = Abandoned Monitoring Well
Horizontal and vertical coordinates converted to Arkansas State Plane, North Zone (NAD83) and North American Vertical Datum of 1988 (NAVD88) based on 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.
5 = During the November 2018 well repair event TOC elevations were modified due to repair work for TMW-12, TMW-19, TMW-23 and TMW-24. The TOC elevations listed on the table represent the most current elevations. All water level elevations prior to November 2018 were calculated using the previous surveyed TOC elevations.
6 = Water level collected on 10/20/22.

TABLE 5
SUMMARY OF VERTICAL HYDRAULIC GRADIENT
Whirlpool Facility - Fort Smith, Arkansas

Location/ Well Pairs	Middle of Screen Elevation[1] (feet)	Static Water Level Elevation (feet)					
		4/13/2015	7/20/2015	10/5/2015	1/6/2016	5/2/2016	11/7/2016
Shallow Well MW-177 and MW-70							
MW-177	462.00	466.94	469.09	465.34	469.97	469.00	465.19
MW-70	451.53	464.17	465.33	465.15	464.77	464.59	462.70
Vertical Hydraulic Gradient[2,3]		-0.26	-0.36	-0.02	-0.50	-0.42	-0.24
Shallow Well MW-176 and MW-46R[4]							
MW-176	451.74	463.81	464.66	464.49	464.38	464.18	462.30
MW-46R	446.69	462.85	464.88	464.67	464.40	464.21	462.34
Vertical Hydraulic Gradient[2,3]		-0.19	0.04	0.04	0.004	0.005	0.01
Shallow Well MW-175							
MW-175	450.17	460.25	463.71	463.47	463.37	463.42	462.22
Ave. of MW-46R & MW-56/56R	446.46	461.54	463.68	463.15	463.26	463.21	460.68
Vertical Hydraulic Gradient [2,3]		0.35	-0.007	-0.07	-0.02	-0.04	-0.32
Shallow Wells MW-174 and MW-63/MW-63R							
MW-174	451.95	457.67	459.92	461.75	459.71	460.01	459.77
MW-63/MW-63R	445.37	459.36	462.29	462.08	460.93	460.79	460.05
Vertical Hydraulic Gradient[2,3]		0.26	0.43	0.06	0.22	0.14	0.05
Shallow Wells MW-178 and MW-83							
MW-178	467.90	472.29	471.94	471.48	471.93	472.05	470.38
MW-83	450.98	464.02	465.25	465.01	464.72	464.47	462.64
Vertical Hydraulic Gradient[2,3]		-0.49	-0.40	-0.38	-0.43	-0.45	-0.46

Notes:

[1] MW-56R and MW-63R were installed in June 2015

[2] Negative gradient indicates downward gradient

[3] Reference elevations used in vertical gradient calculations were changed from ground surface to top of casing for the First Quarter 2016 Annual Groundwater Monitoring Report.

NM = Measurement not completed

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TABLE 5
SUMMARY OF VERTICAL HYDRAULIC GRADIENT
Whirlpool Facility - Fort Smith, Arkansas

Location/ Well Pairs	Middle of Screen Elevation[1] (feet)	Static Water Level Elevation (feet)							
		4/25/2017	10/23/2017	4/17/2018	11/13/2018	4/23/2019	10/22/2019	5/11/2020	10/5/2020
Shallow Well MW-177 and MW-70									
MW-177	462.00	461.78	NM	467.56	467.47	467.69	467.31	468.55	468.41
MW-70	451.53	462.38	462.93	462.85	463.26	463.48	464.06	463.54	464.34
Vertical Hydraulic Gradient[2,3]		0.06	NM	-0.45	-0.40	-0.40	-0.31	-0.48	-0.39
Shallow Well MW-176 and MW-46R[4]									
MW-176	451.74	461.99	462.93	462.49	462.86	463.22	463.82	463.35	463.89
MW-46R	446.69	462.03	462.55	462.53	462.87	463.16	463.74	463.31	463.91
Vertical Hydraulic Gradient[2,3]		0.01	-0.08	0.01	0.001	-0.01	-0.02	-0.01	0.00
Shallow Well MW-175									
MW-175	450.17	460.74	456.06	461.71	462.08	462.44	464.17	462.90	463.14
Ave. of MW-46R & MW-56/56R	446.46	461.38	461.24	461.37	461.78	462.28	462.75	462.51	462.98
Vertical Hydraulic Gradient [2,3]		0.14	1.09	-0.07	-0.06	-0.03	-0.30	-0.08	-0.03
Shallow Wells MW-174 and MW-63/MW-63R									
MW-174	451.95	457.87	453.10	458.04	458.69	460.45	460.32	461.85	460.52
MW-63/MW-63R	445.37	458.56	459.92	458.22	459.35	458.94	460.96	459.57	461.06
Vertical Hydraulic Gradient[2,3]		0.13	1.24	0.03	0.12	-0.27	0.12	-0.41	0.10
Shallow Wells MW-178 and MW-83									
MW-178	467.90	471.50	471.31	471.54	471.37	471.62	470.99	471.38	471.08
MW-83	450.98	462.32	462.86	462.69	463.10	463.33	463.88	463.37	463.99
Vertical Hydraulic Gradient[2,3]		-0.54	-0.50	-0.52	-0.49	-0.49	-0.42	-0.47	-0.42

Notes:

[1] MW-56R and MW-63R were installed in June 2015

[2] Negative gradient indicates downward gradient

[3] Reference elevations used in vertical gradient calculations were changed from ground surface to top of casing for the First Quarter 2016 Annual Groundwater Monitoring Report.

NM = Measurement not completed

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TABLE 5
SUMMARY OF VERTICAL HYDRAULIC GRADIENT
Whirlpool Facility - Fort Smith, Arkansas

Location/ Well Pairs	Middle of Screen Elevation[1] (feet)	Static Water Level Elevation (feet)					
		4/12/2021	10/18/2021	4/12/2022	10/17/2022	4/17/2023	10/16/2023
Shallow Well MW-177 and MW-70							
MW-177	462.00	468.44	467.18	468.61	465.97	466.35	465.75
MW-70	451.53	463.52	462.59	462.12	463.03	463.82	462.95
Vertical Hydraulic Gradient[2,3]		-0.47	-0.44	-0.62	-0.28	-0.24	-0.27
Shallow Well MW-176 and MW-46R[4]							
MW-176	451.74	463.15	463.27	463.13	462.68	462.48	462.64
MW-46R	446.69	463.30	463.33	463.20	462.68	462.50	462.65
Vertical Hydraulic Gradient[2,3]		0.03	0.01	0.01	0.00	0.00	0.00
Shallow Well MW-175							
MW-175	450.17	463.67	462.79	462.14	462.62	461.41	462.41
Ave. of MW-46R & MW-56/56R	446.46	462.52	462.02	445.43	445.43	461.60	445.43
Vertical Hydraulic Gradient [2,3]		-0.24	-0.16	0.05	-0.32	0.04	-0.24
Shallow Wells MW-174 and MW-63/MW-63R							
MW-174	451.95	460.12	460.16	461.77	460.24	460.78	459.55
MW-63/MW-63R	445.37	459.58	460.81	459.17	460.09	458.53	460.00
Vertical Hydraulic Gradient[2,3]		-0.10	0.12	-0.47	-0.03	-0.41	0.08
Shallow Wells MW-178 and MW-83							
MW-178	467.90	471.36	467.79	470.64	470.82	471.23	469.81
MW-83	450.98	463.12	463.47	463.31	462.90	462.66	462.83
Vertical Hydraulic Gradient[2,3]		-0.49	-0.26	-0.43	-0.47	-0.51	-0.41

Notes:

[1] MW-56R and MW-63R were installed in June 2015

[2] Negative gradient indicates downward gradient

[3] Reference elevations used in vertical gradient calculations were changed from ground surface to top of casing for the First Quarter 2016 Annual Groundwater Monitoring Report.

NM = Measurement not completed

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TABLE 6
SUMMARY OF FINAL WELL GROUNDWATER FIELD PARAMETER MEASUREMENTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (inches)	Date Sampled	Water Level prior to Purging (feet btoc)	Total Depth of Well Casing (feet)	Set Tubing Depth (feet)	Time Sampled	Water Level after Purging (feet btoc)	Purge Volume (Gallons)	Purge Rate (mL/min)	Temperature (^{o}C)	Specific Conductivity (µS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Persulfate (mg/L)	Color
ITMW-5	4	4/19/2023	22.25	29.83	25.00	13:55	22.31	3.5	100	21.0	660	4.63	6.22	156.1	2.43	0.01	NM	clear
ITMW-7	4	4/19/2023	21.12	36.98	31.78	14:05	21.16	1.2	140	21.3	780	2.36	5.35	203.1	0.57	0.04	NM	clear
ITMW-9	4	4/19/2023	14.38	34.95	32.00	15:15	15.44	8.5	100	20.6	955	0.24	5.72	372.0	10.90	0.03	NM	clear
ITMW-20	4	4/17/2023	14.25	31.03	26.50	17:45	14.80	1.6	140	21.2	589	3.64	5.85	194.0	0.68	0.04	NM	clear
ITMW-21	4	4/18/2023	13.04	32.99	27.00	17:45	13.57	2.4	200	23.6	2,015	3.04	5.15	192.7	0.65	0.00	NM	clear
MW-26	4	4/17/2023	14.26	35.14	30.15	17:10	14.57	4.8	100	20.9	1,061	3.77	5.23	243.3	2.11	0.20	NM	clear
MW-29	2	4/18/2023	11.67	30.32	22.00	16:20	11.85	6.0	100	21.6	479	0.32	4.88	278.0	3.19	0.09	NM	clear
MW-38	2	4/20/2023	11.76	29.83	24.83	13:27	11.97	3.0	150	22.4	952	0.44	5.84	132.2	1.55	0.34	0.7	clear
MW-39R	2	4/19/2023	12.49	29.69	27.19	8:49	12.68	2.5	100	18.3	1,214	3.50	5.40	139.1	2.17	0.00	NM	clear
MW-40R	2	4/18/2023	10.16	28.30	23.30	8:49	10.20	2.8	150	17.4	612	0.12	4.94	248.5	1.26	0.69	NM	clear
MW-46R	2	4/20/2023	3.11	25.01	19.01	10:21	3.80	5.0	150	18.7	679	0.10	5.14	212.5	11.39	0.45	NM	clear
MW-50R	2	4/18/2023	5.51	18.24	15.90	15:49	10.09	4.0	200	17.2	1,320	0.16	6.21	94.7	8.86	0.13	NM	clear
MW-55R	2	4/19/2023	2.30	20.96	19.96	15:33	5.89	2.0	100	16.6	952	0.18	5.25	178.5	1.69	0.00	NM	clear
MW-57R	2	4/20/2023	2.27	19.35	16.00	9:03	4.60	3.0	150	16.6	767	-0.04	5.19	162.0	3.66	0.73	NM	clear
MW-60R	2	4/18/2023	5.05	14.86	12.36	9:01	9.39	2.5	100	17.5	1,363	0.90	6.73	548.5	10.83	0.00	NM	clear
MW-61R	2	4/18/2023	5.29	15.28	12.78	16:00	6.90	2.4	200	13.4	1,075	0.16	6.62	45.6	8.89	3.40	NM	clear
MW-62R	2	4/18/2023	5.42	20.01	17.51	9:15	7.02	2.6	140	15.9	943	0.78	5.63	193.2	5.78	0.44	NM	clear
MW-63R	2	4/19/2023	5.16	19.72	17.20	12:49	12.61	3.5	150	17.1	617	0.86	5.44	212.3	17.70	0.21	NM	clear
MW-68	2	4/17/2023	6.78	20.35	15.30	16:31	7.03	4.5	150	18.5	766	0.04	5.03	242.0	1.72	0.08	NM	clear
RW-69	4	4/19/2023	8.17	28.71	23.71	16:50	8.30	3.0	100	18..0	854	2.30	4.99	293.9	0.62	NM	NM	clear
MW-84	2	4/19/2023	12.72	26.77	23.27	12:45	12.79	2.5	140	21.9	4,314	0.46	7.06	206.3	6.11	0.00	1	clear
MW-87	2	4/20/2023	13.03	26.84	21.84	12:00	13.21	5.0	100	22.4	480	0.11	5.74	119.1	25.50	0.00	NM	clear
MW-91	2	4/19/2023	12.51	25.70	20.70	9:59	13.52	1.8	150	21.2	780	2.80	6.91	-101.7	5.81	2.84	NM	clear
MW-93	2	4/19/2023	15.11	34.21	29.21	12:59	15.25	2.5	100	20.9	1,330	6.50	4.96	222.2	2.35	0.02	0.0	clear
MW-95	2	4/19/2023	15.10	34.14	29.14	13:51	15.45	2.5	100	21.1	1,290	0.66	5.15	217.0	0.79	0.00	0.00	clear
MW-96	2	4/18/2023	8.51	14.53	12.05	9:10	9.02	4.2	100	17.3	173	2.13	5.30	179.7	8.02	0.00	NM	clear
MW-97	2	4/18/2023	9.11	15.20	13.20	15:25	13.45	2.5	100	17.7	248	3.85	5.98	147.4	17.90	NM	NM	clear
MW-98	2	4/17/2023	11.65	19.65	17.15	16:45	16.67	2.3	140	21.9	224	1.32	6.25	184.0	1.05	0.15	NM	clear
MW-99	2	4/19/2023	10.06	22.74	20.24	9:38	18.67	3.0	100	17.8	1,545	0.26	7.21	-145.3	13.20	2.12	NM	clear
IW-73	2	4/19/2023	8.41	26.82	21.82	18:17	8.45	3.3	100	17.9	580	0.30	5.16	217.3	1.95	0.02	NM	clear
IW-77	2	4/19/2023	10.05	28.70	23.70	11:33	10.11	3.3	100	17.8	1,296	8.60	6.38	107.3	1.37	0.01	7.00	clear
MW-175	2	4/20/2023	2.46	14.59	14.09	9:56	12.63	1.8	200	16.4	1,321	3.79	7.22	203.5	6.81	NM	NM	clear
MW-176	2	4/18/2023	2.59	14.00	13.50	11:53	6.99	2.8	200	16.0	1,038	0.75	9.84	53.2	14.5	0.24	NM	cloudy/clear
MW-178	2	4/20/2023	4.35	7.97	7.47	10:41	7.30	0.8	200	23.1	205	5.25	6.47	154.8	33.50	0.00	NM	dark brown haze with black flecks
MW-179	2	4/20/2023	8.69	12.79	12.39	10:49	12.49	0.8	200	21.8	149	4.63	5.83	165.1	10.30	0.00	NM	clear
MW-183R	2	4/19/2023	12.92	17.82	15.32	7:50	16.24	3.0	90	19.8	240	0.75	5.99	79.3	9.24	0.00	NM	clear
MW-184	2	4/17/2023	9.80	23.55	18.55	16:45	11.42	3.5	250	18.1	144	0.76	6.03	156.6	71.7	0.00	NM	slightly cloudy, colorless
MW-185	2	4/19/2023	14.59	29.19	24.28	15:51	14.61	3.0	150	23.2	353	0.36	5.78	173.7	3.22	0.00	NM	clear
MW-186	2	4/18/2023	13.04	27.80	22.00	13:52	20.31	3.2	150	22.1	1,026	0.08	7.01	-155.8	47.90	1.73	NM	clear
MW-187	2	4/19/2023	18.95	30.25	25.25	12:15	19.10	5.0	100	17.8	786	0.55	5.90	209.6	10.30	0.00	NM	clear
MW-188	2	4/19/2023	21.55	34.58	29.59	9:50	21.75	4.0	75	18.9	225.2	0.20	6.41	-56.4	19.10	4.50	NM	clear
MW-189	2	4/20/2023	25.73	40.85	35.85	9:35	25.74	2.3	140	20.9	1,404	0.62	7.34	202.0	1.73	0.00	NM	clear
MW-190	2	4/19/2023	21.50	36.10	31.10	16:00	21.75	1.9	140	24.3	758	0.43	6.89	202.5	3.29	0.15	NM	clear
MW-191	2	4/18/2023	17.09	33.20	30.70	16:12	17.09	2.8	150	24.7	223	0.08	5.62	182.9	8.01	0.04	NM	clear
MW-192	2	4/18/2023	16.80	30.19	27.70	13:20	15.79	5.0	100	24.3	151	0.77	5.23	147.9	5.56	0.00	NM	clear
MW-194	2	4/20/2023	4.86	21.30	16.30	11:25	5.06	2.7	140	18.9	1,301	4.70	6.75	95.4	10.13	5.20	NM	clear
MW-195	2	4/18/2023	2.75	17.20	14.70	13:20	9.77	2.9	200	21.0	965	0.77	6.60	194.2	2.00	0.07	NM	clear
MW-196	2	4/18/2023	4.02	15.00	12.50	11:15	9.99	2.2	140	20.5	1,581	0.52	6.89	215.1	3.99	0.04	NM	clear
MW-197	2	4/19/2023	11.62	25.00	20.00	9:07	11.44	4.0	100	17.2	662	0.07	6.62	-109.2	5.42	2.29	NM	clear
MW-198	2	4/20/2023	10.38	29.00	26.50	13:33	10.39	2.1	140	22.9	1,607	1.10	5.95	196.7	6.11	0.04	NM	clear
MW-199	2	4/19/2023	8.95	22.00	17.00	17:10	9.70	7.5	400	16.8	827	0.16	6.15	249.0	13.50	0.03	NM	clear
MW-200	2	4/18/2023	10.75	25.20	20.20	14:35	10.87	1.4	140	21.9	231	0.12	6.37	186.9	18.10	0.05	NM	clear
MW-201	2	4/18/2023	21.29	36.00	31.00	10:32	21.32	3.0	150	20.5	421	0.17	5.72	293.1	4.26	0.01	NM	clear
MW-202	2	4/19/2023	10.30	24.20	19.20	10:39	10.40	4.0	150	17.9	237	3.48	6.00	124.8	9.39	0.00	NM	clear
MW-203	2	4/19/2023	23.72	37.00	34.50	8:45	23.73	1.2	140	18.7	607	0.12	5.72	199.2	4.49	0.03	NM	clear
MW-204	2	4/19/2023	21.48	36.00	31.00	12:00	21.68	3.5	100	18.0	856	0.11	5.80	191.7	47.40	0.01	NM	clear
MW-205	2	4/19/2023	15.29	28.49	23.49	10:45	15.29	2.6	140	21.0	346	0.88	6.15	196.6	5.72	0.00	NM	clear
MW-206	2	4/19/2023	17.37	31.58	25.00	9:46	17.67	4.5	150	17.7	584	0.22	5.79	382.0	5.11	0.18	NM	clear
TMW-10	2	4/19/2023	5.31	15.19	12.69	10:01	6.90	2.5	150	16.4	1,301	0.13	6.87	-128.3	6.19	5.00	NM	clear with black specks
TMW-11	2	4/19/2023	4.58	15.13	12.63	9:04	6.21	2.5	150	15.7	495	-0.17	6.97	-156.7	9.62	3.80	NM	clear with black specks
TMW-12	2	4/20/2023	4.65	20.00	15.00	11:49	4.85	4.0	150	18.0	580	0.19	5.33	241.9	13.30	0.04	NM	clear
TMW-19	2	4/19/2023	25.17	43.00	36.00	17:45	25.59	4.0	100	20.0	674	0.11	5.86	147.8	3.66	0.03	NM	clear
TMW-21	2	4/20/2023	2.15	19.70	14.00	8:56	5.16	3.0	200	16.4	1,738	3.34	6.49	-75.0	8.01	9.00	NM	clear

RAMBOLL

TABLE 6
SUMMARY OF FINAL WELL GROUNDWATER FIELD PARAMETER MEASUREMENTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Well Casing Diameter (inches)	Date Sampled	Water Level prior to Purging (feet btoc)	Total Depth of Well Casing (feet)	Set Tubing Depth (feet)	Time Sampled	Water Level after Purging (feet btoc)	Purge Volume (Gallons)	Purge Rate (mL/min)	Temperature (^{o}C)	Specific Conductivity (µS/cm)	DO (mg/L)	pH	ORP (mV)	Turbidity (NTUs)	Ferrous Iron (mg/L)	Persulfate (mg/L)	Color
TMW-22R	2	4/19/2023	4.82	17.80	15.30	15:18	9.95	3.0	150	16.7	1,444	0.07	6.40	-67.0	19.10	3.90	NM	clear
TMW-23	2	4/20/2023	5.03	20.00	17.50	9:45	11.15	3.5	100	16.9	1,027	0.26	6.41	121.1	6.69	0.00	NM	clear
TMW-24	2	4/20/2023	2.45	19.50	17.00	13:55	3.24	4.0	100	17.7	717	0.19	5.88	74.7	4.85	0.32	NM	clear
TMW-25	2	4/19/2023	14.72	30.50	25.50	11:07	20.48	2.0	130	17.2	705	6.02	6.79	-148.8	44.5	5.50	NM	black hue
TMW-26	2	4/19/2023	15.20	28.60	23..6	14:40	19.85	2.5	75	18.4	1,756	0.05	6.99	-130.9	11.50	5.80	NM	slightly yellow
TMW-29	2	4/17/2023	9.94	27.50	22.50	16:46	15.08	3.5	200	19.0	1,205	0.04	6.49	3.4	20.90	0.26	NM	clear
TMW-30	2	4/20/2023	13.92	28.80	23.80	8:00	21.33	2.0	40	18.8	2,604	0.01	7.02	-156.7	107	6.00	NM	light brown
TMW-32	2	4/19/2023	10.81	26.50	21.50	10:35	10.82	3.5	100	16.5	682	0.10	6.49	-38.7	8.67	4.68	NM	clear with orange particulates
TMW-34	2	4/19/2023	12.36	24.78	22.28	13:42	13.13	3.0	150	21.4	431	-0.06	6.55	-31.3	5.35	0.76	NM	clear
TMW-36	2	4/17/2023	25.63	41.00	38.50	16:21	25.79	2.5	100	20.5	772	2.70	6.25	-3.4	2.30	3.30	NM	clear
TMW-36B	2	4/17/2023	25.58	31.00	28.50	17:18	25.97	2.6	100	20.8	1,835	2.60	6.21	9.7	1.75	2.09	NM	slightly cloudy, light brown

Notes:

btoc = Below top of casing
ORP = Oxidation reduction potential
DO = Dissolved oxygen
(^{o}C) = Degrees Celsius
mL/min = Milliliters per minute
mg/L = Milligrams per liter
NTUs = Nephelometric turbidity units
NM = Not measured
mV = Millivolts
(µS/cm) = Microsiemens per centimeter

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

TABLE 7
SUMMARY OF GROUNDWATER SAMPLING RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Plume	Remedial Action	North Plume																		
Location	Levels per ADEQ	IW-73	IW-77	IW-78	IW-78	MW-39R	MW-40R	MW-46R	MW-50R	MW-55R	MW-56R	MW-57R	MW-58R	MW-60R	MW-61R	MW-62R	MW-63R	MW-68	MW-82	MW-194	MW-195
Sample Date	RADD Issued Dec	10/19/2023	10/19/2023	10/18/2023	10/18/2023	10/16/2023	10/17/2023	10/19/2023	10/17/2023	10/18/2023	10/19/2023	10/19/2023	10/19/2023	10/16/2023	10/18/2023	10/16/2023	10/18/2023	10/16/2023	10/18/2023	10/18/2023	10/17/2023
Comments	2013				Field Duplicate																
Volatile Organic Compounds																					
Acetone	12000	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	5.0	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	80	U (0.16)	U (0.16)	U (0.16)	0.27 J (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	80	U (0.68)	U (0.68)	16.6 (0.68)	18.9 (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)
2-Butanone	4900	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)
Carbon Disulfide	720	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	1.1 J (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)
Carbon Tetrachloride	5	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	100	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	12000	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	80	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	190	U (0.28)	U (0.28)	0.29 J (0.28)	0.32 J (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	0.91 J (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	80	U (0.30)	U (0.30)	0.77 J (0.30)	0.83 J (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	2.4	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)
1,2-Dichloroethane	5.0	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	7.0	0.83 J (0.22)	1.0 (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	1.1 (0.22)	U (0.22)	0.39 J (0.22)	1.5 (0.22)	1.6 (0.22)	1.8 (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)
cis-1,2-Dichloroethene	70	6.2 (0.13)	5.3 (0.13)	0.58 J (0.13)	0.52 J (0.13)	U (0.13)	U (0.13)	8.8 (0.13)	0.16 J (0.13)	1.1 (0.13)	10.7 (0.13)	16.4 (0.13)	7.3 (0.13)	U (0.13)	1.3 (0.13)	U (0.13)	0.87 J (0.13)	U (0.13)	0.67 J (0.13)	2.6 (0.13)	0.30 J (0.13)
trans-1,2-Dichloroethene	100	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)
1,2-Dichloropropane	5.0	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)
1,3-Dichloropropene (total)	0.41	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)
trans-1,3-Dichloropropene		U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)
Ethyl Benzene	700	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	1000	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)
Methylene Chloride	5.0	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)
1,1,2,2-Tetrachloroethane	0.066	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	5.0	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	1000	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	200	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	5.0	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	UJ (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	5.0	195 (1.0)	181 (1.0)	24.8 (0.21)	23.9 (0.21)	U (0.21)	U (0.21)	288 (2.1)	1.6 (0.21)	26.9 (0.21)	552 (4.2)	240 (1.0)	218 (1.0)	U (0.21)	1.7 (0.21)	U (0.21)	7.2 (0.21)	U (0.21)	31.5 (0.21)	7.1 (0.21)	5.6 (0.21)
Vinyl Chloride	2.0	0.23 J (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	0.47 J (0.17)	U (0.17)	U (0.17)	U (0.17)	2.8 (0.17)	0.42 J (0.17)	U (0.17)	1.7 (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Xylenes (total)	10000	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals																					
Iron	NE	216 (50.0)	NM	NM	NM	NM	NM	NM	702 (50.0)	NM	NM	NM	320 (50.0)	NM	9550 (50.0)	NM	NM	NM	NM	10800 (50.0)	NM
Iron, Ferrous	NE	U (10)	30	U (10)	NM	460	340	1920	80	580	U (10)	620	U (10)	50	3320	370	U (10)	1990	1420	3050	40
Monitored Natural Attenuation Parameters (Laboratory)																					
Organic Carbon (total)	NE	610 J (1000)	NM	NM	NM	NM	NM	NM	U (1000)	NM	NM	NM	UJ (1000)	NM	1300 (1000)	NM	NM	NM	NM	U (1000)	NM
Organic Carbon (dissolved)	NE	NM	NM	NM	NM	NM	NM	NM	UJ (1000)	NM	NM	NM	NM	NM	1100 J (1000)	NM	NM	NM	NM	UJ (1000)	NM
Chloride	NE	NM	NM	NM	NM	NM	NM	NM	235000 (20000)	NM	NM	NM	NM	NM	140000 (20000)	NM	NM	NM	NM	155000 (20000)	NM
Nitrogen	NE	230 (100)	NM	NM	NM	NM	NM	NM	U (100)	NM	NM	NM	U (100)	NM	U (100)	NM	NM	NM	NM	U (100)	NM
Nitrogen, Nitrate (As N)	NE	230 (100)	NM	NM	NM	NM	NM	NM	U (100)	NM	NM	NM	U (100)	NM	U (100)	NM	NM	NM	NM	U (100)	NM
Sulfide (total)	NE	U (50)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (50)	NM	NM	NM	NM	NM	NM	NM	NM
Sulfate	NE	5700 (1000)	NM	NM	NM	NM	NM	NM	16000 (1000)	NM	NM	NM	2200 (1000)	NM	3100 J (1000)	NM	NM	NM	NM	10300 (1000)	NM
Sodium Persulfate	NE	NM	2800	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Pyruvic Acid	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (5000)	NM	NM	NM	NM	U (5000)	NM
n-Hexanoic acid	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	UJ (5000)	NM	NM	NM	NM	UJ (5000)	NM
Lactic Acid	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	3100 J (5000)	NM	NM	NM	NM	3400 J (5000)	NM
Gasses																					
Acetylene	NE	U (2.0)	NM	NM	NM	NM	NM	NM	U (2.0)	NM	NM	NM	U (2.0)	NM	NM	NM	NM	NM	NM	NM	NM
Methane	NE	4.2 J (10.0)	NM	NM	NM	NM	NM	NM	10.9 (10.0)	NM	NM	NM	21.3 (10.0)	NM	1170 (10.0)	NM	NM	NM	NM	550 (10.0)	NM
Ethane	NE	1.4 J (5.0)	NM	NM	NM	NM	NM	NM	U (5.0)	NM	NM	NM	1.3 J (5.0)	NM	U (5.0)	NM	NM	NM	NM	0.96 J (5.0)	NM
Ethene	NE	1.1 J (5.0)	NM	NM	NM	NM	NM	NM	1.2 J (5.0)	NM	NM	NM	0.96 J (5.0)	NM	U (5.0)	NM	NM	NM	NM	0.81 J (5.0)	NM
HYDROGEN (H2) [nM]	NE	1.7 J (1.9)	NM	NM	NM	NM	NM	NM	1.4 J (1.9)	NM	NM	NM	0.87 J (1.9)	NM	NM	NM	NM	NM	NM	NM	NM
Molecular Analyses																					
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	1.2 (0.5)	NM	NM	NM	NM	NM	NM	U (0.5)	NM	NM	NM	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM
Dehalococcoides (DHC) [cells/mL]	NE	27.9 (0.5)	NM	NM	NM	NM	NM	NM	1.4 (0.5)	NM	NM	NM	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM
tceA Reductase [cells/mL]	NE	U (0.5)	NM	NM	NM	NM	NM	NM	U (0.5)	NM	NM	NM	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	U (0.5)	NM	NM	NM	NM	NM	NM	U (0.5)	NM	NM	NM	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM
Field Parameters																					
Depth to Water [ft BTOC]	NE	8.34	9.84	10.82	NM	12.48	9.01	2.89	3.45	2.42	3.12	3.16	3.52	2.01	4.42	4.86	3.77	7.02	10.48	4.03	1.75
Oxidation Reduction Potential [mV]	NE	179.8	176.4	244.5	NM	250.3	199.6	80.1	112	97.4	29.8	187.5	229.9	198	6.1	-136.6	-133.6	150.2	109.1	-222.2	45.4
pH (Field Analysis) [SU]	NE	5.7	6.66	6.89	NM	4.68	5.2	5.49	6.46	5.76	5.63	5.27	4.95	6.78	6.45	6.13	5.85	5.01	5.03	6.59	6.63
Specific Conductivity (Field Analysis) [uS/cm]	NE	532	1321	5285	NM	1409	628	834	1180	1016	650	889	967	1260	1267	1222	1135	810	1806	1727	930
Temperature (Field) [C]	NE	20.6	20.1	21.2	NM	20.5	21.7	21.5	22.5	20.6	20.1	21.3	19.8	23.1	22.9	20.2	19.8	20.1	20.4	21.2	24
Turbidity (Field Parameters) [NTU]	NE	1.97	5.45	4.22	NM	0.13	3.93	4.89	7.84	3.3	1.35	2.04	2.26	119	1.15	30.3	15.7	3.81	4.88	1.7	22.9
Dissolved oxygen (total)	NE	60	530	1260	NM	10	200	100	2150	70	110	20	40	300	50	800	280	80	410	60	1050

Notes:

1 All concentrations are presented in µg/L (ppb) except where otherwise noted.

2 Only compounds with at least one detection are shown.

Abbreviations:

µg/L = Micrograms per liter

ppb = Parts per billion

bgs = Below ground surface

VOC = Volatile organic compound

B = Analyte found in associated blank.

D3 = Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference

U = Not detected

J = Estimated concentration

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.

RADD = Remedial action decision document

ADEQ= Arkansas Department of Environmental Quality

NE = Not established

NM = Not measured

RAMBOLL

TABLE 7
SUMMARY OF GROUNDWATER SAMPLING RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Plume	Remedial Action Levels per ADEQ RADD Issued Dec 2013	North Plume															South Plume			
Location		MW-195	MW-196	RW-69	TMW-10	TMW-11	TMW-12	TMW-12	TMW-14	TMW-20	TMW-21	TMW-22R	TMW-23	TMW-24	TMW-29	TMW-35	TMW-35	ITMW-1R	ITMW-2R	ITMW-5	ITMW-6
Sample Date		10/17/2023	10/17/2023	10/19/2023	10/18/2023	10/18/2023	10/18/2023	10/18/2023	10/17/2023	10/17/2023	10/17/2023	10/19/2023	10/18/2023	10/19/2023	10/16/2023	10/17/2023	10/17/2023	10/18/2023	10/17/2023	10/19/2023	10/19/2023
Comments		Field Duplicate						Field Duplicate									Field Duplicate				
Volatile Organic Compounds																					
Acetone	12000	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	5.0	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	0.23 J (0.14)	0.14 J (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	80	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	80	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)
2-Butanone	4900	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)
Carbon Disulfide	720	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)
Carbon Tetrachloride	5	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	100	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	0.10 J (0.089)	U (0.089)
Chloroethane	12000	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	2.5 (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	80	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	0.73 J (0.22)	0.42 J (0.22)
Chloromethane	190	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	80	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	2.4	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	6.8 (0.12)	U (0.12)	0.61 J (0.12)	U (0.12)
1,2-Dichloroethane	5.0	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	7.0	U (0.22)	U (0.22)	1.7 (0.22)	U (0.22)	U (0.22)	1.3 (0.22)	1.3 (0.22)	U (0.22)	U (0.22)	U (0.22)	0.59 J (0.22)	0.39 J (0.22)	1.2 (0.22)	U (0.22)	U (0.22)	U (0.22)	0.45 J (0.22)	U (0.22)	4.6 (0.22)	2.1 (0.22)
cis-1,2-Dichloroethene	70	0.30 J (0.13)	U (0.13)	6.1 (0.13)	1.6 (0.13)	U (0.13)	8.5 (0.13)	8.8 (0.13)	2.1 (0.13)	U (0.13)	1.9 (0.13)	37.8 (0.13)	2.8 (0.13)	11.2 (0.13)	U (0.13)	U (0.13)	U (0.13)	31.0 (0.13)	U (0.13)	22.6 (0.13)	11.3 (0.13)
trans-1,2-Dichloroethene	100	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	1.3 (0.10)	U (0.10)	0.17 J (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)
1,2-Dichloropropane	5.0	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)
1,3-Dichloropropene (total)	0.41	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)
trans-1,3-Dichloropropene		U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)
Ethyl Benzene	700	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	1000	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)
Methylene Chloride	5.0	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)
1,1,2,2-Tetrachloroethane	0.066	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	5.0	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	0.38 J (0.33)	U (0.33)	1.6 (0.33)	0.65 J (0.33)
Toluene	1000	U (0.25)	U (0.25)	U (0.25)	0.44 J (0.25)	U (0.25)	U (0.25)	U (0.25)	2.2 (0.25)	U (0.25)	0.48 J (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	200	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	5.0	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	UJ (0.14)	UJ (0.14)
Trichloroethene	5.0	5.3 (0.21)	U (0.21)	89.0 (0.21)	4.4 (0.21)	U (0.21)	323 (2.1)	328 (2.1)	3.3 (0.21)	0.24 J (0.21)	3.7 (0.21)	52.2 (0.21)	191 (0.21)	445 (2.1)	U (0.21)	U (0.21)	U (0.21)	22.3 (0.21)	1.6 (0.21)	2690 (4.2)	1630 (4.2)
Vinyl Chloride	2.0	U (0.17)	U (0.17)	0.43 J (0.17)	4.8 (0.17)	U (0.17)	0.19 J (0.17)	0.20 J (0.17)	U (0.17)	U (0.17)	U (0.17)	6.2 (0.17)	21.0 (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	0.90 J (0.17)	0.81 J (0.17)
Xylenes (total)	10000	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals																					
Iron	NE	NM	NM	543 (50.0)	11400 (50.0)	4200 (50.0)	NM	NM	NM	NM	11800 (50.0)	10400 (50.0)	819 (50.0)	381 (50.0)	NM	NM	NM	NM	NM	NM	NM
Iron, Ferrous	NE	NM	130	300	5400	3600	30	NM	2700	2300	3300	3300	70	430	310	110	NM	400	U (10)	U (10)	100
Monitored Natural Attenuation Parameters (Laboratory)																					
Organic Carbon (total)	NE	NM	NM	UJ (1000)	1300 (1000)	3100 (1000)	NM	NM	NM	NM	1400 (1000)	610 J (1000)	NM	NM	NM	NM	NM	NM	NM	NM	NM
Organic Carbon (dissolved)	NE	NM	NM	NM	1200 J (1000)	3300 J (1000)	NM	NM	NM	NM	1000 J (1000)	920 J (1000)	NM	NM	NM	NM	NM	NM	NM	NM	NM
Chloride	NE	NM	NM	NM	146000 (20000)	43700 B (10000)	NM	NM	NM	NM	243000 (20000)	192000 (10000)	NM	NM	NM	NM	NM	NM	NM	NM	NM
Nitrogen	NE	NM	NM	U (100)	U (100)	U (100)	NM	NM	NM	NM	U (100)	U (100)	U (100)	110 (100)	NM	NM	NM	NM	NM	NM	NM
Nitrogen, Nitrate (As N)	NE	NM	NM	U (100)	U (100)	U (100)	NM	NM	NM	NM	U (100)	U (100)	U (100)	110 (100)	NM	NM	NM	NM	NM	NM	NM
Sulfide (total)	NE	NM	NM	U (50)	33 J (50)	U (50)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Sulfate	NE	NM	NM	2000 (1000)	2100 (1000)	2000 (1000)	NM	NM	NM	NM	3600 (1000)	4300 (1000)	1500 (1000)	7600 (1000)	NM	NM	NM	NM	NM	NM	NM
Sodium Persulfate	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Pyruvic Acid	NE	NM	NM	NM	U (5000)	U (2500)	NM	NM	NM	NM	U (5000)	U (5000)	NM	NM	NM	NM	NM	NM	NM	NM	NM
n-Hexanoic acid	NE	NM	NM	NM	UJ (5000)	UJ (2500)	NM	NM	NM	NM	UJ (5000)	UJ (5000)	NM	NM	NM	NM	NM	NM	NM	NM	NM
Lactic Acid	NE	NM	NM	NM	4800 J (5000)	6800 D3 (2500)	NM	NM	NM	NM	3600 J (5000)	4000 J (5000)	NM	NM	NM	NM	NM	NM	NM	NM	NM
Gasses																					
Acetylene	NE	NM	NM	U (2.0)	U (2.0)	U (2.0)	NM	NM	NM	NM	NM	NM	U (2.0)	U (2.0)	NM	NM	NM	NM	NM	NM	NM
Methane	NE	NM	NM	33.2 (10.0)	3320 (10.0)	3380 (10.0)	NM	NM	NM	NM	8240 (10.0)	4350 (10.0)	318 (10.0)	16.6 (10.0)	NM	NM	NM	NM	NM	NM	NM
Ethane	NE	NM	NM	U (5.0)	2.1 J (5.0)	0.91 J (5.0)	NM	NM	NM	NM	1.2 J (5.0)	2.8 J (5.0)	29.1 (5.0)	1.7 J (5.0)	NM	NM	NM	NM	NM	NM	NM
Ethene	NE	NM	NM	U (5.0)	5.7 (5.0)	U (5.0)	NM	NM	NM	NM	2.3 J (5.0)	17.9 (5.0)	8.2 (5.0)	1.6 J (5.0)	NM	NM	NM	NM	NM	NM	NM
HYDROGEN (H2) [nM]	NE	NM	NM	5.1 (1.9)	1.8 J (1.9)	U (1.9)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Molecular Analyses																					
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	NM	NM	U (0.5)	U (0.5)	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Dehalococcoides (DHC) [cells/mL]	NE	NM	NM	1.8 (0.5)	58 (0.5)	57.8 (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
tceA Reductase [cells/mL]	NE	NM	NM	U (0.5)	18.1 (0.5)	7.8 (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	NM	NM	U (0.5)	0.9 (0.5)	0.4 J (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Field Parameters																					
Depth to Water [ft BTOC]	NE	NM	3.46	8.1	3.83	3	5.6	NM	3.26	2.89	3.23	3.65	3.46	3.57	9.06	10.55	NM	12.2	12.73	14.3	23.27
Oxidation Reduction Potential [mV]	NE	NM	103.6	199.6	-128.5	-142.3	-179.8	NM	-287.2	-146.5	111.7	-91.1	-18.3	-312.4	47.1	-55	NM	84.7	218.7	146.3	520
pH (Field Analysis) [SU]	NE	NM	6.79	5.35	6.85	7.09	5.56	NM	7.57	6.76	7.2	6.82	6.57	5.83	6.62	4.79	NM	6.4	6	6.08	6.58
Specific Conductivity (Field Analysis) [uS/cm]	NE	NM	1579	840	1294	862	1111	NM	899	954	1371	1435	1591	1396	1118	252.7	NM	700	537	883	1357
Temperature (Field) [C]	NE	NM	27	19.5	20	22.1	22.3	NM	21.6	22	22	20.3	22.4	20.1	21.6	19.7	NM	21.6	22.2	22.8	19.1
Turbidity (Field Parameters) [NTU]	NE	NM	38.1	1.52	2.23	3.93	4.23	NM	26.7	1.68	6.63	18.1	8.76	7.14	86	1.07	NM	92.6	0.96	10.1	0.62
Dissolved oxygen (total)	NE	NM	2690	6000	90	40	90	NM	10	4200	140	100	190	80	2680	10	NM	2390	1480	70	230

Notes:

1 All concentrations are presented in µg/L (ppb) except where otherwise noted.

2 Only compounds with at least one detection are shown.

Abbreviations:

µg/L = Micrograms per liter

ppb = Parts per billion

bgs = Below ground surface

VOC = Volatile organic compound

B = Analyte found in associated blank.

D3 = Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference

U = Not detected

J = Estimated concentration

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.

RADD = Remedial action decision document

ADEQ= Arkansas Department of Environmental Quality

NE = Not established

NM = Not measured

RAMBOLL

TABLE 7
SUMMARY OF GROUNDWATER SAMPLING RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Plume	Remedial Action	South Plume																			
Location	Levels per ADEQ	ITMW-7	ITMW-9	ITMW-10	ITMW-18	ITMW-19	ITMW-20	ITMW-20	ITMW-21	ITMW-21	MW-22	MW-24	MW-24	MW-25R	MW-26	MW-27	MW-28	MW-29	MW-38	MW-83	MW-84
Sample Date	RADD Issued Dec	10/18/2023	10/19/2023	10/19/2023	10/19/2023	10/19/2023	10/17/2023	10/17/2023	10/18/2023	10/18/2023	10/17/2023	10/18/2023	10/18/2023	10/18/2023	10/17/2023	10/18/2023	10/17/2023	10/16/2023	10/19/2023	10/18/2023	10/18/2023
Comments	2013							Field Duplicate		Field Duplicate			Field Duplicate								
Volatile Organic Compounds																					
Acetone	12000	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	5.0	0.17 J (0.14)	1.4 (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	0.20 J (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	80	U (0.16)	U (0.16)	U (0.16)	0.53 J (0.16)	0.47 J (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	80	U (0.68)	U (0.68)	U (0.68)	2.1 (0.68)	10.3 (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	2.2 (0.68)	3.3 (0.68)	2.5 (0.68)
2-Butanone	4900	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)
Carbon Disulfide	720	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)
Carbon Tetrachloride	5	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	100	6.9 (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	5.2 (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	12000	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	80	U (0.22)	1.2 (0.22)	U (0.22)	2.3 (0.22)	1.6 (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	4.4 (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	190	U (0.28)	U (0.28)	U (0.28)	U (0.28)	0.68 J (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	0.73 J (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	1.1 (0.28)	
Dibromochloromethane	80	U (0.30)	U (0.30)	U (0.30)	U (0.30)	0.79 J (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	2.0 (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	0.48 J (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	2.4	U (0.12)	3.0 (0.12)	0.27 J (0.12)	0.47 J (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	1.3 (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)
1,2-Dichloroethane	5.0	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	7.0	U (0.22)	12.2 (0.22)	0.96 J (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	12.2 (0.22)	0.27 J (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)
cis-1,2-Dichloroethene	70	6.2 (0.13)	92.0 (0.13)	5.5 (0.13)	215 (3.2)	11.4 (0.13)	U (0.13)	U (0.13)	0.17 J (0.13)	0.19 J (0.13)	U (0.13)	0.29 J (0.13)	0.32 J (0.13)	3120 (6.4)	U (0.13)	3.1 (0.13)	U (0.13)	U (0.13)	2.2 (0.13)	0.54 J (0.13)	U (0.13)
trans-1,2-Dichloroethene	100	U (0.10)	6.0 (0.10)	U (0.10)	42.2 (0.10)	2.1 J (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	92.4 (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)
1,2-Dichloropropane	5.0	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	0.41 J (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)
1,3-Dichloropropene (total)	0.41	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)
trans-1,3-Dichloropropene		U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)
Ethyl Benzene	700	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	0.34 J (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	1000	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	0.85 J (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)
Methylene Chloride	5.0	U (0.39)	0.44 J (0.39)	U (0.39)	0.92 J (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)
1,1,2,2-Tetrachloroethane	0.066	U (0.15)	0.44 J (0.15)	U (0.15)	0.25 J (0.15)	0.45 J (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	0.79 J (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	5.0	U (0.33)	3.9 (0.33)	U (0.33)	1.4 (0.33)	0.66 J (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	1.7 (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	1000	U (0.25)	U (0.25)	0.30 J (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	2.0 (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	200	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	5.0	U (0.14)	0.69 J (0.14)	U (0.14)	U (0.14)	0.21 J (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	0.31 J (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	UJ (0.14)	U (0.14)	U (0.14)
Trichloroethene	5.0	16.1 (0.21)	4190 (10.5)	344 (2.1)	2380 (5.2)	1150 (4.2)	U (0.21)	U (0.21)	7.3 (0.21)	7.6 (0.21)	U (0.21)	16.0 (0.21)	16.1 (0.21)	6300 (10.5)	U (0.21)	123 (0.21)	U (0.21)	U (0.21)	108 (10.5)	27.5 (0.21)	2.7 (0.21)
Vinyl Chloride	2.0	U (0.17)	2.0 (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	88.4 (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Xylenes (total)	10000	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals																					
Iron	NE	NM	99.7 (50.0)	NM	NM	49.4 J (50.0)	NM	NM	NM	NM	NM	NM	NM	4040 (50.0)	NM	191 (50.0)	NM	NM	173 (50.0)	13.7 J (50.0)	NM
Iron, Ferrous	NE	50	40	80	120	U (10)	30	NM	U (10)	NM	40	U (10)	NM	1770	100	U (10)	2760	70	U (10)	U (10)	U (10)
Monitored Natural Attenuation Parameters (Laboratory)																					
Organic Carbon (total)	NE	NM	680 J (1000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	4400 J (5000)	NM	NM	NM	NM	UJ (1000)	NM	NM
Organic Carbon (dissolved)	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Chloride	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Nitrogen	NE	NM	U (200)	NM	NM	2500 (100)	NM	NM	NM	NM	NM	NM	NM	570 (100)	NM	160 (100)	NM	NM	820 (100)	U (100)	NM
Nitrogen, Nitrate (As N)	NE	NM	U (200)	NM	NM	2500 (100)	NM	NM	NM	NM	NM	NM	NM	570 (100)	NM	160 (100)	NM	NM	820 (100)	U (100)	NM
Sulfide (total)	NE	NM	U (50)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	100 (50)	NM	NM	NM	NM	U (50)	NM	NM
Sulfate	NE	NM	33100 (10000)	NM	NM	1780000 (400000)	NM	NM	NM	NM	NM	NM	NM	754000 (50000)	NM	314000 (20000)	NM	NM	410000 (50000)	590000 (50000)	NM
Sodium Persulfate	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Pyruvic Acid	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
n-Hexanoic acid	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Lactic Acid	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Gasses																					
Acetylene	NE	NM	U (2.0)	NM	NM	U (2.0)	NM	NM	NM	NM	NM	NM	NM	0.39 J (2.0)	NM	U (2.0)	NM	NM	U (2.0)	0.99 J (2.0)	NM
Methane	NE	NM	15.8 (10.0)	NM	NM	5.1 J (10.0)	NM	NM	NM	NM	NM	NM	NM	185 (10.0)	NM	6.2 J (10.0)	NM	NM	U (10.0)	709 (10.0)	NM
Ethane	NE	NM	1.8 J (5.0)	NM	NM	1.8 J (5.0)	NM	NM	NM	NM	NM	NM	NM	5.8 (5.0)	NM	1.2 J (5.0)	NM	NM	1.5 J (5.0)	35.4 (5.0)	NM
Ethene	NE	NM	1.9 J (5.0)	NM	NM	1.1 J (5.0)	NM	NM	NM	NM	NM	NM	NM	2.5 J (5.0)	NM	1.1 J (5.0)	NM	NM	1.3 J (5.0)	13.5 (5.0)	NM
HYDROGEN (H2) [nM]	NE	NM	10.9 (1.9)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (1.9)	NM	NM
Molecular Analyses																					
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	NM	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (1.1)	NM	NM	NM	NM	U (0.5)	NM	NM
Dehalocaccoides (DHC) [cells/mL]	NE	NM	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (1.1)	NM	NM	NM	NM	U (0.5)	NM	NM
tceA Reductase [cells/mL]	NE	NM	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (1.1)	NM	NM	NM	NM	U (0.5)	NM	NM
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	NM	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (1.1)	NM	NM	NM	NM	U (0.5)	NM	NM
Field Parameters																					
Depth to Water [ft BTOC]	NE	20.54	22.09	21.01	10.77	13.29	14.7	NM	13.32	NM	11.71	13.22	NM	9.7	14.57	12.35	7.95	12.57	10.99	12.32	12.6
Oxidation Reduction Potential [mV]	NE	224.1	213	-135.9	239.9	-91.7	268.5	NM	333.2	NM	-224	245.9	NM	196.9	-138.4	-129.6	-41.7	302.6	-210.7	230	84.8
pH (Field Analysis) [SU]	NE	5.34	6.07	5.8	5.62	5.92	5.15	NM	4.8	NM	5.4	4.97	NM	7.04	5.3	5.45	6.45	5.5	6.02	6.57	7.3
Specific Conductivity (Field Analysis) [uS/cm]	NE	689	617	1746	3582	5142	709	NM	2670	NM	656	1246	NM	2684	1507	1843	378.1	506	2687	2797	4125
Temperature (Field) [C]	NE	21.4	22.7	20.6	21.5	22	22	NM	21.5	NM	21.7	24.5	NM	22.5	19.9	20.4	24.4	22.2	25.5	25.1	22.9
Turbidity (Field Parameters) [NTU]	NE	0.92	2.9	0.6	0.14	4.34	2.82	NM	2.11	NM	1.35	0.69	NM	5.73	3.12	2.86	9.24	2.72	4.85	5.43	4.21
Dissolved oxygen (total)	NE	720	17	19	490	1100	300	NM	920	NM	1200	50	NM	620	260	100	100	230	190	390	140

Notes:

1 All concentrations are presented in µg/L (ppb) except where otherwise noted.

2 Only compounds with at least one detection are shown.

Abbreviations:

µg/L = Micrograms per liter

ppb = Parts per billion

bgs = Below ground surface

VOC = Volatile organic compound

B = Analyte found in associated blank.

D3 = Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference

U = Not detected

J = Estimated concentration

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.

RADD = Remedial action decision document

ADEQ= Arkansas Department of Environmental Quality

NE = Not established

NM = Not measured

RAMBOLL

TABLE 7
SUMMARY OF GROUNDWATER SAMPLING RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Plume	Remedial Action	South Plume																		
Location	Levels per ADEQ	MW-92	MW-93	MW-95	MW-182	MW-182	MW-186	MW-187	MW-188	MW-189	MW-190	MW-191	MW-192	MW-197	MW-198	MW-199	MW-201	MW-203	MW-204	MW-206	RW-1
Sample Date	RADD Issued Dec	10/19/2023	10/19/2023	10/19/2023	10/20/2023	10/20/2023	10/20/2023	10/20/2023	10/20/2023	10/19/2023	10/17/2023	10/16/2023	10/17/2023	10/18/2023	10/19/2023	10/19/2023	10/17/2023	10/17/2023	10/18/2023	10/17/2023	10/18/2023
Comments	2013					Field Duplicate															
Volatile Organic Compounds																					
Acetone	12000	U (2.5)	U (2.5)	UJ (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	6.9 J (2.5)
Benzene	5.0	U (0.14)	U (0.14)	0.20 J (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	0.24 J (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	0.41 J (0.14)
Bromodichloromethane	80	U (0.16)	U (0.16)	0.43 J (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	1.1 (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	80	0.73 J (0.68)	0.72 J (0.68)	UJ (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	1.7 (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	0.77 J (0.68)
2-Butanone	4900	U (0.98)	U (0.98)	UJ (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	1.6 J (0.98)
Carbon Disulfide	720	U (0.98)	U (0.98)	UJ (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)
Carbon Tetrachloride	5	U (0.17)	0.49 J (0.17)	0.74 J (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	1.0 (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	100	U (0.089)	U (0.089)	UJ (0.089)	4.9 (0.089)	5.0 (0.089)	U (0.089)	U (0.089)	U (0.089)	0.45 J (0.089)	U (0.089)	U (0.089)	U (0.089)	1.2 (0.089)	U (0.089)	0.94 J (0.089)	U (0.089)	U (0.089)	2.0 (0.089)	U (0.089)	U (0.089)
Chloroethane	12000	U (0.37)	U (0.37)	UJ (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	0.90 J (0.37)
Chloroform	80	0.28 J (0.22)	1.6 (0.22)	7.8 J (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	1.2 (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	11.7 (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	18.4 (0.22)
Chloromethane	190	U (0.28)	U (0.28)	UJ (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	80	U (0.30)	U (0.30)	UJ (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	0.57 J (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	2.4	U (0.12)	U (0.12)	0.79 J (0.12)	U (0.12)	U (0.12)	U (0.12)	0.59 J (0.12)	U (0.12)	0.19 J (0.12)	0.34 J (0.12)	U (0.12)	U (0.12)	U (0.12)	1.7 (0.12)	U (0.12)	0.36 J (0.12)	U (0.12)	U (0.12)	U (0.12)	3.7 (0.12)
1,2-Dichloroethane	5.0	U (0.21)	U (0.21)	0.27 J (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	0.64 J (0.21)
1,1-Dichloroethene	7.0	0.69 J (0.22)	7.3 (0.22)	79.1 J (0.22)	U (0.22)	U (0.22)	U (0.22)	0.46 J (0.22)	U (0.22)	0.45 J (0.22)	1.2 (0.22)	U (0.22)	U (0.22)	U (0.22)	41.4 (0.22)	0.43 J (0.22)	U (0.22)	0.82 J (0.22)	U (0.22)	U (0.22)	359 J (219)
cis-1,2-Dichloroethene	70	2.3 (0.13)	48.9 (0.13)	828 (25.8)	0.79 J (0.13)	0.88 J (0.13)	0.61 J (0.13)	3.5 (0.13)	0.64 J (0.13)	9.6 (0.13)	6.5 (0.13)	0.24 J (0.13)	U (0.13)	14.7 (0.13)	2650 (32.2)	10.5 (0.13)	U (0.13)	9.3 (0.13)	3.1 (0.13)	0.90 J (0.13)	55700 (129)
trans-1,2-Dichloroethene	100	U (0.10)	2.7 (0.10)	20.0 J (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	58.6 (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (102)
1,2-Dichloropropane	5.0	U (0.14)	U (0.14)	UJ (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	0.19 J (0.14)
1,3-Dichloropropene (total)	0.41	U (0.18)	U (0.18)	UJ (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	0.26 J (0.18)
trans-1,3-Dichloropropene		U (0.18)	U (0.18)	UJ (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	0.26 J (0.18)
Ethyl Benzene	700	U (0.12)	U (0.12)	UJ (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	0.24 J (0.12)
4-Methyl-2-pentanone	1000	U (0.74)	U (0.74)	UJ (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	0.80 J (0.74)
Methylene Chloride	5.0	U (0.39)	U (0.39)	1.5 J (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	0.70 J (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	2.1 (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	0.83 J (0.39)
1,1,2,2-Tetrachloroethane	0.066	U (0.15)	U (0.15)	1.1 J (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	20.7 (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	1.1 (0.15)
Tetrachloroethene	5.0	U (0.33)	2.6 (0.33)	16.3 J (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	11.1 (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	18.2 (0.33)
Toluene	1000	U (0.25)	U (0.25)	1.7 J (0.25)	U (0.25)	U (0.25)	0.76 J (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	0.95 J (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	11.6 (0.25)
1,1,1-Trichloroethane	200	U (0.11)	U (0.11)	167 J (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	21.9 (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	8.3 (0.11)
1,1,2-Trichloroethane	5.0	UJ (0.14)	UJ (0.14)	3.2 J (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	1.3 J (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	4.4 (0.14)
Trichloroethene	5.0	404 (4.2)	8370 (42.0)	44300 (42.0)	16.4 (0.21)	16.7 (0.21)	1.1 (0.21)	96.0 (0.21)	7.3 (0.21)	261 (2.1)	533 (2.1)	10.5 (0.21)	U (0.21)	1.3 (0.21)	31400 (52.5)	93.1 (0.21)	U (0.21)	330 (2.1)	40.7 (0.21)	7.9 (0.21)	62300 (210)
Vinyl Chloride	2.0	U (0.17)	U (0.17)	3.7 J (0.17)	U (0.17)	U (0.17)	0.59 J (0.17)	U (0.17)	U (0.17)	0.27 J (0.17)	0.32 J (0.17)	U (0.17)	U (0.17)	U (0.17)	129 J (41.8)	U (0.17)	U (0.17)	0.22 J (0.17)	U (0.17)	U (0.17)	389 J (167)
Xylenes (total)	10000	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	2.3 J (0.28)
Metals																					
Iron	NE	84.2 (50.0)	NM	16.2 J (50.0)	NM	NM	13800 (50.0)	NM	NM	NM	NM	NM	NM	15100 (50.0)	121 (50.0)	NM	NM	NM	NM	NM	NM
Iron, Ferrous	NE	30	U (10)	U (10)	U (10)	NM	1620	180	6800	30	20	U (10)	U (10)	1420	60	130	90	U (10)	200	U (10)	480
Monitored Natural Attenuation Parameters (Laboratory)																					
Organic Carbon (total)	NE	NM	NM	UJ (1000)	NM	NM	12000 (5000)	NM	NM	NM	NM	NM	NM	NM	650 J (1000)	NM	NM	NM	NM	NM	NM
Organic Carbon (dissolved)	NE	NM	NM	NM	NM	NM	8800 (1000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Chloride	NE	NM	NM	NM	NM	NM	126000 (10000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Nitrogen	NE	770 (100)	NM	650 (100)	NM	NM	100	NM	NM	NM	NM	NM	NM	U (100)	1400 (100)	NM	NM	NM	NM	NM	NM
Nitrogen, Nitrate (As N)	NE	770 (100)	NM	650 (100)	NM	NM	100	NM	NM	NM	NM	NM	NM	U (100)	1400 (100)	NM	NM	NM	NM	NM	NM
Sulfide (total)	NE	NM	NM	U (50)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (50)	NM	NM	NM	NM	NM	NM
Sulfate	NE	204000 (50000)	NM	125000 (10000)	NM	NM	860 J (1000)	NM	NM	NM	NM	NM	NM	21300 (2000)	247000 (20000)	NM	NM	NM	NM	NM	NM
Sodium Persulfate	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Pyruvic Acid	NE	NM	NM	NM	NM	NM	UJ (5000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
n-Hexanoic acid	NE	NM	NM	NM	NM	NM	UJ (5000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Lactic Acid	NE	NM	NM	NM	NM	NM	4500 J (5000)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Gasses																					
Acetylene	NE	U (2.0)	NM	0.46 J (2.0)	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (2.0)	0.42 J (2.0)	NM	NM	NM	NM	NM	NM
Methane	NE	6.2 J (10.0)	NM	5.9 J (10.0)	NM	NM	1320 J (10.0)	NM	NM	NM	NM	NM	NM	716 (10.0)	16.7 (10.0)	NM	NM	NM	NM	NM	NM
Ethane	NE	1.7 J (5.0)	NM	1.4 J (5.0)	NM	NM	5	NM	NM	NM	NM	NM	NM	1.0 J (5.0)	9.3 (5.0)	NM	NM	NM	NM	NM	NM
Ethene	NE	1.4 J (5.0)	NM	U (5.0)	NM	NM	5	NM	NM	NM	NM	NM	NM	0.91 J (5.0)	5.1 (5.0)	NM	NM	NM	NM	NM	NM
HYDROGEN (H2) [nM]	NE	NM	NM	0.51 J (1.9)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (1.9)	NM	NM	NM	NM	NM	NM
Molecular Analyses																					
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	NM	NM	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (0.5)	NM	NM	NM	NM	NM	NM
Dehalococcoides (DHC) [cells/mL]	NE	NM	NM	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (0.5)	NM	NM	NM	NM	NM	NM
tceA Reductase [cells/mL]	NE	NM	NM	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (0.5)	NM	NM	NM	NM	NM	NM
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	NM	NM	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (0.5)	NM	NM	NM	NM	NM	NM
Field Parameters																					
Depth to Water [ft BTOC]	NE	10.67	14.89	14.85	15.05	NM	18.84	19.44	21.92	25.86	21.61	17.29	16.81	11.72	10.21	9.3	21.57	13.95	21.26	18.15	9.81
Oxidation Reduction Potential [mV]	NE	174.9	255.9	43.6	149.1	NM	-108.7	161.2	-52.6	162.3	67.1	198.7	300	-89.2	26.6	176.5	186.8	0.9	155.5	139	-94.3
pH (Field Analysis) [SU]	NE	6	5.15	NM	5.53	NM	7.12	5.89	6.39	6.18	6.72	5.53	5.12	7.06	NM	6.39	5.9	5.94	6.08	6.53	7.09
Specific Conductivity (Field Analysis) [uS/cm]	NE	1902	1257	1328	559.7	NM	1702	840	506	1744	762	262.6	170.7	609	1769	801	503.6	704	753	621	1293
Temperature (Field) [C]	NE	20.6	22.1	22.2	17.3	NM	17	17.5	18.4	21.7	23.4	23.5	24.2	20	23	20.7	20.2	20.2	19.4	21.2	24.8
Turbidity (Field Parameters) [NTU]	NE	2.03	1.41	2.83	1.87	NM	30.7	8.67	4.25	1.87	7.25	4.26	9.05	9.82	4.11	5.84	2.28	1.9	18.5	9.69	2.34
Dissolved oxygen (total)	NE	1260	1910	1330	20	NM	70	160	120	1520	680	110	630	180	1980	40	130	430	90	210	3240

Notes:

1 All concentrations are presented in µg/L (ppb) except where otherwise noted.

2 Only compounds with at least one detection are shown.

Abbreviations:

µg/L = Micrograms per liter

ppb = Parts per billion

bgs = Below ground surface

VOC = Volatile organic compound

B = Analyte found in associated blank.

D3 = Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference

U = Not detected

J = Estimated concentration

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.

RADD = Remedial action decision document

ADEQ= Arkansas Department of Environmental Quality

NE = Not established

NM = Not measured

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TABLE 7
SUMMARY OF GROUNDWATER SAMPLING RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Plume	Remedial Action	South Plume										East Plume									
Location	Levels per ADEQ	TMW-16	TMW-19	TMW-25	TMW-26	TMW-27	TMW-30	TMW-30	TMW-32	TMW-36	TMW-36B	MW-87	MW-89	MW-91	MW-96	MW-96	MW-97	MW-98	MW-99	MW-183R	MW-184
Sample Date	RADD Issued Dec	10/20/2023	10/17/2023	10/20/2023	10/20/2023	10/20/2023	10/20/2023	10/20/2023	10/20/2023	10/16/2023	10/16/2023	10/18/2023	10/17/2023	10/17/2023	10/16/2023	10/16/2023	10/17/2023	10/18/2023	10/18/2023	10/17/2023	10/16/2023
Comments	2013							Field Duplicate								Field Duplicate					
Volatile Organic Compounds																					
Acetone	12000	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	3.3 J (2.5)	U (2.5)
Benzene	5.0	0.25 J (0.14)	U (0.14)	U (0.14)	0.15 J (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	0.20 J (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	0.48 J (0.14)	U (0.14)	U (0.14)
Bromodichloromethane	80	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	80	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)
2-Butanone	4900	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)
Carbon Disulfide	720	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	1.3 J (0.98)	1.3 J (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)
Carbon Tetrachloride	5	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	100	0.11 J (0.089)	U (0.089)	1.8 (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	1.1 (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	12000	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	80	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)
Chloromethane	190	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	80	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	2.4	U (0.12)	0.59 J (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	0.38 J (0.12)	U (0.12)	0.73 J (0.12)	U (0.12)	0.48 J (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)
1,2-Dichloroethane	5.0	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	7.0	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	0.75 J (0.22)	U (0.22)	2.5 (0.22)	U (0.22)	1.7 (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)
cis-1,2-Dichloroethene	70	0.67 J (0.13)	4.7 (0.13)	0.80 J (0.13)	0.75 J (0.13)	U (0.13)	3.4 (0.13)	3.8 (0.13)	5.3 (0.13)	60.5 (0.13)	0.19 J (0.13)	14.8 (0.13)	0.30 J (0.13)	107 (0.13)	U (0.13)	U (0.13)	U (0.13)	0.20 J (0.13)	10.2 (0.13)	U (0.13)	0.18 J (0.13)
trans-1,2-Dichloroethene	100	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)
1,2-Dichloropropane	5.0	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)
1,3-Dichloropropene (total)	0.41	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)
trans-1,3-Dichloropropene		U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)
Ethyl Benzene	700	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	0.16 J (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	1000	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	1.1 J (0.74)	U (0.74)	U (0.74)
Methylene Chloride	5.0	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)
1,1,2,2-Tetrachloroethane	0.066	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	5.0	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	2.9 (0.33)	U (0.33)	0.49 J (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)	U (0.33)
Toluene	1000	0.82 J (0.25)	U (0.25)	1.9 (0.25)	2.0 (0.25)	U (0.25)	3.7 (0.25)	3.2 (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	0.54 J (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	0.99 J (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	200	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	5.0	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)
Trichloroethene	5.0	31.8 (0.21)	88.5 (0.21)	3.4 (0.21)	37.2 (0.21)	1.3 (0.21)	15.9 (0.21)	19.3 (0.21)	10.2 (0.21)	103 (0.21)	U (0.21)	257 (1.0)	4.6 (0.21)	132 (0.21)	U (0.21)	U (0.21)	U (0.21)	1.2 (0.21)	0.37 J (0.21)	0.50 J (0.21)	1.4 (0.21)
Vinyl Chloride	2.0	0.74 J (0.17)	U (0.17)	0.35 J (0.17)	0.62 J (0.17)	U (0.17)	U (0.17)	U (0.17)	0.38 J (0.17)	0.31 J (0.17)	U (0.17)	U (0.17)	U (0.17)	0.38 J (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Xylenes (total)	10000	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	0.59 J (0.28)	0.60 J (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals																					
Iron	NE	7190 (50.0)	36.9 J (50.0)	40400 (50.0)	11100 (50.0)	NM	NM	NM	6710 (50.0)	5910 (50.0)	1070 (50.0)	3510 (50.0)	214 (50.0)	6470 (50.0)	NM	NM	NM	NM	5490 (50.0)	NM	NM
Iron, Ferrous	NE	2070	U (10)	4600	5100	30	5000	NM	7500	3300	2200	40	340	2760	U (10)	NM	2160	100	3500	390	60
Monitored Natural Attenuation Parameters (Laboratory)																					
Organic Carbon (total)	NE	12800 (5000)	830 J (1000)	3800 (1000)	11100 (5000)	NM	NM	NM	920 J (1000)	1500 (1000)	U (1000)	U (1000)	660 J (1000)	3600 (1000)	NM	NM	NM	NM	6000 (1000)	NM	NM
Organic Carbon (dissolved)	NE	6700 (1000)	UJ (1000)	5300 (1000)	6200 (1000)	NM	NM	NM	1100 (1000)	920 J (1000)	UJ (1000)	NM	UJ (1000)	3100 J (1000)	NM	NM	NM	NM	30900 J (5000)	NM	NM
Chloride	NE	211000 (20000)	121000 (20000)	94600 (10000)	189000 (10000)	NM	NM	NM	69600 (10000)	164000 (50000)	516000 (50000)	NM	53900 (5000)	77600 (20000)	NM	NM	NM	NM	71500 B (20000)	NM	NM
Nitrogen	NE	100	10000 (500)	210 J (100)	100	NM	NM	NM	100	2100 (100)	1300 (100)	740 (100)	75700 J (5000)	U (100)	NM	NM	NM	NM	U (100)	NM	NM
Nitrogen, Nitrate (As N)	NE	100	10000 (500)	210 J (100)	100	NM	NM	NM	100	2100 (100)	1300 (100)	740 (100)	75700 J (5000)	U (100)	NM	NM	NM	NM	U (100)	NM	NM
Sulfide (total)	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	62 (50)	NM	NM	NM	NM	NM	NM	NM	NM	NM
Sulfate	NE	5000 (1000)	18600 (1000)	8900 (1000)	4700 (1000)	NM	NM	NM	40700 (10000)	13100 (1000)	23200 (5000)	14600 (1000)	2600 (1000)	5500 (1000)	NM	NM	NM	NM	5500 (1000)	NM	NM
Sodium Persulfate	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM
Pyruvic Acid	NE	840 J (5000)	U (5000)	UJ (5000)	910 J (5000)	NM	NM	NM	UJ (5000)	U (5000)	U (10000)	NM	NM	U (5000)	NM	NM	NM	NM	U (5000)	NM	NM
n-Hexanoic acid	NE	590 J (5000)	UJ (5000)	UJ (5000)	UJ (5000)	NM	NM	NM	UJ (5000)	UJ (5000)	UJ (10000)	NM	NM	UJ (5000)	NM	NM	NM	NM	UJ (5000)	NM	NM
Lactic Acid	NE	4900 J (5000)	590 J (5000)	5000 J (5000)	4500 J (5000)	NM	NM	NM	3900 J (5000)	650 J (5000)	U (10000)	NM	NM	6200 D3 (5000)	NM	NM	NM	NM	7000 D3 (5000)	NM	NM
Gasses																					
Acetylene	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (2.0)	U (2.0)	NM	NM	NM	NM	NM	NM	NM	NM
Methane	NE	1650 J (10.0)	9.7 J (10.0)	333 J (10.0)	1460 J (10.0)	NM	NM	NM	167 J (10.0)	4130 (10.0)	251 (10.0)	6.1 J (10.0)	32.9 (10.0)	8290 (10.0)	NM	NM	NM	NM	5780 (10.0)	NM	NM
Ethane	NE	1.2 J (5.0)	U (5.0)	5	5	NM	NM	NM	5	U (5.0)	U (5.0)	U (5.0)	U (5.0)	2.7 J (5.0)	NM	NM	NM	NM	1.4 J (5.0)	NM	NM
Ethene	NE	1.1 J (5.0)	0.94 J (5.0)	5	1.1 J (5.0)	NM	NM	NM	5	U (5.0)	U (5.0)	1.1 J (5.0)	1.2 J (5.0)	1.7 J (5.0)	NM	NM	NM	NM	U (5.0)	NM	NM
HYDROGEN (H2) [nM]	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	1.1 J (1.9)	2.3 (1.9)	NM	NM	NM	NM	NM	NM	NM	NM
Molecular Analyses																					
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (0.5)	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM
Dehalococcoides (DHC) [cells/mL]	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	0.2 J (0.5)	1.5 (0.5)	NM	NM	NM	NM	NM	NM	NM	NM
tceA Reductase [cells/mL]	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (0.5)	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	NM	NM	NM	NM	NM	NM	NM	NM	NM	NM	U (0.5)	U (0.5)	NM	NM	NM	NM	NM	NM	NM	NM
Field Parameters																					
Depth to Water [ft BTOC]	NE	12.71	25.5	15.12	15.71	10.6	13.41	NM	11.14	26.09	26.34	12.6	10.44	11.89	8.92	NM	9.13	14.42	9.89	13.21	9.66
Oxidation Reduction Potential [mV]	NE	-112.7	144.3	-290.3	-129.7	-278.4	-175.5	NM	-51.3	-0.7	46.8	143.2	246.3	-105.2	79.6	NM	141.2	178.6	-135.7	-284.9	151.3
pH (Field Analysis) [SU]	NE	7.19	6.74	7.13	6.97	5.45	7.14	NM	6.59	6.44	6.23	5.75	5.37	7.04	6.31	NM	6.06	6.56	7.26	6.19	6.59
Specific Conductivity (Field Analysis) [uS/cm]	NE	1657	669	2008	1650	1173	2387	NM	711	876	1825	477.6	908	755	220.6	NM	238.5	235.3	1363	821	140.7
Temperature (Field) [C]	NE	17.3	19.2	16.8	17	17.8	17.7	NM	19.2	20.6	20.5	25.7	22.66	25.6	24.6	NM	23.9	21.3	22.3	24.4	20.8
Turbidity (Field Parameters) [NTU]	NE	12.61	2.5	NM	9.09	6.15	67	NM	5.15	5.62	175	28.8	8.18	7.88	3.95	NM	35.5	1.96	17.8	5.82	23.7
Dissolved oxygen (total)	NE	50	230	220	100	80	3710	NM	160	100	190	50	300	530	320	NM	2100	2170	2120	280	210

Notes:

1 All concentrations are presented in µg/L (ppb) except where otherwise noted.

2 Only compounds with at least one detection are shown.

Abbreviations:

µg/L = Micrograms per liter

ppb = Parts per billion

bgs = Below ground surface

VOC = Volatile organic compound

B = Analyte found in associated blank.

D3 = Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference

U = Not detected

J = Estimated concentration

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.

RADD = Remedial action decision document

ADEQ= Arkansas Department of Environmental Quality

NE = Not established

NM = Not measured

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TABLE 7
SUMMARY OF GROUNDWATER SAMPLING RESULTS
Whirlpool Facility - Fort Smith, Arkansas

Plume	Remedial Action Levels per ADEQ RADD Issued Dec 2013	East Plume					
Location		MW-184	MW-185	MW-200	MW-202	MW-205	TMW-34
Sample Date		10/16/2023	10/19/2023	10/17/2023	10/19/2023	10/19/2023	10/18/2023
Comments		Field Duplicate					
Volatile Organic Compounds							
Acetone	12000	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)	U (2.5)
Benzene	5.0	U (0.14)	U (0.14)	U (0.14)	U (0.14)	0.20 J (0.14)	U (0.14)
Bromodichloromethane	80	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)	U (0.16)
Bromoform	80	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)	U (0.68)
2-Butanone	4900	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)
Carbon Disulfide	720	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)	U (0.98)
Carbon Tetrachloride	5	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)
Chlorobenzene	100	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)	U (0.089)
Chloroethane	12000	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)	U (0.37)
Chloroform	80	U (0.22)	U (0.22)	U (0.22)	U (0.22)	0.23 J (0.22)	U (0.22)
Chloromethane	190	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Dibromochloromethane	80	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)	U (0.30)
1,1-Dichloroethane	2.4	U (0.12)	0.55 J (0.12)	U (0.12)	0.46 J (0.12)	1.4 (0.12)	0.50 J (0.12)
1,2-Dichloroethane	5.0	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)	U (0.21)
1,1-Dichloroethene	7.0	U (0.22)	1.3 (0.22)	U (0.22)	1.6 (0.22)	4.6 (0.22)	1.2 (0.22)
cis-1,2-Dichloroethene	70	0.16 J (0.13)	8.5 (0.13)	2.4 (0.13)	24.0 (0.13)	122 (0.13)	24.3 (0.13)
trans-1,2-Dichloroethene	100	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)	U (0.10)
1,2-Dichloropropane	5.0	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)	U (0.14)
1,3-Dichloropropene (total)	0.41	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)
trans-1,3-Dichloropropene		U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)	U (0.18)
Ethyl Benzene	700	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)	U (0.12)
4-Methyl-2-pentanone	1000	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)	U (0.74)
Methylene Chloride	5.0	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)	U (0.39)
1,1,2,2-Tetrachloroethane	0.066	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)	U (0.15)
Tetrachloroethene	5.0	U (0.33)	U (0.33)	U (0.33)	0.40 J (0.33)	1.5 (0.33)	U (0.33)
Toluene	1000	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)	U (0.25)
1,1,1-Trichloroethane	200	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)	U (0.11)
1,1,2-Trichloroethane	5.0	U (0.14)	U (0.14)	U (0.14)	U (0.14)	0.38 J (0.14)	U (0.14)
Trichloroethene	5.0	1.8 (0.21)	177 (0.21)	26.5 (0.21)	276 (1.0)	582 (2.1)	147 (0.21)
Vinyl Chloride	2.0	U (0.17)	U (0.17)	U (0.17)	U (0.17)	0.90 J (0.17)	U (0.17)
Xylenes (total)	10000	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)	U (0.28)
Metals							
Iron	NE	NM	59.3 (50.0)	NM	NM	NM	1010 (50.0)
Iron, Ferrous	NE	NM	U (10)	10	U (10)	U (10)	510
Monitored Natural Attenuation Parameters (Laboratory)							
Organic Carbon (total)	NE	NM	UJ (1000)	NM	NM	NM	U (1000)
Organic Carbon (dissolved)	NE	NM	UJ (1000)	NM	NM	NM	UJ (1000)
Chloride	NE	NM	50200 (10000)	NM	NM	NM	49800 B (10000)
Nitrogen	NE	NM	4800 (100)	NM	NM	NM	3000 (100)
Nitrogen, Nitrate (As N)	NE	NM	4800 (100)	NM	NM	NM	3000 (100)
Sulfide (total)	NE	NM	NM	NM	NM	NM	NM
Sulfate	NE	NM	11000 (1000)	NM	NM	NM	11000 (1000)
Sodium Persulfate	NE	NM	NM	NM	NM	NM	NM
Pyruvic Acid	NE	NM	U (2500)	NM	NM	NM	U (2500)
n-Hexanoic acid	NE	NM	UJ (2500)	NM	NM	NM	UJ (2500)
Lactic Acid	NE	NM	2100 J (2500)	NM	NM	NM	3200 D3 (2500)
Gasses							
Acetylene	NE	NM	U (2.0)	NM	NM	NM	NM
Methane	NE	NM	5.6 J (10.0)	NM	NM	NM	523 (10.0)
Ethane	NE	NM	1.6 J (5.0)	NM	NM	NM	U (5.0)
Ethene	NE	NM	1.3 J (5.0)	NM	NM	NM	U (5.0)
HYDROGEN (H2) [nM]	NE	NM	NM	NM	NM	NM	NM
Molecular Analyses							
BAV1 Vinyl Chloride Reductase [cells/mL]	NE	NM	NM	NM	NM	NM	NM
Dehalocaccoides (DHC) [cells/mL]	NE	NM	NM	NM	NM	NM	NM
tceA Reductase [cells/mL]	NE	NM	NM	NM	NM	NM	NM
Vinyl Chloride Reductase (vrcA) [cells/mL]	NE	NM	NM	NM	NM	NM	NM
Field Parameters							
Depth to Water [ft BTOC]	NE	NM	14.62	10.61	10.15	15.25	12.52
Oxidation Reduction Potential [mV]	NE	NM	163.2	-11.3	147.7	67.4	-9.1
pH (Field Analysis) [SU]	NE	NM	6.01	6.77	6.45	6.27	6.4
Specific Conductivity (Field Analysis) [uS/cm]	NE	NM	357.9	242.4	247.8	402.7	399.2
Temperature (Field) [C]	NE	NM	23.6	21.7	19.6	23.7	24
Turbidity (Field Parameters) [NTU]	NE	NM	3.38	101	9.87	1.36	13
Dissolved oxygen (total)	NE	NM	420	1480	380	140	300

Notes:

1 All concentrations are presented in µg/L (ppb) except where otherwise noted.

2 Only compounds with at least one detection are shown.

Abbreviations:

µg/L = Micrograms per liter

ppb = Parts per billion

bgs = Below ground surface

VOC = Volatile organic compound

B = Analyte found in associated blank.

D3 = Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference

U = Not detected

J = Estimated concentration

( ) = Method detection limit for VOCs; reporting detection limit for other analyses.

RADD = Remedial action decision document

ADEQ= Arkansas Department of Environmental Quality

NE = Not established

NM = Not measured

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TABLE 8
SUMMARY OF TREND ANALYSIS (2009 - 2023)
Whirlpool Facility - Fort Smith, Arkansas

				Trichloroethene						cis-1,2-Dichloroethene						Vinyl Chloride					
Well ID	**Start Date**	**End Date**	**Number of Samples**	**Test Statistic (S)**	**Number of Analyses**	**Number of Detects**	**Detection Frequency**	**P-value**	**Trend Result**	**Test Statistic (S)**	**Number of Analyses**	**Number of Detects**	**Detection Frequency**	**P-value**	**Trend Result**	**Test Statistic (S)**	**Number of Analyses**	**Number of Detects**	**Detection Frequency**	**P-value**	**Trend Result**
North Plume Wells																					
IW-73	4/23/2009	10/19/2023	31	80	31	31	100.0%	8.97E-02	No Trend	-10	31	31	100%	4.39E-01	No Trend	-112	30	19	63%	2.34E-02	Decreasing
IW-77	4/23/2009	10/19/2023	43	-279	43	43	100.0%	1.81E-03	Decreasing	-281	43	43	100%	1.69E-03	Decreasing	-405	42	4	10%	4.31E-06	Decreasing
IW-78	10/25/2011	10/18/2023	17	-43	17	17	100.0%	4.17E-02	Decreasing	-42	17	11	65%	4.44E-02	Decreasing	NC	17	0	0%	NC	NC
MW-194	8/5/2016	10/18/2023	17	-65	19	17	89.5%	4.16E-03	Decreasing	84	19	15	79%	3.08E-04	Increasing	NC	19	0	0%	NC	NC
MW-195	8/5/2016	10/17/2023	16	90	18	8	44.4%	8.46E-06	Increasing	NC	18	1	6%	NC	NC	NC	18	0	0%	NC	NC
MW-196	8/5/2016	10/17/2023	16	NC	18	2	11.1%	NC	NC	NC	18	0	0%	NC	NC	NC	18	0	0%	NC	NC
MW-39/MW-39R	4/24/2009	10/16/2023	32	NC	32	3	9.4%	NC	NC	NC	32	0	0%	NC	NC	NC	32	0	0%	NC	NC
MW-40/MW-40R	4/24/2009	10/17/2023	36	-344	36	4	11.1%	9.64E-07	Decreasing	NC	36	1	3%	NC	NC	NC	36	0	0%	NC	NC
MW-46R	4/25/2009	10/19/2023	39	-71	39	38	97.4%	1.98E-01	No Trend	126	39	38	97%	6.51E-02	No Trend	-210	38	25	66%	4.12E-03	Decreasing
MW-50/MW-50R	4/24/2009	10/17/2023	33	17	33	18	54.5%	4.02E-01	No Trend	NC	33	3	9%	NC	NC	NC	33	0	0%	NC	NC
MW-55/MW-55R	4/24/2009	10/18/2023	27	205	27	26	96.3%	1.04E-05	Increasing	8	27	16	59%	4.42E-01	No Trend	-60	27	7	26%	1.07E-01	No Trend
MW-56/MW-56R	4/24/2009	10/19/2023	27	171	27	27	100.0%	1.96E-04	Increasing	115	27	25	93%	8.71E-03	Increasing	-62	27	14	52%	1.01E-01	No Trend
MW-57/MW-57R	4/24/2009	10/19/2023	30	143	30	30	100.0%	5.63E-03	Increasing	221	30	30	100%	4.34E-05	Increasing	22	30	16	53%	3.53E-01	No Trend
MW-58/MW-58R	4/25/2009	10/19/2023	28	-271	28	27	96.4%	4.71E-08	Decreasing	-145	28	28	100%	2.22E-03	Decreasing	-279	28	22	79%	1.85E-08	Decreasing
MW-60/MW-60R	4/24/2009	10/16/2023	33	-243	33	4	12.1%	6.37E-05	Decreasing	NC	33	0	0%	NC	NC	NC	33	0	0%	NC	NC
MW-61/MW-61R	4/24/2009	10/18/2023	37	152	37	33	89.2%	2.40E-02	Increasing	7	37	20	54%	4.69E-01	No Trend	-45	37	5	14%	2.74E-01	No Trend
MW-62/MW-62R	4/24/2009	10/16/2023	32	-219	32	5	15.6%	1.43E-04	Decreasing	NC	32	1	3%	NC	NC	NC	32	0	0%	NC	NC
MW-63/MW-63R	4/24/2009	10/18/2023	33	-109	33	32	97.0%	4.71E-02	Decreasing	-137	33	24	73%	1.72E-02	Decreasing	NC	33	1	3%	NC	NC
MW-68	1/15/2009	10/16/2023	33	-226	33	5	15.2%	1.74E-04	Decreasing	NC	33	0	0%	NC	NC	NC	33	0	0%	NC	NC
MW-82	5/28/2014	10/18/2023	18	1	17	16	94.1%	5.00E-01	No Trend	-12	17	14	82%	3.25E-01	No Trend	NC	17	1	6%	NC	NC
RW-69	1/15/2009	10/19/2023	38	-331	40	40	100.0%	1.66E-05	Decreasing	-48	40	39	98%	2.77E-01	No Trend	-138	39	18	46%	3.59E-02	Decreasing
TMW-10	9/18/2015	10/18/2023	22	-183	22	22	100.0%	1.43E-07	Decreasing	-69	22	21	95%	2.76E-02	Decreasing	141	22	14	64%	2.85E-05	Increasing
TMW-11	9/18/2015	10/18/2023	21	-145	21	15	71.4%	5.83E-06	Decreasing	-113	21	16	76%	3.41E-04	Decreasing	35	21	7	33%	1.45E-01	No Trend
TMW-12	4/27/2017	10/18/2023	13	-54	13	13	100.0%	6.11E-04	Decreasing	-64	13	13	100%	5.72E-05	Decreasing	-48	13	13	100%	2.00E-03	Decreasing
TMW-14	4/27/2017	10/17/2023	10	-1	10	10	100.0%	5.00E-01	No Trend	28	10	7	70%	7.66E-03	Increasing	NC	10	0	0%	NC	NC
TMW-20	10/10/2017	10/17/2023	11	NC	11	2	18.2%	NC	NC	NC	11	1	9%	NC	NC	NC	11	0	0%	NC	NC
TMW-21	10/10/2017	10/17/2023	16	-86	16	16	100.0%	6.49E-05	Decreasing	-61	16	16	100%	3.42E-03	Decreasing	54	16	13	81%	8.25E-03	Increasing
TMW-22/TMW-22R	10/13/2017	10/19/2023	15	-71	15	15	100.0%	2.66E-04	Decreasing	27	15	15	100%	9.91E-02	No Trend	60	15	11	73%	1.68E-03	Increasing
TMW-23	10/13/2017	10/18/2023	14	39	14	14	100.0%	1.87E-02	Increasing	61	14	14	100%	4.93E-04	Increasing	NC	14	0	0%	NC	NC
TMW-24	10/10/2017	10/19/2023	14	-27	14	14	100.0%	7.73E-02	No Trend	4	14	14	100%	4.35E-01	No Trend	-19	14	8	57%	1.59E-01	No Trend
TMW-29	10/12/2017	10/16/2023	14	NC	14	1	7.1%	NC	NC	NC	14	0	0%	NC	NC	NC	14	0	0%	NC	NC
TMW-35	10/22/2019	10/17/2023	6	NC	6	0	0.0%	NC	NC	NC	6	0	0%	NC	NC	NC	6	0	0%	NC	NC
East Plume Wells																					
MW-183/MW-183R	10/6/2015	10/17/2023	18	-102	18	17	94%	6.45E-05	Decreasing	-82	18	6	33%	9.28E-04	Decreasing	NC	18	0	0%	NC	NC
MW-184	10/5/2015	10/16/2023	18	85	18	7	39%	3.19E-04	Increasing	NC	18	2	11%	NC	NC	NC	18	0	0%	NC	NC
MW-185	9/16/2015	10/19/2023	20	156	20	17	85%	2.31E-07	Increasing	136	20	13	65%	3.59E-06	Increasing	NC	20	3	15%	NC	NC
MW-87	6/25/2014	10/18/2023	19	-86	21	19	90%	1.46E-03	Decreasing	-115	21	19	90%	3.33E-05	Decreasing	-69	21	9	43%	8.23E-03	Decreasing
MW-89	6/24/2014	10/17/2023	16	-81	17	16	94%	1.56E-04	Decreasing	30	17	11	65%	9.10E-02	No Trend	NC	17	0	0%	NC	NC
MW-91	6/25/2014	10/17/2023	23	-64	24	23	96%	4.80E-02	Decreasing	135	24	23	96%	2.01E-04	Increasing	31	24	19	79%	2.14E-01	No Trend
MW-96	10/22/2014	10/16/2023	22	NC	22	1	5%	NC	NC	NC	22	0	0%	NC	NC	NC	22	0	0%	NC	NC
MW-97	10/22/2014	10/17/2023	22	NC	22	1	5%	NC	NC	NC	22	1	5%	NC	NC	NC	22	0	0%	NC	NC
MW-98	10/29/2014	10/18/2023	22	14	22	6	27%	3.54E-01	No Trend	NC	22	2	9%	NC	NC	NC	22	0	0%	NC	NC
MW-99	10/22/2014	10/18/2023	21	63	21	12	57%	2.94E-02	Increasing	108	21	12	57%	5.20E-04	Increasing	NC	21	0	0%	NC	NC
MW-200	7/14/2020	10/17/2023	8	26	8	6	75%	9.91E-04	Increasing	15	8	4	50%	4.05E-02	No Trend	NC	8	0	0%	NC	NC
MW-202	7/15/2020	10/19/2023	8	28	8	8	100%	4.18E-04	Increasing	28	8	8	100%	4.18E-04	Increasing	NC	8	0	0%	NC	NC
MW-205	10/21/2021	10/19/2023	5	8	5	5	100%	4.32E-02	Increasing	-4	5	5	100%	2.31E-01	No Trend	1	5	5	100%	5.00E-01	No Trend
TMW-34	11/14/2018	10/18/2023	11	41	11	11	100%	9.23E-04	Increasing	27	11	11	100%	2.15E-02	Increasing	NC	11	0	0%	NC	NC
South Plume Wells																					
ITMW-1/ITMW-1R	10/27/2011	10/18/2023	23	5	23	23	100%	4.58E-01	No Trend	21	23	23	100%	2.98E-01	No Trend	NC	23	1	4%	NC	NC
ITMW-10	4/27/2009	10/19/2023	29	107	29	29	100%	2.34E-02	Increasing	-299	29	29	100%	1.13E-08	Decreasing	-326	29	28	97%	5.26E-10	Decreasing
ITMW-18	4/27/2009	10/19/2023	28	-178	27	27	100%	2.35E-04	Decreasing	-164	27	26	96%	3.36E-04	Decreasing	-198	27	6	22%	1.42E-05	Decreasing
ITMW-19	4/27/2009	10/19/2023	28	-170	28	28	100%	4.19E-04	Decreasing	-178	28	24	86%	2.29E-04	Decreasing	-212	28	7	25%	1.19E-05	Decreasing
ITMW-2/ITMW-2R	11/3/2010	10/17/2023	24	-118	24	8	33%	1.69E-03	Decreasing	-121	24	7	29%	1.37E-03	Decreasing	NC	24	0	0%	NC	NC
ITMW-20	10/29/2009	10/17/2023	33	-235	33	4	12%	1.01E-04	Decreasing	NC	33	0	0%	NC	NC	NC	33	1	3%	NC	NC
ITMW-21	10/27/2009	10/18/2023	33	-297	33	33	100%	2.25E-06	Decreasing	-109	33	17	52%	4.63E-02	Decreasing	NC	33	0	0%	NC	NC
ITMW-5	4/27/2009	10/19/2023	24	167	24	24	100%	1.90E-05	Increasing	-64	24	24	100%	5.91E-02	No Trend	-125	24	17	71%	9.46E-04	Decreasing
ITMW-6	10/28/2009	10/19/2023	21	144	21	15	71%	7.02E-06	Increasing	146	21	21	100%	5.72E-06	Increasing	5	21	12	57%	4.52E-01	No Trend
ITMW-7	4/27/2009	10/18/2023	34	-445	34	34	100%	2.32E-11	Decreasing	-426	34	34	100%	1.43E-10	Decreasing	-325	34	12	35%	6.86E-07	Decreasing
ITMW-9	4/27/2009	10/19/2023	32	242	32	32	100%	4.60E-05	Increasing	52	32	32	100%	2.04E-01	No Trend	-99	32	28	88%	5.57E-02	No Trend
MW-182	7/23/2015	10/20/2023	15	-85	17	16	94%	1.61E-05	Decreasing	-94	17	15	88%	2.03E-06	Decreasing	-36	17	5	29%	4.01E-02	Decreasing
MW-187	9/14/2015	10/20/2023	19	149	19	15	79%	9.67E-08	Increasing	141	19	17	89%	4.70E-07	Increasing	NC	19	1	5%	NC	NC
MW-188	9/17/2015	10/20/2023	19	106	19	10	53%	4.76E-05	Increasing	105	19	9	47%	5.61E-05	Increasing	NC	19	0	0%	NC	NC
MW-189	9/17/2015	10/19/2023	19	87	19	19	100%	1.31E-03	Increasing	20	19	19	100%	2.53E-01	No Trend	28	19	16	84%	1.72E-01	No Trend

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TABLE 8
SUMMARY OF TREND ANALYSIS (2009 - 2023)
Whirlpool Facility - Fort Smith, Arkansas

				Trichloroethene						cis-1,2-Dichloroethene						Vinyl Chloride					
Well ID	Start Date	End Date	Number of Samples	Test Statistic (S)	Number of Analyses	Number of Detects	Detection Frequency	P-value	Trend Result	Test Statistic (S)	Number of Analyses	Number of Detects	Detection Frequency	P-value	Trend Result	Test Statistic (S)	Number of Analyses	Number of Detects	Detection Frequency	P-value	Trend Result
MW-190	9/14/2015	10/17/2023	19	118	19	9	47%	4.34E-06	Increasing	125	19	9	47%	2.06E-06	Increasing	NC	19	3	16%	NC	NC
MW-191	9/15/2015	10/16/2023	19	85	19	4	21%	4.97E-04	Increasing	NC	19	1	5%	NC	NC	NC	19	0	0%	NC	NC
MW-192	9/16/2015	10/17/2023	19	NC	19	2	11%	NC	NC	NC	19	0	0%	NC	NC	NC	19	0	0%	NC	NC
MW-197	9/22/2020	10/18/2023	6	-9	6	6	100%	6.64E-02	No Trend	5	6	6	100%	2.26E-01	No Trend	NC	6	3	50%	NC	NC
MW-22	10/27/2009	10/17/2023	25	NC	25	1	4%	NC	NC	NC	25	0	0%	NC	NC	NC	25	0	0%	NC	NC
MW-24	4/27/2009	10/18/2023	28	-213	28	28	100%	1.39E-05	Decreasing	-208	28	20	71%	2.11E-05	Decreasing	NC	28	1	4%	NC	NC
MW-25/MW-25R	4/27/2009	10/18/2023	32	-118	31	31	100%	2.89E-02	Decreasing	-7	31	30	97%	4.61E-01	No Trend	-78	31	24	77%	9.52E-02	No Trend
MW-26	10/29/2009	10/17/2023	33	-200	33	7	21%	8.96E-04	Decreasing	NC	33	1	3%	NC	NC	NC	33	0	0%	NC	NC
MW-27	5/12/2010	10/18/2023	25	6	25	17	68%	4.53E-01	No Trend	-9	25	10	40%	4.25E-01	No Trend	NC	25	0	0%	NC	NC
MW-28	10/29/2009	10/17/2023	27	-208	27	4	15%	4.84E-06	Decreasing	NC	27	0	0%	NC	NC	NC	27	0	0%	NC	NC
MW-29	10/29/2009	10/16/2023	31	NC	31	2	6%	NC	NC	NC	31	1	3%	NC	NC	NC	31	0	0%	NC	NC
MW-38	10/26/2011	10/19/2023	29	-78	29	29	100%	7.43E-02	No Trend	-171	29	29	100%	7.13E-04	Decreasing	-153	29	26	90%	2.17E-03	Decreasing
MW-83	5/23/2014	10/18/2023	19	-55	19	19	100%	2.94E-02	Decreasing	-47	19	13	68%	5.06E-02	No Trend	NC	19	0	0%	NC	NC
MW-84	5/27/2014	10/18/2023	25	120	25	17	68%	2.53E-03	Increasing	NC	25	1	4%	NC	NC	NC	25	1	4%	NC	NC
MW-92	10/22/2014	10/19/2023	14	-12		11		1.26E-01	No Trend	-8		10		2.33E-01	No Trend	-26		8		4.57E-03	Decreasing
MW-93	10/22/2014	10/19/2023	22	-147	29	26	90%	1.92E-05	Decreasing	-140	29	26	90%	4.41E-05	Decreasing	-108	29	21	72%	1.27E-03	Decreasing
MW-95	10/22/2014	10/19/2023	23	62	30	29	97%	5.34E-02	No Trend	177	30	29	97%	1.65E-06	Increasing	-123	30	23	77%	6.36E-04	Decreasing
MW-198	10/8/2020	10/19/2023	7	7	7	7	100%	1.84E-01	No Trend	5	7	7	100%	2.74E-01	No Trend	15	7	7	100%	1.77E-02	Increasing
MW-201	7/15/2020	10/17/2023	8	NC	8	0	0%	NC	NC	NC	8	0	0%	NC	NC	NC	8	0	0%	NC	NC
MW-203	9/25/2020	10/17/2023	7	19	7	7	100%	3.43E-03	Increasing	19	7	6	86%	3.43E-03	Increasing	NC	7	1	14%	NC	NC
MW-204	9/25/2020	10/18/2023	8	-6	8	8	100%	2.68E-01	No Trend	0	8	8	100%	N/A	No Trend	NC	8	0	0%	NC	NC
MW-206	10/20/2021	10/17/2023	5	10	5	5	100%	1.37E-02	Increasing	8	5	5	100%	4.32E-02	Increasing	NC	5	0	0%	NC	NC
RW-1	10/22/2021	10/18/2023	3	NC	3	3	100%	NC	NC	NC	3	3	100%	NC	NC	NC	3	2	67%	NC	NC
TMW-19	4/25/2017	10/17/2023	14	79	14	12	86%	9.77E-06	Increasing	72	14	12	86%	4.96E-05	Increasing	NC	14	1	7%	NC	NC
TMW-25	10/11/2017	10/20/2023	14	-69	14	14	100%	9.86E-05	Decreasing	-61	14	14	100%	5.10E-04	Decreasing	10	14	11	79%	3.11E-01	No Trend
TMW-36	10/24/2019	10/16/2023	9	-16	9	9	100%	5.89E-02	No Trend	18	9	9	100%	3.82E-02	Increasing	-5	9	7	78%	3.37E-01	No Trend
TMW-36B	7/15/2020	10/16/2023	8	NC	8	1	13%	NC	NC	NC	8	1	13%	NC	NC	NC	8	0	0%	NC	NC
MW-186	9/14/2015	10/20/2023	22	-49	21	20	95%	8.78E-02	No Trend	-32	21	20	95%	1.91E-01	No Trend	126	21	14	67%	7.13E-05	Increasing
MW-199	7/15/2020	10/19/2023	9	18	9	9	100%	3.82E-02	Increasing	27	9	9	100%	3.21E-03	Increasing	-25	9	4	44%	2.69E-03	Decreasing
TMW-16	4/25/2017	10/20/2023	14	-55	14	14	100%	1.56E-03	Decreasing	-34	14	14	100%	3.52E-02	Decreasing	0	14	13	93%	N/A	No Trend
TMW-26	10/11/2017	10/20/2023	16	-68	16	16	100%	1.28E-03	Decreasing	-34	16	14	88%	6.83E-02	No Trend	50	16	11	69%	1.33E-02	Increasing
TMW-27	10/11/2017	10/20/2023	12	NC	12	2	17%	NC	NC	NC	12	0	0%	NC	NC	NC	12	0	0%	NC	NC
TMW-30	10/13/2017	10/20/2023	13	48	13	10	77%	2.07E-03	Increasing	47	13	8	62%	2.46E-03	Increasing	NC	13	1	8%	NC	NC
TMW-32	4/3/2018	10/20/2023	14	-47	14	14	100%	5.90E-03	Decreasing	10	14	14	100%	3.11E-01	No Trend	33	14	10	71%	3.88E-02	Increasing

TABLE 9
INDOOR AND OUTDOOR AIR ANALYTICAL RESULTS
(October 2023)
Whirlpool Facility - Fort Smith, Arkansas

Location	Industrial Air RSL (TR = 1E-5, THQ = 0.1)	AA	Z1-1	Z2-1	Z3-1	Z3-2	Z4-1	Z4-2	Z5-1	Z5-2	Z5-OF	Z6-1	Z6-2	Z6-2
Field Sample ID		AA-1-IA-202310	Z1-1-IA-202310	Z2-1-IA-202310	Z3-1-IA-202310	Z3-2-IA-202310	Z4-1-IA-202310	Z4-2-IA-202310	Z5-1-IA-202310	Z5-2-IA-202310	Z5-OF-IA-202310	Z6-1-IA-202310	Z6-2-IA-202310	DUP-IA-202310
Sample Date		10/17/2023	10/17/2023	10/17/2023	10/17/2023	10/17/2023	10/17/2023	10/17/2023	10/17/2023	10/17/2023	10/17/2023	10/17/2023	10/17/2023	10/17/2023
Comments														Field Duplicate
VOC														
Benzene	13	0.309 (0.0639)	0.438 (0.0639)	0.409 (0.0639)	0.904 (0.0639)	0.454 (0.0639)	0.914 (0.0639)	0.604 (0.0639)	1.91 (0.0639)	0.658 (0.0639)	0.862 (0.0639)	1.72 (0.0639)	0.668 (0.0639)	0.706 B (0.184)
Carbon Tetrachloride	20	0.447 (0.126)	0.453 (0.126)	0.457 (0.126)	0.447 (0.126)	0.439 (0.126)	0.463 (0.126)	0.457 (0.126)	0.455 (0.126)	0.442 (0.126)	0.514 (0.126)	0.447 (0.126)	0.455 (0.126)	0.417 (0.363)
Chloroethane	1800	U (0.106)	U (0.106)	U (0.106)	U (0.106)	U (0.106)	U (0.106)	U (0.106)	U (0.106)	U (0.106)	U (0.106)	U (0.106)	U (0.106)	U (0.303)
Chloroform	5.3	U (0.0973)	U (0.0973)	U (0.0973)	U (0.0973)	0.437 (0.0973)	1.74 (0.0973)	U (0.0973)	1.25 (0.0973)	0.973 (0.0973)	1.01 (0.0973)	1.1 (0.0973)	0.905 (0.0973)	U (0.28)
Chloromethane	39	0.775 (0.062)	0.853 (0.062)	0.824 (0.062)	0.828 (0.062)	0.808 (0.062)	0.847 (0.062)	0.867 (0.062)	1.1 (0.062)	0.95 (0.062)	1.06 (0.062)	0.96 (0.062)	0.872 (0.062)	0.915 (0.178)
1,2-Dibromoethane	0.2	U (0.154)	U (0.154)	U (0.154)	U (0.154)	U (0.154)	U (0.154)	U (0.154)	U (0.154)	U (0.154)	U (0.154)	U (0.154)	U (0.154)	U (0.443)
1,4-Dichlorobenzene	11	U (0.12)	0.191 (0.12)	0.189 (0.12)	0.196 (0.12)	0.145 (0.12)	0.159 (0.12)	0.268 (0.12)	0.293 (0.12)	U (0.12)	1.45 (0.12)	0.285 (0.12)	U (0.12)	U (0.346)
1,1-Dichloroethane	77	U (0.0802)	U (0.0802)	U (0.0802)	U (0.0802)	U (0.0802)	U (0.0802)	U (0.0802)	U (0.0802)	U (0.0802)	U (0.0802)	U (0.0802)	U (0.0802)	U (0.231)
1,2-Dichloroethane	3.1	U (0.081)	U (0.081)	U (0.081)	0.186 (0.081)	0.127 (0.081)	0.161 (0.081)	U (0.081)	U (0.081)	U (0.081)	0.366 (0.081)	U (0.081)	U (0.081)	U (0.233)
1,1-Dichloroethene	88	U (0.0793)	U (0.0793)	U (0.0793)	U (0.0793)	U (0.0793)	U (0.0793)	U (0.0793)	U (0.0793)	U (0.0793)	U (0.0793)	U (0.0793)	U (0.0793)	U (0.228)
cis-1,2-Dichloroethene	18	U (0.0793)	U (0.0793)	U (0.0793)	U (0.0793)	U (0.0793)	U (0.0793)	U (0.0793)	U (0.0793)	0.151 (0.0793)	U (0.0793)	U (0.0793)	0.161 (0.0793)	U (0.228)
trans-1,2-Dichloroethene	18	0.103 (0.0793)	U (0.0793)	U (0.0793)	0.0975 (0.0793)	U (0.0793)	0.12 (0.0793)	U (0.0793)	U (0.0793)	0.375 (0.0793)	U (0.0793)	U (0.0793)	0.487 (0.0793)	0.436 (0.228)
1,2-Dichloropropane	1.8	U (0.139)	U (0.139)	U (0.139)	U (0.139)	U (0.139)	U (0.139)	U (0.139)	U (0.139)	U (0.139)	U (0.139)	U (0.139)	U (0.139)	U (0.399)
1,3-Dichloropropene (total)	8.8	U (0.136)	U (0.136)	U (0.136)	U (0.136)	U (0.136)	U (0.136)	U (0.136)	U (0.136)	U (0.136)	U (0.136)	U (0.136)	U (0.136)	U (0.392)
Ethyl Benzene	49	U (0.13)	0.367 (0.13)	0.336 (0.13)	1.48 (0.13)	0.385 (0.13)	1.24 (0.13)	0.398 (0.13)	1.7 (0.13)	0.906 (0.13)	1.23 (0.13)	1.58 (0.13)	0.88 (0.13)	0.854 (0.375)
1,1,2,2-Tetrachloroethane	2.1	U (0.137)	U (0.137)	U (0.137)	U (0.137)	U (0.137)	U (0.137)	U (0.137)	U (0.137)	U (0.137)	U (0.137)	U (0.137)	U (0.137)	U (0.396)
Tetrachloroethene	18	U (0.136)	1.67 (0.136)	2.17 (0.136)	0.889 (0.136)	1.05 (0.136)	0.661 B (0.136)	1.75 (0.136)	0.412 B (0.136)	0.325 B (0.136)	0.154 B (0.136)	0.339 B (0.136)	0.365 B (0.136)	U (0.391)
1,1,1-Trichloroethane	2200	U (0.109)	U (0.109)	U (0.109)	U (0.109)	U (0.109)	U (0.109)	U (0.109)	U (0.109)	U (0.109)	U (0.109)	U (0.109)	U (0.109)	U (0.313)
1,1,2-Trichloroethane	0.088	U (0.163)	U (0.163)	U (0.163)	U (0.163)	U (0.163)	U (0.163)	U (0.163)	U (0.163)	U (0.163)	U (0.163)	U (0.163)	U (0.163)	U (0.47)
Trichloroethene	0.88	U (0.107)	0.287 (0.107)	0.29 (0.107)	0.723 (0.107)	0.339 (0.107)	0.697 (0.107)	0.648 (0.107)	1.18 (0.107)	4.88 (0.107)	0.281 (0.107)	0.863 (0.107)	5.19 (0.107)	5.13 (0.309)
Vinyl Acetate	88	U (0.0704)	U (0.0704)	U (0.0704)	U (0.0704)	U (0.0704)	U (0.0704)	U (0.0704)	U (0.0704)	U (0.0704)	U (0.0704)	U (0.0704)	U (0.0704)	U (0.203)
Vinyl Chloride	28	U (0.0511)	U (0.0511)	U (0.0511)	U (0.0511)	U (0.0511)	U (0.0511)	U (0.0511)	U (0.0511)	U (0.0511)	U (0.0511)	U (0.0511)	U (0.0511)	U (0.147)

Notes:

1 All concentrations are presented in micrograms per cubic meter (µg/m3).

2 Only compounds with at least one detection are shown.

3 Concentrations that exceed the Industrial Air RSL (TR = 1E-5, THQ = 0.1) are double underlined.

Abbreviations:

B -- The same analyte is found in the associated blank.
U -- Not Detected.
( ) -- Reporting Detection Limit.
RSL -- Regional Screening Level.
Z5-OF -- Z5 Office
AA -- Ambient Air

TABLE 10
SUB-SLAB SOIL VAPOR ANALYTICAL RESULTS
(October 2023)
Whirlpool Facility - Fort Smith, Arkansas

Location	Industrial SSV RSL	AA	Z1-1	Z2-1	Z3-1	Z3-2	Z4-1	Z4-2	Z5-1	Z5-2	Z5-OF	Z6-1	Z6-2
Field Sample ID	TR = 1E-5, THQ = 0.1	AA-2-202310	Z1-1-202310	Z2-1-202310	Z3-1-202310	Z3-2-202310	Z4-1-202310	Z4-2-202310	Z5-1-202310	Z5-2-202310	Z5-OF-202310	Z6-1-202310	Z6-2-202310
Sample Date		10/18/2023	10/18/2023	10/18/2023	10/18/2023	10/18/2023	10/18/2023	10/18/2023	10/18/2023	10/18/2023	10/18/2023	10/18/2023	10/18/2023
VOC													
Acetone		---	45.4 (2.97)	15.1 (2.97)	15.4 (2.97)	12.3 (2.97)	62 (2.97)	23 (2.97)	14.5 (2.97)	16.6 (2.97)	14 (2.97)	8.67 (2.97)	15.5 (2.97)
Benzene	433	0.502 (0.0639)	U (0.639)	U (0.639)	10.5 (0.639)	U (0.639)	0.818 (0.639)	U (0.639)	U (0.639)	0.968 (0.639)	U (0.639)	U (0.639)	U (0.639)
Bromomethane	70	---	U (0.776)	U (0.776)	U (0.776)	U (0.776)	1.74 (0.776)	U (0.776)	U (0.776)	U (0.776)	U (0.776)	U (0.776)	U (0.776)
2-Butanone	73000	---	8.52 (3.69)	5.93 (3.69)	U (3.69)	6.66 (3.69)	17 (3.69)	8.49 (3.69)	U (3.69)	U (3.69)	U (3.69)	U (3.69)	U (3.69)
Carbon Disulfide	10000	---	233 (0.622)	3.3 (0.622)	15.2 (0.622)	5.63 (0.622)	2.11 (0.622)	2.35 (0.622)	1.86 (0.622)	3.36 (0.622)	0.937 (0.622)	1.12 (0.622)	U (0.622)
Carbon Tetrachloride	670	0.536 (0.126)	U (1.26)	U (1.26)	U (1.26)	U (1.26)	U (1.26)	U (1.26)	U (1.26)	U (1.26)	U (1.26)	U (1.26)	U (1.26)
Chloromethane	1000	0.969 (0.062)	U (0.413)	1.5 (0.413)	U (0.413)	U (0.413)	1.03 (0.413)	1.11 (0.413)	0.473 (0.413)	U (0.413)	U (0.413)	0.518 (0.413)	0.481 (0.413)
1,4-Dichlorobenzene	370	U (0.12)	1.23 (1.2)	U (1.2)	U (1.2)	U (1.2)	U (1.2)	U (1.2)	U (1.2)	U (1.2)	U (1.2)	U (1.2)	U (1.2)
Dichlorodifluoromethane	1500	---	1.69 (0.989)	1420 (98.9)	2.95 (0.989)	U (0.989)	2.09 (0.989)	13.2 (0.989)	1.76 (0.989)	56.4 (0.989)	1.48 (0.989)	2.45 (0.989)	1.48 (0.989)
1,1-Dichloroethane	2600	U (0.0802)	2.53 (0.802)	0.978 (0.802)	234 (0.802)	U (0.802)	6.33 (0.802)	2.27 (0.802)	24.3 (0.802)	U (0.802)	2.74 (0.802)	617 (80.2)	U (0.802)
1,1-Dichloroethene	2900	U (0.0793)	U (0.793)	U (0.793)	10.7 (0.793)	U (0.793)	U (0.793)	U (0.793)	U (0.793)	U (0.793)	U (0.793)	7.37 (0.793)	U (0.793)
cis-1,2-Dichloroethene	600	U (0.0793)	4.76 (0.793)	1.34 (0.793)	307 (0.793)	2.01 (0.793)	8.68 (0.793)	2.22 (0.793)	U (0.793)	U (0.793)	3.43 (0.793)	5.15 (0.793)	U (0.793)
trans-1,2-Dichloroethene	600	U (0.0793)	2.71 (0.793)	0.943 (0.793)	273 (0.793)	1.58 (0.793)	7.41 (0.793)	1.83 (0.793)	U (0.793)	U (0.793)	3.11 (0.793)	3.38 (0.793)	U (0.793)
Ethyl Benzene	1630	U (0.13)	1.16 (0.867)	U (0.867)	U (0.867)	U (0.867)	U (0.867)	U (0.867)	U (0.867)	U (0.867)	U (0.867)	U (0.867)	U (0.867)
n-Heptane	6000	---	U (0.818)	U (0.818)	9.37 (0.818)	U (0.818)	1.22 (0.818)	U (0.818)	U (0.818)	U (0.818)	U (0.818)	U (0.818)	0.965 (0.818)
n-Hexane	10000	---	U (2.22)	U (2.22)	38.4 (2.22)	U (2.22)	U (2.22)	U (2.22)	U (2.22)	U (2.22)	U (2.22)	U (2.22)	U (2.22)
Isopropanol	3000	---	5.43 (3.07)	U (3.07)	4.47 (3.07)	U (3.07)	10.3 (3.07)	4.35 (3.07)	8.04 (3.07)	12.8 (3.07)	5.09 (3.07)	6.93 (3.07)	U (3.07)
4-Methyl-2-pentanone	40000	---	U (5.12)	U (5.12)	12.2 (5.12)	U (5.12)	U (5.12)	U (5.12)	U (5.12)	U (5.12)	U (5.12)	U (5.12)	U (5.12)
Methylene Chloride	9000	---	0.844 (0.694)	0.847 (0.694)	U (0.694)	0.868 (0.694)	2.98 (0.694)	4.34 (0.694)	1.96 (0.694)	0.712 (0.694)	1.11 (0.694)	6.25 (0.694)	U (0.694)
Propylene	40000	---	U (2.15)	U (2.15)	78.3 (2.15)	U (2.15)	U (2.15)	U (2.15)	U (2.15)	U (2.15)	U (2.15)	U (2.15)	U (2.15)
Styrene	10000	---	1.13 (0.851)	U (0.851)	U (0.851)	0.995 (0.851)	1.09 (0.851)	0.876 (0.851)	0.906 (0.851)	1.24 (0.851)	U (0.851)	0.885 (0.851)	1.38 (0.851)
Tetrachloroethene	600	U (0.136)	94.4 (1.36)	8890 (136)	257 (1.36)	1510 (13.6)	93 (1.36)	358 (1.36)	340 (1.36)	30.8 (1.36)	57.4 (1.36)	903 (136)	U (1.36)
Toluene	70000	---	4.86 (1.88)	U (1.88)	3.68 (1.88)	U (1.88)	3.28 (1.88)	2.15 (1.88)	2.05 (1.88)	2.06 (1.88)	U (1.88)	1.95 (1.88)	2.73 (1.88)
1,1,1-Trichloroethane	70000	U (0.109)	26.4 (1.09)	61.5 (1.09)	93.6 (1.09)	23 (1.09)	80.5 (1.09)	18.9 (1.09)	453 (1.09)	93 (1.09)	21.9 (1.09)	7890 (109)	U (1.09)
Trichloroethene	29	U (0.107)	21.5 (1.07)	30.1 (1.07)	86.3 (1.07)	295 (1.07)	91.1 (1.07)	41.1 (1.07)	104 (1.07)	1250 (10.7)	48.3 (1.07)	219 (1.07)	U (1.07)
Trichlorofluoromethane		---	16.7 (1.12)	73.1 (1.12)	1.74 (1.12)	436 (1.12)	11.5 (1.12)	669 (11.2)	4.3 (1.12)	860 (11.2)	1.73 (1.12)	17 (1.12)	1.82 (1.12)
1,1,2-Trichloro-1,2,2-trifluoroethane	70000	---	U (1.53)	35.6 (1.53)	2.37 (1.53)	U (1.53)	U (1.53)	23.3 (1.53)	U (1.53)	U (1.53)	U (1.53)	U (1.53)	4.04 (1.53)
1,2,4-Trimethylbenzene	900	---	1.3 (0.982)	U (0.982)	1.11 (0.982)	U (0.982)	1.03 (0.982)	U (0.982)	U (0.982)	U (0.982)	1.1 (0.982)	U (0.982)	U (0.982)
1,3,5-Trimethylbenzene	900	---	U (0.982)	U (0.982)	1.64 (0.982)	U (0.982)	U (0.982)	U (0.982)	U (0.982)	U (0.982)	U (0.982)	U (0.982)	U (0.982)
Vinyl Chloride	933	U (0.0511)	9.64 (0.511)	2.68 (0.511)	3860 (51.1)	5.01 (0.511)	72.6 (0.511)	14.6 (0.511)	U (0.511)	U (0.511)	12.6 (0.511)	U (0.511)	U (0.511)
ortho-xylene	1000	---	1.24 (0.867)	U (0.867)	U (0.867)	U (0.867)	0.984 (0.867)	U (0.867)	U (0.867)	U (0.867)	U (0.867)	U (0.867)	0.897 (0.867)
Xylenes (total)	1000	---	3.5 (2.61)	2.76 (2.61)	U (2.61)	U (2.61)	3.1 (2.61)	U (2.61)	U (2.61)	U (2.61)	2.87 (2.61)	U (2.61)	2.97 (2.61)

Notes:

1 All concentrations presented in micrograms per cubic meter (µg/m3).

2 Only compounds with at least one detection are shown.

3 Concentrations that exceed the Industrial SSV RSL TR = 1E-5, THQ = 0.1 are double underlined.

Abbreviations:

U -- Not Detected.

J -- Estimated Concentration.

( ) -- Reporting Detection Limit.

--- -- Not Analyzed.

SSV - Sub-slab Vapor.

RSL -- Regional Screening Level

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TABLE 11
ONSITE VAPOR INTRUSION - VALUES USED FOR DAILY INTAKE CALCULATIONS
Whirlpool Facility - Fort Smith, Arkansas

Scenario Timeframe: Current
Medium: Indoor air or Soil vapor
Exposure Medium: Air
Exposure Point: Groundwater
Receptor Population: Indoor C/I Worker
Receptor Age: Adult

Exposure Route	Parameter Code	Parameter Definition	Units	RME Value	RME Rationale/ Reference	Intake Equation
Inhalation	CA	Chemical Concentration in Air	ug/m^3	(1)	(1)	Chronic Daily Intake (CDI) (mg/m^3) = CA x ET x EF x ED x 1/CF x 1/AT
	ET	Exposure Time	hours/day	8	d,i	
	EF	Exposure Frequency	days/year	250	i	
	ED	Exposure Duration	years	25	i	
	CF		hour/day * ug/mg	24000	Calculated	
	AT-C	Averaging Time (Cancer)	days	25,550	a,d	
	AT-N	Averaging Time (Non-Cancer)	days	9,125	a,d	

References

a. Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual (Part A) Interim Final (EPA 1989).
i. Standard default exposure factors. OSWER Directive 9200.1-120 (EPA 2014).
d. Risk Assessment Guidance for Superfund, Volume I: Human Health Evaluation Manual: Part F, Supplemental Guidance for Inhalation Risk Assessment (EPA 2009).

Notes:

(1) Indoor air concentrations of volatile organic compounds resulting from vapor intrusion was collected in October 2023
ug/mg = micrograms per milligram
mg/m^3 = milligrams per cubic meter
µg/m^3 = micrograms per cubic meter

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TABLE 12
ONSITE VAPOR INTRUSION - TOXICITY VALUES
Whirlpool Facility - Fort Smith, Arkansas

Chemicals	Inhalation Unit Risk (IUR) $(mg/m^3)^{-1}$			Inhalation Reference Concentration (RfC) (mg/m^3)		
	Value	Ref	Note	Value	Ref	Note
1,1-Dichloroethane	NA	126	90	5.00E-01	2	3
1,2-Dichloroethane	2.60E-02	1		7.00E-03	126	
1,1-Dichloroethene	NA			2.00E-01	1	
cis-1,2-Dichloroethene	NA			4.00E-02	126	
trans-1,2-Dichloroethene	NA			NA	1	90
Tetrachloroethene	2.60E-04	1		4.00E-02	1	
1,1,1-Trichloroethane	NA			5.00E+00	1	
Trichloroethene	4.10E-03	1	159	2.00E-03	1	
Vinyl Chloride	4.40E-03	1	79	1.00E-01	1	

References

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.

126. Provisional Peer Reviewed Toxicity Values for Superfund (PPRTV) Database.

Notes:

mg/m^3 = Milligrams per cubic meter

3. HEAST Alternate Method.

79. For evaluating partial lifetime exposures that include early-life exposure, the unit risk factor is also used in risk calculations that do not prorate the early-life exposure, per USEPA's May 2000 Toxicological Review.

90. Inadequate data exist to derive a toxicity value, according to the indicated reference.

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).

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TABLE 13
INDOOR AIR HUMAN HEALTH RISKS (October 2023)
Whirlpool Facility - Fort Smith, Arkansas

Z1-1					
Constituent	**Air Concentration** ($\mu g/m^3$)	**Cancer CDI** (mg/m^3)	**Non-Cancer CDI** (mg/m^3)	**LCR**	**HQ**
1,1-Dichloroethane	U (0.0802)			NA	NA
1,2-Dichloroethane	U (0.081)			NA	NA
1,1-Dichloroethene	U (0.0793)			NA	NA
cis-1,2-Dichloroethene	U (0.0793)			NA	NA
trans-1,2-Dichloroethene	U (0.0793)			NA	NA
Tetrachloroethene	1.67 (0.136)	1.4E-04	3.8E-04	3.5E-08	9.5E-03
1,1,1-Trichloroethane	U (0.109)			NA	NA
Trichloroethene	0.287 (0.107)	2.3E-05	6.6E-05	9.6E-08	3.3E-02
Vinyl Chloride	U (0.0511)			NA	NA
			Summed Risk	1E-07	4E-02

Z2-1					
Constituent	**Air Concentration** ($\mu g/m^3$)	**Cancer CDI** (mg/m^3)	**Non-Cancer CDI** (mg/m^3)	**LCR**	**HQ**
1,1-Dichloroethane	U (0.0802)			NA	NA
1,2-Dichloroethane	U (0.081)			NA	NA
1,1-Dichloroethene	U (0.0793)			NA	NA
cis-1,2-Dichloroethene	U (0.0793)			NA	NA
trans-1,2-Dichloroethene	U (0.0793)			NA	NA
Tetrachloroethene	2.17 (0.136)	1.8E-04	5.0E-04	4.6E-08	1.2E-02
1,1,1-Trichloroethane	U (0.109)			NA	NA
Trichloroethene	0.29 (0.107)	2.4E-05	6.6E-05	9.7E-08	3.3E-02
Vinyl Chloride	U (0.0511)			NA	NA
			Summed Risk	1E-07	5E-02

Z3-1					
Constituent	**Air Concentration** ($\mu g/m^3$)	**Cancer CDI** (mg/m^3)	**Non-Cancer CDI** (mg/m^3)	**LCR**	**HQ**
1,1-Dichloroethane	U (0.0802)			NA	NA
1,2-Dichloroethane	0.186 (0.081)	1.5E-05	4.2E-05	3.9E-07	6.1E-03
1,1-Dichloroethene	U (0.0793)			NA	NA
cis-1,2-Dichloroethene	U (0.0793)			NA	NA
trans-1,2-Dichloroethene	0.0975 (0.0793)	8.0E-06	2.2E-05	NA	NA
Tetrachloroethene	0.889 (0.136)	7.2E-05	2.0E-04	1.9E-08	5.1E-03
1,1,1-Trichloroethane	U (0.109)			NA	NA
Trichloroethene	0.723 (0.107)	5.9E-05	1.7E-04	2.4E-07	8.3E-02
Vinyl Chloride	U (0.0511)			NA	NA
			Summed Risk	7E-07	9E-02

TABLE 13
INDOOR AIR HUMAN HEALTH RISKS (October 2023)
Whirlpool Facility - Fort Smith, Arkansas

Z3-2					
Constituent	**Air Concentration** ($\mu g/m^3$)	**Cancer CDI** (mg/m^3)	**Non-Cancer CDI** (mg/m^3)	**LCR**	**HQ**
1,1-Dichloroethane	U (0.0802)			NA	NA
1,2-Dichloroethane	0.127 (0.081)	1.0E-05	2.9E-05	2.7E-07	4.1E-03
1,1-Dichloroethene	U (0.0793)			NA	NA
cis-1,2-Dichloroethene	U (0.0793)			NA	NA
trans-1,2-Dichloroethene	U (0.0793)			NA	NA
Tetrachloroethene	1.05 (0.136)	8.6E-05	2.4E-04	2.2E-08	6.0E-03
1,1,1-Trichloroethane	U (0.109)			NA	NA
Trichloroethene	0.339 (0.107)	2.8E-05	7.7E-05	1.1E-07	3.9E-02
Vinyl Chloride	U (0.0511)			NA	NA
			Summed Risk	4E-07	5E-02

Z4-1					
Constituent	**Air Concentration** ($\mu g/m^3$)	**Cancer CDI** (mg/m^3)	**Non-Cancer CDI** (mg/m^3)	**LCR**	**HQ**
1,1-Dichloroethane	U (0.0802)			NA	NA
1,2-Dichloroethane	0.161 (0.081)	1.3E-05	3.7E-05	3.4E-07	5.3E-03
1,1-Dichloroethene	U (0.0793)			NA	NA
cis-1,2-Dichloroethene	U (0.0793)			NA	NA
trans-1,2-Dichloroethene	0.12 (0.0793)	9.8E-06	2.7E-05	NA	NA
Tetrachloroethene	0.661 B (0.136)	5.4E-05	1.5E-04	1.4E-08	3.8E-03
1,1,1-Trichloroethane	U (0.109)			NA	NA
Trichloroethene	0.697 (0.107)	5.7E-05	1.6E-04	2.3E-07	8.0E-02
Vinyl Chloride	U (0.0511)			NA	NA
			Summed Risk	6E-07	9E-02

Z4-2					
Constituent	**Air Concentration** ($\mu g/m^3$)	**Cancer CDI** (mg/m^3)	**Non-Cancer CDI** (mg/m^3)	**LCR**	**HQ**
1,1-Dichloroethane	U (0.0802)			NA	NA
1,2-Dichloroethane	U (0.081)			NA	NA
1,1-Dichloroethene	U (0.0793)			NA	NA
cis-1,2-Dichloroethene	U (0.0793)			NA	NA
trans-1,2-Dichloroethene	U (0.0793)			NA	NA
Tetrachloroethene	1.75 (0.136)	1.4E-04	4.0E-04	3.7E-08	1.0E-02
1,1,1-Trichloroethane	U (0.109)			NA	NA
Trichloroethene	0.648 (0.107)	5.3E-05	1.5E-04	2.2E-07	7.4E-02
Vinyl Chloride	U (0.0511)			NA	NA
			Summed Risk	3E-07	8E-02

TABLE 13
INDOOR AIR HUMAN HEALTH RISKS (October 2023)
Whirlpool Facility - Fort Smith, Arkansas

Z5-1					
Constituent	**Air Concentration** ($\mu g/m^3$)	**Cancer CDI** (mg/m^3)	**Non-Cancer CDI** (mg/m^3)	**LCR**	**HQ**
1,1-Dichloroethane	U (0.0802)			NA	NA
1,2-Dichloroethane	U (0.081)			NA	NA
1,1-Dichloroethene	U (0.0793)			NA	NA
cis-1,2-Dichloroethene	U (0.0793)			NA	NA
trans-1,2-Dichloroethene	U (0.0793)			NA	NA
Tetrachloroethene	0.412 B (0.136)	3.4E-05	9.4E-05	8.7E-09	2.4E-03
1,1,1-Trichloroethane	U (0.109)			NA	NA
Trichloroethene	1.18 (0.107)	9.6E-05	2.7E-04	3.9E-07	1.3E-01
Vinyl Chloride	U (0.0511)			NA	NA
			Summed Risk	4E-07	1E-01

Z5-2					
Constituent	**Air Concentration** ($\mu g/m^3$)	**Cancer CDI** (mg/m^3)	**Non-Cancer CDI** (mg/m^3)	**LCR**	**HQ**
1,1-Dichloroethane	U (0.0802)			NA	NA
1,2-Dichloroethane	U (0.081)			NA	NA
1,1-Dichloroethene	U (0.0793)			NA	NA
cis-1,2-Dichloroethene	0.151 (0.0793)	1.2E-05	3.4E-05	3.1E-04	8.6E-04
trans-1,2-Dichloroethene	0.375 (0.0793)	3.1E-05	8.6E-05	NA	NA
Tetrachloroethene	0.325 B (0.136)	2.7E-05	7.4E-05	6.9E-09	1.9E-03
1,1,1-Trichloroethane	U (0.109)			NA	NA
Trichloroethene	4.88 (0.107)	4.0E-04	1.1E-03	1.6E-06	5.6E-01
Vinyl Chloride	U (0.0511)			NA	NA
			Summed Risk	3E-04	6E-01

Z5-OF					
Constituent	**Air Concentration** ($\mu g/m^3$)	**Cancer CDI** (mg/m^3)	**Non-Cancer CDI** (mg/m^3)	**LCR**	**HQ**
1,1-Dichloroethane	U (0.0802)			NA	NA
1,2-Dichloroethane	0.366 (0.081)	3.0E-05	8.4E-05	7.8E-07	1.2E-02
1,1-Dichloroethene	U (0.0793)			NA	NA
cis-1,2-Dichloroethene	U (0.0793)			NA	NA
trans-1,2-Dichloroethene	U (0.0793)			NA	NA
Tetrachloroethene	0.154 B (0.136)	1.3E-05	3.5E-05	3.3E-09	8.8E-04
1,1,1-Trichloroethane	U (0.109)			NA	NA
Trichloroethene	0.281 (0.107)	2.3E-05	6.4E-05	9.4E-08	3.2E-02
Vinyl Chloride	U (0.0511)			NA	NA
			Summed Risk	9E-07	4E-02

TABLE 13
INDOOR AIR HUMAN HEALTH RISKS (October 2023)
Whirlpool Facility - Fort Smith, Arkansas

Z6-1					
Constituent	**Air Concentration** ($\mu g/m^3$)	**Cancer CDI** (mg/m^3)	**Non-Cancer CDI** (mg/m^3)	**LCR**	**HQ**
1,1-Dichloroethane	U (0.0802)			NA	NA
1,2-Dichloroethane	U (0.081)			NA	NA
1,1-Dichloroethene	U (0.0793)			NA	NA
cis-1,2-Dichloroethene	U (0.0793)			NA	NA
trans-1,2-Dichloroethene	U (0.0793)			NA	NA
Tetrachloroethene	0.339 B (0.136)	2.8E-05	7.7E-05	7.2E-09	1.9E-03
1,1,1-Trichloroethane	U (0.109)			NA	NA
Trichloroethene	0.863 (0.107)	7.0E-05	2.0E-04	2.9E-07	9.9E-02
Vinyl Chloride	U (0.0511)			NA	NA
			Summed Risk	3E-07	1E-01

Z6-2					
Constituent	**Air Concentration** ($\mu g/m^3$)	**Cancer CDI** (mg/m^3)	**Non-Cancer CDI** (mg/m^3)	**LCR**	**HQ**
1,1-Dichloroethane	U (0.0802)			NA	NA
1,2-Dichloroethane	U (0.081)			NA	NA
1,1-Dichloroethene	U (0.0793)			NA	NA
cis-1,2-Dichloroethene	0.161 (0.0793)	1.3E-05	3.7E-05	NA	9.2E-04
trans-1,2-Dichloroethene	0.487 (0.0793)	4.0E-05	1.1E-04	NA	NA
Tetrachloroethene	0.365 B (0.136)	3.0E-05	8.3E-05	7.7E-09	2.1E-03
1,1,1-Trichloroethane	U (0.109)			NA	NA
Trichloroethene	5.19 (0.107)	4.2E-04	1.2E-03	1.7E-06	5.9E-01
Vinyl Chloride	U (0.0511)			NA	NA
			Summed Risk	2E-06	6E-01

Z6-2 (FD)					
Constituent	**Air Concentration** ($\mu g/m^3$)	**Cancer CDI** (mg/m^3)	**Non-Cancer CDI** (mg/m^3)	**LCR**	**HQ**
1,1-Dichloroethane	U (0.231)			NA	NA
1,2-Dichloroethane	U (0.233)			NA	NA
1,1-Dichloroethene	U (0.228)			NA	NA
cis-1,2-Dichloroethene	U (0.228)			NA	NA
trans-1,2-Dichloroethene	0.436 (0.228)	3.6E-05	1.0E-04	NA	NA
Tetrachloroethene	U (0.391)			NA	NA
1,1,1-Trichloroethane	U (0.313)			NA	NA
Trichloroethene	5.13 (0.309)	4.2E-04	1.2E-03	1.7E-06	5.9E-01
Vinyl Chloride	U (0.147)			NA	NA
			Summed Risk	2E-06	6E-01

TABLE 13
INDOOR AIR HUMAN HEALTH RISKS (October 2023)
Whirlpool Facility - Fort Smith, Arkansas

AA					
Constituent	**Air Concentration** ($\mu g/m^3$)	**Cancer CDI** (mg/m^3)	**Non-Cancer CDI** (mg/m^3)	**LCR**	**HQ**
1,1-Dichloroethane	U (0.0802)			NA	NA
1,2-Dichloroethane	U (0.081)			NA	NA
1,1-Dichloroethene	U (0.0793)			NA	NA
cis-1,2-Dichloroethene	U (0.0793)			NA	NA
trans-1,2-Dichloroethene	0.103 (0.0793)	8.4E-06	2.4E-05	NA	NA
Tetrachloroethene	U (0.136)			NA	NA
1,1,1-Trichloroethane	U (0.109)			NA	NA
Trichloroethene	U (0.107)			NA	NA
Vinyl Chloride	U (0.0511)			NA	NA
			Summed Risk	NA	NA

Notes:
$\mu g/m^3$ = Microgram per cubic meter
CDI = Chronic Daily Intake
ND = Nondetect
HQ = Hazard Quotient
LCR = Lifetime Cancer Risk
HI = Hazard Index
U -- Nondetect.
NA -- Insufficient toxicity or nondetect.

Summary	**Target Cancer Risk**	**Target HI**
Location	**1E-04 LCR**	**1E+00 HI**
Z1-1	1E-07	4E-02
Z2-1	1E-07	5E-02
Z3-1	7E-07	9E-02
Z3-2	4E-07	5E-02
Z4-1	6E-07	9E-02
Z4-2	3E-07	8E-02
Z5-1	4E-07	1E-01
Z5-2	3E-04	6E-01
Z5-OF	9E-07	4E-02
Z6-1	3E-07	1E-01
Z6-2	2E-06	6E-01
AA	NA	NA
Z6-2 (FD)	2E-06	6E-01

TABLE 14
ANNUAL 2023 GROUNDWATER VOC DATA FOR SHALLOW MONITORING WELLS AND VAPOR POINTS
Whirlpool Facility - Fort Smith, Arkansas

Location	MW-175	MW-176	MW-178	MW-179	VP-8	VP-12	VP-14
Sample Date	10/19/2023	10/17/2023	10/19/2023	10/19/2023	10/19/2023	10/19/2023	10/19/2023
Acetone	U (2.5)	U (2.5)	U (2.5)	U (2.5)	31.0 (2.5)	U (2.5)	U (2.5)
Benzene	U (0.14)	U (0.14)	U (0.14)	U (0.14)	0.43 J (0.14)	U (0.14)	U (0.14)
2-Butanone	U (0.98)	U (0.98)	U (0.98)	U (0.98)	6.0 J (0.98)	U (0.98)	U (0.98)
Chloroform	U (0.22)	0.61 J (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)	U (0.22)
1,1-Dichloroethene	0.47 J (0.22)	2.1 (0.22)	U (0.22)	0.51 J (0.22)	U (0.22)	U (0.22)	0.31 J (0.22)
cis-1,2-Dichloroethene	3.1 (0.13)	13.4 (0.13)	0.26 J (0.13)	1.3 (0.13)	0.25 J (0.13)	U (0.13)	1.1 (0.13)
trans-1,2-Dichloroethene	0.13 J (0.10)	0.33 J (0.10)	U (0.10)	0.11 J (0.10)	U (0.10)	U (0.10)	U (0.10)
Toluene	U (0.25)	U (0.25)	U (0.25)	U (0.25)	0.27 J (0.25)	U (0.25)	U (0.25)
Trichloroethene	133 (0.21)	319 (2.1)	0.34 J (0.21)	32.6 (0.21)	5.5 (0.21)	U (0.21)	21.7 (0.21)
Vinyl Chloride	U (0.17)	20.1 (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)	U (0.17)

Notes:

1 All concentrations are presented in ug/L (ppb).

2 Only compounds with at least one detection are shown.

U -- Not Detected.

J -- Estimated Concentration.

( ) -- Reporting Detection Limit.

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TABLE 15
UPPER-BOUND VAPOR INTRUSION RISK ESTIMATES
BASED ON ANNUAL 2023 GROUNDWATER DATA IN THE NEIGHBORHOOD
Whirlpool Facility - Fort Smith, Arkansas

Chem Group	Chemical	CASRN	Maximum Detected Concentration in Groundwater in Neighborhood (mg/L)	Location of Maximum Detected Concentration in Groundwater in Neighborhood	Residential Vapor Intrusion	
					Risk	HQ
VOC	Benzene	71-43-2	2.30E-04	TMW-21	1.0E-09	1.0E-05
VOC	Bromodichloromethane	75-27-4	2.70E-04	IW-78	NC	NC
VOC	Bromoform	75-25-2	1.89E-02	IW-78	2.0E-09	NC
VOC	Carbon Disulfide	75-15-0	1.10E-03	MW-56R	NC	4.4E-06
VOC	Chloroform	67-66-3	6.10E-04	MW-176	7.3E-09	1.5E-05
VOC	Chloromethane	74-87-3	9.10E-04	MW-82	NC	1.6E-05
VOC	Dibromochloromethane	124-48-1	8.30E-04	IW-78	NC	NC
VOC	1,1-Dichloroethene	75-35-4	2.10E-03	MW-176	NC	2.7E-05
VOC	cis-1,2-Dichloroethene	156-59-2	1.64E-02	MW-57R	NC	4.8E-04
VOC	trans-1,2-Dichloroethene	156-60-5	7.70E-04	TMW-21	NC	NC
VOC	Toluene	108-88-3	2.20E-03	TMW-14	NC	5.6E-07
VOC	Trichloroethene	79-01-6	5.52E-01	MW-56R	2.1E-06	4.2E-01
VOC	Vinyl Chloride	75-01-4	2.01E-02	MW-176	4.1E-07	6.4E-04

Cumulative Risk and HI:	2E-06	4E-01
ADEQ Target Cumulative Risk and HI:	1E-04	1E+00

Notes:

Only COCs detected in monitoring wells in the neighborhood are shown.

Detected concentrations are from samples collected from groundwater monitoring wells in the 2023 Annual Sampling Event.

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.

NC -- Risk and HQ estimates were not calculated for detected chemicals with inadequate toxicity or physical/chemical parameters.

mg/L -- Milligrams per liter.

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TABLE 16
EVALUATION OF VOCS IN WATER AT PARCELS 2 THROUGH 5
Whirlpool Facility - Fort Smith, Arkansas

Chem Group	Chemical	CASRN	Parcel 2						Parcel 3		
			10.5 feet bgs			12 feet bgs			12 feet bgs		
			VP-8			MW-175			MW-176		
			Perched Water			Groundwater			Groundwater		
			Conc	Risk	HQ	Conc	Risk	HQ	Conc	Risk	HQ
VOC	Acetone	67-64-1	3.10E-02	NC	2.3E-07	ND	NC	NC	ND	NC	NC
VOC	Benzene	71-43-2	4.30E-04	1.9E-09	1.9E-05	ND	NC	NC	ND	NC	NC
VOC	2-Butanone	78-93-3	6.00E-03	NC	2.6E-07	ND	NC	NC	ND	NC	NC
VOC	1,1-Dichloroethene	75-35-4	ND	NC	NC	4.70E-04	NC	6.1E-06	2.10E-03	NC	2.7E-05
VOC	cis-1,2-Dichloroethene	156-59-2	2.50E-04	NC	7.5E-06	3.10E-03	NC	9.1E-05	1.34E-02	NC	3.9E-04
VOC	trans-1,2-Dichloroethene	156-60-5	ND	NC	NC	1.30E-04	NC	NC	3.30E-04	NC	NC
VOC	Toluene	108-88-3	2.70E-04	NC	7.0E-08	ND	NC	NC	ND	NC	NC
VOC	Trichloroethene	79-01-6	5.50E-03	2.1E-08	4.2E-03	1.33E-01	4.9E-07	1.0E-01	3.19E-01	1.2E-06	2.5E-01
VOC	Vinyl Chloride	75-01-4	ND	NC	NC	ND	NC	NC	2.01E-02	4.1E-07	6.4E-04
	Cumulative Risk and HI:			2E-08	4E-03		5E-07	1E-01		2E-06	2E-01

Notes:

ND -- Not detected.

Groundwater and perched water concentrations are in mg/L.

Only COCs detected in the Annual Sampling Event samples at locations listed on the table are shown.

NC -- 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.

Cumulative cancer risk and HI estimates were below Arkansas Department of Environmental Quality (ADEQ)'s risk limits (1E-4 and 1, respectively).

bgs -- Below ground surface

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TABLE 16
EVALUATION OF VOCS IN WATER AT PARCELS 2 THROUGH 5
Whirlpool Facility - Fort Smith, Arkansas

Chem Group	Chemical	CASRN	Parcel 4			Parcel 5								
			12.5 feet bgs			7.5 feet bgs			10.5 feet bgs			12 feet bgs		
			VP-12			MW-178			VP-14			MW-179		
			Groundwater			Groundwater			Groundwater			Groundwater		
			Conc	Risk	HQ	Conc	Risk	HQ	Conc	Risk	HQ	Conc	Risk	HQ
VOC	Acetone	67-64-1	ND	NC	NC	ND	NC	NC	ND	NC	NC	ND	NC	NC
VOC	Benzene	71-43-2	ND	NC	NC	ND	NC	NC	ND	NC	NC	ND	NC	NC
VOC	2-Butanone	78-93-3	ND	NC	NC	ND	NC	NC	ND	NC	NC	ND	NC	NC
VOC	1,1-Dichloroethene	75-35-4	ND	NC	NC	ND	NC	NC	3.10E-04	NC	4.0E-06	5.10E-04	NC	6.6E-06
VOC	cis-1,2-Dichloroethene	156-59-2	ND	NC	NC	2.60E-04	NC	8.2E-06	1.10E-03	NC	3.3E-05	1.30E-03	NC	3.8E-05
VOC	trans-1,2-Dichloroethene	156-60-5	ND	NC	NC	ND	NC	NC	ND	NC	NC	1.10E-04	NC	NC
VOC	Toluene	108-88-3	ND	NC	NC	ND	NC	NC	ND	NC	NC	ND	NC	NC
VOC	Trichloroethene	79-01-6	ND	NC	NC	3.40E-04	1.3E-09	2.7E-04	2.17E-02	8.1E-08	1.7E-02	3.26E-02	1.2E-07	2.5E-02
VOC	Vinyl Chloride	75-01-4	ND	NC	NC	ND	NC	NC	ND	NC	NC	ND	NC	NC
	Cumulative Risk and HI:			NC	NC		1E-09	3E-04		8E-08	2E-02		1E-07	3E-02

Notes:

ND -- Not detected.

Groundwater and perched water concentrations are in mg/L.

Only COCs detected in the Annual Sampling Event samples at location

NC -- Risk and HQ estimates were not calculated for detected chemical

Risks based on concentrations measured in groundwater were calculat

Cumulative cancer risk and HI estimates were below Arkansas Departm

bgs -- Below ground surface

RAMBOLL

TABLE 17
SUMMARY OF TCE CONCENTRATIONS At PARCEL 3 FROM 2015 TO PRESENT
Whirlpool Facility - Fort Smith, Arkansas

Sampling Quarter	Sample Date	MW-176 Groundwater 13.5-14.5 feet bgs (µg/L)	VP-10 Groundwater 10.75-11.25 feet bgs (µg/L)	VP-9 Groundwater 5.25-5.75 feet bgs (µg/L)	VP-9 Soil Gas 5.25-5.75 feet bgs (µg/m^3)	Crawl Space (µg/m^3)	Indoor Air (µg/m^3)	Outdoor Air (µg/m^3)
2015Q1	Jan-15	720 (5.0)	636 (5.0)	--	31 (0.011)	--	--	--
2015Q2	Apr-15	528 (1.7)	395 (1.7)	--	0.25 (0.012)	U (0.011)	U (0.013)	U (0.012)
2015Q3	Jul-15	575 (1.7)	6.1 (0.17)	2.4 (0.17)	--	--	--	--
2015Q4	Oct-15	420 (1.7)	198 (0.17)	--	360 (0.79)	--	--	--
2015Q4	Nov-15	--	--	--	1200 (1.8)	U (0.011)	0.062 (0.011)	U (0.011)
2016Q1	Jan-16	306 (1.7)	823 (0.85)	--	--	--	--	--
2016Q2	May-16	389 (1.7)	376 (0.85)	--	--	--	--	--
2016Q4	Nov-16	320 (1.7)	278 (0.85)	--	464 (7.7)	--	--	--
2017Q2	Apr-17	355 (1.7)	198 (0.85)	--	400 D (0.14)	--	--	--
2017Q4	Oct-17	281 (1.7)	211 (0.85)	--	400 D (1.5)	--	--	--
2018Q2	Apr-18	426 (1.7)	357 (0.85)	--	540 D (0.27)	--	--	--
2018Q4	Nov-18	397 (1.7)	250 (0.85)	--	230 (8.4)	--	--	--
2019Q2	Apr-19	503 (1.7)	211 (0.48)	--	2.5 (0.36)	--	--	--
2019Q4	Oct-19	317 (1.7)	3.3 J (0.85)	--	--	--	--	--
2020Q2	May-20	323 (0.90)	27.5 (0.17)	--	--	--	--	--
2020Q4	Oct-20	359 (2.5)	110 (1.2)	--	--	--	--	--
2021Q2	May-21	369 (2.5)	169 (0.25)	--	--	--	--	--
2021Q4	Oct-21	310 (2.1)	177 (1.0)	--	--	--	--	--
2022Q2	Apr-22	380 (1.0)	--	--	--	--	--	--
2022Q4	Oct-22	329 (1.0)	--	--	--	--	--	--
2023Q2	Apr-23	282 (1.0)	--	--	--	--	--	--
2023Q4	Oct-23	319 (2.1)	--	--	--	--	--	--

Notes:

1. The VP-9 soil gas sample was collected in May 2017.
2. VP-10 was installed as a vapor sampling point but was flooded during all of the sampling events shown.
3. VP-9 was flooded in July 2015; a groundwater sample was collected.
4. Neither a soil gas sample or water sample was able to be collected at VP-9 in all samples after April 2019 due to flooding and a lack of recharge.

Abbreviations:

U -- Not Detected.

D -- Compound Quantitated on a Diluted Sample.

( ) -- Detection Limit.

-- -- Sample Not Collected.

bgs - Below ground surface

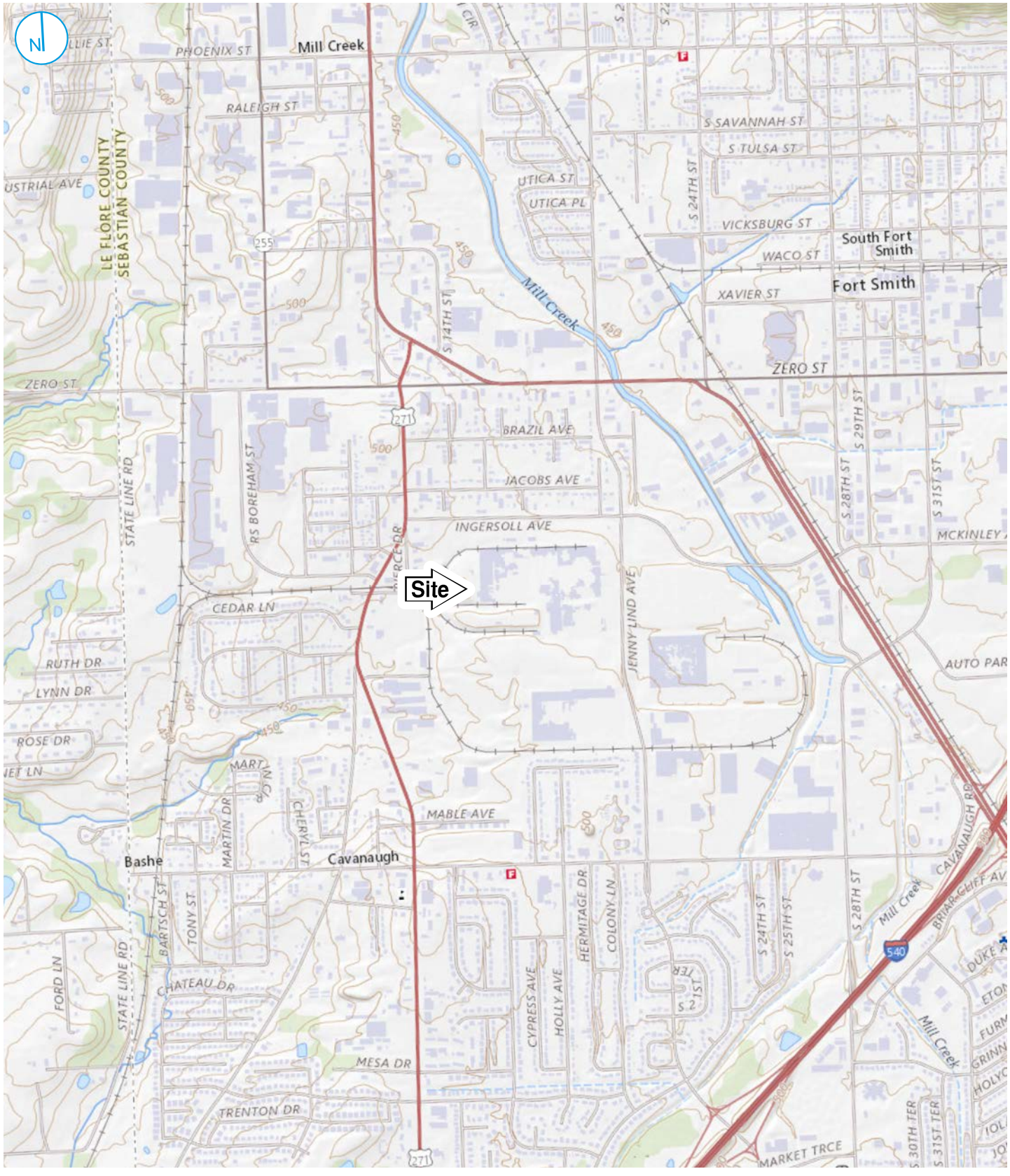
µg/L - Micrograms per liter

(µg/m^3) - Micrograms per cubic meter

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Figures

C:\GIS\Whirlpool\2023 Annual M&R\2023 Annual M&R.aprx\Figure 01



PROJECT: 1690030988 | DATED: 12/29/2023 | DESIGNER: ATABARES

Map Scale: 1:24,000 | Map Center: 94°25'6"W 35°19'17"N



KEY MAP (not to scale)

0 1,000 2,000 Feet

SITE LOCATION

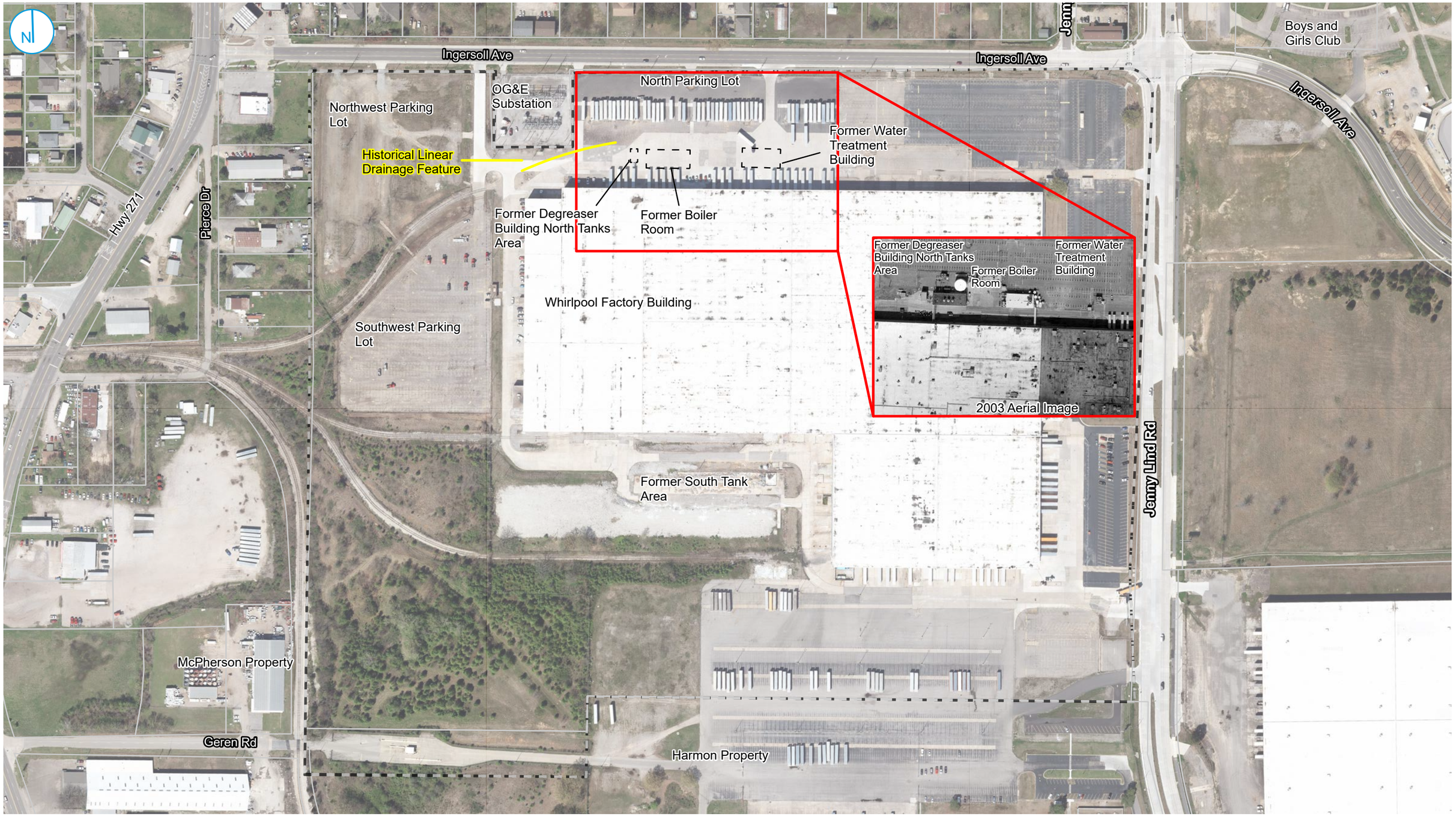
FIGURE 01

2023 Annual Report
Whirlpool Fort Smith Arkansas

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

C:\GIS\Whirlpool\2023 Annual M&R\2023 Annual M&R.aprx\Figure 02



Approximate Property Boundary
County Assessor Parcel
Outline of Former Buildings

0 200 400 Feet

SITE LAYOUT

2023 Annual Report
Whirlpool Fort Smith, Arkansas

FIGURE 02

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

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PROJECT: 1690030988 | DATED: 2/5/2024 | DESIGNER: ATABARES

C:\GIS\Whirlpool\2023 Annual M&R\2023 Annual M&R.aprx\Figure 03A



PROJECT: 169000309888 | DATED: 2/5/2024 | DESIGNER: ATABARES

- Injection Well
- Monitoring Well
- Vapor Point
- County Assessor Parcel

0 300 600 Feet

Notes
-Blue symbol represent locations sampled semi-annually and annually
-Orange symbol represent locations sampled annually only
-Aerial Imagery from City of Fort Smith, 2020

GROUNDWATER SAMPLING NETWORK

2023 Annual Report
Whirlpool Fort Smith, Arkansas

FIGURE 03A

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
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C:\GIS\Whirlpool\2023 Annual M&R\2023 Annual M&R.aprx\Figure 03B

PROJECT: 1690003098 | DATED: 2/8/2024 | DESIGNER: ATABARES



Approximate Property Boundary
County Assessor Parcel
Monitoring Well

Notes
-Blue symbol represent locations sampled semi-annually and annually
-Orange symbol represent locations sampled annually only
-Aerial Imagery from City of Fort Smith, 2020

0 400 800 Feet

GROUNDWATER SAMPLING NETWORK

2023 Annual Report
Whirlpool Fort Smith, Arkansas

FIGURE 03B

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL



- Monitoring Wells
- Groundwater Contours (1-ft Interval)
- Approximate Property Boundary
- County Assessor Parcel

NM Not Measured

Notes
-The following Monitoring Wells were not gauged at the Annual Event due to a breach of Site Security: MW-182, MW-186, MW-187, TMW-16, TMW-25, TMW-26, TMW-27, TMW-30, TMW-32
-The water level at MW-185 was not used in the interpolation due to anomalous measurement
-Groundwater elevations reported in feet above mean sea level
-Aerial Imagery from City of Fort Smith, 2020

0 250 500 Feet

2023 ANNUAL SAMPLING POTENTIOMETRIC SURFACE

2023 Annual Report
Whirlpool Fort Smith, Arkansas

FIGURE 04

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

C:\GIS\Whirlpool\2023 Annual M&R\2023 Annual M&R.aprx\Figure 05



PROJECT: 1690030988 | DATED: 2/5/2024 | DESIGNER: ATABARES

Vertical Gradient Direction
↑ Upward
↓ Downward
- Flat

Deep Monitoring Well Location

Shallow Monitoring Well Location

Approximate Property Boundary

0 100 200 Feet

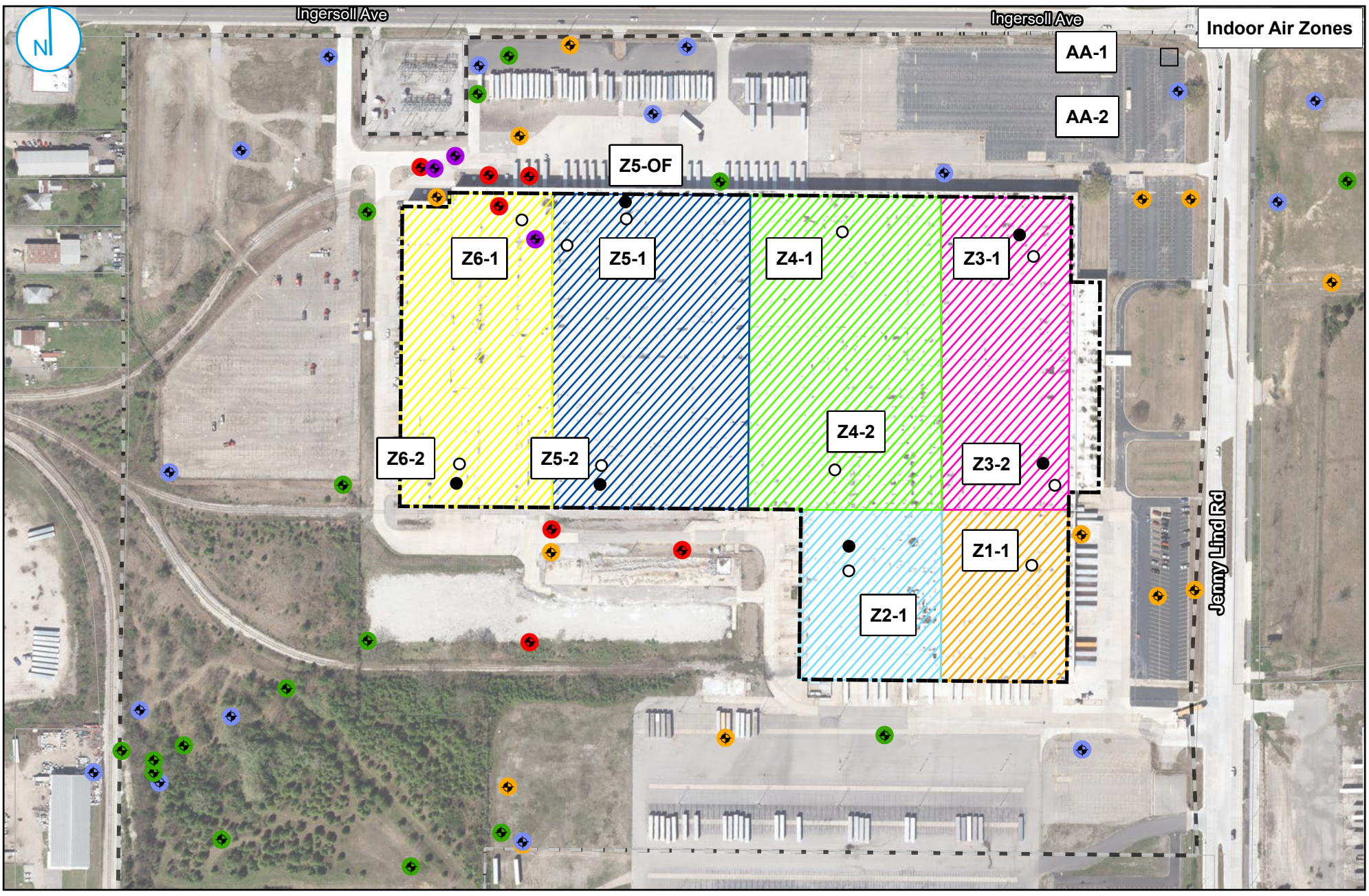
VERTICAL GROUNDWATER GRADIENTS OBSERVED IN NESTED WELLS
OCTOBER 2023

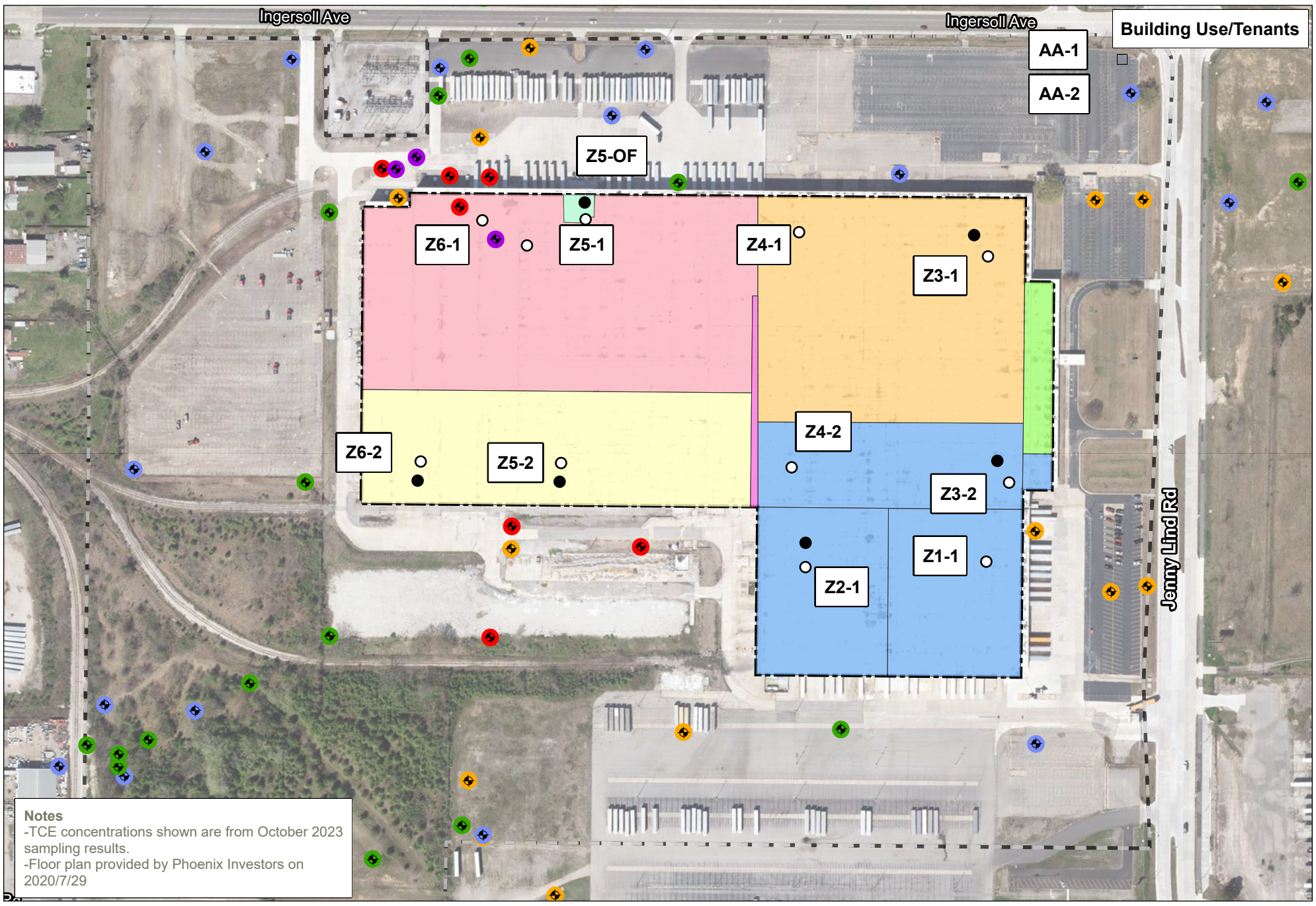
2023 Annual Report Whirlpool
Fort Smith, Arkansas

FIGURE 05

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
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Oct. 2023 TCE Concentration (µg/L)
- < 5
- 5.1 - <100
- 101 - <1000
- 10001 - <10,000
- > 10,000
- Ambient Air Background
- Indoor Air Sample Location
- Sub-Slab Sample Location

Indoor Air Zones
- Zone 1
- Zone 2
- Zone 3
- Zone 4
- Zone 5
- Zone 6
- Building Boundary
- Approximate Property Boundary

Buiding Use/Tenants

Zone
- MP Warehouse
- Mars Petcare
- Stryten
- Qualserv
- Common Space
- Office Vacancy 1st and 2nd Floor

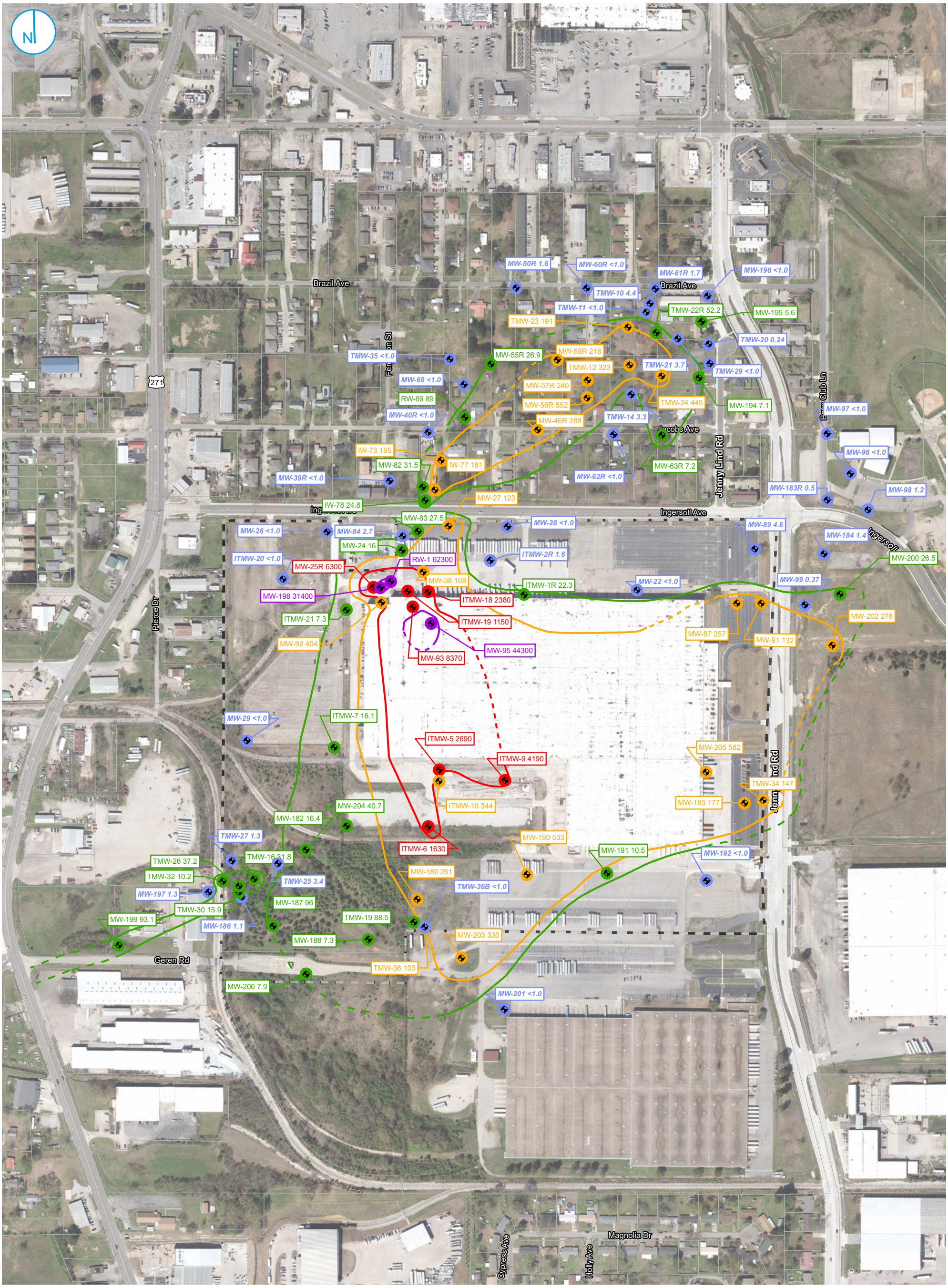
0 250 500 Feet

INDOOR AIR AND SUBSLAB SAMPLING LOCATIONS

FIGURE 06

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Whirlpool Fort Smith, Arkansas

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Oct. 2023 TCE Isoconcentration Line
- 5 µg/L
- 100 µg/L
- 1000 µg/L
- 10000 µg/L

Notes
-Dashed lines are inferred Isoconcentration lines
-Trichloroethene (TCE) in groundwater reported in µg/L
-TCE samples collected in October 2023

TCE Concentration (µg/L)
- < 5
- 5.1 - <100
- 101 - < 1000
- 10001 - < 10,000
- < 62300
- Approximate Property Boundary
- County Assessor Parcel

0 250 500 Feet

2023 ANNUAL TCE ISOCONCENTRATION MAP

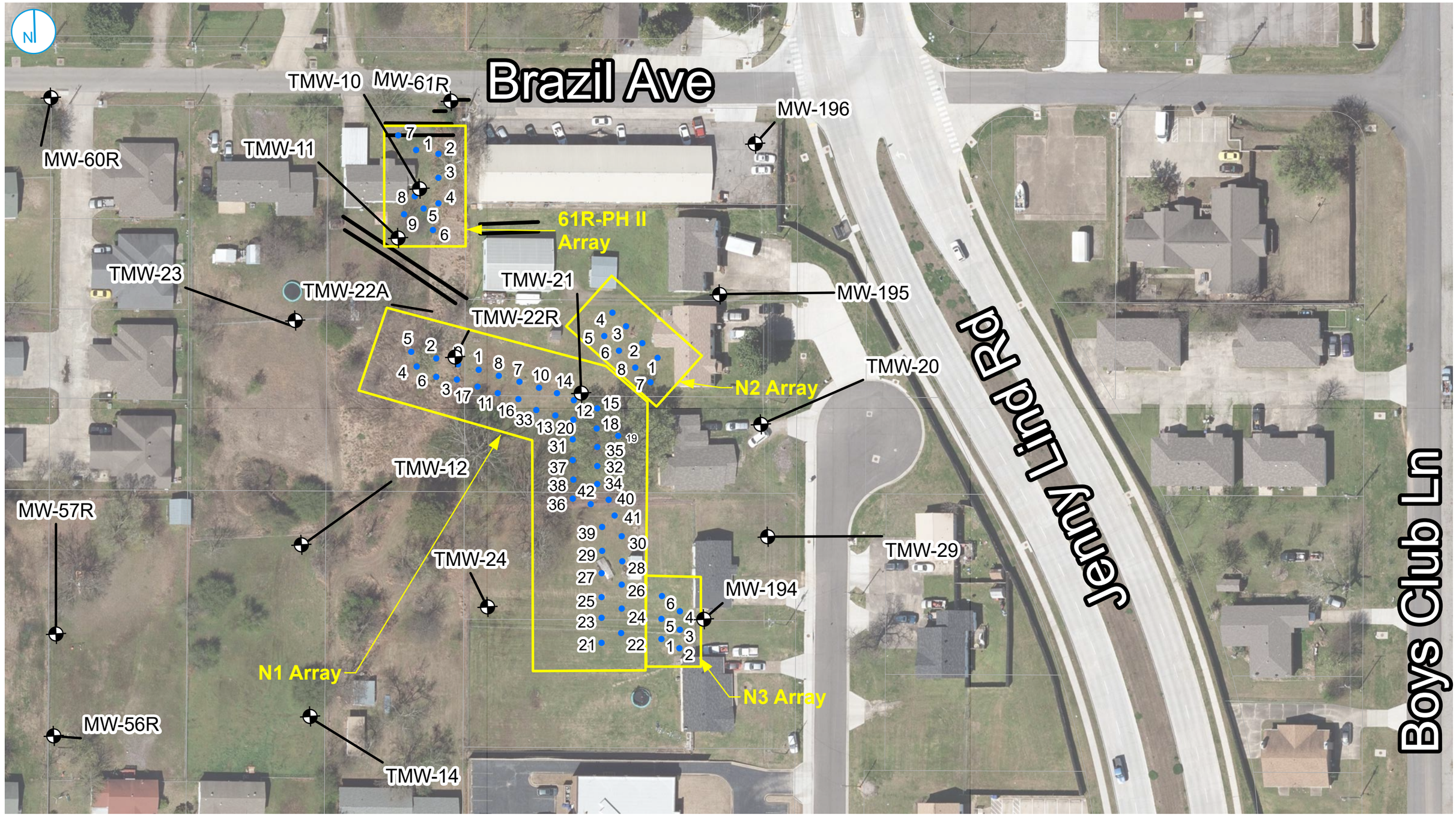
2023 Annual Report
Whirlpool Fort Smith, Arkansas

FIGURE 07

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

C:\GIS\Whirlpool\2023 Annual M&R\2023 Annual M&R.aprx\Figure 08

PROJECT: 169000309B8 | DATED: 2/5/2024 | DESIGNER: ATABARES



Monitoring Wells
2018 Temporary Injection Points
2015 ISCR Treatment Zones
2018 Treatment Zones
County Assessor Parcel

0 100 200 Feet

2018 TREATMENT ZONE INJECTION POINTS
NORTH PLUME

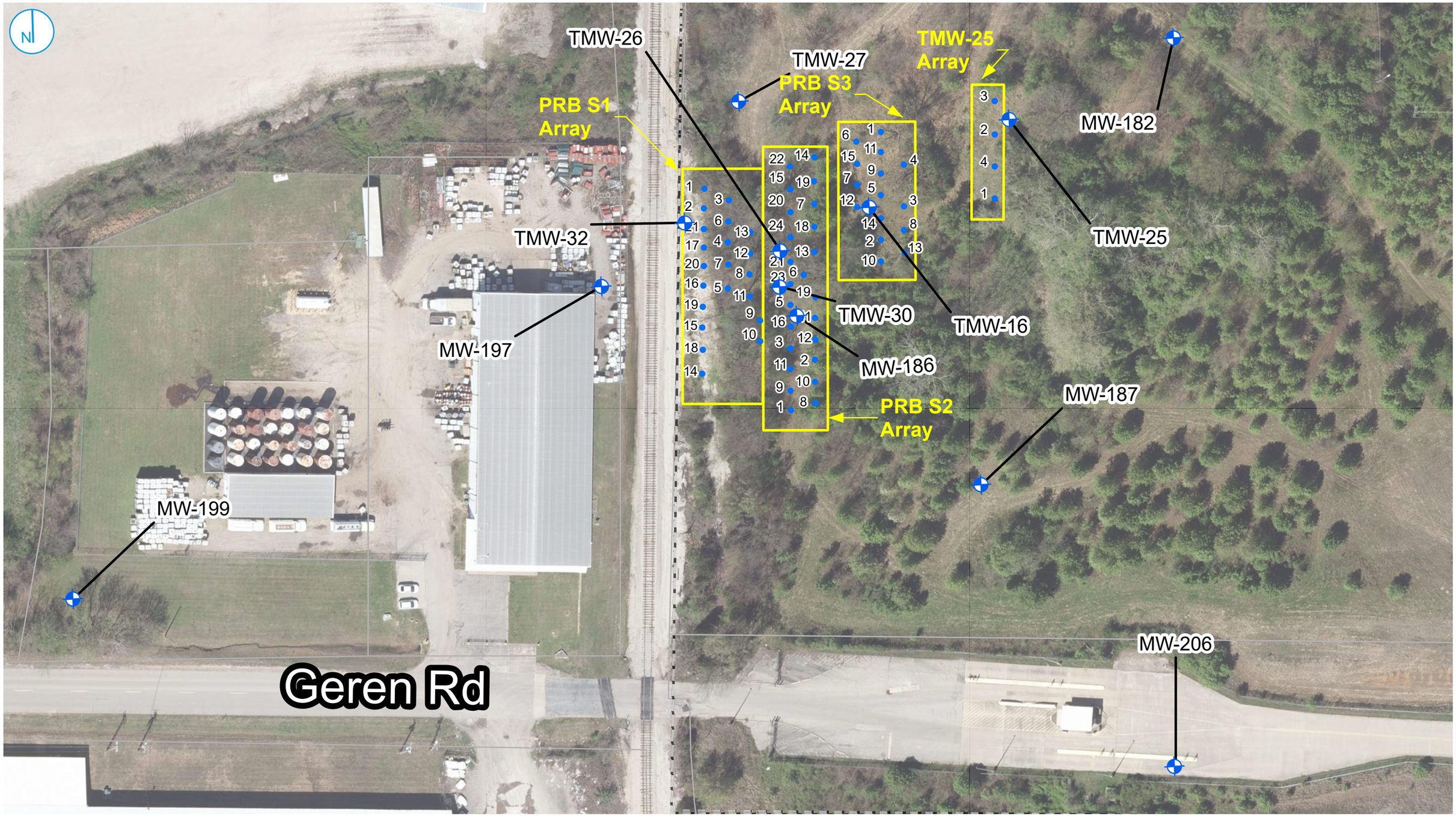
2023 Annual Report
Whirlpool Fort Smith, Arkansas

FIGURE 08

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

C:\GIS\Whirlpool\2023 Annual M&R\2023 Annual M&R.aprx\Figure 09



PROJECT: 1690030988 | DATED: 2/5/2024 | DESIGNER: ATABARES

- Monitoring Well
- 2018 Temporary Injection Points
- 2018 Treatment Zones
- Approximate Property Boundary
- County Assessor Parcel

0 100 200 Feet

2018 TREATMENT ZONE INJECTION POINTS
SOUTHWEST PLUME

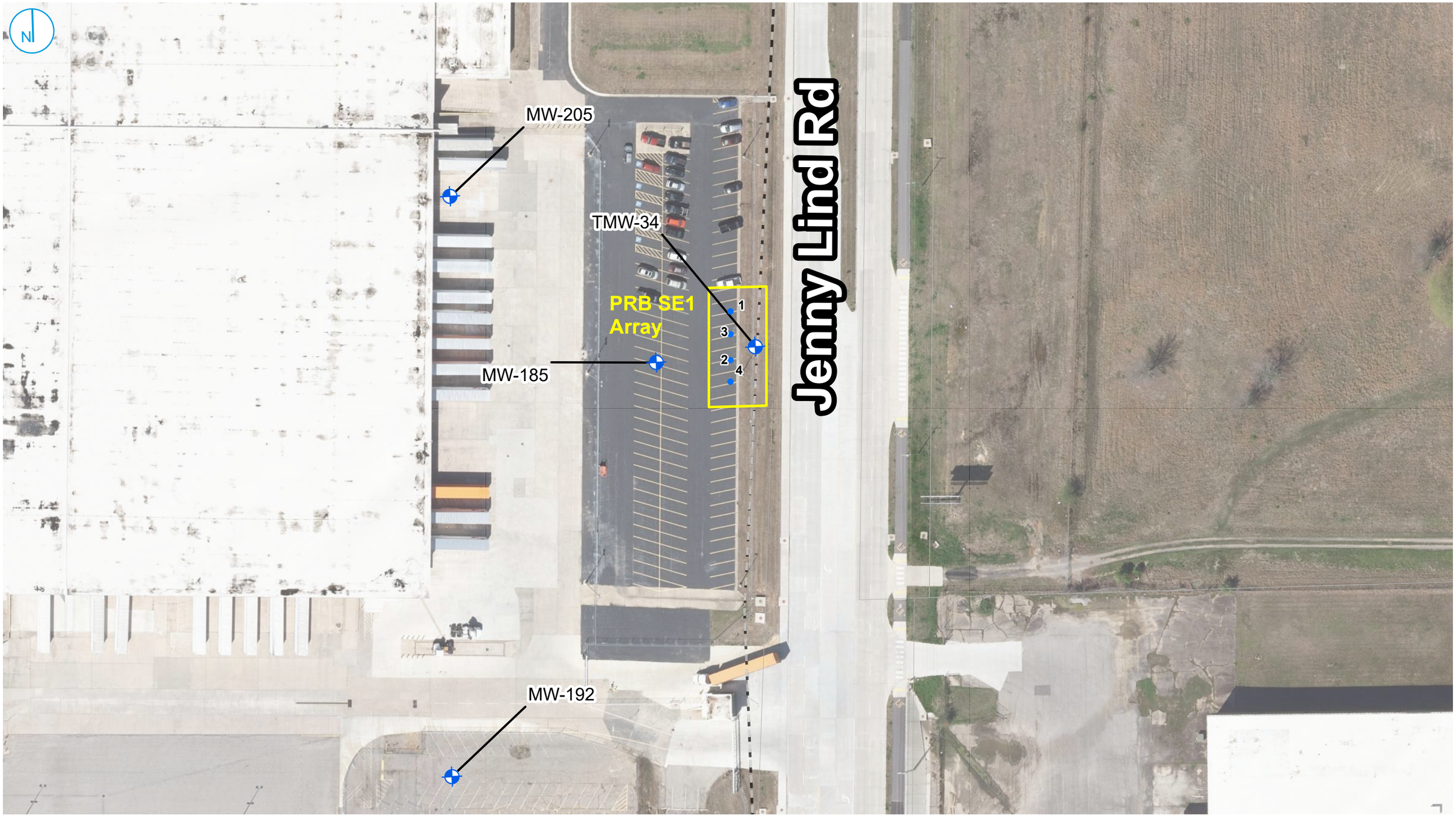
2023 Annual Report
Whirlpool Fort Smith, Arkansas

FIGURE 09

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

C:\GIS\Whirlpool\2023 Annual M&R\2023 Annual M&R.aprx\Figure 10



PROJECT: 1690030988 | DATED: 1/29/2024 | DESIGNER: ATABARES

Monitoring Well
2018 Temporary Injection Points
2018 Treatment Zones
Approximate Property Boundary
County Assessor Parcel

0 100 200 Feet

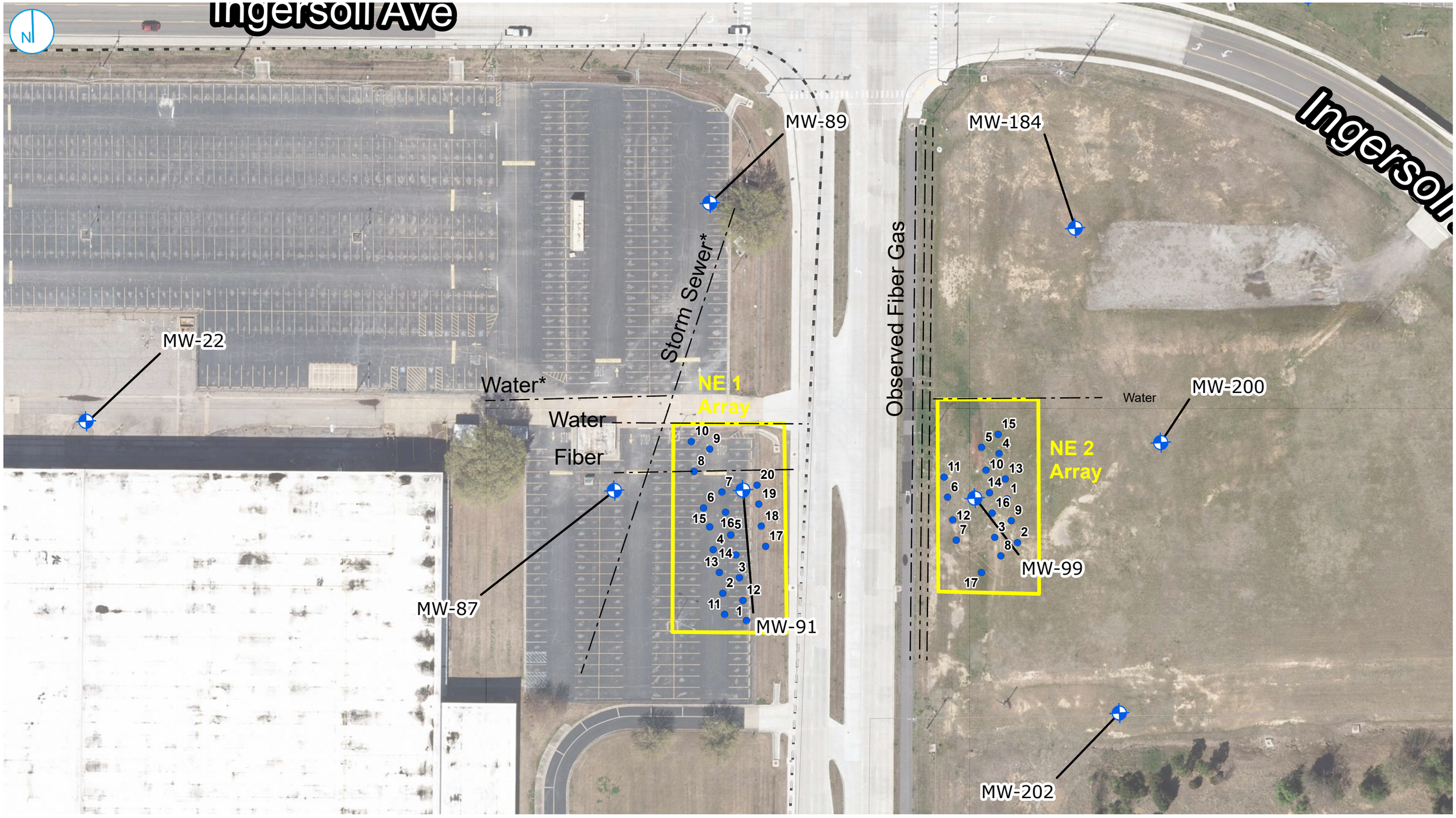
2018 TREATMENT ZONE INJECTION POINTS
SOUTHEAST PLUME

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Whirlpool Fort Smith, Arkansas

FIGURE 10

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ENGINEERING SOLUTIONS, INC.
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C:\GIS\Whirlpool\2023 Annual M&R\2023 Annual M&R.aprx\Figure 11



PROJECT: 1690030988 | DATED: 1/29/2024 | DESIGNER: ATABARES

Monitoring Well
2018 Temporary Injection Points
2018 Temporary Injection Area
Utility Lines
Approximate Property Boundary
County Assessor Parcel

0 100 200 Feet

2018 TREATMENT ZONE INJECTION POINTS
NORTHEAST PLUME

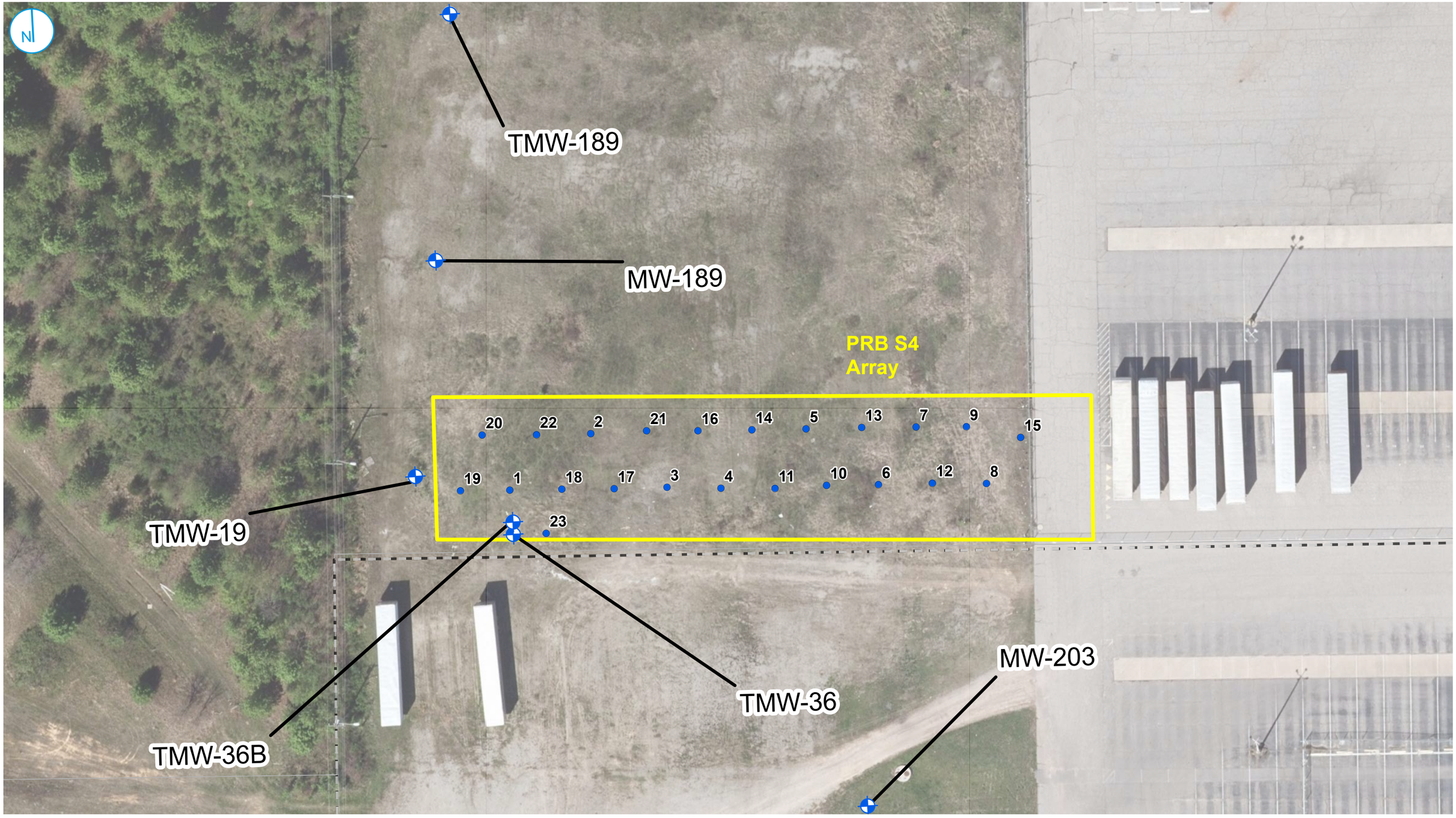
2023 Annual Report
Whirlpool Fort Smith, Arkansas

FIGURE 11

RAMBOLL AMERICAS
ENGINEERING SOLUTIONS, INC.
A RAMBOLL COMPANY

RAMBOLL

C:\GIS\Whirlpool\2023 Annual M&R\2023 Annual M&R.aprx\Figure 12



PROJECT: 1690030988 | DATED: 1/29/2024 | DESIGNER: ATABARES

Monitoring Well
2018 Temporary Injection
2018 Temporary Injection Area
Approximate Property Boundary
County Assessor Parcel

0 50 100 Feet

2020 TREATMENT ZONE INJECTION POINTS
SOUTH PLUME

2023 Annual Report
Whirlpool Fort Smith, Arkansas

FIGURE 12

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ENGINEERING SOLUTIONS, INC.
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RAMBOLL

Appendix A

Calibration Logs

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/19/2023

Calibrated by: Alanna Tabares

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 230100185 **Exp:** 07/2026

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3G10389 **Exp:** 09/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG053X **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0702 + 10min = 0712
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.5 in. x 25.4 = 749.3 mmHg - 15.169 = 734.131 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:
YSI – Serial Number: FA04893

1. Specific Conductance: 6777
2. ORP: 232.8
3. pH:
   - Point 1: 0703
   - Point 2: 4.00
   - Point 3: 10.09
4. DO: 9.16

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/18/2023

Calibrated by: Manuel Tabares

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 230100185 **Exp:** 07/30/26

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GH0354 **Exp:** 9/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG1053 **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0703 + 10min = 0713
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.02 in. x 25.4 = 762.508 mmHg - 15.169 = 747.339 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:
YSI – Serial Number: FA04893

1. Specific Conductance: 6905
2. ORP: 242.3
3. pH:
   - Point 1: 7.05
   - Point 2: 4.00
   - Point 3: 10.13
4. DO: 9.82

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/17/2023

Calibrated by: Hanna Tabares

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 23D100185 **Exp:** 07/2026

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GI0389 **Exp:** ~~9/15/25~~ 9/30/25 AT 10/17/23
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0737 + 10min = 0747
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.)
   30.15 in. x 25.4 = 766.57 mmHg - 15.169 = 751.403 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: FA04893

1. Specific Conductance: 6976
2. ORP: 267.9
3. pH:
   - Point 1: 6.96
   - Point 2: 3.89
   - Point 3: 9.89
4. DO:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/20/2023

Calibrated by: Alanna Tabares

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1396 **Exp:** 05/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 231D0185 **Exp:** 07/2026

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3G1038 **Exp:** 09/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1024 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG052X **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0830 + 10min 0840
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.)
   29.9 in. x 25.4 = 759.46 mmHg - 15.169 = 744.291 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: FA04893

1. Specific Conductance: 7149
2. ORP: ~~1111~~ 237.4
3. pH:
   - Point 1: 7.04
   - Point 2: 4.00
   - Point 3: 10.10
4. DO: 9.48

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/17/23

Calibrated by: Collin Cox

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 5/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 07/26

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE0389 **Exp:** 9/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE107H **Exp:** 5/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 7/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 8:26 + 10min = 8:36
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.)
   30.18 in. x 25.4 = 766.57 mmHg - 15.169 = 751.40 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:
YSI – Serial Number: FA5H646, FA5H646

1. Specific Conductance: 9.02
2. ORP: 256.2
3. pH: 6.98
   - Point 1: ~~6.98~~ ~~5.52~~ ~~7.22~~ ~~7.33~~ 7.05
   - Point 2: ~~5.50~~ ~~5.72~~ 5.77
   - Point 3: 9.63
4. DO: 98.9

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/18/23

Calibrated by: Collin Cox

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 5/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 1d658 **Exp:** 07/26

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GI0389 **Exp:** 9/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 5/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE0538 **Exp:** 7/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 7:53 + 10min = 8:03
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   _____ in. x 25.4 = 762 mmHg - 15.169 = 746.831 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:
YSI – Serial Number: FA05059 / ~~FA0480~~ FA 04946

1. Specific Conductance: 0989
2. ORP: 258.5
3. pH:
   - Point 1: 7.15
   - Point 2: 4.37
   - Point 3: 9.96
4. DO: 97.7%

Turbidity Meter Model/Serial Number: FA0 2643

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

All equipment and calibration fluid same as 10/18/23 entries except ORP

Date: 10/19/23

Calibrated by: Collin Cox

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:**_____

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 061320 **Exp:** 9/6/28

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 7:33 + 10min = 7:43
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.95 in. x 25.4 = 760.73 mmHg - 15.169 = 745.561 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number:

1. Specific Conductance: 6499
2. ORP: 255.5
3. pH:
   - Point 1: 7.01
   - Point 2: 4.00
   - Point 3: 9.89
4. DO: 98.6

$233 + 1.47(25 - 4)$

253.433

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

All equipment + calibration fluid is the same as yesterday (10/19/23)

Date: 10/20/23

Calibrated by: Collin Cox

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:**_____

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:**_____ **Exp:** _____

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 7:09 + 10min = 7:19
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.9 in. x 25.4 = 759.5 mmHg - 15.169 = 744.29 30 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 254.315

1. Specific Conductance: 6956
2. ORP: 255.0
3. pH:
   - Point 1: 7.27
   - Point 2: 4.13
   - Point 3: 10.43
4. DO: 82.9

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/23

Calibrated by: NDI GP

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05.31.24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 07/2026

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GI0387 **Exp:** 09/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes. Initial time: 1206 + 10min = 1216
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.)
   29.28 in. x 25.4 = 769.112 mmHg - 15.169 = 753.943 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: FA01764

1. Specific Conductance: 6999 µS/cm
2. ORP: 249.1 mV
3. pH:
   - Point 1: 7.09
   - Point 2: 4.00
   - Point 3: 10.01
4. DO: 99.4%

Turbidity Meter Model/Serial Number:

$233+1.47(25-T)$

$233+1.47(25-14)$

$233+1.47(11)$

249.17

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/23

Calibrated by: ND/GP

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05-31.24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 07/2026

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GI0389 **Exp:** 09/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1208 + 10min = 1218
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.)
   20.28 in. x 25.4 = 769.112 mmHg - 15.169 = 753.943 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: FA04646

1. Specific Conductance: 7028 µS/cm
2. ORP: 249.2 mV
3. pH:
   - Point 1: 7.02
   - Point 2: 4.04
   - Point 3: 10.18
4. DO: 99.7%

233 + 1.47 (25 - T)
233 + 1.47 (25 - 11)
233 + 1.47 (11)
249.17

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/23

Calibrated by: ND/GP

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05.31.24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 07/2026

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GI0389 **Exp:** 09/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1045 + 10min = 1055
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.)
   20.28 in. x 25.4 = 769.112 mmHg - 15.169 = 753.943 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: FA05059

1. Specific Conductance: 7007 µS/cm
2. ORP: 249.2 mV
3. pH:
   - Point 1: 7.00
   - Point 2: 4.26
   - Point 3: 10.01
4. DO: 99.2 %

Turbidity Meter Model/Serial Number:

233 + 1.47 (25-T)
233 + 1.47 (25-14)
233 + 1.47 (11)
~~248.73~~ 249.17

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/23

Calibrated by: GP / ND

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05.31.24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 07/2026

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** ~~3GE1399~~ 3GI0389 **Exp:** ~~05.31.24~~ 09/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1048 + 10min = 1058
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.)
   20.28 in x 25.4 = 769.112 mmHg - 15.169 = 753.943 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: FA05816

1. Specific Conductance: 7002 µS/cm
2. ORP: 249.2 mV
3. pH:
   - Point 1: 7.01
   - Point 2: 4.28
   - Point 3: 10.07
4. DO: 99.2 %

Turbidity Meter Model/Serial Number:

233 + 1.47 (25-T)
233 + 1.47 (25-14)
233 + 1.47 (11)
249.17

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/17/2023

Calibrated by: Nic Downton

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05.31.24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 07/2026

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. 263.87
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GI0389 **Exp:** 09/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0754 + 10min = 0904
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.)
   30.19 in. x 25.4 = 766.826 mmHg - 15.169 = 751.657 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

233 + 1.47(25-T)

YSI – Serial Number: FA05816

1. Specific Conductance: 7001
2. ORP: 263.9
3. pH:
   - Point 1: 7.00
   - Point 2: 3.95
   - Point 3: 9.99
4. DO: 98.8%

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/19/23

Calibrated by: Nic Doanton

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05.31.24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 07/2026

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GI0389 **Exp:** 09/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG053 **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0734 + 10min = 0744
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.95 in x 25.4 = 760.73 mmHg - 15.169 = 745.561 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number:

1. Specific Conductance: 7001 µS/cm
2. ORP: 253.5 mV
3. pH:
   - Point 1: 6.99
   - Point 2: 4.08
   - Point 3: 9.97
4. DO: 98.1%

Turbidity Meter Model/Serial Number:

11.1

233 + 1.47(25 - T)

253.433

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/17/23

Calibrated by: J. Kahky

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 5/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 22J100070 **Exp:** 9/7/27

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GJ0389 **Exp:** 9/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 5/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG1538 **Exp:** 7/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 7:07 + 10min = 7:17
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.)
   30.19 in. x 25.4 = 766.572 mmHg - 15.169 = 751.403 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:
YSI – Serial Number:

1. Specific Conductance: 7,152 mV
2. ORP: 263.87 µS/cm
3. pH:
   - Point 1: 6.80
   - Point 2: 10.02
   - Point 3: 3.84
4. DO: 80.4%

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Scanned with CamScanner

* Same as 10/17/23

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/18/23

Calibrated by: Joshua Kahky

Turn on YSI. Note time in DO section Line 1.

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0728 + 10min = 0738
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.)
   30.00 in. x 25.4 = 762.000 mmHg - 15.169 = 746.831 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:
YSI – Serial Number:

1. Specific Conductance: 245.5 mV
2. ORP: 6,823 µS/cm
3. pH:
   - Point 1: 6.97
   - Point 2: 3.99
   - Point 3: 10.01
4. DO: 116.7%

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Scanned with CamScanner

Whirlpool Ft. Smith Field Equipment Calibration Checklist

0 * Same as 10/17/23

Date: 10/19/23

Calibrated by: Joshua Kahky

Turn on YSI. Note time in DO section Line 1.

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0739 + 10min = 0749
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.)
   29.96 in. x 25.4 = 760.984 mmHg - 15.169 = 745.815 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: FA02989

1. Specific Conductance: 6,886 mV µS/cm
2. ORP: 243.4 mV
3. pH:
   - Point 1: 6.96
   - Point 2: 4.04
   - Point 3: 9.96
4. DO: 86.8%

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Scanned with CamScanner

Whirlpool Ft. Smith Field Equipment Calibration Checklist Ø * Same as 10/17/23

Date: 10/20/23

Calibrated by: Joshua Kahky

Turn on YSI. Note time in DO section Line 1.

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0658 + 10min = 0708
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.967 in. x 25.4 = 759.1818 mmHg - 15.169 = 743.529 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:
YSI – Serial Number:

1. Specific Conductance: 6,788 µS/cm
2. ORP: 254.815 mV
3. pH:
   - Point 1: 6.98
   - Point 2: 4.04
   - Point 3: 10.01
4. DO: 114.6%

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Scanned with CamScanner

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/19/2023

Calibrated by: Alanna Tabares

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 230100185 **Exp:** 07/2026

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3G10389 **Exp:** 09/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG053X **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0702 + 10min = 0712
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.5 in. x 25.4 = 749.3 mmHg - 15.169 = 734.131 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:
YSI – Serial Number: FA04893

1. Specific Conductance: 6777
2. ORP: 232.8
3. pH:
   - Point 1: 0703
   - Point 2: 4.00
   - Point 3: 10.09
4. DO: 9.16

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/18/2023

Calibrated by: Manuel Tabares

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 230100185 **Exp:** 07/30/26

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GH0354 **Exp:** 9/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG1053 **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0703 + 10min = 0713
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.02 in. x 25.4 = 762.508 mmHg - 15.169 = 747.339 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:
YSI – Serial Number: FA04893

1. Specific Conductance: 6905
2. ORP: 242.3
3. pH:
   - Point 1: 7.05
   - Point 2: 4.00
   - Point 3: 10.13
4. DO: 9.82

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/17/2023

Calibrated by: Hanna Tabares

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 23D100185 **Exp:** 07/2026

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GI0389 **Exp:** ~~9/15/25~~ 9/30/25 AT 10/17/23
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0737 + 10min = 0747
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.)
   30.15 in. x 25.4 = 766.57 mmHg - 15.169 = 751.403 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: FA04893

1. Specific Conductance: 6976
2. ORP: 267.9
3. pH:
   - Point 1: 6.96
   - Point 2: 3.89
   - Point 3: 9.89
4. DO:

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/20/2023

Calibrated by: Alanna Tabares

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1396 **Exp:** 05/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 231D0185 **Exp:** 07/2026

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3G1038 **Exp:** 09/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1024 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG052X **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0830 + 10min 0840
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.)
   29.9 in. x 25.4 = 759.46 mmHg - 15.169 = 744.291 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: FA04893

1. Specific Conductance: 7149
2. ORP: ~~1111~~ 237.4
3. pH:
   - Point 1: 7.04
   - Point 2: 4.00
   - Point 3: 10.10
4. DO: 9.48

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/17/23

Calibrated by: Collin Cox

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 5/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 07/26

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE0389 **Exp:** 9/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE107H **Exp:** 5/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 7/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 8:26 + 10min = 8:36
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.)
   30.18 in. x 25.4 = 766.57 mmHg - 15.169 = 751.40 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:
YSI – Serial Number: FA5H646, FA5H646

1. Specific Conductance: 9.02
2. ORP: 256.2
3. pH: 6.98
   - Point 1: ~~6.98~~ ~~5.52~~ ~~7.22~~ ~~7.33~~ 7.05
   - Point 2: ~~5.50~~ ~~5.72~~ 5.77
   - Point 3: 9.63
4. DO: 98.9

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/18/23

Calibrated by: Collin Cox

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 5/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 1d658 **Exp:** 07/26

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GI0389 **Exp:** 9/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 5/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE0538 **Exp:** 7/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 7:53 + 10min = 8:03
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   _____ in. x 25.4 = 762 mmHg - 15.169 = 746.831 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:
YSI – Serial Number: FA05059 / ~~FA0480~~ FA 04946

1. Specific Conductance: 0989
2. ORP: 258.5
3. pH:
   - Point 1: 7.15
   - Point 2: 4.37
   - Point 3: 9.96
4. DO: 97.7%

Turbidity Meter Model/Serial Number: FA0 2643

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

All equipment and calibration fluid same as 10/18/23 entries except ORP

Date: 10/19/23

Calibrated by: Collin Cox

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:**_____

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 061320 **Exp:** 9/6/28

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 7:33 + 10min = 7:43
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.95 in. x 25.4 = 760.73 mmHg - 15.169 = 745.561 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number:

1. Specific Conductance: 6499
2. ORP: 255.5
3. pH:
   - Point 1: 7.01
   - Point 2: 4.00
   - Point 3: 9.89
4. DO: 98.6

$233 + 1.47(25 - 4)$

253.433

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

All equipment + calibration fluid is the same as yesterday (10/19/23)

Date: 10/20/23

Calibrated by: Collin Cox

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:**_____

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:**_____ **Exp:** _____

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 7:09 + 10min = 7:19
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.9 in. x 25.4 = 759.5 mmHg - 15.169 = 744.29 30 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 254.315

1. Specific Conductance: 6956
2. ORP: 255.0
3. pH:
   - Point 1: 7.27
   - Point 2: 4.13
   - Point 3: 10.43
4. DO: 82.9

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/23

Calibrated by: NDI GP

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05.31.24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 07/2026

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GI0387 **Exp:** 09/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes. Initial time: 1206 + 10min = 1216
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.)
   29.28 in. x 25.4 = 769.112 mmHg - 15.169 = 753.943 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: FA01764

1. Specific Conductance: 6999 µS/cm
2. ORP: 249.1 mV
3. pH:
   - Point 1: 7.09
   - Point 2: 4.00
   - Point 3: 10.01
4. DO: 99.4%

Turbidity Meter Model/Serial Number:

$233+1.47(25-T)$

$233+1.47(25-14)$

$233+1.47(11)$

249.17

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/23

Calibrated by: ND/GP

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05-31.24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 07/2026

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GI0389 **Exp:** 09/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1208 + 10min = 1218
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.)
   20.28 in. x 25.4 = 769.112 mmHg - 15.169 = 753.943 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: FA04646

1. Specific Conductance: 7028 µS/cm
2. ORP: 249.2 mV
3. pH:
   - Point 1: 7.02
   - Point 2: 4.04
   - Point 3: 10.18
4. DO: 99.7%

233 + 1.47 (25 - T)
233 + 1.47 (25 - 11)
233 + 1.47 (11)
249.17

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/23

Calibrated by: ND/GP

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05.31.24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 07/2026

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GI0389 **Exp:** 09/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1045 + 10min = 1055
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.)
   20.28 in. x 25.4 = 769.112 mmHg - 15.169 = 753.943 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: FA05059

1. Specific Conductance: 7007 µS/cm
2. ORP: 249.2 mV
3. pH:
   - Point 1: 7.00
   - Point 2: 4.26
   - Point 3: 10.01
4. DO: 99.2 %

Turbidity Meter Model/Serial Number:

233 + 1.47 (25-T)
233 + 1.47 (25-14)
233 + 1.47 (11)
~~248.73~~ 249.17

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/23

Calibrated by: GP / ND

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05.31.24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 07/2026

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** ~~3GE1399~~ 3GI0389 **Exp:** ~~05.31.24~~ 09/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1048 + 10min = 1058
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.)
   20.28 in x 25.4 = 769.112 mmHg - 15.169 = 753.943 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: FA05816

1. Specific Conductance: 7002 µS/cm
2. ORP: 249.2 mV
3. pH:
   - Point 1: 7.01
   - Point 2: 4.28
   - Point 3: 10.07
4. DO: 99.2 %

Turbidity Meter Model/Serial Number:

233 + 1.47 (25-T)
233 + 1.47 (25-14)
233 + 1.47 (11)
249.17

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/17/2023

Calibrated by: Nic Downton

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05.31.24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 07/2026

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. 263.87
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GI0389 **Exp:** 09/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0754 + 10min = 0904
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.)
   30.19 in. x 25.4 = 766.826 mmHg - 15.169 = 751.657 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

233 + 1.47(25-T)

YSI – Serial Number: FA05816

1. Specific Conductance: 7001
2. ORP: 263.9
3. pH:
   - Point 1: 7.00
   - Point 2: 3.95
   - Point 3: 9.99
4. DO: 98.8%

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/19/23

Calibrated by: Nic Doanton

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05.31.24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 07/2026

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GI0389 **Exp:** 09/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG053 **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0734 + 10min = 0744
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.95 in x 25.4 = 760.73 mmHg - 15.169 = 745.561 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number:

1. Specific Conductance: 7001 µS/cm
2. ORP: 253.5 mV
3. pH:
   - Point 1: 6.99
   - Point 2: 4.08
   - Point 3: 9.97
4. DO: 98.1%

Turbidity Meter Model/Serial Number:

11.1

233 + 1.47(25 - T)

253.433

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10-17-23

Calibrated by: JZ

Turn on YSI. Note time in DO section Line 1.

same as yesterday

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:** _____

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:** _____

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:** _____
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:** _____
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:** _____
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0737 + 10min = 0747
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.)
   30.18 in. x 25.4 = 766.572 mmHg - 15.169 = 751.403 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 14H102456

1. Specific Conductance: 69666
2. ORP: 263.9
3. pH:
   - Point 1: 6.76
   - Point 2: 3.66
   - Point 3: 10.08
4. DO: ~~FA0536~~ 91.71.

Turbidity Meter Model/Serial Number: FA0536 68

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10-18-23

Calibrated by: JZ

same as yesterday

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:** _____

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:** _____

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:** _____
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:** _____
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:** _____
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0727 + 10min = 0737
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.)
   29.99 in. x 25.4 = 761.746 mmHg - 15.169 = 746.577 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: Same

1. Specific Conductance: 6957
2. ORP: 261.9
3. pH:
   - Point 1: 6.89
   - Point 2: 4.09
   - Point 3: 9.93
4. DO: 98.4%

Turbidity Meter Model/Serial Number: Same

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10-19-23

Calibrated by: JT

Turn on YSI. Note time in DO section Line 1. same as yesterday

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:** _____

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:** _____

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:** _____
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:** _____
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:** _____
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0725 + 10min = 0735
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.95 in. x 25.4 = 760.73 mmHg - 15.169 = 745.561 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: same

1. Specific Conductance: 6917
2. ORP: 242.2
3. pH:
   - Point 1: 6.92
   - Point 2: 3.97
   - Point 3: 10.01
4. DO: 93.1

Turbidity Meter Model/Serial Number: same

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10-20-23

Calibrated by: JZ

Turn on YSI. Note time in DO section Line 1.

Same as yesterday

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:** _____

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:** _____

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:** _____
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:** _____
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:** _____
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0652 + 10min = 0702
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.)
   29.87 in. x 25.4 = 758.698 mmHg - 15.169 = 743.529 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: Same

1. Specific Conductance: 6795
2. ORP: 243.7
3. pH:
   - Point 1: 6.96
   - Point 2: 4.11
   - Point 3: 10.11
4. DO: 92.31

Turbidity Meter Model/Serial Number: same

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/17/23

Calibrated by: J. Kahky

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 5/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 22J100070 **Exp:** 9/7/27

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GJ0389 **Exp:** 9/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 5/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG1538 **Exp:** 7/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 7:07 + 10min = 7:17
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.)
   30.19 in. x 25.4 = 766.572 mmHg - 15.169 = 751.403 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:
YSI – Serial Number:

1. Specific Conductance: 7,152 mV
2. ORP: 263.87 µS/cm
3. pH:
   - Point 1: 6.80
   - Point 2: 10.02
   - Point 3: 3.84
4. DO: 80.4%

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Scanned with CamScanner

* Same as 10/17/23

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/18/23

Calibrated by: Joshua Kahky

Turn on YSI. Note time in DO section Line 1.

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0728 + 10min = 0738
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.)
   30.00 in. x 25.4 = 762.000 mmHg - 15.169 = 746.831 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:
YSI – Serial Number:

1. Specific Conductance: 245.5 mV
2. ORP: 6,823 µS/cm
3. pH:
   - Point 1: 6.97
   - Point 2: 3.99
   - Point 3: 10.01
4. DO: 116.7%

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Scanned with CamScanner

Whirlpool Ft. Smith Field Equipment Calibration Checklist

0 * Same as 10/17/23

Date: 10/19/23

Calibrated by: Joshua Kahky

Turn on YSI. Note time in DO section Line 1.

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0739 + 10min = 0749
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.)
   29.96 in. x 25.4 = 760.984 mmHg - 15.169 = 745.815 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: FA02989

1. Specific Conductance: 6,886 mV µS/cm
2. ORP: 243.4 mV
3. pH:
   - Point 1: 6.96
   - Point 2: 4.04
   - Point 3: 9.96
4. DO: 86.8%

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Scanned with CamScanner

Whirlpool Ft. Smith Field Equipment Calibration Checklist Ø * Same as 10/17/23

Date: 10/20/23

Calibrated by: Joshua Kahky

Turn on YSI. Note time in DO section Line 1.

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

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

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

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

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

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0658 + 10min = 0708
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.967 in. x 25.4 = 759.1818 mmHg - 15.169 = 743.529 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:
YSI – Serial Number:

1. Specific Conductance: 6,788 µS/cm
2. ORP: 254.815 mV
3. pH:
   - Point 1: 6.98
   - Point 2: 4.04
   - Point 3: 10.01
4. DO: 114.6%

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Scanned with CamScanner

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/23

Calibrated by: CP

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 5/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 7/26

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. 249.17
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3G10389 **Exp:** 9/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 5/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 7/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1045 + 10min = 1055
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.28 in. x 25.4 = 769.112 mmHg - 15.169 = 753.943mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry: 1

YSI – Serial Number: FA04893

1. Specific Conductance: 7001
2. ORP: 249.1
3. pH:
   - Point 1: 7.05
   - Point 2: 4.00
   - Point 3: 10.17
4. DO: 99.2

10c

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/23

Calibrated by: GP

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 5/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 7/2026

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. 249.17
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3G10389 **Exp:** 9/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 5/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 7/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1048 + 10min = 1058
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   _____ in. x 25.4 = _____ mmHg - 15.169 = 753.943 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry: 2

YSI – Serial Number: FA05817

1. Specific Conductance: 7001
2. ORP:
3. pH:
   - Point 1: 7.01
   - Point 2: 4.06
   - Point 3: 10.00
4. DO: 99.2

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/23

Calibrated by: CA

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 5/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 7/2026

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. 249.17
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3G10389 **Exp:** 9/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 5/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0533 **Exp:** 7/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1049 + 10min = 1059
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   _____ in. x 25.4 = _____ mmHg - 15.169 = 753.943 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry: 3

YSI – Serial Number: FA02989

1. Specific Conductance: 6996
2. ORP: 249.0
3. pH:
   - Point 1: 7.04
   - Point 2: 4.00
   - Point 3: 10.00
4. DO: 99.2

Turbidity Meter Model/Serial Number:

$233 + 1.47(25-T)$

249.17

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/23

Calibrated by: GP

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 5/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 7/2026

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3G10389 **Exp:** 9/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 5/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 7/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1202 + 10min = 1212
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.27 in. x 25.4 = 768.858 mmHg - 15.169 = 753.689 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: FA04846

1. Specific Conductance: 7000
2. ORP: 249.2
3. pH:
   - Point 1: 7.01
   - Point 2: 4.00
   - Point 3: 10.11
4. DO: 99.2

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/19

Calibrated by: CP

See 10/13/23 calibration sheets for Lot + exp.

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:**_____

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:**_____ **Exp:** _____

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

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

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: FA04646

1. Specific Conductance: 7000
2. ORP:
3. pH:
   - Point 1: ~~6.98~~
   - Point 2: ~~3.99~~
   - Point 3:
4. DO: 98.2

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/23

Calibrated by: CP

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 5/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 7/26

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. 249.17
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3G10389 **Exp:** 9/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 5/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 7/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1045 + 10min = 1055
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.28 in. x 25.4 = 769.112 mmHg - 15.169 = 753.943mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry: 1

YSI – Serial Number: FA04893

1. Specific Conductance: 7001
2. ORP: 249.1
3. pH:
   - Point 1: 7.05
   - Point 2: 4.00
   - Point 3: 10.17
4. DO: 99.2

10c

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/23

Calibrated by: GP

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 5/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 7/2026

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. 249.17
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3G10389 **Exp:** 9/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 5/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 7/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1048 + 10min = 1058
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   _____ in. x 25.4 = _____ mmHg - 15.169 = 753.943 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry: 2

YSI – Serial Number: FA05817

1. Specific Conductance: 7001
2. ORP:
3. pH:
   - Point 1: 7.01
   - Point 2: 4.06
   - Point 3: 10.00
4. DO: 99.2

Turbidity Meter Model/Serial Number:

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/23

Calibrated by: CA

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 5/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 7/2026

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. 249.17
4. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3G10389 **Exp:** 9/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 5/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0533 **Exp:** 7/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1049 + 10min = 1059
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   _____ in. x 25.4 = _____ mmHg - 15.169 = 753.943 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry: 3

YSI – Serial Number: FA02989

1. Specific Conductance: 6996
2. ORP: 249.0
3. pH:
   - Point 1: 7.04
   - Point 2: 4.00
   - Point 3: 10.00
4. DO: 99.2

Turbidity Meter Model/Serial Number:

$233 + 1.47(25-T)$

249.17

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/16/23

Calibrated by: GP

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 5/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 6658 **Exp:** 7/2026

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3G10389 **Exp:** 9/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1074 **Exp:** 5/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GG0538 **Exp:** 7/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 1202 + 10min = 1212
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30.27 in. x 25.4 = 768.858 mmHg - 15.169 = 753.689 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: FA04846

1. Specific Conductance: 7000
2. ORP: 249.2
3. pH:
   - Point 1: 7.01
   - Point 2: 4.00
   - Point 3: 10.11
4. DO: 99.2

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/19

Calibrated by: CP

See 10/13/23 calibration sheets for Lot + exp.

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:**_____

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:**_____ **Exp:** _____

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

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

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: FA04646

1. Specific Conductance: 7000
2. ORP:
3. pH:
   - Point 1: ~~6.98~~
   - Point 2: ~~3.99~~
   - Point 3:
4. DO: 98.2

Turbidity Meter Model/Serial Number:

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/19/23

Calibrated by: MB

Same as Previous days

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:**_____

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:**_____ **Exp:** _____

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:**_____
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0725 + 10min = 0735
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.95 in. x 25.4 = 760.73 mmHg - 15.169 = 745.561 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 13A102117

1. Specific Conductance: 7.0 MP 7.37 ms/cm
2. ORP: 248.6
3. pH:
   - Point 1: 6.97
   - Point 2: 4.08
   - Point 3: 9.90
4. DO: 728.4 mm hg

Turbidity Meter Model/Serial Number: N/A (Already Calibrated)

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/19/23

Calibrated by: MB

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3661799 **Exp:** 05/31/25

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 61320 **Exp:** 4/11/2028

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3610589 **Exp:** 9/30/2025
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3681074 **Exp:** 05/31/2025
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3660388 **Exp:** 07/31/2025
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0725 + 10min = 0735
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   _____ in. x 25.4 = _____ mmHg - 15.169 = _____ mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 21D103310 / 21D100080

1. Specific Conductance:
2. ORP:
3. pH:
   - Point 1:
   - Point 2:
   - Point 3:
4. DO:

DO probe malfunction. Unable to calibrate on 10/19/23

Turbidity Meter Model/Serial Number: HACH2100Q IFA058141

Cal check passed @ 10.4 NTU

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/18/23

Calibrated by: MB

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3681399 **Exp:** 05/31/2023

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 61320 **Exp:** 4/11/2028

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3610389 **Exp:** 09/30/2023
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3681074 **Exp:** 05/31/2025
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3660538 **Exp:** 07/31/2025
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

Dissolved Oxygen (% DO) calibration (should take *at least* 10 minutes): 1305 1315

1. Ensure unit has been on for at least 10 minutes: Initial time: ~~1405~~ mo + 10min = ~~1415~~ mo
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.)
   29.39 in. x 25.4 = 746.8 mmHg - 15.169 = 746.6 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: 13A100117

1. Specific Conductance: 6.74 ms/cm
2. ORP: 237.1
3. pH:
   - Point 1: 6.89
   - Point 2: 4.02
   - Point 3: 10.04
4. DO: 117.5 %

Turbidity Meter Model/Serial Number: N/A (Already Calibrated)

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/18/23

Calibrated by: MB

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 36E1399 **Exp:** 05/31/23

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 61320 **Exp:** 04/11/2028

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 36I0389 **Exp:** 09/30/2025
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 36E1074 **Exp:** 05/31/2025
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.
9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 36G0588 **Exp:** 07/31/2025
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0720 + 10min = 0730
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.)
   29.99 in. x 25.4 = ~761.8 mmHg - 15.169 = ~746.6 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry: 10118123

YSI – Serial Number: 21D103310/21B100086

1. Specific Conductance: 7.100 mS/cm (7100 µS/cm) actual; measured 6.87 mS/cm
2. ORP: 262.3 mV
3. pH:
   - Point 1: 7.37
   - Point 2: ~~263.3 mV~~ MB 4.61
   - Point 3: 9.06
4. DO: 113.2%

Turbidity Meter Model/Serial Number: FA05814

Full Cal NTUs: 0, 20.2, 102, 802

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/17/2023

Calibrated by: MB

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 36E1399 **Exp:** 05131124

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** ~~61320~~ MB ~~6658~~ MB 36E0389 **Exp:** ~~07/2026~~ 04/11/2028 MB

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 36E0389 **Exp:** 09/30/15
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 36E1074 **Exp:** 05/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3660538 **Exp:** 07/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0711 + 10min = 0721 ✓
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.)
   30.18 in. x 25.4 = 766.8 mmHg - 15.169 = 751.4 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry: 10/17/23

YSI – Serial Number: 21010331 / 21010080

1. Specific Conductance: 7.100 ms/cm (~7100 uS/cm)
2. ORP: 262.6 mV
3. pH: ~~7.67~~ MB
   - Point 1: 7.67
   - Point 2: 4.47
   - Point 3: 9.30
4. DO: ~~10.1 NTU~~ MB 110.2%

Turbidity Meter Model/Serial Number: FAO 5814

10.1 NTU Cal Check Passed

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/17/23

Calibrated by: Emma Perkins

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** 3GE1399 **Exp:** 05/31/24

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** 223100070 **Exp:** 2027-09-07

236.87

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3610389 **Exp:** 9/30/25
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3GE1674 **Exp:** 5/31/25
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** 3660537 **Exp:** 7/31/25
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0735 + 10min = 0745
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 in. x 25.4 = 762 mmHg - 15.169 = 746.831 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:
YSI – Serial Number: 25E102072 / 23D100397

1. Specific Conductance: 6929
2. ORP: 236.87
3. pH:
   - Point 1: 7.02
   - Point 2: 4.08
   - Point 3: 9.91
4. DO: 96.1

Turbidity Meter Model/Serial Number: F A02643

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/20/23

Calibrated by: E Perkins

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:** _____

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

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:** _____

236.8

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.

Same as Yesterday

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

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

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0650 + 10min = 0700
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   30 in. x 25.4 = _____ mmHg - 15.169 = 746.831 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: Same

1. Specific Conductance: 68.56
2. ORP: 236.8
3. pH:
   - Point 1: 7.06
   - Point 2: 4.01
   - Point 3: 9.94
4. DO: 97.3

Turbidity Meter Model/Serial Number: Same

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/19/23

Calibrated by: E Perkins

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:** _____

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.

Same as Yesterday

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:** _____

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:** _____
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:** _____
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:** _____
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0730 + 10min = 0740
2. Enter the local barometric pressure.
   (Note: to convert from inches (common on a weather app or forecast) to mmHg, multiply by 25.4, then to correct to Ft. Smith's altitude, subtract 15.169 mmHg.)
   29.95 in. x 25.4 = 760.73 mmHg - 15.169 = 745.561 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: Same as Yesterday

1. Specific Conductance: ~~6[illegible]2~~ 6762
2. ORP: 236.87
3. pH:
   - Point 1: 7.03
   - Point 2: 4.01
   - Point 3: 9.96
4. DO: 97.9%

Turbidity Meter Model/Serial Number: Same as yesterday

RAMBOLL ENVIRON

Whirlpool Ft. Smith Field Equipment Calibration Checklist

Date: 10/18/23

Calibrated by: Emma Perkins

Turn on YSI. Note time in DO section Line 1.

Specific Conductance calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:** _____

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.

Same as yesterday

ORP calibration (should take *at least* 1.5 minutes): **Lot #:** _____ **Exp:** _____

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

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

1. Pour pH 7.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:** _____
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 4.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:** _____
6. Allow *1 minute* for temperature stabilization.
7. Press "calibrate" after *30 seconds* of no significant change in pH. Note standard below.
8. Discard used calibration standard, and rinse calibration cup and probes with DI water.

9. Pour pH 10.0 standard into the calibration cup and immerse pH sensor. **Lot #** _____ **Exp:** _____
10. Allow *1 minute* for temperature stabilization.
11. Press "calibrate" after *30 seconds* of no significant change in pH. Note below
12. Discard used calibration standard, and rinse calibration cup and probes with DI water.

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

1. Ensure unit has been on for at least 10 minutes: Initial time: 0723 + 10min = 0733
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 in. x 25.4 = 762 mmHg - 15.169 = 746.83 mmHg
3. Place ~3mm of DI water in the bottom of the calibration cup.
4. Lightly screw on the calibration cup (only 1 or 2 threads!)
5. Allow *10 minutes* for the air in the cup to become water-saturated and temp to stabilize.
6. Press "calibrate" after *30 seconds* of no significant change in DO. Note below.
7. Discard used DI water, and rinse calibration cup and probes with DI water.

Turbidity calibration:

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

Field Notebook calibration entry:

YSI – Serial Number: Same as yesterday

1. Specific Conductance: 6925
2. ORP: 236.87
3. pH:
   - Point 1: 7.07
   - Point 2: 4.09
   - Point 3: 10.04
4. DO: 92.1%

Turbidity Meter Model/Serial Number: 2518-1122

Appendix B
Laboratory Analytical Data

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

November 18, 2023

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 17, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Baton Rouge
- Pace Analytical Services - Kansas City

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

Sincerely,



Jamie Church
jamie.church@pacelabs.com
314-838-7223
Project Manager

Enclosures

cc: Caroline Chavers, Ramboll US Consulting, Inc.
Kristen Drucquer, Ramboll US Consulting, Inc.
Jackie Zellmer, Ramboll

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

CERTIFICATIONS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 88-00679
Illinois Certification #: 2000302023-5
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212023-1
Oklahoma Certification #: 2022-057
Florida: Cert E871149 SEKS WET
Texas Certification #: T104704407-22-16
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

Pace Analytical Services Baton Rouge
7979 Innovation Park Drive Ste A, Baton Rouge, LA 70820-7402
Louisiana Dept of Enviromental Quality (NELAC/LELAP): 01979
Florida Dept of Health (NELAC/FELAP): E87854
DoD ELAP (A2LA) #: 6429.01
Alabama DEM #: 41900
Alaska DEC-DW #: LA00024
Alaska DEC CS-LAP #: 21-001
Arkansas DEQ #: 88-0655
California ELAP #: 3063
Georgia DPD #: C050
Hawaii DOH State Laboratories Division
Illinois EPA #: 200048
Kansas DoHE #: E-10354
Kentucky DEP UST Branch #: 123054
Louisiana DOH #: LA036
Minnesota DOH #: 2233799
Mississippi State Dept of Health
Montana Department of Environmental Quality
Nebraska DHHS #: NE-OS-35.21
Nevada DCNR DEP #: LA00024
New York DOH #: 12149
North Carolina DEQ - WW & GW #: 618
North Dakota DEQ #: R195
Ohio EPA #: 87782
Oklahoma Dept of Environmental Quality #: 9403
Oregon ELAP #: 4168
Pennsylvania Dept of Environmental Protection #: 68-05973
South Carolina DHEC #: 73006001
Texas CEQ #: T104704178-23-15
Utah DOH #: LA00024
Virginia DCLS #: 6460215
Washington Dept of Ecology #: C929
Wisconsin DNR #: 399139510

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Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60439898001	**MW-68-202310**	Water	10/16/23 15:39	10/17/23 01:30
60439898002	**MW-39R-202310**	Water	10/16/23 16:10	10/17/23 01:30
60439898003	**MW-29-202310**	Water	10/16/23 16:15	10/17/23 01:30
60439898004	**MW-62R-202310**	Water	10/16/23 16:20	10/17/23 01:30
60439898005	**TMW-29-202310**	Water	10/16/23 16:35	10/17/23 01:30
60439898006	**MW-191-202310**	Water	10/16/23 17:04	10/17/23 01:30
60439898007	**MW-96-202310**	Water	10/16/23 17:00	10/17/23 01:30
60439898008	**DUP-10-202310**	Water	10/16/23 17:00	10/17/23 01:30
60439898009	**TB-01-202310**	Water	10/16/23 07:00	10/17/23 01:30
60439898010	**EB-01-202310**	Water	10/16/23 07:50	10/17/23 01:30
60439898011	**TMW-36-202310**	Water	10/16/23 15:14	10/17/23 01:30
60439898012	**TMW-36B-202310**	Water	10/16/23 16:48	10/17/23 01:30

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60439898001	**MW-68-202310**	EPA 5030B/8260	PGH	38	PASI-K
60439898002	**MW-39R-202310**	EPA 5030B/8260	PGH	38	PASI-K
60439898003	**MW-29-202310**	EPA 5030B/8260	PGH	38	PASI-K
60439898004	**MW-62R-202310**	EPA 5030B/8260	PGH	38	PASI-K
60439898005	**TMW-29-202310**	EPA 5030B/8260	PGH	38	PASI-K
60439898006	**MW-191-202310**	EPA 5030B/8260	PGH	38	PASI-K
60439898007	**MW-96-202310**	EPA 5030B/8260	PGH	38	PASI-K
60439898008	**DUP-10-202310**	EPA 5030B/8260	PGH	38	PASI-K
60439898009	**TB-01-202310**	EPA 5030B/8260	PGH	38	PASI-K
60439898010	**EB-01-202310**	EPA 5030B/8260	PGH	38	PASI-K
60439898011	**TMW-36-202310**	RSK175	BDP	4	PASI-BR
		Pace ENV-SOP-BTRO-0042	LHM	10	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K
60439898012	**TMW-36B-202310**	RSK175	BDP	4	PASI-BR
		Pace ENV-SOP-BTRO-0042	LHM	10	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K

PASI-BR = Pace Analytical Services - Baton Rouge
PASI-K = Pace Analytical Services - Kansas City

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Method: **RSK175**
Description: BR RSK175 Headspace
Client: Ramboll_AR
Date: November 18, 2023

General Information:
2 samples were analyzed for RSK175 by Pace Analytical Services Baton Rouge. 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.

QC Batch: 305383

B: Analyte was detected in the associated method blank.

- BLANK for HBN 305383 [BRGV/133 (Lab ID: 1461779)
  - Ethane
  - Ethene

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.: 60439898

Method: **Pace ENV-SOP-BTRO-0042**
Description: BR AM23G Low Level VFA
Client: Ramboll_AR
Date: November 18, 2023

General Information:
2 samples were analyzed for Pace ENV-SOP-BTRO-0042 by Pace Analytical Services Baton Rouge. 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.

QC Batch: 304657

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 1458490)
  - Hexanoic Acid
  - i-Hexanoic Acid

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

QC Batch: 304657

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60440028030

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 1458667)
  - Hexanoic Acid
  - i-Hexanoic Acid
- MSD (Lab ID: 1458668)
  - Hexanoic Acid
  - i-Hexanoic Acid

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Method: **Pace ENV-SOP-BTRO-0042**
Description: BR AM23G Low Level VFA
Client: Ramboll_AR
Date: November 18, 2023

QC Batch: 304657

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60440028030

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

- MS (Lab ID: 1458667)
  - Pentanoic Acid
- MSD (Lab ID: 1458668)
  - Pentanoic Acid

Additional Comments:

Analyte Comments:

QC Batch: 304657

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- TMW-36-202310 (Lab ID: 60439898011)
  - Lactic Acid
- TMW-36B-202310 (Lab ID: 60439898012)
  - Lactic Acid

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- BLANK (Lab ID: 1458489)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- LCS (Lab ID: 1458490)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- MS (Lab ID: 1458667)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- MSD (Lab ID: 1458668)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- TMW-36-202310 (Lab ID: 60439898011)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Method: **Pace ENV-SOP-BTRO-0042**
Description: BR AM23G Low Level VFA
Client: Ramboll_AR
Date: November 18, 2023

Analyte Comments:

QC Batch: 304657

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- TMW-36B-202310 (Lab ID: 60439898012)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Ramboll_AR
Date: November 18, 2023

General Information:
2 samples were analyzed for EPA 6010 by Pace Analytical Services Kansas City. 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.

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.

QC Batch: 870673

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60439889002

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

- MSD (Lab ID: 3448396)
  - Iron

Additional Comments:

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Ramboll_AR
Date: November 18, 2023

General Information:
12 samples were analyzed for EPA 5030B/8260 by Pace Analytical Services Kansas City. 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: 869971

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60439898001,60439898003

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

- MS (Lab ID: 3445026)
  - Styrene
- MSD (Lab ID: 3445027)
  - Styrene

Additional Comments:

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Ramboll_AR
Date: November 18, 2023

General Information:
2 samples were analyzed for EPA 300.0 by Pace Analytical Services Kansas City. 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.

Method Blank:
All analytes were below the report limit in the method blank, 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: 870557

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60440072001,60440458001

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

- MS (Lab ID: 3447678)
  - Chloride
- MS (Lab ID: 3447682)
  - Chloride
  - Sulfate

R1: RPD value was outside control limits.

- MSD (Lab ID: 3447683)
  - Chloride
  - Sulfate

Additional Comments:

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Ramboll_AR
Date: November 18, 2023

General Information:
2 samples were analyzed for EPA 353.2 by Pace Analytical Services Kansas City. 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.

Method Blank:
All analytes were below the report limit in the method blank, 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.: 60439898

Method: **SM 5310C**
Description: 5310C TOC
Client: Ramboll_AR
Date: November 18, 2023

General Information:
2 samples were analyzed for SM 5310C by Pace Analytical Services Kansas City. 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.

Method Blank:
All analytes were below the report limit in the method blank, 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.: 60439898

Method: **SM 5310C**
Description: 5310C Diss. Organic Carbon LF
Client: Ramboll_AR
Date: November 18, 2023

General Information:
2 samples were analyzed for SM 5310C by Pace Analytical Services Kansas City. 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.

H1: Analysis conducted outside the EPA method holding time.
- TMW-36-202310 (Lab ID: 60439898011)
- TMW-36B-202310 (Lab ID: 60439898012)

Method Blank:
All analytes were below the report limit in the method blank, 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:

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.: 60439898

Sample: MW-68-202310 **Lab ID: 60439898001** Collected: 10/16/23 15:39 Received: 10/17/23 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 09:07	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 09:07	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 09:07	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 09:07	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 09:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 09:07	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 09:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 09:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 09:07	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 09:07	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 09:07	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 09:07	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 09:07	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 09:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 09:07	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 09:07	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 09:07	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 09:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 09:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 09:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 09:07	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 09:07	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 09:07	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 09:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 09:07	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 09:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 09:07	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 09:07	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 09:07	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 09:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 09:07	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 09:07	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 09:07	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 09:07	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/20/23 09:07	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/20/23 09:07	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		10/20/23 09:07	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 09:07		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Sample: MW-39R-202310 **Lab ID: 60439898002** Collected: 10/16/23 16:10 Received: 10/17/23 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 09:21	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 09:21	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 09:21	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 09:21	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 09:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 09:21	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 09:21	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 09:21	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 09:21	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 09:21	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 09:21	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 09:21	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 09:21	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 09:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 09:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 09:21	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 09:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 09:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 09:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 09:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 09:21	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 09:21	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 09:21	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 09:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 09:21	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 09:21	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 09:21	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 09:21	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 09:21	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 09:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 09:21	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 09:21	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 09:21	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 09:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/23 09:21	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/20/23 09:21	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/20/23 09:21	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 09:21		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Sample: MW-29-202310 **Lab ID: 60439898003** Collected: 10/16/23 16:15 Received: 10/17/23 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 09:34	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 09:34	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 09:34	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 09:34	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 09:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 09:34	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 09:34	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 09:34	56-23-5	
Chlorobenzene	**5.2**	ug/L	1.0	0.089	1		10/20/23 09:34	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 09:34	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 09:34	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 09:34	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 09:34	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 09:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 09:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 09:34	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 09:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 09:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 09:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 09:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 09:34	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 09:34	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 09:34	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 09:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 09:34	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 09:34	100-42-5	M1
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 09:34	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 09:34	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 09:34	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 09:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 09:34	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 09:34	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 09:34	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 09:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/23 09:34	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/20/23 09:34	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/20/23 09:34	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 09:34		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Sample: MW-62R-202310 **Lab ID: 60439898004** Collected: 10/16/23 16:20 Received: 10/17/23 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 09:48	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 09:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 09:48	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 09:48	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 09:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 09:48	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 09:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 09:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 09:48	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 09:48	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 09:48	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 09:48	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 09:48	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 09:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 09:48	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 09:48	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 09:48	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 09:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 09:48	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 09:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 09:48	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 09:48	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 09:48	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 09:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 09:48	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 09:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 09:48	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 09:48	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 09:48	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 09:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 09:48	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 09:48	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 09:48	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 09:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/20/23 09:48	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/20/23 09:48	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/20/23 09:48	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 09:48		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Sample: TMW-29-202310 **Lab ID: 60439898005** Collected: 10/16/23 16:35 Received: 10/17/23 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 10:02	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 10:02	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 10:02	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 10:02	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 10:02	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 10:02	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 10:02	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 10:02	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 10:02	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 10:02	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 10:02	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 10:02	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 10:02	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 10:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 10:02	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 10:02	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 10:02	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 10:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 10:02	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 10:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 10:02	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 10:02	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 10:02	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 10:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 10:02	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 10:02	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 10:02	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 10:02	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 10:02	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 10:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 10:02	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 10:02	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 10:02	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 10:02	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/20/23 10:02	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/20/23 10:02	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		10/20/23 10:02	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 10:02		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Sample: MW-191-202310 **Lab ID: 60439898006** Collected: 10/16/23 17:04 Received: 10/17/23 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 10:15	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 10:15	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 10:15	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 10:15	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 10:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 10:15	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 10:15	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 10:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 10:15	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 10:15	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 10:15	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 10:15	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 10:15	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 10:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 10:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 10:15	75-35-4	
cis-1,2-Dichloroethene	**0.24J**	ug/L	1.0	0.13	1		10/20/23 10:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 10:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 10:15	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 10:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 10:15	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 10:15	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 10:15	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 10:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 10:15	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 10:15	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 10:15	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 10:15	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 10:15	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 10:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 10:15	79-00-5	
Trichloroethene	**10.5**	ug/L	1.0	0.21	1		10/20/23 10:15	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 10:15	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 10:15	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/20/23 10:15	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/20/23 10:15	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/20/23 10:15	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 10:15		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Sample: MW-96-202310 **Lab ID: 60439898007** Collected: 10/16/23 17:00 Received: 10/17/23 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 10:29	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 10:29	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 10:29	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 10:29	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 10:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 10:29	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 10:29	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 10:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 10:29	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 10:29	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 10:29	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 10:29	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 10:29	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 10:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 10:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 10:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 10:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 10:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 10:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 10:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 10:29	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 10:29	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 10:29	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 10:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 10:29	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 10:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 10:29	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 10:29	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 10:29	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 10:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 10:29	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 10:29	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 10:29	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 10:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	95	%	80-120		1		10/20/23 10:29	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/20/23 10:29	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		10/20/23 10:29	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 10:29		

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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Sample: DUP-10-202310 **Lab ID: 60439898008** Collected: 10/16/23 17:00 Received: 10/17/23 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 10:42	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 10:42	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 10:42	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 10:42	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 10:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 10:42	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 10:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 10:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 10:42	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 10:42	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 10:42	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 10:42	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 10:42	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 10:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 10:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 10:42	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 10:42	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 10:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 10:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 10:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 10:42	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 10:42	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 10:42	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 10:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 10:42	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 10:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 10:42	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 10:42	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 10:42	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 10:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 10:42	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 10:42	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 10:42	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 10:42	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/20/23 10:42	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/20/23 10:42	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/20/23 10:42	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 10:42		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Sample: TB-01-202310 **Lab ID: 60439898009** Collected: 10/16/23 07:00 Received: 10/17/23 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 08:40	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 08:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 08:40	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 08:40	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 08:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 08:40	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 08:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 08:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 08:40	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 08:40	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 08:40	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 08:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 08:40	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 08:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 08:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 08:40	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 08:40	156-59-2	
trans-1,2-Dichloroethene	**0.48J**	ug/L	1.0	0.10	1		10/20/23 08:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 08:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 08:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 08:40	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 08:40	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 08:40	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 08:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 08:40	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 08:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 08:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 08:40	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 08:40	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 08:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 08:40	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 08:40	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 08:40	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 08:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/20/23 08:40	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/20/23 08:40	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/20/23 08:40	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 08:40		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Sample: EB-01-202310 **Lab ID: 60439898010** Collected: 10/16/23 07:50 Received: 10/17/23 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 08:54	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 08:54	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 08:54	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 08:54	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 08:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 08:54	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 08:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 08:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 08:54	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 08:54	75-00-3	
Chloroform	**0.39J**	ug/L	1.0	0.22	1		10/20/23 08:54	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 08:54	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 08:54	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 08:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 08:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 08:54	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 08:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 08:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 08:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 08:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 08:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 08:54	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 08:54	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 08:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 08:54	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 08:54	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 08:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 08:54	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 08:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 08:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 08:54	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 08:54	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 08:54	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 08:54	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/23 08:54	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/20/23 08:54	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/20/23 08:54	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 08:54		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Sample: TMW-36-202310 **Lab ID: 60439898011** Collected: 10/16/23 15:14 Received: 10/17/23 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175								
	Pace Analytical Services - Baton Rouge								
Ethane	**1.9J**	ug/L	5.0	0.90	1		10/26/23 18:27	74-84-0	B
Ethene	**1.1J**	ug/L	5.0	0.79	1		10/26/23 18:27	74-85-1	B
Methane	**4130**	ug/L	10.0	3.8	1		10/26/23 18:27	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	105	%.	70-130		1		10/26/23 18:27		
BR AM23G Low Level VFA	Analytical Method: Pace ENV-SOP-BTRO-0042								
	Pace Analytical Services - Baton Rouge								
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/23/23 15:30	109-52-4	N2
Acetic Acid	ND	mg/L	5.0	1.2	10		10/23/23 15:30	64-19-7	
Butyric Acid	ND	mg/L	5.0	0.58	10		10/23/23 15:30	107-92-6	
Formic acid	ND	mg/L	5.0	0.55	10		10/23/23 15:30	64-18-6	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/23/23 15:30	142-62-1	L2,N2
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/23/23 15:30	646-07-1	L2,N2
Lactic Acid	**0.65J**	mg/L	5.0	0.53	10		10/23/23 15:30	50-21-5	D3
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/23/23 15:30	503-74-2	N2
Propionic Acid	ND	mg/L	5.0	0.53	10		10/23/23 15:30	79-09-4	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/23/23 15:30	127-17-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Pace Analytical Services - Kansas City								
Iron	**5910**	ug/L	50.0	9.1	1	10/25/23 16:35	10/27/23 10:22	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 10:56	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 10:56	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 10:56	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 10:56	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 10:56	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 10:56	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 10:56	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 10:56	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 10:56	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 10:56	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 10:56	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 10:56	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 10:56	124-48-1	
1,1-Dichloroethane	**0.38J**	ug/L	1.0	0.12	1		10/20/23 10:56	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 10:56	107-06-2	
1,1-Dichloroethene	**0.75J**	ug/L	1.0	0.22	1		10/20/23 10:56	75-35-4	
cis-1,2-Dichloroethene	**60.5**	ug/L	1.0	0.13	1		10/20/23 10:56	156-59-2	
trans-1,2-Dichloroethene	**0.16J**	ug/L	1.0	0.10	1		10/20/23 10:56	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 10:56	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 10:56	10061-01-5	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Sample: TMW-36-202310 **Lab ID: 60439898011** Collected: 10/16/23 15:14 Received: 10/17/23 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 10:56	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 10:56	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 10:56	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 10:56	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 10:56	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 10:56	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 10:56	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 10:56	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 10:56	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 10:56	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 10:56	79-00-5	
Trichloroethene	**103**	ug/L	1.0	0.21	1		10/20/23 10:56	79-01-6	
Vinyl chloride	**0.31J**	ug/L	1.0	0.17	1		10/20/23 10:56	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 10:56	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/20/23 10:56	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/20/23 10:56	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/20/23 10:56	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 10:56		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**164**	mg/L	50.0	26.4	50		10/25/23 21:40	16887-00-6	
Sulfate	**13.1**	mg/L	1.0	0.55	1		10/26/23 11:03	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**2.1**	mg/L	0.10	0.069	1		10/17/23 15:13		
Nitrogen, Nitrate	**2.1**	mg/L	0.10	0.069	1		10/17/23 15:13	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/17/23 15:13	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	**1.5**	mg/L	1.0	0.54	1		11/07/23 15:27	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**0.92J**	mg/L	1.0	0.54	1		11/17/23 14:34		H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Sample: TMW-36B-202310 **Lab ID: 60439898012** Collected: 10/16/23 16:48 Received: 10/17/23 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175								
	Pace Analytical Services - Baton Rouge								
Ethane	ND	ug/L	5.0	0.90	1		10/26/23 18:43	74-84-0	
Ethene	**1.2J**	ug/L	5.0	0.79	1		10/26/23 18:43	74-85-1	B
Methane	**251**	ug/L	10.0	3.8	1		10/26/23 18:43	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	107	%.	70-130		1		10/26/23 18:43		
BR AM23G Low Level VFA	Analytical Method: Pace ENV-SOP-BTRO-0042								
	Pace Analytical Services - Baton Rouge								
Pentanoic Acid	ND	mg/L	10.0	1.1	20		10/23/23 15:55	109-52-4	N2
Acetic Acid	ND	mg/L	10.0	2.5	20		10/23/23 15:55	64-19-7	
Butyric Acid	ND	mg/L	10.0	1.2	20		10/23/23 15:55	107-92-6	
Formic acid	ND	mg/L	10.0	1.1	20		10/23/23 15:55	64-18-6	
Hexanoic Acid	ND	mg/L	10.0	1.2	20		10/23/23 15:55	142-62-1	L2,N2
i-Hexanoic Acid	ND	mg/L	10.0	1.1	20		10/23/23 15:55	646-07-1	L2,N2
Lactic Acid	ND	mg/L	10.0	1.1	20		10/23/23 15:55	50-21-5	D3
i-Pentanoic Acid	ND	mg/L	10.0	1.2	20		10/23/23 15:55	503-74-2	N2
Propionic Acid	ND	mg/L	10.0	1.1	20		10/23/23 15:55	79-09-4	
Pyruvic Acid	ND	mg/L	10.0	1.2	20		10/23/23 15:55	127-17-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Pace Analytical Services - Kansas City								
Iron	**1070**	ug/L	50.0	9.1	1	10/25/23 16:35	10/27/23 10:30	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 11:09	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 11:09	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 11:09	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 11:09	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 11:09	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 11:09	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 11:09	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 11:09	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 11:09	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 11:09	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 11:09	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 11:09	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 11:09	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 11:09	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 11:09	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 11:09	75-35-4	
cis-1,2-Dichloroethene	**0.19J**	ug/L	1.0	0.13	1		10/20/23 11:09	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 11:09	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 11:09	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 11:09	10061-01-5	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

Sample: TMW-36B-202310 **Lab ID: 60439898012** Collected: 10/16/23 16:48 Received: 10/17/23 01:30 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 11:09	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 11:09	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 11:09	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 11:09	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 11:09	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 11:09	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 11:09	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 11:09	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 11:09	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 11:09	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 11:09	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 11:09	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 11:09	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 11:09	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/23 11:09	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/20/23 11:09	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		10/20/23 11:09	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 11:09		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**516**	mg/L	50.0	26.4	50		10/25/23 22:07	16887-00-6	
Sulfate	**23.2**	mg/L	5.0	2.8	5		10/26/23 11:16	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**1.3**	mg/L	0.10	0.069	1		10/17/23 15:13		
Nitrogen, Nitrate	**1.3**	mg/L	0.10	0.069	1		10/17/23 15:13	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/17/23 15:13	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	ND	mg/L	1.0	0.54	1		11/07/23 15:43	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	ND	mg/L	1.0	0.54	1		11/17/23 15:03		H1

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

QC Batch: 305383
QC Batch Method: RSK175
Analysis Method: RSK175
Analysis Description: BR RSK175W Headspace
Laboratory: Pace Analytical Services - Baton Rouge
Associated Lab Samples: 60439898011, 60439898012

METHOD BLANK: 1461779 Matrix: Water
Associated Lab Samples: 60439898011, 60439898012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ethane	ug/L	0.97J	5.0	0.90	10/26/23 17:23	
Ethene	ug/L	0.86J	5.0	0.79	10/26/23 17:23	
Methane	ug/L	4.7J	10.0	3.8	10/26/23 17:23	
Methyl-tert-butyl-ether-d3 (S)	%.	98	70-130		10/26/23 17:23	

LABORATORY CONTROL SAMPLE: 1461780

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ethane	ug/L	243	247	102	70-130	
Ethene	ug/L	296	294	99	70-130	
Methane	ug/L	945	892	94	70-130	
Methyl-tert-butyl-ether-d3 (S)	%.			94	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1461781 1461782

Parameter	Units	20293414001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ethane	ug/L	5.0U	243	243	226	223	93	92	70-130	1	20	
Ethene	ug/L	5.0U	296	296	270	261	91	88	70-130	4	20	
Methane	ug/L	412	945	945	1340	1320	98	96	70-130	2	20	
Methyl-tert-butyl-ether-d3 (S)	%.						86	104	70-130			

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

QC Batch: 304657
QC Batch Method: Pace ENV-SOP-BTRO-0042
Analysis Method: Pace ENV-SOP-BTRO-0042
Analysis Description: BR AM23G Low Level VFA
Laboratory: Pace Analytical Services - Baton Rouge
Associated Lab Samples: 60439898011, 60439898012

METHOD BLANK: 1458489 Matrix: Water
Associated Lab Samples: 60439898011, 60439898012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetic Acid	mg/L	ND	0.50	0.12	10/23/23 12:13	
Butyric Acid	mg/L	ND	0.50	0.058	10/23/23 12:13	
Formic acid	mg/L	ND	0.50	0.055	10/23/23 12:13	
Hexanoic Acid	mg/L	ND	0.50	0.058	10/23/23 12:13	N2
i-Hexanoic Acid	mg/L	ND	0.50	0.056	10/23/23 12:13	N2
i-Pentanoic Acid	mg/L	ND	0.50	0.061	10/23/23 12:13	N2
Lactic Acid	mg/L	ND	0.50	0.053	10/23/23 12:13	
Pentanoic Acid	mg/L	ND	0.50	0.056	10/23/23 12:13	N2
Propionic Acid	mg/L	ND	0.50	0.053	10/23/23 12:13	
Pyruvic Acid	mg/L	ND	0.50	0.060	10/23/23 12:13	

LABORATORY CONTROL SAMPLE: 1458490

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acetic Acid	mg/L	2	2.0	102	70-130	
Butyric Acid	mg/L	2	1.8	88	70-130	
Formic acid	mg/L	2	1.9	97	70-130	
Hexanoic Acid	mg/L	2	1.0	50	70-130	L2,N2
i-Hexanoic Acid	mg/L	2	1.4	69	70-130	L2,N2
i-Pentanoic Acid	mg/L	2	1.6	81	70-130	N2
Lactic Acid	mg/L	2	2.0	101	70-130	
Pentanoic Acid	mg/L	2	1.4	71	70-130	N2
Propionic Acid	mg/L	2	1.9	97	70-130	
Pyruvic Acid	mg/L	2	1.9	95	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1458667 1458668

Parameter	Units	60440028030 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acetic Acid	mg/L	ND	20	20	20.2	20.1	99	99	70-130	0	20	
Butyric Acid	mg/L	ND	20	20	17.1	17.1	85	85	70-130	0	20	
Formic acid	mg/L	ND	20	20	19.0	18.9	94	94	70-130	0	20	
Hexanoic Acid	mg/L	ND	20	20	9.6	9.7	48	48	70-130	1	20	M0,N2
i-Hexanoic Acid	mg/L	ND	20	20	13.2	13.2	66	66	70-130	0	20	M0,N2
i-Pentanoic Acid	mg/L	ND	20	20	15.5	16.0	77	80	70-130	3	20	N2
Lactic Acid	mg/L	6.2	20	20	25.3	25.2	96	95	70-130	1	20	
Pentanoic Acid	mg/L	ND	20	20	13.6	13.5	68	68	70-130	0	20	M1,N2

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1458667 1458668

Parameter	Units	60440028030 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Propionic Acid	mg/L	ND	20	20	18.9	18.9	94	94	70-130	0	20	
Pyruvic Acid	mg/L	ND	20	20	18.6	18.2	93	91	70-130	2	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

QC Batch: 870673
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60439898011, 60439898012

METHOD BLANK: 3448393 Matrix: Water
Associated Lab Samples: 60439898011, 60439898012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	9.1	10/27/23 10:05	

LABORATORY CONTROL SAMPLE: 3448394

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

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3448395 3448396

Parameter	Units	60439889002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	1.0 mg/L	10000	10000	12700	14000	117	130	75-125	9	20	M1

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

QC Batch: 869971
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60439898001, 60439898002, 60439898003, 60439898004, 60439898005, 60439898006, 60439898007, 60439898008, 60439898009, 60439898010, 60439898011, 60439898012

METHOD BLANK: 3445022
Matrix: Water
Associated Lab Samples: 60439898001, 60439898002, 60439898003, 60439898004, 60439898005, 60439898006, 60439898007, 60439898008, 60439898009, 60439898010, 60439898011, 60439898012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/20/23 08:27	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/20/23 08:27	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/20/23 08:27	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/20/23 08:27	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/20/23 08:27	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/20/23 08:27	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/20/23 08:27	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/20/23 08:27	
2-Hexanone	ug/L	ND	10.0	1.1	10/20/23 08:27	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/20/23 08:27	
Acetone	ug/L	ND	10.0	2.5	10/20/23 08:27	
Benzene	ug/L	ND	1.0	0.14	10/20/23 08:27	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/20/23 08:27	
Bromoform	ug/L	ND	1.0	0.68	10/20/23 08:27	
Bromomethane	ug/L	ND	5.0	0.46	10/20/23 08:27	
Carbon disulfide	ug/L	ND	5.0	0.98	10/20/23 08:27	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/20/23 08:27	
Chlorobenzene	ug/L	ND	1.0	0.089	10/20/23 08:27	
Chloroethane	ug/L	ND	1.0	0.37	10/20/23 08:27	
Chloroform	ug/L	ND	1.0	0.22	10/20/23 08:27	
Chloromethane	ug/L	ND	1.0	0.28	10/20/23 08:27	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/20/23 08:27	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/20/23 08:27	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/20/23 08:27	
Ethylbenzene	ug/L	ND	1.0	0.12	10/20/23 08:27	
Methylene Chloride	ug/L	ND	1.0	0.39	10/20/23 08:27	
Styrene	ug/L	ND	1.0	0.12	10/20/23 08:27	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/20/23 08:27	
Toluene	ug/L	ND	1.0	0.25	10/20/23 08:27	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/20/23 08:27	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/20/23 08:27	
Trichloroethene	ug/L	ND	1.0	0.21	10/20/23 08:27	
Vinyl chloride	ug/L	ND	1.0	0.17	10/20/23 08:27	
Xylene (Total)	ug/L	ND	3.0	0.28	10/20/23 08:27	
1,2-Dichlorobenzene-d4 (S)	%	103	80-120		10/20/23 08:27	
4-Bromofluorobenzene (S)	%	100	80-120		10/20/23 08:27	
Toluene-d8 (S)	%	100	80-120		10/20/23 08:27	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

LABORATORY CONTROL SAMPLE: 3445023

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.6	98	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	17.5	87	70-130	
1,1,2-Trichloroethane	ug/L	20	18.8	94	75-125	
1,1-Dichloroethane	ug/L	20	18.6	93	75-120	
1,1-Dichloroethene	ug/L	20	18.5	93	75-120	
1,2-Dichloroethane	ug/L	20	17.1	86	80-120	
1,2-Dichloropropane	ug/L	20	17.7	88	80-120	
2-Butanone (MEK)	ug/L	100	76.1	76	60-140	
2-Hexanone	ug/L	100	86.7	87	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	79.5	80	70-135	
Acetone	ug/L	100	76.6	77	25-185	
Benzene	ug/L	20	18.9	95	80-120	
Bromodichloromethane	ug/L	20	19.0	95	80-120	
Bromoform	ug/L	20	19.9	100	70-135	
Bromomethane	ug/L	20	14.8	74	50-145	
Carbon disulfide	ug/L	20	18.9	95	70-130	
Carbon tetrachloride	ug/L	20	19.2	96	80-130	
Chlorobenzene	ug/L	20	19.5	97	80-120	
Chloroethane	ug/L	20	20.1	100	60-135	
Chloroform	ug/L	20	17.3	87	75-125	
Chloromethane	ug/L	20	17.2	86	60-130	
cis-1,2-Dichloroethene	ug/L	20	18.4	92	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.5	93	75-125	
Dibromochloromethane	ug/L	20	19.7	99	80-120	
Ethylbenzene	ug/L	20	20.2	101	80-120	
Methylene Chloride	ug/L	20	20.2	101	70-130	
Styrene	ug/L	20	19.9	100	80-155	
Tetrachloroethene	ug/L	20	21.1	105	80-125	
Toluene	ug/L	20	19.6	98	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.3	91	75-125	
trans-1,3-Dichloropropene	ug/L	20	17.9	89	70-125	
Trichloroethene	ug/L	20	18.7	93	80-125	
Vinyl chloride	ug/L	20	19.3	97	65-130	
Xylene (Total)	ug/L	60	59.7	100	80-120	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3445024 3445025

Parameter	Units	60439898001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	19.5	19.1	97	96	75-125	2	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	17.3	16.4	86	82	80-120	5	15	
1,1,2-Trichloroethane	ug/L	ND	20	20	17.4	16.6	87	83	80-120	4	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3445024 3445025

Parameter	Units	60439898001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	ND	20	20	18.2	18.1	91	90	75-120	1	15	
1,1-Dichloroethene	ug/L	ND	20	20	19.0	18.8	95	94	75-120	1	25	
1,2-Dichloroethane	ug/L	ND	20	20	16.8	16.8	84	84	80-120	0	25	
1,2-Dichloropropane	ug/L	ND	20	20	17.4	17.0	87	85	80-120	2	20	
2-Butanone (MEK)	ug/L	ND	100	100	53.8	53.7	54	54	50-155	0	25	
2-Hexanone	ug/L	ND	100	100	62.6	62.4	63	62	55-145	0	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	76.5	73.7	76	74	70-130	4	20	
Acetone	ug/L	ND	100	100	39.6	37.7	40	38	35-160	5	25	
Benzene	ug/L	ND	20	20	18.7	18.7	93	93	80-120	0	25	
Bromodichloromethane	ug/L	ND	20	20	18.4	18.1	92	90	80-120	2	15	
Bromoform	ug/L	ND	20	20	18.0	18.0	90	90	60-130	0	20	
Bromomethane	ug/L	ND	20	20	14.0	15.6	70	78	50-140	11	45	
Carbon disulfide	ug/L	ND	20	20	19.4	18.6	97	93	75-125	4	25	
Carbon tetrachloride	ug/L	ND	20	20	19.2	19.4	96	97	70-130	1	20	
Chlorobenzene	ug/L	ND	20	20	18.5	18.2	93	91	80-120	2	20	
Chloroethane	ug/L	ND	20	20	20.3	19.2	101	96	70-130	5	20	
Chloroform	ug/L	ND	20	20	17.4	17.1	87	85	75-120	2	20	
Chloromethane	ug/L	ND	20	20	16.2	16.8	81	84	45-145	3	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	18.5	17.8	93	89	80-120	4	20	
cis-1,3-Dichloropropene	ug/L	ND	20	20	17.5	17.9	87	89	75-125	2	20	
Dibromochloromethane	ug/L	ND	20	20	17.8	17.4	89	87	75-125	2	20	
Ethylbenzene	ug/L	ND	20	20	19.0	19.1	95	95	80-120	1	25	
Methylene Chloride	ug/L	ND	20	20	19.6	18.7	98	94	70-140	5	25	
Styrene	ug/L	ND	20	20	18.4	18.2	92	91	80-120	1	30	
Tetrachloroethene	ug/L	ND	20	20	19.1	19.0	95	95	80-125	0	25	
Toluene	ug/L	ND	20	20	19.1	18.8	95	94	80-120	2	25	
trans-1,2-Dichloroethene	ug/L	ND	20	20	18.7	18.3	93	92	80-120	2	20	
trans-1,3-Dichloropropene	ug/L	ND	20	20	16.0	15.6	80	78	75-125	2	15	
Trichloroethene	ug/L	ND	20	20	18.7	18.2	94	91	80-125	3	20	
Vinyl chloride	ug/L	ND	20	20	19.0	18.6	95	93	65-140	2	25	
Xylene (Total)	ug/L	ND	60	60	56.3	55.8	94	93	80-120	1	30	
1,2-Dichlorobenzene-d4 (S)	%						100	100	80-120			
4-Bromofluorobenzene (S)	%						98	98	80-120			
Toluene-d8 (S)	%						96	101	80-120			
Preservation pH		1.0			1.0	1.0				0		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3445026 3445027

Parameter	Units	60439898003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	19.0	19.5	95	97	75-125	3	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	17.4	17.6	87	88	80-120	1	15	
1,1,2-Trichloroethane	ug/L	ND	20	20	17.3	18.6	87	93	80-120	7	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3445026 3445027

Parameter	Units	60439898003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	ND	20	20	18.1	18.5	90	93	75-120	2	15	
1,1-Dichloroethene	ug/L	ND	20	20	18.4	19.3	92	97	75-120	5	25	
1,2-Dichloroethane	ug/L	ND	20	20	17.1	17.9	85	89	80-120	5	25	
1,2-Dichloropropane	ug/L	ND	20	20	17.1	17.6	86	88	80-120	3	20	
2-Butanone (MEK)	ug/L	ND	100	100	54.9	54.6	55	55	50-155	1	25	
2-Hexanone	ug/L	ND	100	100	63.6	67.3	64	67	55-145	6	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	78.6	85.4	79	85	70-130	8	20	
Acetone	ug/L	ND	100	100	40.7	41.2	41	41	35-160	1	25	
Benzene	ug/L	ND	20	20	18.8	19.5	94	97	80-120	4	25	
Bromodichloromethane	ug/L	ND	20	20	18.4	19.3	92	97	80-120	5	15	
Bromoform	ug/L	ND	20	20	19.3	19.7	96	98	60-130	2	20	
Bromomethane	ug/L	ND	20	20	14.9	14.9	75	75	50-140	0	45	
Carbon disulfide	ug/L	ND	20	20	18.7	19.5	93	97	75-125	4	25	
Carbon tetrachloride	ug/L	ND	20	20	19.6	19.9	98	99	70-130	1	20	
Chlorobenzene	ug/L	5.2	20	20	23.2	23.7	90	93	80-120	2	20	
Chloroethane	ug/L	ND	20	20	19.4	19.7	97	98	70-130	1	20	
Chloroform	ug/L	ND	20	20	17.1	17.6	85	87	75-120	3	20	
Chloromethane	ug/L	ND	20	20	16.8	17.0	84	85	45-145	2	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	17.3	18.1	86	91	80-120	5	20	
cis-1,3-Dichloropropene	ug/L	ND	20	20	17.5	18.7	87	94	75-125	7	20	
Dibromochloromethane	ug/L	ND	20	20	18.2	19.0	91	95	75-125	4	20	
Ethylbenzene	ug/L	ND	20	20	19.4	19.9	97	99	80-120	3	25	
Methylene Chloride	ug/L	ND	20	20	19.8	20.8	99	104	70-140	5	25	
Styrene	ug/L	ND	20	20	7.8	6.0	39	30	80-120	26	30	M1
Tetrachloroethene	ug/L	ND	20	20	19.6	20.0	98	100	80-125	2	25	
Toluene	ug/L	ND	20	20	18.8	19.4	94	97	80-120	3	25	
trans-1,2-Dichloroethene	ug/L	ND	20	20	17.3	18.0	87	90	80-120	4	20	
trans-1,3-Dichloropropene	ug/L	ND	20	20	16.3	17.4	82	87	75-125	7	15	
Trichloroethene	ug/L	ND	20	20	18.0	19.1	90	95	80-125	6	20	
Vinyl chloride	ug/L	ND	20	20	18.6	19.3	93	96	65-140	3	25	
Xylene (Total)	ug/L	ND	60	60	55.3	56.7	92	95	80-120	3	30	
1,2-Dichlorobenzene-d4 (S)	%						101	100	80-120			
4-Bromofluorobenzene (S)	%						98	98	80-120			
Toluene-d8 (S)	%						99	100	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

QC Batch: 870557
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60439898011, 60439898012

METHOD BLANK: 3447674 Matrix: Water
Associated Lab Samples: 60439898011, 60439898012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.53	10/25/23 15:13	
Sulfate	mg/L	ND	1.0	0.55	10/25/23 15:13	

METHOD BLANK: 3450958 Matrix: Water
Associated Lab Samples: 60439898011, 60439898012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.53	10/26/23 09:12	
Sulfate	mg/L	ND	1.0	0.55	10/26/23 09:12	

LABORATORY CONTROL SAMPLE: 3447675

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	95	90-110	
Sulfate	mg/L	5	5.1	101	90-110	

LABORATORY CONTROL SAMPLE: 3450959

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	95	90-110	
Sulfate	mg/L	5	4.9	98	90-110	

MATRIX SPIKE SAMPLE: 3447678

Parameter	Units	60440072001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	99.5	5	101	39	80-120	M1
Sulfate	mg/L	1.8	5	6.7	96	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3447682 3447683

Parameter	Units	60440458001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	9.2J	50	50	72.6	55.6	127	93	80-120	27	15	M1,R1
Sulfate	mg/L	48.5	50	50	124	99.3	151	102	80-120	22	15	M1,R1

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

QC Batch: 869460
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60439898011, 60439898012

METHOD BLANK: 3443125 Matrix: Water
Associated Lab Samples: 60439898011, 60439898012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	0.069	10/17/23 15:00	
Nitrogen, Nitrite	mg/L	ND	0.10	0.069	10/17/23 15:00	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	0.069	10/17/23 15:00	

LABORATORY CONTROL SAMPLE: 3443126

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1	0.93	93	70-130	
Nitrogen, Nitrite	mg/L	1	1.0	100	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	1.9	97	90-110	

MATRIX SPIKE SAMPLE: 3443127

Parameter	Units	60439907001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1.0	1	1.9	90	70-130	
Nitrogen, Nitrite	mg/L	<0.069	1	1.0	105	90-110	H1
Nitrogen, NO2 plus NO3	mg/L	1.0	2	3.0	97	90-110	H1

SAMPLE DUPLICATE: 3443128

Parameter	Units	60439907003 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	<0.069	ND		20	
Nitrogen, Nitrite	mg/L	<0.069	ND		20	H1
Nitrogen, NO2 plus NO3	mg/L	<0.069	ND		20	H1

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

QC Batch: 870575
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60439898011, 60439898012

METHOD BLANK: 3447767 Matrix: Water
Associated Lab Samples: 60439898011, 60439898012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	0.54	11/07/23 11:37	

LABORATORY CONTROL SAMPLE: 3447768

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	4.7	94	80-120	

MATRIX SPIKE SAMPLE: 3447769

Parameter	Units	60440159001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	ND	5	5.6	109	80-120	

SAMPLE DUPLICATE: 3447770

Parameter	Units	60439770001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	3.6	3.6	1	25	

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

QC Batch: 873477
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Dissolved Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60439898011, 60439898012

METHOD BLANK: 3459571 Matrix: Water
Associated Lab Samples: 60439898011, 60439898012

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dissolved Organic Carbon	mg/L	ND	1.0	0.54	11/17/23 14:06	

LABORATORY CONTROL SAMPLE: 3459572

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	5	5.1	103	80-120	

MATRIX SPIKE SAMPLE: 3459573

Parameter	Units	60439898011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	0.92J	5	5.9	100	80-120	H1

SAMPLE DUPLICATE: 3459574

Parameter	Units	60440028030 Result	Dup Result	RPD	Max RPD	Qualifiers
Dissolved Organic Carbon	mg/L	3.1	3.1	2	25	H1

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60439898

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.

TNTC - Too Numerous To Count

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

ANALYTE QUALIFIERS

B	Analyte was detected in the associated method blank.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
H1	Analysis conducted outside the EPA method holding time.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
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.: 60439898

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60439898011	**TMW-36-202310**	RSK175	305383		
60439898012	**TMW-36B-202310**	RSK175	305383		
60439898011	**TMW-36-202310**	Pace ENV-SOP-BTRO-0042	304657		
60439898012	**TMW-36B-202310**	Pace ENV-SOP-BTRO-0042	304657		
60439898011	**TMW-36-202310**	EPA 3010	870673	EPA 6010	870694
60439898012	**TMW-36B-202310**	EPA 3010	870673	EPA 6010	870694
60439898001	**MW-68-202310**	EPA 5030B/8260	869971		
60439898002	**MW-39R-202310**	EPA 5030B/8260	869971		
60439898003	**MW-29-202310**	EPA 5030B/8260	869971		
60439898004	**MW-62R-202310**	EPA 5030B/8260	869971		
60439898005	**TMW-29-202310**	EPA 5030B/8260	869971		
60439898006	**MW-191-202310**	EPA 5030B/8260	869971		
60439898007	**MW-96-202310**	EPA 5030B/8260	869971		
60439898008	**DUP-10-202310**	EPA 5030B/8260	869971		
60439898009	**TB-01-202310**	EPA 5030B/8260	869971		
60439898010	**EB-01-202310**	EPA 5030B/8260	869971		
60439898011	**TMW-36-202310**	EPA 5030B/8260	869971		
60439898012	**TMW-36B-202310**	EPA 5030B/8260	869971		
60439898011	**TMW-36-202310**	EPA 300.0	870557		
60439898012	**TMW-36B-202310**	EPA 300.0	870557		
60439898011	**TMW-36-202310**	EPA 353.2	869460		
60439898012	**TMW-36B-202310**	EPA 353.2	869460		
60439898011	**TMW-36-202310**	SM 5310C	870575		
60439898012	**TMW-36B-202310**	SM 5310C	870575		
60439898011	**TMW-36-202310**	SM 5310C	873477		
60439898012	**TMW-36B-202310**	SM 5310C	873477		

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WO# : 60439898

60439898

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_Sample Co		
	Revision: 2	Effective Date: 01/12/2022	Issued By: Lenexa

Client Name: Ramboll

Courier: FedEx ☐ UPS ☐ VIA ☑ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

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

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: T298 **Type of Ice:** Wet ☑ Blue None

Cooler Temperature (°C): **As-read** 2.6 **Corr. Factor** -0.3 **Corrected** 2.3

Date and initials of person examining contents: AV 10/17/23

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☑Yes ☐No ☐N/A	NOL NO3
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#: 67181	☑Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☑Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 3

Section A Required Client Information:

Company:	Ramboll
Address:	10851 Mastin Blvd., Ste. 100
	Overland Park, KS 66210
Email To:	JZellmer@ramboll.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STD TAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	VOC ONLY

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-68-202310	WT	G	10-16-23	1539				3									X	X		60439898
2	MW-68-202310 MS	WT	G	10-16-23	1539				3									X	X		
3	MW-68-202310 MSD	WT	G	10-16-23	1539				3									X	X		
4	MW-39R-202310	WT	G	10-16-23	1610				3									X	X		
5	MW-29-202310	WT	G	10-16-23	1615				3									X	X		
6	MW-29-202310 MS	WT	G	10-16-23	1615				3									X	X		
7	MW-29-202310 MSD	WT	G	10-16-23	1615				3									X	X		
8	MW-62R-202310	WT	G	10-16-23	1620				3									X	X		
9	TMW-29-202310	WT	G	10-16-23	1635				3									X	X		
10	MW-191-202310	WT	G	10-16-23	1704				3									X	X		
11	MW-96-202310	WT	G	10-16-23	1700				3									X	X		
12	Dup-10-202310	WT	G	10-16-23	1700				3									X	X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Ramboll	10-16-23	1745		10/17	0130	2-3	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER: [signature]

DATE Signed (MM/DD/YY): 10-16-23

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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

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Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STD TAT

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Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	VOC ONLY

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

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

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: 8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TB-01-202310	WT	G	10-16-23	0700	—			2									X		60439898
2	~~EB-202~~ EB-01-202310	WT	G	10-16-23	1750	—			3									X		
3																				
4																				
5																				
6																				
7																				
8																				
9																				
10																				
11																				
12																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Ramboll	10-16-23	1745		10/17	0730 (N 10/17)	2-3	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-16-23

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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Page: 3 of 3

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Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STD TAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	ISCR

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

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

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	6010 Iron	300.0 Sulfate	300.0 Chloride	353.2 Nitrate+Nitrite, unpres.	5310 TOC	5310 DOC (Lab Filtered)	RSK175 Methane/Ethane/Ethene	AM23G Volatile Fatty Acids			Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TMW-36-202310	WT	G	10-16-23	1514	—			12										X	X	X	X	X	X	X	X	X		60439898
2	TMW-36B-202310	WT	G	10-16-23	1648	—			12										X	X	X	X	X	X	X	X	X		
3																													
4																													
5																													
6																													
7																													
8																													
9																													
10																													
11																													
12																													

Pace Project No./ Lab I.D.: 60439898

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
RSK 175 Methane/Ethane/Ethene & VFAs to Pace Baton Rouge	Ramboll	10-16-23	1745		10/17	0830	2-3	Y	Y	Y

SAMPLER NAME AND SIGNATURE					
PRINT Name of SAMPLER:	Jackie Zellmer				
SIGNATURE of SAMPLER:		DATE Signed (MM/DD/YY):	10-16-23		

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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Client: Ramboll

Profile #: 7444-1

Site:

Notes:

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	WT	9	9																													
2																																
3																																
4	WT		3																													
5	WT		9																													
6																																
7																																
8	WT		3																													
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1C	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2C	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3C	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60439898

2/3

Client: Ram6011

Profile # 7444-1

Site:

Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	WT	2																														
2	↓		3																													
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1C	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2C	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3C	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60439898

DC#_Title: ENV-FRM-LENE-0001_Sample Container Count
Revision: 3 | Effective Date: | Issued by: Lenexa

3/3 VG9H = SS-394Air
OTHR = SS-316GCSV

Client: RAM6011 Profile # 7444-1

Site: Notes 109 8266 on to DG9H. AG2U = 5310 DOC.

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	WT	3	3									1	1								1		1							1		
2	↓	3	3									1	1								1		1							2		
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass				Plastic		Misc.	
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar	BP1C	1L NAOH plastic	I	Wipe/Swab
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar	BP1N	1L HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar	BP1S	1L H2SO4 plastic	ZPLC	Ziploc Bag
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide	BP1U	1L unpreserved plastic	AF	Air Filter
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass	BP1Z	1L NaOH, Zn Acetate	C	Air Cassettes
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass	BP2C	500mL NAOH plastic	R	Terracore Kit
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass	BP2N	500mL HNO3 plastic	U	Summa Can
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass	BP2S	500mL H2SO4 plastic		
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass	BP2U	500mL unpreserved plastic		
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass	BP2Z	500mL NaOH, Zn Acetate	Matrix	
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass	BP3C	250mL NaOH plastic		
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass	BP3F	250mL HNO3 plastic - field filtered	WT	Water
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass	BP3N	250mL HNO3 plastic	SL	Solid
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass	BP3U	250mL unpreserved plastic	NAL	Non-aqueous Liquid
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass	BP3S	250mL H2SO4 plastic	OL	OIL
		AG5U	100mL unpres amber glass	BP3Z	250mL NaOH, Zn Acetate	WP	Wipe
				BP4U	125mL unpreserved plastic	DW	Drinking Water
				BP4N	125mL HNO3 plastic		
				BP4S	125mL H2SO4 plastic		
				WPDU	16oz unpresserved plstic		

Work Order Number: 60439898

Internal Transfer Chain of Custody

WO# : 20293818

20293818

☐ Rush Multiplier_____X

☐ Samples Pre-Logged into eCOC

State Of Origin: AR

Cert. Needed: ☒ Yes

Workorder: 60439898 Workorder Name: WHIRLPOOL FORT SMITH, AR

Owner Received Date: Results Requested By: 10/31/2023

Report To	Subcontract To
Jamie Church Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 314-838-7223	Pace Analytical Baton Rouge 7979 Innovation Park Road Baton Rouge, LA 70809 Phone (225)678-1833

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HCL	Preserved Containers: Other	AM23G Volatile Fatty Acids	RSK 175 Methane/Ethane/Ethene	LAB USE ONLY
1	TMW-36-202310	PS	10/16/2023 15:14	60439898011	Water	3	2	X	X	1
2	TMW-36B-202310	PS	10/16/2023 16:48	60439898012	Water	3	2	X	X	2
3										
4										
5										

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	10.18.23 17CC		
2	Fed Ex	10/18/23 9:48	[signature]	10/18/23 9:48
3				

Comments

Cooler Temperature on Receipt ____ °C	Custody Seal Y or N	Received on Ice Y or N	Samples Intact Y or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document. This chain of custody is considered complete as is since this information is available in the owner laboratory.*

Pace

Sample Condition Upon Rec

WO#: 20293818

Workor

PM: DRM Due Date: 10/30/23

CLIENT: BR-PACE LENX

7979 Innovation Park Dr. Baton Rouge, LA 70806

Cooler Inspected by/date: BRP 10/19/23

Means of receipt: ☐ Pace ☐ Client ☐ UPS ☐ FedEx ☐ Other: _____

☑ Yes	☐ No		Were custody seals present on the cooler?
☑ Yes	☐ No	☐ NA	If custody seals were present, were they intact and unbroken?

Method: ☐ Temperature Blank ☐ Against Bottles IR Gun ID: 613 IR Gun Correction Factor: 0 °C

Cooler #1	Cooler Temp °C: 2.6	(Actual/True)	Samples on ice ☑ Yes ☐ No; pH Strip Lot #
Cooler #2	Cooler Temp °C: _____	(Actual/True)	
Cooler #3	Cooler Temp °C: _____	(Actual/True)	Method of coolant:
Cooler #4	Cooler Temp °C: _____	(Actual/True)	☑ Wet ☐ Ice Packs ☐ Dry Ice ☐ None

Tracking #: 6432 1393 7912

☐ Yes	☑ No	☐ NA	Is a temperature blank present?	
☑ Yes	☐ No	☐ NA	Was a chain of custody (COC) recieved?	
☐ Yes	☑ No	☐ NA	Was the line and profile number listed on the COC?	
☑ Yes	☐ No	☐ NA	Were all coolers received at or below 6.0°C? If no, notify Project Manager notified via email.	
☑ Yes	☐ No		Were proper custody procedures (relinquished/received) followed?	
☑ Yes	☐ No	☐ NA	Is the sampler name and signature on the COC?	
☑ Yes	☐ No		Were sample IDs listed on the COC and all sample containers?	
☑ Yes	☐ No		Was collection date & time listed on the COC and all sample containers?	
☐ Yes	☐ No		Did all container label information (ID, date, time) agree with the COC?	
☑ Yes	☐ No		Were tests to be performed listed on the COC?	
☑ Yes	☐ No		Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?	
☑ Yes	☐ No		Was adequate sample volume available?	
☑ Yes	☐ No		Were all samples received within ½ the holding time or 48 hours, whichever comes first?	
☑ Yes	☐ No		Were all samples containers accounted for? (No missing / excess)	
☑ Yes	☐ No	☐ NA	Were VOA, 8015C (GRO/VPH), and RSK-175 samples free of bubbles > "pea size" (1/4" or 6mm in diameter) in any of the VOA vials?	
☐ Yes	☐ No	☑ NA	Trip blank present?	
☐ Yes	☐ No	☑ NA	Filtered volume received for dissolved tests? *If no, list affected sample(s) in comments below.*	
☐ Yes	☐ No	☑ NA	Were all metals/nutrient samples received at a pH of < 2?	If No, was preservative added? ☐ Yes ☐ No If added, record lots. Dispenser/pipette lot #: _____
☐ Yes	☐ No	☑ NA	Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?	HNO_3_____ H_2SO_4_____ NaOH_____ Date: _____ Time: _____

Comments:

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

December 08, 2023

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 18, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Baton Rouge
- Pace Analytical Services - Kansas City

REV-1, Sample collection date for MW-60R-202310 updated to reflect 10/16/23 per client request.

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

Sincerely,

Jamie Church
jamie.church@pacelabs.com
314-838-7223
Project Manager

Enclosures

cc: Caroline Chavers, Ramboll US Consulting, Inc.
Kristen Drucquer, Ramboll US Consulting, Inc.
Jackie Zellmer, Ramboll

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CERTIFICATIONS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 88-00679
Illinois Certification #: 2000302023-5
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212023-1
Oklahoma Certification #: 2022-057
Florida: Cert E871149 SEKS WET
Texas Certification #: T104704407-22-16
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

Pace Analytical Services Baton Rouge
7979 Innovation Park Drive Ste A, Baton Rouge, LA 70820-7402
Louisiana Dept of Enviromental Quality (NELAC/LELAP): 01979
Florida Dept of Health (NELAC/FELAP): E87854
DoD ELAP (A2LA) #: 6429.01
Alabama DEM #: 41900
Alaska DEC-DW #: LA00024
Alaska DEC CS-LAP #: 21-001
Arkansas DEQ #: 88-0655
California ELAP #: 3063
Georgia DPD #: C050
Hawaii DOH State Laboratories Division
Illinois EPA #: 200048
Kansas DoHE #: E-10354
Kentucky DEP UST Branch #: 123054
Louisiana DOH #: LA036
Minnesota DOH #: 2233799
Mississippi State Dept of Health
Montana Department of Environmental Quality
Nebraska DHHS #: NE-OS-35.21
Nevada DCNR DEP #: LA00024
New York DOH #: 12149
North Carolina DEQ - WW & GW #: 618
North Dakota DEQ #: R195
Ohio EPA #: 87782
Oklahoma Dept of Environmental Quality #: 9403
Oregon ELAP #: 4168
Pennsylvania Dept of Environmental Protection #: 68-05973
South Carolina DHEC #: 73006001
Texas CEQ #: T104704178-23-15
Utah DOH #: LA00024
Virginia DCLS #: 6460215
Washington Dept of Ecology #: C929
Wisconsin DNR #: 399139510

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SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60440028001	**TMW-20-202310**	Water	10/17/23 09:35	10/18/23 05:50
60440028002	**MW-184-202310**	Water	10/16/23 17:46	10/18/23 05:50
60440028003	**DUP-01-202310**	Water	10/16/23 17:46	10/18/23 05:50
60440028004	**MW-26-202310**	Water	10/17/23 09:36	10/18/23 05:50
60440028005	**MW-22-202310**	Water	10/17/23 11:16	10/18/23 05:50
60440028006	**MW-176-202310**	Water	10/17/23 11:19	10/18/23 05:50
60440028007	**MW-196-202310**	Water	10/17/23 11:25	10/18/23 05:50
60440028008	**TMW-35-202310**	Water	10/17/23 12:15	10/18/23 05:50
60440028009	**DUP-11-202310**	Water	10/17/23 12:20	10/18/23 05:50
60440028010	**ITMW-20-202310**	Water	10/17/23 14:00	10/18/23 05:50
60440028011	**DUP-02-202310**	Water	10/17/23 14:00	10/18/23 05:50
60440028012	**MW-195-202310**	Water	10/17/23 13:55	10/18/23 05:50
60440028013	**DUP-05-202310**	Water	10/17/23 13:55	10/18/23 05:50
60440028014	**MW-28-202310**	Water	10/17/23 10:55	10/18/23 05:50
60440028015	**MW-206-202310**	Water	10/17/23 12:50	10/18/23 05:50
60440028016	**MW-97-202310**	Water	10/17/23 13:45	10/18/23 05:50
60440028017	**MW-201-202310**	Water	10/17/23 14:42	10/18/23 05:50
60440028018	**TMW-14-202310**	Water	10/17/23 15:26	10/18/23 05:50
60440028019	**MW-183R-202310**	Water	10/17/23 13:01	10/18/23 05:50
60440028020	**MW-192-202310**	Water	10/17/23 15:30	10/18/23 05:50
60440028021	**MW-40R-202310**	Water	10/17/23 16:03	10/18/23 05:50
60440028022	**MW-200-202310**	Water	10/17/23 16:00	10/18/23 05:50
60440028023	**MW-190-202310**	Water	10/17/23 17:10	10/18/23 05:50
60440028024	**ITMW-2R-202310**	Water	10/17/23 17:22	10/18/23 05:50
60440028025	**TB-02-202310**	Water	10/17/23 07:00	10/18/23 05:50
60440028026	**EB-02-202310**	Water	10/17/23 17:50	10/18/23 05:50
60440028027	**TB-03-202310**	Water	10/17/23 07:05	10/18/23 05:50
60440028028	**MW-203-202310**	Water	10/17/23 17:45	10/18/23 05:50
60440028029	**MW-60R-202310**	Water	10/16/23 18:10	10/18/23 05:50
60440028030	**MW-91-202310**	Water	10/17/23 12:48	10/18/23 05:50
60440028031	**TMW-21-202310**	Water	10/17/23 15:35	10/18/23 05:50
60440028032	**TMW-19-202310**	Water	10/17/23 17:20	10/18/23 05:50
60440028033	**MW-89-202310**	Water	10/17/23 10:18	10/18/23 05:50
60440028034	**MW-50R-202310**	Water	10/17/23 14:28	10/18/23 05:50

REPORT OF LABORATORY ANALYSIS

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60440028001	**TMW-20-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028002	**MW-184-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028003	**DUP-01-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028004	**MW-26-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028005	**MW-22-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028006	**MW-176-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028007	**MW-196-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028008	**TMW-35-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028009	**DUP-11-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028010	**ITMW-20-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028011	**DUP-02-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028012	**MW-195-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028013	**DUP-05-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028014	**MW-28-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028015	**MW-206-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028016	**MW-97-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028017	**MW-201-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028018	**TMW-14-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028019	**MW-183R-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028020	**MW-192-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028021	**MW-40R-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028022	**MW-200-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028023	**MW-190-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028024	**ITMW-2R-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028025	**TB-02-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028026	**EB-02-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028027	**TB-03-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028028	**MW-203-202310**	EPA 5030B/8260	HM1, PGH	38	PASI-K
60440028029	**MW-60R-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440028030	**MW-91-202310**	RSK175	BDP	4	PASI-BR
		Pace ENV-SOP-BTRO-0042	LHM	10	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60440028031	**TMW-21-202310**	RSK175	BDP	4	PASI-BR
		Pace ENV-SOP-BTRO-0042	LHM	10	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K
60440028032	**TMW-19-202310**	RSK175	BDP	4	PASI-BR
		Pace ENV-SOP-BTRO-0042	LHM	10	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K
60440028033	**MW-89-202310**	AM20	LB	1	PASI-BR
		RSK175	BDP	5	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K
60440028034	**MW-50R-202310**	AM20	LB	1	PASI-BR
		RSK175	BDP	5	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K

PASI-BR = Pace Analytical Services - Baton Rouge
PASI-K = Pace Analytical Services - Kansas City

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Lenexa, KS 66219
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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Method: **AM20**
Description: BR Hydrogen by AM20 in Vapor
Client: Ramboll_AR
Date: December 08, 2023

General Information:
2 samples were analyzed for AM20 by Pace Analytical Services Baton Rouge. 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.

Additional Comments:

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Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Method: **RSK175**
Description: BR RSK175 Headspace
Client: Ramboll_AR
Date: December 08, 2023

General Information:
5 samples were analyzed for RSK175 by Pace Analytical Services Baton Rouge. 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.

Additional Comments:

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Method: **Pace ENV-SOP-BTRO-0042**
Description: BR AM23G Low Level VFA
Client: Ramboll_AR
Date: December 08, 2023

General Information:
3 samples were analyzed for Pace ENV-SOP-BTRO-0042 by Pace Analytical Services Baton Rouge. 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.

QC Batch: 304657

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 1458490)
  - Hexanoic Acid
  - i-Hexanoic Acid

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

QC Batch: 304657

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60440028030

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 1458667)
  - Hexanoic Acid
  - i-Hexanoic Acid
- MSD (Lab ID: 1458668)
  - Hexanoic Acid
  - i-Hexanoic Acid

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Method: **Pace ENV-SOP-BTRO-0042**
Description: BR AM23G Low Level VFA
Client: Ramboll_AR
Date: December 08, 2023

QC Batch: 304657

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60440028030

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

- MS (Lab ID: 1458667)
  - Pentanoic Acid
- MSD (Lab ID: 1458668)
  - Pentanoic Acid

Additional Comments:

Analyte Comments:

QC Batch: 304657

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- MW-91-202310 (Lab ID: 60440028030)
  - Lactic Acid
- TMW-19-202310 (Lab ID: 60440028032)
  - Lactic Acid
- TMW-21-202310 (Lab ID: 60440028031)
  - Lactic Acid

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- BLANK (Lab ID: 1458489)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- LCS (Lab ID: 1458490)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- MS (Lab ID: 1458667)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- MSD (Lab ID: 1458668)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- MW-91-202310 (Lab ID: 60440028030)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Method: **Pace ENV-SOP-BTRO-0042**
Description: BR AM23G Low Level VFA
Client: Ramboll_AR
Date: December 08, 2023

Analyte Comments:

QC Batch: 304657

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- MW-91-202310 (Lab ID: 60440028030)
  - Pentanoic Acid
- TMW-19-202310 (Lab ID: 60440028032)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- TMW-21-202310 (Lab ID: 60440028031)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Ramboll_AR
Date: December 08, 2023

General Information:
5 samples were analyzed for EPA 6010 by Pace Analytical Services Kansas City. 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.

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.: 60440028

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Ramboll_AR
Date: December 08, 2023

General Information:
34 samples were analyzed for EPA 5030B/8260 by Pace Analytical Services Kansas City. 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: 869971

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60439898001,60439898003

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

- MS (Lab ID: 3445026)
  - Styrene
- MSD (Lab ID: 3445027)
  - Styrene

QC Batch: 870274

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

QC Batch: 870433

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60440028029

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

- MS (Lab ID: 3447099)
  - Styrene

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Ramboll_AR
Date: December 08, 2023

QC Batch: 870433

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60440028029

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

- MSD (Lab ID: 3447100)
  - Styrene

QC Batch: 870617

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60440186023,60440430053

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

- MS (Lab ID: 3448131)
  - 1,1,2,2-Tetrachloroethane
  - 4-Methyl-2-pentanone (MIBK)
  - Styrene
  - trans-1,2-Dichloroethene
- MS (Lab ID: 3448133)
  - 1,1,2,2-Tetrachloroethane
  - 1,2-Dichloroethane
  - 4-Methyl-2-pentanone (MIBK)
  - Ethylbenzene
  - Styrene
  - cis-1,2-Dichloroethene
- MSD (Lab ID: 3448132)
  - 1,1,2,2-Tetrachloroethane
  - 1,1,2-Trichloroethane
  - 1,1-Dichloroethane
  - 1,2-Dichloroethane
  - 1,2-Dichloropropane
  - 2-Hexanone
  - 4-Methyl-2-pentanone (MIBK)
  - Benzene
  - Bromodichloromethane
  - Chlorobenzene
  - Dibromochloromethane
  - Ethylbenzene
  - Styrene
  - Tetrachloroethene
  - Toluene
  - cis-1,2-Dichloroethene
  - cis-1,3-Dichloropropene
  - trans-1,2-Dichloroethene
  - trans-1,3-Dichloropropene
- MSD (Lab ID: 3448134)
  - 1,1,1-Trichloroethane
  - 1,1,2,2-Tetrachloroethane
  - 1,1,2-Trichloroethane
  - 1,1-Dichloroethane

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Ramboll_AR
Date: December 08, 2023

QC Batch: 870617

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60440186023,60440430053

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

- 1,1-Dichloroethene
- 1,2-Dichloroethane
- 1,2-Dichloropropane
- 2-Hexanone
- 4-Methyl-2-pentanone (MIBK)
- Benzene
- Bromodichloromethane
- Carbon disulfide
- Carbon tetrachloride
- Chlorobenzene
- Chloroform
- Dibromochloromethane
- Ethylbenzene
- Methylene Chloride
- Styrene
- Tetrachloroethene
- Toluene
- cis-1,2-Dichloroethene
- cis-1,3-Dichloropropene
- trans-1,2-Dichloroethene
- trans-1,3-Dichloropropene

R1: RPD value was outside control limits.

- MSD (Lab ID: 3448132)
  - Acetone
- MSD (Lab ID: 3448134)
  - 1,1,1-Trichloroethane
  - 1,1,2,2-Tetrachloroethane
  - 1,1,2-Trichloroethane
  - 1,1-Dichloroethane
  - 1,2-Dichloropropane
  - 4-Methyl-2-pentanone (MIBK)
  - Acetone
  - Bromodichloromethane
  - Carbon tetrachloride
  - Chlorobenzene
  - Chloroform
  - cis-1,3-Dichloropropene
  - trans-1,2-Dichloroethene
  - trans-1,3-Dichloropropene

Additional Comments:

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Ramboll_AR
Date: December 08, 2023

General Information:
5 samples were analyzed for EPA 300.0 by Pace Analytical Services Kansas City. 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.

Method Blank:
All analytes were below the report limit in the method blank, 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: 871224

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60440813003

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

- MS (Lab ID: 3450795)
  - Sulfate
- MSD (Lab ID: 3450796)
  - Sulfate

R1: RPD value was outside control limits.

- MSD (Lab ID: 3450796)
  - Sulfate

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.: 60440028

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Ramboll_AR
Date: December 08, 2023

General Information:
5 samples were analyzed for EPA 353.2 by Pace Analytical Services Kansas City. 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.

Method Blank:
All analytes were below the report limit in the method blank, 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: 869795

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60440028033

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

- MS (Lab ID: 3444326)
  - 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.: 60440028

Method: **SM 5310C**
Description: 5310C TOC
Client: Ramboll_AR
Date: December 08, 2023

General Information:
5 samples were analyzed for SM 5310C by Pace Analytical Services Kansas City. 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.

Method Blank:
All analytes were below the report limit in the method blank, 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.: 60440028

Method: **SM 5310C**
Description: 5310C Diss. Organic Carbon LF
Client: Ramboll_AR
Date: December 08, 2023

General Information:
5 samples were analyzed for SM 5310C by Pace Analytical Services Kansas City. 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.

H1: Analysis conducted outside the EPA method holding time.
- MW-50R-202310 (Lab ID: 60440028034)
- MW-89-202310 (Lab ID: 60440028033)
- MW-91-202310 (Lab ID: 60440028030)
- TMW-19-202310 (Lab ID: 60440028032)
- TMW-21-202310 (Lab ID: 60440028031)

Method Blank:
All analytes were below the report limit in the method blank, 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:

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.: 60440028

Sample: TMW-20-202310 **Lab ID: 60440028001** Collected: 10/17/23 09:35 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 11:23	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 11:23	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 11:23	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 11:23	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 11:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 11:23	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 11:23	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 11:23	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 11:23	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 11:23	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 11:23	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 11:23	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 11:23	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 11:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 11:23	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 11:23	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 11:23	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 11:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 11:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 11:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 11:23	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 11:23	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 11:23	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 11:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 11:23	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 11:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 11:23	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 11:23	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 11:23	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 11:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 11:23	79-00-5	
Trichloroethene	**0.24J**	ug/L	1.0	0.21	1		10/20/23 11:23	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 11:23	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 11:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/20/23 11:23	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/20/23 11:23	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/20/23 11:23	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 11:23		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-184-202310 **Lab ID: 60440028002** Collected: 10/16/23 17:46 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 11:36	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 11:36	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 11:36	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 11:36	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 11:36	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 11:36	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 11:36	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 11:36	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 11:36	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 11:36	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 11:36	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 11:36	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 11:36	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 11:36	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 11:36	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 11:36	75-35-4	
cis-1,2-Dichloroethene	**0.18J**	ug/L	1.0	0.13	1		10/20/23 11:36	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 11:36	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 11:36	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 11:36	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 11:36	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 11:36	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 11:36	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 11:36	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 11:36	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 11:36	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 11:36	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 11:36	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 11:36	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 11:36	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 11:36	79-00-5	
Trichloroethene	**1.4**	ug/L	1.0	0.21	1		10/20/23 11:36	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 11:36	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 11:36	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/20/23 11:36	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/20/23 11:36	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/20/23 11:36	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 11:36		

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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: DUP-01-202310 **Lab ID: 60440028003** Collected: 10/16/23 17:46 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 11:50	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 11:50	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 11:50	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 11:50	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 11:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 11:50	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 11:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 11:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 11:50	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 11:50	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 11:50	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 11:50	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 11:50	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 11:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 11:50	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 11:50	75-35-4	
cis-1,2-Dichloroethene	**0.16J**	ug/L	1.0	0.13	1		10/20/23 11:50	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 11:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 11:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 11:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 11:50	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 11:50	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 11:50	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 11:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 11:50	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 11:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 11:50	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 11:50	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 11:50	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 11:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 11:50	79-00-5	
Trichloroethene	**1.8**	ug/L	1.0	0.21	1		10/20/23 11:50	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 11:50	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 11:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/23 11:50	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/20/23 11:50	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/20/23 11:50	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 11:50		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-26-202310 **Lab ID: 60440028004** Collected: 10/17/23 09:36 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 12:04	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 12:04	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 12:04	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 12:04	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 12:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 12:04	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 12:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 12:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 12:04	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 12:04	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 12:04	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 12:04	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 12:04	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 12:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 12:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 12:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 12:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 12:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 12:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 12:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 12:04	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 12:04	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 12:04	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 12:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 12:04	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 12:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 12:04	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 12:04	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 12:04	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 12:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 12:04	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 12:04	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 12:04	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 12:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/23 12:04	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/20/23 12:04	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/20/23 12:04	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 12:04		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-22-202310 **Lab ID: 60440028005** Collected: 10/17/23 11:16 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 12:17	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 12:17	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 12:17	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 12:17	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 12:17	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 12:17	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 12:17	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 12:17	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 12:17	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 12:17	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 12:17	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 12:17	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 12:17	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 12:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 12:17	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 12:17	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 12:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 12:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 12:17	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 12:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 12:17	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 12:17	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 12:17	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 12:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 12:17	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 12:17	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 12:17	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 12:17	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 12:17	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 12:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 12:17	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 12:17	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 12:17	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 12:17	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/20/23 12:17	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/20/23 12:17	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/20/23 12:17	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 12:17		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-176-202310 **Lab ID: 60440028006** Collected: 10/17/23 11:19 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 12:58	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 12:58	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 12:58	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 12:58	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 12:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 12:58	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 12:58	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 12:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 12:58	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 12:58	75-00-3	
Chloroform	**0.61J**	ug/L	1.0	0.22	1		10/20/23 12:58	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 12:58	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 12:58	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 12:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 12:58	107-06-2	
1,1-Dichloroethene	**2.1**	ug/L	1.0	0.22	1		10/20/23 12:58	75-35-4	
cis-1,2-Dichloroethene	**13.4**	ug/L	1.0	0.13	1		10/20/23 12:58	156-59-2	
trans-1,2-Dichloroethene	**0.33J**	ug/L	1.0	0.10	1		10/20/23 12:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 12:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 12:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 12:58	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 12:58	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 12:58	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 12:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 12:58	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 12:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 12:58	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 12:58	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 12:58	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 12:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 12:58	79-00-5	
Trichloroethene	**319**	ug/L	10.0	2.1	10		10/24/23 00:33	79-01-6	
Vinyl chloride	**20.1**	ug/L	1.0	0.17	1		10/20/23 12:58	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 12:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/23 12:58	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/20/23 12:58	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/20/23 12:58	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 12:58		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-196-202310 **Lab ID: 60440028007** Collected: 10/17/23 11:25 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 12:31	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 12:31	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 12:31	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 12:31	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 12:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 12:31	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 12:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 12:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 12:31	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 12:31	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 12:31	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 12:31	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 12:31	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 12:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 12:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 12:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 12:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 12:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 12:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 12:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 12:31	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 12:31	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 12:31	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 12:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 12:31	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 12:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 12:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 12:31	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 12:31	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 12:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 12:31	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 12:31	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 12:31	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 12:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/23 12:31	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/20/23 12:31	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/20/23 12:31	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 12:31		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: TMW-35-202310 **Lab ID: 60440028008** Collected: 10/17/23 12:15 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 12:44	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 12:44	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 12:44	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 12:44	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 12:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 12:44	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 12:44	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 12:44	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 12:44	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 12:44	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 12:44	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 12:44	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 12:44	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 12:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 12:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 12:44	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 12:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 12:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 12:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 12:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 12:44	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 12:44	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 12:44	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 12:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 12:44	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 12:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 12:44	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 12:44	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 12:44	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 12:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 12:44	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 12:44	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 12:44	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 12:44	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/20/23 12:44	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/20/23 12:44	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/20/23 12:44	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 12:44		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: DUP-11-202310 **Lab ID: 60440028009** Collected: 10/17/23 12:20 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 19:57	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 19:57	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 19:57	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 19:57	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 19:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 19:57	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 19:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 19:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 19:57	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 19:57	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 19:57	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 19:57	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 19:57	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 19:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 19:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 19:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 19:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 19:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 19:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 19:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 19:57	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 19:57	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 19:57	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 19:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 19:57	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 19:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 19:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 19:57	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 19:57	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 19:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 19:57	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 19:57	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 19:57	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 19:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/23 19:57	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/20/23 19:57	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/20/23 19:57	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 19:57		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: ITMW-20-202310 **Lab ID: 60440028010** Collected: 10/17/23 14:00 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 20:10	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 20:10	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 20:10	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 20:10	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 20:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 20:10	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 20:10	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 20:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 20:10	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 20:10	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 20:10	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 20:10	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 20:10	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 20:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 20:10	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 20:10	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 20:10	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 20:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 20:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 20:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 20:10	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 20:10	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 20:10	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 20:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 20:10	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 20:10	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 20:10	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 20:10	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 20:10	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 20:10	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 20:10	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 20:10	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 20:10	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 20:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/20/23 20:10	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/20/23 20:10	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		10/20/23 20:10	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 20:10		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: DUP-02-202310 **Lab ID: 60440028011** Collected: 10/17/23 14:00 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 20:24	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 20:24	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 20:24	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 20:24	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 20:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 20:24	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 20:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 20:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 20:24	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 20:24	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 20:24	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 20:24	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 20:24	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 20:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 20:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 20:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 20:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 20:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 20:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 20:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 20:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 20:24	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 20:24	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 20:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 20:24	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 20:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 20:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 20:24	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 20:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 20:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 20:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 20:24	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 20:24	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 20:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/20/23 20:24	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/20/23 20:24	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/20/23 20:24	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 20:24		

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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-195-202310 **Lab ID: 60440028012** Collected: 10/17/23 13:55 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 20:37	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 20:37	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 20:37	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 20:37	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 20:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 20:37	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 20:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 20:37	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 20:37	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 20:37	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 20:37	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 20:37	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 20:37	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 20:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 20:37	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 20:37	75-35-4	
cis-1,2-Dichloroethene	**0.30J**	ug/L	1.0	0.13	1		10/20/23 20:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 20:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 20:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 20:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 20:37	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 20:37	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 20:37	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 20:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 20:37	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 20:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 20:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 20:37	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 20:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 20:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 20:37	79-00-5	
Trichloroethene	**5.6**	ug/L	1.0	0.21	1		10/20/23 20:37	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 20:37	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 20:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/23 20:37	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/20/23 20:37	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/20/23 20:37	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 20:37		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: DUP-05-202310 **Lab ID: 60440028013** Collected: 10/17/23 13:55 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 20:51	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 20:51	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 20:51	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 20:51	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 20:51	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 20:51	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 20:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 20:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 20:51	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 20:51	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 20:51	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 20:51	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 20:51	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 20:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 20:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 20:51	75-35-4	
cis-1,2-Dichloroethene	**0.30J**	ug/L	1.0	0.13	1		10/20/23 20:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 20:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 20:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 20:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 20:51	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 20:51	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 20:51	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 20:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 20:51	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 20:51	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 20:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 20:51	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 20:51	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 20:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 20:51	79-00-5	
Trichloroethene	**5.3**	ug/L	1.0	0.21	1		10/20/23 20:51	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 20:51	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 20:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/20/23 20:51	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/20/23 20:51	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/20/23 20:51	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 20:51		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-28-202310 **Lab ID: 60440028014** Collected: 10/17/23 10:55 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 21:04	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 21:04	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 21:04	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 21:04	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 21:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 21:04	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 21:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 21:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 21:04	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 21:04	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 21:04	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 21:04	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 21:04	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 21:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 21:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 21:04	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 21:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 21:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 21:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 21:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 21:04	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 21:04	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 21:04	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 21:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 21:04	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 21:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 21:04	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 21:04	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 21:04	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 21:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 21:04	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 21:04	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 21:04	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 21:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/23 21:04	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/20/23 21:04	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/20/23 21:04	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 21:04		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-206-202310 **Lab ID: 60440028015** Collected: 10/17/23 12:50 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 21:18	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 21:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 21:18	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 21:18	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 21:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 21:18	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 21:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 21:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 21:18	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 21:18	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 21:18	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 21:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 21:18	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 21:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 21:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 21:18	75-35-4	
cis-1,2-Dichloroethene	**0.90J**	ug/L	1.0	0.13	1		10/20/23 21:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 21:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 21:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 21:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 21:18	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 21:18	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 21:18	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 21:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 21:18	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 21:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 21:18	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 21:18	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 21:18	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 21:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 21:18	79-00-5	
Trichloroethene	**7.9**	ug/L	1.0	0.21	1		10/20/23 21:18	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 21:18	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 21:18	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/20/23 21:18	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/20/23 21:18	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/20/23 21:18	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 21:18		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-97-202310 **Lab ID: 60440028016** Collected: 10/17/23 13:45 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 21:31	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 21:31	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 21:31	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 21:31	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 21:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 21:31	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 21:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 21:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 21:31	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 21:31	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 21:31	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 21:31	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 21:31	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 21:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 21:31	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 21:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 21:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 21:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 21:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 21:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 21:31	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 21:31	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 21:31	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 21:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 21:31	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 21:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 21:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 21:31	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 21:31	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 21:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 21:31	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 21:31	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 21:31	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 21:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/20/23 21:31	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/20/23 21:31	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/20/23 21:31	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 21:31		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-201-202310 **Lab ID: 60440028017** Collected: 10/17/23 14:42 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 21:45	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 21:45	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 21:45	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 21:45	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 21:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 21:45	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 21:45	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 21:45	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 21:45	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 21:45	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 21:45	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 21:45	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 21:45	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 21:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 21:45	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 21:45	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 21:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 21:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 21:45	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 21:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 21:45	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 21:45	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 21:45	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 21:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 21:45	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 21:45	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 21:45	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 21:45	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 21:45	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 21:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 21:45	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 21:45	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 21:45	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 21:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/23 21:45	460-00-4	
Toluene-d8 (S)	104	%	80-120		1		10/20/23 21:45	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		10/20/23 21:45	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 21:45		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: TMW-14-202310 **Lab ID: 60440028018** Collected: 10/17/23 15:26 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 23:06	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 23:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 23:06	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 23:06	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 23:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 23:06	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 23:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 23:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 23:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 23:06	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 23:06	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 23:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 23:06	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 23:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 23:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 23:06	75-35-4	
cis-1,2-Dichloroethene	**2.1**	ug/L	1.0	0.13	1		10/20/23 23:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 23:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 23:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 23:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 23:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 23:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 23:06	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 23:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 23:06	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 23:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 23:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 23:06	127-18-4	
Toluene	**2.2**	ug/L	1.0	0.25	1		10/20/23 23:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 23:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 23:06	79-00-5	
Trichloroethene	**3.3**	ug/L	1.0	0.21	1		10/20/23 23:06	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 23:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 23:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/23 23:06	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/20/23 23:06	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/20/23 23:06	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 23:06		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-183R-202310 **Lab ID: 60440028019** Collected: 10/17/23 13:01 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	**3.3J**	ug/L	10.0	2.5	1		10/20/23 21:58	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 21:58	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 21:58	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 21:58	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 21:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 21:58	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 21:58	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 21:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 21:58	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 21:58	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 21:58	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 21:58	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 21:58	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 21:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 21:58	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 21:58	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 21:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 21:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 21:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 21:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 21:58	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 21:58	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 21:58	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 21:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 21:58	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 21:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 21:58	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 21:58	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 21:58	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 21:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 21:58	79-00-5	
Trichloroethene	**0.50J**	ug/L	1.0	0.21	1		10/20/23 21:58	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 21:58	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 21:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/20/23 21:58	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/20/23 21:58	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		10/20/23 21:58	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 21:58		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-192-202310 **Lab ID: 60440028020** Collected: 10/17/23 15:30 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 22:12	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 22:12	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 22:12	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 22:12	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 22:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 22:12	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 22:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 22:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 22:12	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 22:12	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 22:12	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 22:12	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 22:12	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 22:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 22:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 22:12	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 22:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 22:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 22:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 22:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 22:12	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 22:12	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 22:12	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 22:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 22:12	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 22:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 22:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 22:12	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 22:12	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 22:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 22:12	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 22:12	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 22:12	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 22:12	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/20/23 22:12	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/20/23 22:12	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/20/23 22:12	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 22:12		

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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-40R-202310 **Lab ID: 60440028021** Collected: 10/17/23 16:03 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 22:25	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 22:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 22:25	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 22:25	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 22:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 22:25	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 22:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 22:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 22:25	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 22:25	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 22:25	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 22:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 22:25	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 22:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 22:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 22:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 22:25	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 22:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 22:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 22:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 22:25	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 22:25	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 22:25	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 22:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 22:25	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 22:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 22:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 22:25	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 22:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 22:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 22:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/20/23 22:25	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 22:25	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 22:25	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/20/23 22:25	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/20/23 22:25	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/20/23 22:25	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 22:25		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-200-202310 **Lab ID: 60440028022** Collected: 10/17/23 16:00 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 22:39	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 22:39	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 22:39	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 22:39	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 22:39	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 22:39	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 22:39	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 22:39	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 22:39	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 22:39	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 22:39	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 22:39	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 22:39	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 22:39	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 22:39	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 22:39	75-35-4	
cis-1,2-Dichloroethene	**2.4**	ug/L	1.0	0.13	1		10/20/23 22:39	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 22:39	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 22:39	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 22:39	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 22:39	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 22:39	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 22:39	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 22:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 22:39	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 22:39	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 22:39	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 22:39	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 22:39	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 22:39	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 22:39	79-00-5	
Trichloroethene	**26.5**	ug/L	1.0	0.21	1		10/20/23 22:39	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 22:39	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 22:39	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/20/23 22:39	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/20/23 22:39	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/20/23 22:39	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 22:39		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-190-202310 **Lab ID: 60440028023** Collected: 10/17/23 17:10 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 23:19	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 23:19	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 23:19	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 23:19	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 23:19	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 23:19	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 23:19	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 23:19	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 23:19	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 23:19	75-00-3	
Chloroform	**0.31J**	ug/L	1.0	0.22	1		10/20/23 23:19	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 23:19	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 23:19	124-48-1	
1,1-Dichloroethane	**0.34J**	ug/L	1.0	0.12	1		10/20/23 23:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 23:19	107-06-2	
1,1-Dichloroethene	**1.2**	ug/L	1.0	0.22	1		10/20/23 23:19	75-35-4	
cis-1,2-Dichloroethene	**6.5**	ug/L	1.0	0.13	1		10/20/23 23:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 23:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 23:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 23:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 23:19	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 23:19	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 23:19	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 23:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 23:19	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 23:19	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 23:19	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 23:19	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 23:19	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 23:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 23:19	79-00-5	
Trichloroethene	**533**	ug/L	10.0	2.1	10		10/24/23 00:46	79-01-6	
Vinyl chloride	**0.32J**	ug/L	1.0	0.17	1		10/20/23 23:19	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 23:19	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/23 23:19	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/20/23 23:19	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/20/23 23:19	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 23:19		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: ITMW-2R-202310 **Lab ID: 60440028024** Collected: 10/17/23 17:22 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/20/23 22:52	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/20/23 22:52	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/20/23 22:52	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/20/23 22:52	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/20/23 22:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/20/23 22:52	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/20/23 22:52	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/20/23 22:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/20/23 22:52	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/20/23 22:52	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/20/23 22:52	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/20/23 22:52	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/20/23 22:52	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/20/23 22:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/20/23 22:52	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/20/23 22:52	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/20/23 22:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/20/23 22:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/20/23 22:52	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/20/23 22:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/20/23 22:52	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/20/23 22:52	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/20/23 22:52	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/20/23 22:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/20/23 22:52	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/20/23 22:52	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/20/23 22:52	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/20/23 22:52	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/20/23 22:52	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/20/23 22:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/20/23 22:52	79-00-5	
Trichloroethene	**1.6**	ug/L	1.0	0.21	1		10/20/23 22:52	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/20/23 22:52	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/20/23 22:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/20/23 22:52	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/20/23 22:52	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		10/20/23 22:52	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/20/23 22:52		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: TB-02-202310 **Lab ID: 60440028025** Collected: 10/17/23 07:00 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/23/23 20:43	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/23/23 20:43	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/23/23 20:43	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/23/23 20:43	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/23/23 20:43	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/23/23 20:43	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/23/23 20:43	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/23/23 20:43	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/23/23 20:43	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/23/23 20:43	75-00-3	
Chloroform	**0.24J**	ug/L	1.0	0.22	1		10/23/23 20:43	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/23/23 20:43	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/23/23 20:43	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/23/23 20:43	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/23/23 20:43	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/23/23 20:43	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/23/23 20:43	156-59-2	
trans-1,2-Dichloroethene	**0.48J**	ug/L	1.0	0.10	1		10/23/23 20:43	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/23/23 20:43	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/23/23 20:43	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/23/23 20:43	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/23/23 20:43	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/23/23 20:43	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/23/23 20:43	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/23/23 20:43	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/23/23 20:43	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/23/23 20:43	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/23/23 20:43	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/23/23 20:43	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/23/23 20:43	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/23/23 20:43	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/23/23 20:43	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/23/23 20:43	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/23/23 20:43	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		10/23/23 20:43	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/23/23 20:43	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		10/23/23 20:43	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/23/23 20:43		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: EB-02-202310 **Lab ID: 60440028026** Collected: 10/17/23 17:50 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 00:19	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 00:19	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 00:19	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 00:19	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 00:19	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 00:19	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 00:19	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 00:19	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 00:19	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 00:19	75-00-3	
Chloroform	**0.51J**	ug/L	1.0	0.22	1		10/24/23 00:19	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 00:19	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 00:19	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 00:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 00:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 00:19	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/24/23 00:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 00:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 00:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 00:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 00:19	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 00:19	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 00:19	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 00:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 00:19	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 00:19	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 00:19	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 00:19	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 00:19	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 00:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 00:19	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/24/23 00:19	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 00:19	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 00:19	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		1		10/24/23 00:19	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/24/23 00:19	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/24/23 00:19	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 00:19		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: TB-03-202310 **Lab ID: 60440028027** Collected: 10/17/23 07:05 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/23/23 20:57	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/23/23 20:57	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/23/23 20:57	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/23/23 20:57	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/23/23 20:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/23/23 20:57	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/23/23 20:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/23/23 20:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/23/23 20:57	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/23/23 20:57	75-00-3	
Chloroform	**0.27J**	ug/L	1.0	0.22	1		10/23/23 20:57	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/23/23 20:57	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/23/23 20:57	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/23/23 20:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/23/23 20:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/23/23 20:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/23/23 20:57	156-59-2	
trans-1,2-Dichloroethene	**0.49J**	ug/L	1.0	0.10	1		10/23/23 20:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/23/23 20:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/23/23 20:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/23/23 20:57	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/23/23 20:57	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/23/23 20:57	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/23/23 20:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/23/23 20:57	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/23/23 20:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/23/23 20:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/23/23 20:57	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/23/23 20:57	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/23/23 20:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/23/23 20:57	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/23/23 20:57	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/23/23 20:57	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/23/23 20:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/23/23 20:57	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/23/23 20:57	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/23/23 20:57	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/23/23 20:57		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-203-202310 **Lab ID: 60440028028** Collected: 10/17/23 17:45 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/25/23 18:28	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/23 18:28	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/23 18:28	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/23 18:28	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/23 18:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/23 18:28	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/23 18:28	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/23 18:28	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/23 18:28	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/23 18:28	75-00-3	
Chloroform	**0.35J**	ug/L	1.0	0.22	1		10/25/23 18:28	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/23 18:28	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/23 18:28	124-48-1	
1,1-Dichloroethane	**0.36J**	ug/L	1.0	0.12	1		10/25/23 18:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/23 18:28	107-06-2	
1,1-Dichloroethene	**0.82J**	ug/L	1.0	0.22	1		10/25/23 18:28	75-35-4	
cis-1,2-Dichloroethene	**9.3**	ug/L	1.0	0.13	1		10/25/23 18:28	156-59-2	
trans-1,2-Dichloroethene	**0.22J**	ug/L	1.0	0.10	1		10/25/23 18:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/23 18:28	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/23 18:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/23 18:28	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/23 18:28	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/23 18:28	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/23 18:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/23 18:28	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/23 18:28	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/23 18:28	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/23 18:28	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/23 18:28	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/23 18:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/23 18:28	79-00-5	
Trichloroethene	**330**	ug/L	10.0	2.1	10		10/25/23 02:35	79-01-6	
Vinyl chloride	**0.22J**	ug/L	1.0	0.17	1		10/25/23 18:28	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/23 18:28	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/25/23 18:28	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/25/23 18:28	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/25/23 18:28	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/23 18:28		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-60R-202310 **Lab ID: 60440028029** Collected: 10/16/23 18:10 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/25/23 01:14	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/23 01:14	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/23 01:14	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/23 01:14	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/23 01:14	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/23 01:14	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/23 01:14	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/23 01:14	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/23 01:14	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/23 01:14	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/23 01:14	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/23 01:14	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/23 01:14	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/23 01:14	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/23 01:14	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/23 01:14	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/25/23 01:14	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/23 01:14	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/23 01:14	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/23 01:14	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/23 01:14	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/23 01:14	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/23 01:14	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/23 01:14	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/23 01:14	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/23 01:14	100-42-5	M1
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/23 01:14	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/23 01:14	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/23 01:14	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/23 01:14	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/23 01:14	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/25/23 01:14	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/23 01:14	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/23 01:14	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/25/23 01:14	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/25/23 01:14	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/23 01:14	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/23 01:14		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-91-202310 **Lab ID: 60440028030** Collected: 10/17/23 12:48 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Ethane	**2.7J**	ug/L	5.0	0.90	1		10/26/23 14:12	74-84-0	
Ethene	**1.7J**	ug/L	5.0	0.79	1		10/26/23 14:12	74-85-1	
Methane	**8290**	ug/L	10.0	3.8	1		10/26/23 14:12	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	84	%.	70-130		1		10/26/23 14:12		
BR AM23G Low Level VFA	Analytical Method: Pace ENV-SOP-BTRO-0042 Pace Analytical Services - Baton Rouge								
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/23/23 13:27	109-52-4	M1,N2
Acetic Acid	ND	mg/L	5.0	1.2	10		10/23/23 13:27	64-19-7	
Butyric Acid	ND	mg/L	5.0	0.58	10		10/23/23 13:27	107-92-6	
Formic acid	ND	mg/L	5.0	0.55	10		10/23/23 13:27	64-18-6	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/23/23 13:27	142-62-1	L2,M0,N2
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/23/23 13:27	646-07-1	L2,M0,N2
Lactic Acid	**6.2**	mg/L	5.0	0.53	10		10/23/23 13:27	50-21-5	D3
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/23/23 13:27	503-74-2	N2
Propionic Acid	ND	mg/L	5.0	0.53	10		10/23/23 13:27	79-09-4	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/23/23 13:27	127-17-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**6470**	ug/L	50.0	9.1	1	10/26/23 12:04	10/27/23 14:57	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/25/23 01:28	67-64-1	
Benzene	**0.20J**	ug/L	1.0	0.14	1		10/25/23 01:28	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/23 01:28	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/23 01:28	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/23 01:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/23 01:28	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/23 01:28	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/23 01:28	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/23 01:28	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/23 01:28	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/23 01:28	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/23 01:28	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/23 01:28	124-48-1	
1,1-Dichloroethane	**0.48J**	ug/L	1.0	0.12	1		10/25/23 01:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/23 01:28	107-06-2	
1,1-Dichloroethene	**1.7**	ug/L	1.0	0.22	1		10/25/23 01:28	75-35-4	
cis-1,2-Dichloroethene	**107**	ug/L	1.0	0.13	1		10/25/23 01:28	156-59-2	
trans-1,2-Dichloroethene	**0.51J**	ug/L	1.0	0.10	1		10/25/23 01:28	156-60-5	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-91-202310 **Lab ID: 60440028030** Collected: 10/17/23 12:48 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/23 01:28	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/23 01:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/23 01:28	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/23 01:28	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/23 01:28	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/23 01:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/23 01:28	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/23 01:28	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/23 01:28	79-34-5	
Tetrachloroethene	**0.49J**	ug/L	1.0	0.33	1		10/25/23 01:28	127-18-4	
Toluene	**0.54J**	ug/L	1.0	0.25	1		10/25/23 01:28	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/23 01:28	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/23 01:28	79-00-5	
Trichloroethene	**132**	ug/L	1.0	0.21	1		10/25/23 01:28	79-01-6	
Vinyl chloride	**0.38J**	ug/L	1.0	0.17	1		10/25/23 01:28	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/23 01:28	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/25/23 01:28	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/25/23 01:28	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/23 01:28	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/23 01:28		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**77.6**	mg/L	20.0	10.5	20		10/30/23 17:13	16887-00-6	
Sulfate	**5.5**	mg/L	1.0	0.55	1		11/01/23 20:29	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.069	1		10/19/23 10:05		
Nitrogen, Nitrate	ND	mg/L	0.10	0.069	1		10/19/23 10:05	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/19/23 10:05	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	**3.6**	mg/L	1.0	0.54	1		11/07/23 18:17	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**3.1**	mg/L	1.0	0.54	1		11/17/23 15:18		H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: TMW-21-202310 **Lab ID: 60440028031** Collected: 10/17/23 15:35 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175								
	Pace Analytical Services - Baton Rouge								
Ethane	**1.2J**	ug/L	5.0	0.90	1		10/26/23 14:28	74-84-0	
Ethene	**2.3J**	ug/L	5.0	0.79	1		10/26/23 14:28	74-85-1	
Methane	**8240**	ug/L	10.0	3.8	1		10/26/23 14:28	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	94	%.	70-130		1		10/26/23 14:28		
BR AM23G Low Level VFA	Analytical Method: Pace ENV-SOP-BTRO-0042								
	Pace Analytical Services - Baton Rouge								
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/23/23 14:41	109-52-4	N2
Acetic Acid	ND	mg/L	5.0	1.2	10		10/23/23 14:41	64-19-7	
Butyric Acid	ND	mg/L	5.0	0.58	10		10/23/23 14:41	107-92-6	
Formic acid	ND	mg/L	5.0	0.55	10		10/23/23 14:41	64-18-6	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/23/23 14:41	142-62-1	L2,N2
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/23/23 14:41	646-07-1	L2,N2
Lactic Acid	**3.6J**	mg/L	5.0	0.53	10		10/23/23 14:41	50-21-5	D3
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/23/23 14:41	503-74-2	N2
Propionic Acid	ND	mg/L	5.0	0.53	10		10/23/23 14:41	79-09-4	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/23/23 14:41	127-17-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Pace Analytical Services - Kansas City								
Iron	**11800**	ug/L	50.0	9.1	1	10/26/23 12:04	10/27/23 14:59	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/25/23 01:41	67-64-1	
Benzene	**0.23J**	ug/L	1.0	0.14	1		10/25/23 01:41	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/23 01:41	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/23 01:41	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/23 01:41	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/23 01:41	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/23 01:41	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/23 01:41	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/23 01:41	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/23 01:41	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/23 01:41	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/23 01:41	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/23 01:41	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/23 01:41	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/23 01:41	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/23 01:41	75-35-4	
cis-1,2-Dichloroethene	**1.9**	ug/L	1.0	0.13	1		10/25/23 01:41	156-59-2	
trans-1,2-Dichloroethene	**0.77J**	ug/L	1.0	0.10	1		10/25/23 01:41	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/23 01:41	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/23 01:41	10061-01-5	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: TMW-21-202310 **Lab ID: 60440028031** Collected: 10/17/23 15:35 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/23 01:41	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/23 01:41	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/23 01:41	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/23 01:41	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/23 01:41	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/23 01:41	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/23 01:41	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/23 01:41	127-18-4	
Toluene	**0.48J**	ug/L	1.0	0.25	1		10/25/23 01:41	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/23 01:41	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/23 01:41	79-00-5	
Trichloroethene	**3.7**	ug/L	1.0	0.21	1		10/25/23 01:41	79-01-6	
Vinyl chloride	**6.2**	ug/L	1.0	0.17	1		10/25/23 01:41	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/23 01:41	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/25/23 01:41	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/25/23 01:41	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/25/23 01:41	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/23 01:41		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**243**	mg/L	20.0	10.5	20		10/30/23 17:53	16887-00-6	
Sulfate	**3.6**	mg/L	1.0	0.55	1		11/01/23 20:42	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.069	1		10/19/23 10:09		
Nitrogen, Nitrate	ND	mg/L	0.10	0.069	1		10/19/23 10:09	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/19/23 10:09	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	**1.4**	mg/L	1.0	0.54	1		11/07/23 18:32	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**1.0**	mg/L	1.0	0.54	1		11/17/23 15:46		H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: TMW-19-202310 **Lab ID: 60440028032** Collected: 10/17/23 17:20 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175								
	Pace Analytical Services - Baton Rouge								
Ethane	ND	ug/L	5.0	0.90	1		10/26/23 14:44	74-84-0	
Ethene	**0.94J**	ug/L	5.0	0.79	1		10/26/23 14:44	74-85-1	
Methane	**9.7J**	ug/L	10.0	3.8	1		10/26/23 14:44	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	104	%.	70-130		1		10/26/23 14:44		
BR AM23G Low Level VFA	Analytical Method: Pace ENV-SOP-BTRO-0042								
	Pace Analytical Services - Baton Rouge								
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/23/23 15:06	109-52-4	N2
Acetic Acid	ND	mg/L	5.0	1.2	10		10/23/23 15:06	64-19-7	
Butyric Acid	ND	mg/L	5.0	0.58	10		10/23/23 15:06	107-92-6	
Formic acid	ND	mg/L	5.0	0.55	10		10/23/23 15:06	64-18-6	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/23/23 15:06	142-62-1	L2,N2
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/23/23 15:06	646-07-1	L2,N2
Lactic Acid	**0.59J**	mg/L	5.0	0.53	10		10/23/23 15:06	50-21-5	D3
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/23/23 15:06	503-74-2	N2
Propionic Acid	ND	mg/L	5.0	0.53	10		10/23/23 15:06	79-09-4	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/23/23 15:06	127-17-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Pace Analytical Services - Kansas City								
Iron	**36.9J**	ug/L	50.0	9.1	1	10/26/23 12:04	10/27/23 15:01	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/25/23 01:55	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/23 01:55	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/23 01:55	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/23 01:55	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/23 01:55	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/23 01:55	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/23 01:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/23 01:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/23 01:55	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/23 01:55	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/23 01:55	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/23 01:55	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/23 01:55	124-48-1	
1,1-Dichloroethane	**0.59J**	ug/L	1.0	0.12	1		10/25/23 01:55	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/23 01:55	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/23 01:55	75-35-4	
cis-1,2-Dichloroethene	**4.7**	ug/L	1.0	0.13	1		10/25/23 01:55	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/23 01:55	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/23 01:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/23 01:55	10061-01-5	

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: TMW-19-202310 **Lab ID: 60440028032** Collected: 10/17/23 17:20 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/23 01:55	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/23 01:55	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/23 01:55	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/23 01:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/23 01:55	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/23 01:55	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/23 01:55	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/23 01:55	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/25/23 01:55	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/23 01:55	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/23 01:55	79-00-5	
Trichloroethene	**88.5**	ug/L	1.0	0.21	1		10/25/23 01:55	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/23 01:55	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/23 01:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/25/23 01:55	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/25/23 01:55	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/23 01:55	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/23 01:55		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**121**	mg/L	20.0	10.5	20		10/30/23 18:07	16887-00-6	
Sulfate	**18.6**	mg/L	1.0	0.55	1		11/01/23 21:23	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**10.0**	mg/L	0.50	0.35	5		10/19/23 10:10		
Nitrogen, Nitrate	**10.0**	mg/L	0.50	0.35	5		10/19/23 10:10	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.50	0.35	5		10/19/23 10:10	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.83J**	mg/L	1.0	0.54	1		11/07/23 18:48	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	ND	mg/L	1.0	0.54	1		11/17/23 16:01		H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-89-202310 **Lab ID: 60440028033** Collected: 10/17/23 10:18 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR Hydrogen by AM20 in Vapor	Analytical Method: AM20 Pace Analytical Services - Baton Rouge								
Hydrogen	**2.3**	nMoles	1.9	0.49	1		10/26/23 11:40	1333-74-0	
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	ND	ug/L	2.0	0.39	1		10/26/23 15:00	74-86-2	
Ethane	ND	ug/L	5.0	0.90	1		10/26/23 15:00	74-84-0	
Ethene	**1.2J**	ug/L	5.0	0.79	1		10/26/23 15:00	74-85-1	
Methane	**32.9**	ug/L	10.0	3.8	1		10/26/23 15:00	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	91	%.	70-130		1		10/26/23 15:00		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**214**	ug/L	50.0	9.1	1	10/26/23 12:04	10/27/23 15:03	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/25/23 02:08	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/23 02:08	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/23 02:08	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/23 02:08	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/23 02:08	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/23 02:08	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/23 02:08	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/23 02:08	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/23 02:08	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/23 02:08	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/23 02:08	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/23 02:08	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/23 02:08	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/23 02:08	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/23 02:08	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/23 02:08	75-35-4	
cis-1,2-Dichloroethene	**0.30J**	ug/L	1.0	0.13	1		10/25/23 02:08	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/23 02:08	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/23 02:08	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/23 02:08	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/23 02:08	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/23 02:08	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/23 02:08	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/23 02:08	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/23 02:08	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/23 02:08	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/23 02:08	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/23 02:08	127-18-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-89-202310 **Lab ID: 60440028033** Collected: 10/17/23 10:18 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Toluene	ND	ug/L	1.0	0.25	1		10/25/23 02:08	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/23 02:08	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/23 02:08	79-00-5	
Trichloroethene	**4.6**	ug/L	1.0	0.21	1		10/25/23 02:08	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/23 02:08	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/23 02:08	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/25/23 02:08	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/25/23 02:08	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/25/23 02:08	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/23 02:08		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**53.9**	mg/L	5.0	2.6	5		11/01/23 21:49	16887-00-6	
Sulfate	**2.6**	mg/L	1.0	0.55	1		11/01/23 21:36	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**75.7**	mg/L	5.0	3.5	50		10/19/23 10:00		M1
Nitrogen, Nitrate	**75.7**	mg/L	5.0	3.5	50		10/19/23 10:00	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	5.0	3.5	50		10/19/23 10:00	14797-65-0	M1
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.66J**	mg/L	1.0	0.54	1		11/10/23 13:09	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	ND	mg/L	1.0	0.54	1		11/17/23 16:15		H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-50R-202310 **Lab ID: 60440028034** Collected: 10/17/23 14:28 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR Hydrogen by AM20 in Vapor	Analytical Method: AM20 Pace Analytical Services - Baton Rouge								
Hydrogen	**1.4J**	nMoles	1.9	0.49	1		10/26/23 11:53	1333-74-0	
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	ND	ug/L	2.0	0.39	1		10/26/23 15:16	74-86-2	
Ethane	ND	ug/L	5.0	0.90	1		10/26/23 15:16	74-84-0	
Ethene	**1.2J**	ug/L	5.0	0.79	1		10/26/23 15:16	74-85-1	
Methane	**10.9**	ug/L	10.0	3.8	1		10/26/23 15:16	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	95	%.	70-130		1		10/26/23 15:16		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**702**	ug/L	50.0	9.1	1	10/26/23 12:04	10/27/23 15:05	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/25/23 02:22	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/25/23 02:22	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/25/23 02:22	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/25/23 02:22	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/25/23 02:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/25/23 02:22	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/25/23 02:22	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/25/23 02:22	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/25/23 02:22	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/25/23 02:22	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/25/23 02:22	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/25/23 02:22	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/25/23 02:22	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/25/23 02:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/25/23 02:22	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/25/23 02:22	75-35-4	
cis-1,2-Dichloroethene	**0.16J**	ug/L	1.0	0.13	1		10/25/23 02:22	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/25/23 02:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/25/23 02:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/25/23 02:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/25/23 02:22	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/25/23 02:22	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/25/23 02:22	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/25/23 02:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/25/23 02:22	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/25/23 02:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/25/23 02:22	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/25/23 02:22	127-18-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Sample: MW-50R-202310 **Lab ID: 60440028034** Collected: 10/17/23 14:28 Received: 10/18/23 05:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Toluene	ND	ug/L	1.0	0.25	1		10/25/23 02:22	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/25/23 02:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/25/23 02:22	79-00-5	
Trichloroethene	**1.6**	ug/L	1.0	0.21	1		10/25/23 02:22	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/25/23 02:22	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/25/23 02:22	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/25/23 02:22	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/25/23 02:22	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		10/25/23 02:22	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/25/23 02:22		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**235**	mg/L	20.0	10.5	20		10/30/23 18:33	16887-00-6	
Sulfate	**16.0**	mg/L	1.0	0.55	1		11/01/23 22:03	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.069	1		10/19/23 10:08		
Nitrogen, Nitrate	ND	mg/L	0.10	0.069	1		10/19/23 10:08	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/19/23 10:08	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	ND	mg/L	1.0	0.54	1		11/10/23 13:40	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	ND	mg/L	1.0	0.54	1		11/17/23 16:58		H1

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

QC Batch: 305317
QC Batch Method: AM20
Analysis Method: AM20
Analysis Description: BR Hydrogen by AM20 in Vapor
Laboratory: Pace Analytical Services - Baton Rouge
Associated Lab Samples: 60440028033, 60440028034

METHOD BLANK: 1461434 Matrix: Air
Associated Lab Samples: 60440028033, 60440028034

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Hydrogen	nMoles	ND	1.9	0.49	10/26/23 07:03	

LABORATORY CONTROL SAMPLE & LCSD: 1461435 1461433

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Hydrogen	nMoles	11.9	12.0	13.1	101	110	70-130	9	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

QC Batch: 305247
QC Batch Method: RSK175
Analysis Method: RSK175
Analysis Description: BR RSK175W Headspace
Laboratory: Pace Analytical Services - Baton Rouge
Associated Lab Samples: 60440028030, 60440028031, 60440028032, 60440028033, 60440028034

METHOD BLANK: 1461154 Matrix: Water
Associated Lab Samples: 60440028030, 60440028031, 60440028032, 60440028033, 60440028034

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetylene	ug/L	ND	2.0	0.39	10/26/23 07:19	
Ethane	ug/L	ND	5.0	0.90	10/26/23 07:19	
Ethene	ug/L	ND	5.0	0.79	10/26/23 07:19	
Methane	ug/L	ND	10.0	3.8	10/26/23 07:19	
Methyl-tert-butyl-ether-d3 (S)	%.	91	70-130		10/26/23 07:19	

LABORATORY CONTROL SAMPLE & LCSD: 1461155 1461156

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Acetylene	ug/L	75	60.7	65.6	81	87	70-130	8	20	
Ethane	ug/L	243	209	230	86	95	70-130	9	20	
Ethene	ug/L	296	248	272	84	92	70-130	9	20	
Methane	ug/L	945	787	859	83	91	70-130	9	20	
Methyl-tert-butyl-ether-d3 (S)	%.				99	85	70-130			

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

QC Batch: 304657
QC Batch Method: Pace ENV-SOP-BTRO-0042
Analysis Method: Pace ENV-SOP-BTRO-0042
Analysis Description: BR AM23G Low Level VFA
Laboratory: Pace Analytical Services - Baton Rouge
Associated Lab Samples: 60440028030, 60440028031, 60440028032

METHOD BLANK: 1458489 Matrix: Water
Associated Lab Samples: 60440028030, 60440028031, 60440028032

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetic Acid	mg/L	ND	0.50	0.12	10/23/23 12:13	
Butyric Acid	mg/L	ND	0.50	0.058	10/23/23 12:13	
Formic acid	mg/L	ND	0.50	0.055	10/23/23 12:13	
Hexanoic Acid	mg/L	ND	0.50	0.058	10/23/23 12:13	N2
i-Hexanoic Acid	mg/L	ND	0.50	0.056	10/23/23 12:13	N2
i-Pentanoic Acid	mg/L	ND	0.50	0.061	10/23/23 12:13	N2
Lactic Acid	mg/L	ND	0.50	0.053	10/23/23 12:13	
Pentanoic Acid	mg/L	ND	0.50	0.056	10/23/23 12:13	N2
Propionic Acid	mg/L	ND	0.50	0.053	10/23/23 12:13	
Pyruvic Acid	mg/L	ND	0.50	0.060	10/23/23 12:13	

LABORATORY CONTROL SAMPLE: 1458490

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acetic Acid	mg/L	2	2.0	102	70-130	
Butyric Acid	mg/L	2	1.8	88	70-130	
Formic acid	mg/L	2	1.9	97	70-130	
Hexanoic Acid	mg/L	2	1.0	50	39-114	L2,N2
i-Hexanoic Acid	mg/L	2	1.4	69	39-114	L2,N2
i-Pentanoic Acid	mg/L	2	1.6	81	59-121	N2
Lactic Acid	mg/L	2	2.0	101	70-130	
Pentanoic Acid	mg/L	2	1.4	71	59-121	N2
Propionic Acid	mg/L	2	1.9	97	70-130	
Pyruvic Acid	mg/L	2	1.9	95	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1458667 1458668

Parameter	Units	60440028030 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acetic Acid	mg/L	ND	20	20	20.2	20.1	99	99	70-130	0	30	
Butyric Acid	mg/L	ND	20	20	17.1	17.1	85	85	70-130	0	30	
Formic acid	mg/L	ND	20	20	19.0	18.9	94	94	70-130	0	30	
Hexanoic Acid	mg/L	ND	20	20	9.6	9.7	48	48	39-114	1	30	M0,N2
i-Hexanoic Acid	mg/L	ND	20	20	13.2	13.2	66	66	39-114	0	30	M0,N2
i-Pentanoic Acid	mg/L	ND	20	20	15.5	16.0	77	80	59-121	3	30	N2
Lactic Acid	mg/L	6.2	20	20	25.3	25.2	96	95	70-130	1	30	
Pentanoic Acid	mg/L	ND	20	20	13.6	13.5	68	68	59-121	0	30	M1,N2

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1458667 1458668

Parameter	Units	60440028030 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Propionic Acid	mg/L	ND	20	20	18.9	18.9	94	94	70-130	0	30	
Pyruvic Acid	mg/L	ND	20	20	18.6	18.2	93	91	70-130	2	30	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

QC Batch: 870794
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440028030, 60440028031, 60440028032, 60440028033, 60440028034

METHOD BLANK: 3448891 Matrix: Water
Associated Lab Samples: 60440028030, 60440028031, 60440028032, 60440028033, 60440028034

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	9.1	10/27/23 14:24	

LABORATORY CONTROL SAMPLE: 3448892

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	10400	104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3448893 3448894

Parameter	Units	60440296002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	ND	10000	10000	10400	10300	103	102	75-125	1	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

QC Batch: 869971
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440028001, 60440028002, 60440028003, 60440028004, 60440028005, 60440028006, 60440028007, 60440028008

METHOD BLANK: 3445022
Matrix: Water
Associated Lab Samples: 60440028001, 60440028002, 60440028003, 60440028004, 60440028005, 60440028006, 60440028007, 60440028008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/20/23 08:27	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/20/23 08:27	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/20/23 08:27	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/20/23 08:27	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/20/23 08:27	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/20/23 08:27	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/20/23 08:27	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/20/23 08:27	
2-Hexanone	ug/L	ND	10.0	1.1	10/20/23 08:27	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/20/23 08:27	
Acetone	ug/L	ND	10.0	2.5	10/20/23 08:27	
Benzene	ug/L	ND	1.0	0.14	10/20/23 08:27	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/20/23 08:27	
Bromoform	ug/L	ND	1.0	0.68	10/20/23 08:27	
Bromomethane	ug/L	ND	5.0	0.46	10/20/23 08:27	
Carbon disulfide	ug/L	ND	5.0	0.98	10/20/23 08:27	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/20/23 08:27	
Chlorobenzene	ug/L	ND	1.0	0.089	10/20/23 08:27	
Chloroethane	ug/L	ND	1.0	0.37	10/20/23 08:27	
Chloroform	ug/L	ND	1.0	0.22	10/20/23 08:27	
Chloromethane	ug/L	ND	1.0	0.28	10/20/23 08:27	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/20/23 08:27	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/20/23 08:27	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/20/23 08:27	
Ethylbenzene	ug/L	ND	1.0	0.12	10/20/23 08:27	
Methylene Chloride	ug/L	ND	1.0	0.39	10/20/23 08:27	
Styrene	ug/L	ND	1.0	0.12	10/20/23 08:27	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/20/23 08:27	
Toluene	ug/L	ND	1.0	0.25	10/20/23 08:27	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/20/23 08:27	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/20/23 08:27	
Trichloroethene	ug/L	ND	1.0	0.21	10/20/23 08:27	
Vinyl chloride	ug/L	ND	1.0	0.17	10/20/23 08:27	
Xylene (Total)	ug/L	ND	3.0	0.28	10/20/23 08:27	
1,2-Dichlorobenzene-d4 (S)	%	103	80-120		10/20/23 08:27	
4-Bromofluorobenzene (S)	%	100	80-120		10/20/23 08:27	
Toluene-d8 (S)	%	100	80-120		10/20/23 08:27	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

LABORATORY CONTROL SAMPLE: 3445023

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.6	98	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	17.5	87	70-130	
1,1,2-Trichloroethane	ug/L	20	18.8	94	75-125	
1,1-Dichloroethane	ug/L	20	18.6	93	75-120	
1,1-Dichloroethene	ug/L	20	18.5	93	75-120	
1,2-Dichloroethane	ug/L	20	17.1	86	80-120	
1,2-Dichloropropane	ug/L	20	17.7	88	80-120	
2-Butanone (MEK)	ug/L	100	76.1	76	60-140	
2-Hexanone	ug/L	100	86.7	87	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	79.5	80	70-135	
Acetone	ug/L	100	76.6	77	25-185	
Benzene	ug/L	20	18.9	95	80-120	
Bromodichloromethane	ug/L	20	19.0	95	80-120	
Bromoform	ug/L	20	19.9	100	70-135	
Bromomethane	ug/L	20	14.8	74	50-145	
Carbon disulfide	ug/L	20	18.9	95	70-130	
Carbon tetrachloride	ug/L	20	19.2	96	80-130	
Chlorobenzene	ug/L	20	19.5	97	80-120	
Chloroethane	ug/L	20	20.1	100	60-135	
Chloroform	ug/L	20	17.3	87	75-125	
Chloromethane	ug/L	20	17.2	86	60-130	
cis-1,2-Dichloroethene	ug/L	20	18.4	92	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.5	93	75-125	
Dibromochloromethane	ug/L	20	19.7	99	80-120	
Ethylbenzene	ug/L	20	20.2	101	80-120	
Methylene Chloride	ug/L	20	20.2	101	70-130	
Styrene	ug/L	20	19.9	100	80-155	
Tetrachloroethene	ug/L	20	21.1	105	80-125	
Toluene	ug/L	20	19.6	98	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.3	91	75-125	
trans-1,3-Dichloropropene	ug/L	20	17.9	89	70-125	
Trichloroethene	ug/L	20	18.7	93	80-125	
Vinyl chloride	ug/L	20	19.3	97	65-130	
Xylene (Total)	ug/L	60	59.7	100	80-120	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			104	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3445024 3445025

Parameter	Units	60439898001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	19.5	19.1	97	96	75-125	2	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	17.3	16.4	86	82	80-120	5	15	
1,1,2-Trichloroethane	ug/L	ND	20	20	17.4	16.6	87	83	80-120	4	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3445024 3445025

Parameter	Units	60439898001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	ND	20	20	18.2	18.1	91	90	75-120	1	15	
1,1-Dichloroethene	ug/L	ND	20	20	19.0	18.8	95	94	75-120	1	25	
1,2-Dichloroethane	ug/L	ND	20	20	16.8	16.8	84	84	80-120	0	25	
1,2-Dichloropropane	ug/L	ND	20	20	17.4	17.0	87	85	80-120	2	20	
2-Butanone (MEK)	ug/L	ND	100	100	53.8	53.7	54	54	50-155	0	25	
2-Hexanone	ug/L	ND	100	100	62.6	62.4	63	62	55-145	0	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	76.5	73.7	76	74	70-130	4	20	
Acetone	ug/L	ND	100	100	39.6	37.7	40	38	35-160	5	25	
Benzene	ug/L	ND	20	20	18.7	18.7	93	93	80-120	0	25	
Bromodichloromethane	ug/L	ND	20	20	18.4	18.1	92	90	80-120	2	15	
Bromoform	ug/L	ND	20	20	18.0	18.0	90	90	60-130	0	20	
Bromomethane	ug/L	ND	20	20	14.0	15.6	70	78	50-140	11	45	
Carbon disulfide	ug/L	ND	20	20	19.4	18.6	97	93	75-125	4	25	
Carbon tetrachloride	ug/L	ND	20	20	19.2	19.4	96	97	70-130	1	20	
Chlorobenzene	ug/L	ND	20	20	18.5	18.2	93	91	80-120	2	20	
Chloroethane	ug/L	ND	20	20	20.3	19.2	101	96	70-130	5	20	
Chloroform	ug/L	ND	20	20	17.4	17.1	87	85	75-120	2	20	
Chloromethane	ug/L	ND	20	20	16.2	16.8	81	84	45-145	3	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	18.5	17.8	93	89	80-120	4	20	
cis-1,3-Dichloropropene	ug/L	ND	20	20	17.5	17.9	87	89	75-125	2	20	
Dibromochloromethane	ug/L	ND	20	20	17.8	17.4	89	87	75-125	2	20	
Ethylbenzene	ug/L	ND	20	20	19.0	19.1	95	95	80-120	1	25	
Methylene Chloride	ug/L	ND	20	20	19.6	18.7	98	94	70-140	5	25	
Styrene	ug/L	ND	20	20	18.4	18.2	92	91	80-120	1	30	
Tetrachloroethene	ug/L	ND	20	20	19.1	19.0	95	95	80-125	0	25	
Toluene	ug/L	ND	20	20	19.1	18.8	95	94	80-120	2	25	
trans-1,2-Dichloroethene	ug/L	ND	20	20	18.7	18.3	93	92	80-120	2	20	
trans-1,3-Dichloropropene	ug/L	ND	20	20	16.0	15.6	80	78	75-125	2	15	
Trichloroethene	ug/L	ND	20	20	18.7	18.2	94	91	80-125	3	20	
Vinyl chloride	ug/L	ND	20	20	19.0	18.6	95	93	65-140	2	25	
Xylene (Total)	ug/L	ND	60	60	56.3	55.8	94	93	80-120	1	30	
1,2-Dichlorobenzene-d4 (S)	%						100	100	80-120			
4-Bromofluorobenzene (S)	%						98	98	80-120			
Toluene-d8 (S)	%						96	101	80-120			
Preservation pH		1.0			1.0	1.0				0		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3445026 3445027

Parameter	Units	60439898003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	19.0	19.5	95	97	75-125	3	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	17.4	17.6	87	88	80-120	1	15	
1,1,2-Trichloroethane	ug/L	ND	20	20	17.3	18.6	87	93	80-120	7	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3445026 3445027

Parameter	Units	60439898003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	ND	20	20	18.1	18.5	90	93	75-120	2	15	
1,1-Dichloroethene	ug/L	ND	20	20	18.4	19.3	92	97	75-120	5	25	
1,2-Dichloroethane	ug/L	ND	20	20	17.1	17.9	85	89	80-120	5	25	
1,2-Dichloropropane	ug/L	ND	20	20	17.1	17.6	86	88	80-120	3	20	
2-Butanone (MEK)	ug/L	ND	100	100	54.9	54.6	55	55	50-155	1	25	
2-Hexanone	ug/L	ND	100	100	63.6	67.3	64	67	55-145	6	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	78.6	85.4	79	85	70-130	8	20	
Acetone	ug/L	ND	100	100	40.7	41.2	41	41	35-160	1	25	
Benzene	ug/L	ND	20	20	18.8	19.5	94	97	80-120	4	25	
Bromodichloromethane	ug/L	ND	20	20	18.4	19.3	92	97	80-120	5	15	
Bromoform	ug/L	ND	20	20	19.3	19.7	96	98	60-130	2	20	
Bromomethane	ug/L	ND	20	20	14.9	14.9	75	75	50-140	0	45	
Carbon disulfide	ug/L	ND	20	20	18.7	19.5	93	97	75-125	4	25	
Carbon tetrachloride	ug/L	ND	20	20	19.6	19.9	98	99	70-130	1	20	
Chlorobenzene	ug/L	5.2	20	20	23.2	23.7	90	93	80-120	2	20	
Chloroethane	ug/L	ND	20	20	19.4	19.7	97	98	70-130	1	20	
Chloroform	ug/L	ND	20	20	17.1	17.6	85	87	75-120	3	20	
Chloromethane	ug/L	ND	20	20	16.8	17.0	84	85	45-145	2	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	17.3	18.1	86	91	80-120	5	20	
cis-1,3-Dichloropropene	ug/L	ND	20	20	17.5	18.7	87	94	75-125	7	20	
Dibromochloromethane	ug/L	ND	20	20	18.2	19.0	91	95	75-125	4	20	
Ethylbenzene	ug/L	ND	20	20	19.4	19.9	97	99	80-120	3	25	
Methylene Chloride	ug/L	ND	20	20	19.8	20.8	99	104	70-140	5	25	
Styrene	ug/L	ND	20	20	7.8	6.0	39	30	80-120	26	30	M1
Tetrachloroethene	ug/L	ND	20	20	19.6	20.0	98	100	80-125	2	25	
Toluene	ug/L	ND	20	20	18.8	19.4	94	97	80-120	3	25	
trans-1,2-Dichloroethene	ug/L	ND	20	20	17.3	18.0	87	90	80-120	4	20	
trans-1,3-Dichloropropene	ug/L	ND	20	20	16.3	17.4	82	87	75-125	7	15	
Trichloroethene	ug/L	ND	20	20	18.0	19.1	90	95	80-125	6	20	
Vinyl chloride	ug/L	ND	20	20	18.6	19.3	93	96	65-140	3	25	
Xylene (Total)	ug/L	ND	60	60	55.3	56.7	92	95	80-120	3	30	
1,2-Dichlorobenzene-d4 (S)	%						101	100	80-120			
4-Bromofluorobenzene (S)	%						98	98	80-120			
Toluene-d8 (S)	%						99	100	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

QC Batch: 870044
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440028009, 60440028010, 60440028011, 60440028012, 60440028013, 60440028014, 60440028015, 60440028016, 60440028017, 60440028018, 60440028019, 60440028020, 60440028021, 60440028022, 60440028023, 60440028024

METHOD BLANK: 3445296
Matrix: Water
Associated Lab Samples: 60440028009, 60440028010, 60440028011, 60440028012, 60440028013, 60440028014, 60440028015, 60440028016, 60440028017, 60440028018, 60440028019, 60440028020, 60440028021, 60440028022, 60440028023, 60440028024

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/20/23 19:43	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/20/23 19:43	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/20/23 19:43	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/20/23 19:43	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/20/23 19:43	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/20/23 19:43	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/20/23 19:43	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/20/23 19:43	
2-Hexanone	ug/L	ND	10.0	1.1	10/20/23 19:43	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/20/23 19:43	
Acetone	ug/L	ND	10.0	2.5	10/20/23 19:43	
Benzene	ug/L	ND	1.0	0.14	10/20/23 19:43	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/20/23 19:43	
Bromoform	ug/L	ND	1.0	0.68	10/20/23 19:43	
Bromomethane	ug/L	ND	5.0	0.46	10/20/23 19:43	
Carbon disulfide	ug/L	ND	5.0	0.98	10/20/23 19:43	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/20/23 19:43	
Chlorobenzene	ug/L	ND	1.0	0.089	10/20/23 19:43	
Chloroethane	ug/L	ND	1.0	0.37	10/20/23 19:43	
Chloroform	ug/L	ND	1.0	0.22	10/20/23 19:43	
Chloromethane	ug/L	ND	1.0	0.28	10/20/23 19:43	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/20/23 19:43	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/20/23 19:43	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/20/23 19:43	
Ethylbenzene	ug/L	ND	1.0	0.12	10/20/23 19:43	
Methylene Chloride	ug/L	0.53J	1.0	0.39	10/20/23 19:43	
Styrene	ug/L	ND	1.0	0.12	10/20/23 19:43	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/20/23 19:43	
Toluene	ug/L	ND	1.0	0.25	10/20/23 19:43	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/20/23 19:43	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/20/23 19:43	
Trichloroethene	ug/L	ND	1.0	0.21	10/20/23 19:43	
Vinyl chloride	ug/L	ND	1.0	0.17	10/20/23 19:43	
Xylene (Total)	ug/L	ND	3.0	0.28	10/20/23 19:43	
1,2-Dichlorobenzene-d4 (S)	%	100	80-120		10/20/23 19:43	
4-Bromofluorobenzene (S)	%	98	80-120		10/20/23 19:43	
Toluene-d8 (S)	%	103	80-120		10/20/23 19:43	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

LABORATORY CONTROL SAMPLE: 3445297

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	18.2	91	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	18.0	90	70-130	
1,1,2-Trichloroethane	ug/L	20	18.7	93	75-125	
1,1-Dichloroethane	ug/L	20	17.7	88	75-120	
1,1-Dichloroethene	ug/L	20	18.0	90	75-120	
1,2-Dichloroethane	ug/L	20	17.1	86	80-120	
1,2-Dichloropropane	ug/L	20	17.3	87	80-120	
2-Butanone (MEK)	ug/L	100	85.7	86	60-140	
2-Hexanone	ug/L	100	96.6	97	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	84.9	85	70-135	
Acetone	ug/L	100	88.6	89	25-185	
Benzene	ug/L	20	18.5	93	80-120	
Bromodichloromethane	ug/L	20	19.8	99	80-120	
Bromoform	ug/L	20	20.8	104	70-135	
Bromomethane	ug/L	20	15.3	77	50-145	
Carbon disulfide	ug/L	20	18.1	91	70-130	
Carbon tetrachloride	ug/L	20	18.4	92	80-130	
Chlorobenzene	ug/L	20	18.6	93	80-120	
Chloroethane	ug/L	20	19.5	98	60-135	
Chloroform	ug/L	20	16.9	85	75-125	
Chloromethane	ug/L	20	17.1	86	60-130	
cis-1,2-Dichloroethene	ug/L	20	17.9	89	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.2	91	75-125	
Dibromochloromethane	ug/L	20	19.4	97	80-120	
Ethylbenzene	ug/L	20	18.8	94	80-120	
Methylene Chloride	ug/L	20	20.2	101	70-130	
Styrene	ug/L	20	18.9	95	80-155	
Tetrachloroethene	ug/L	20	18.5	93	80-125	
Toluene	ug/L	20	18.8	94	80-120	
trans-1,2-Dichloroethene	ug/L	20	17.4	87	75-125	
trans-1,3-Dichloropropene	ug/L	20	17.0	85	70-125	
Trichloroethene	ug/L	20	18.0	90	80-125	
Vinyl chloride	ug/L	20	18.2	91	65-130	
Xylene (Total)	ug/L	60	55.1	92	80-120	
1,2-Dichlorobenzene-d4 (S)	%			102	80-120	
4-Bromofluorobenzene (S)	%			99	80-120	
Toluene-d8 (S)	%			102	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3445298 3445299

Parameter	Units	60440028019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	19.0	19.3	95	96	75-125	1	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	16.3	16.7	81	83	80-120	2	15	
1,1,2-Trichloroethane	ug/L	ND	20	20	18.7	18.1	93	91	80-120	3	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3445298 3445299

Parameter	Units	60440028019 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	ND	20	20	18.1	18.5	91	93	75-120	2	15	
1,1-Dichloroethene	ug/L	ND	20	20	18.3	19.6	91	98	75-120	7	25	
1,2-Dichloroethane	ug/L	ND	20	20	17.3	17.2	87	86	80-120	1	25	
1,2-Dichloropropane	ug/L	ND	20	20	17.1	17.4	86	87	80-120	1	20	
2-Butanone (MEK)	ug/L	ND	100	100	56.3	54.8	56	55	50-155	3	25	
2-Hexanone	ug/L	ND	100	100	66.6	66.2	67	66	55-145	1	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	82.4	80.1	82	80	70-130	3	20	
Acetone	ug/L	3.3J	100	100	43.5	42.9	40	40	35-160	1	25	
Benzene	ug/L	ND	20	20	18.7	18.9	93	95	80-120	1	25	
Bromodichloromethane	ug/L	ND	20	20	18.3	18.5	91	93	80-120	1	15	
Bromoform	ug/L	ND	20	20	17.8	19.0	89	95	60-130	6	20	
Bromomethane	ug/L	ND	20	20	14.7	16.1	73	80	50-140	9	45	
Carbon disulfide	ug/L	ND	20	20	17.6	18.2	88	91	75-125	3	25	
Carbon tetrachloride	ug/L	ND	20	20	18.8	19.3	94	97	70-130	3	20	
Chlorobenzene	ug/L	ND	20	20	18.1	18.9	91	95	80-120	4	20	
Chloroethane	ug/L	ND	20	20	20.0	20.1	100	100	70-130	1	20	
Chloroform	ug/L	ND	20	20	17.2	17.5	85	86	75-120	2	20	
Chloromethane	ug/L	ND	20	20	16.2	17.3	81	87	45-145	7	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	17.8	18.4	89	92	80-120	3	20	
cis-1,3-Dichloropropene	ug/L	ND	20	20	16.7	16.7	84	83	75-125	0	20	
Dibromochloromethane	ug/L	ND	20	20	17.5	18.2	88	91	75-125	4	20	
Ethylbenzene	ug/L	ND	20	20	18.2	19.4	91	97	80-120	6	25	
Methylene Chloride	ug/L	ND	20	20	18.3	19.7	91	98	70-140	8	25	
Styrene	ug/L	ND	20	20	18.1	18.8	90	94	80-120	4	30	
Tetrachloroethene	ug/L	ND	20	20	19.0	19.6	95	98	80-125	3	25	
Toluene	ug/L	ND	20	20	18.5	19.4	92	97	80-120	5	25	
trans-1,2-Dichloroethene	ug/L	ND	20	20	17.9	18.6	89	93	80-120	4	20	
trans-1,3-Dichloropropene	ug/L	ND	20	20	16.0	16.5	80	82	75-125	3	15	
Trichloroethene	ug/L	0.50J	20	20	18.9	19.1	92	93	80-125	1	20	
Vinyl chloride	ug/L	ND	20	20	19.3	20.1	96	100	65-140	4	25	
Xylene (Total)	ug/L	ND	60	60	55.3	57.3	92	96	80-120	4	30	
1,2-Dichlorobenzene-d4 (S)	%						102	98	80-120			
4-Bromofluorobenzene (S)	%						98	98	80-120			
Toluene-d8 (S)	%						102	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.: 60440028

QC Batch: 870274
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440028006, 60440028023, 60440028025, 60440028026, 60440028027

METHOD BLANK: 3446238 Matrix: Water
Associated Lab Samples: 60440028006, 60440028023, 60440028025, 60440028026, 60440028027

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/23/23 20:16	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/23/23 20:16	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/23/23 20:16	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/23/23 20:16	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/23/23 20:16	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/23/23 20:16	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/23/23 20:16	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/23/23 20:16	
2-Hexanone	ug/L	ND	10.0	1.1	10/23/23 20:16	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/23/23 20:16	
Acetone	ug/L	ND	10.0	2.5	10/23/23 20:16	
Benzene	ug/L	ND	1.0	0.14	10/23/23 20:16	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/23/23 20:16	
Bromoform	ug/L	ND	1.0	0.68	10/23/23 20:16	
Bromomethane	ug/L	ND	5.0	0.46	10/23/23 20:16	
Carbon disulfide	ug/L	ND	5.0	0.98	10/23/23 20:16	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/23/23 20:16	
Chlorobenzene	ug/L	ND	1.0	0.089	10/23/23 20:16	
Chloroethane	ug/L	ND	1.0	0.37	10/23/23 20:16	
Chloroform	ug/L	ND	1.0	0.22	10/23/23 20:16	
Chloromethane	ug/L	ND	1.0	0.28	10/23/23 20:16	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/23/23 20:16	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/23/23 20:16	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/23/23 20:16	
Ethylbenzene	ug/L	ND	1.0	0.12	10/23/23 20:16	
Methylene Chloride	ug/L	ND	1.0	0.39	10/23/23 20:16	
Styrene	ug/L	ND	1.0	0.12	10/23/23 20:16	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/23/23 20:16	
Toluene	ug/L	ND	1.0	0.25	10/23/23 20:16	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/23/23 20:16	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/23/23 20:16	
Trichloroethene	ug/L	ND	1.0	0.21	10/23/23 20:16	
Vinyl chloride	ug/L	ND	1.0	0.17	10/23/23 20:16	
Xylene (Total)	ug/L	ND	3.0	0.28	10/23/23 20:16	
1,2-Dichlorobenzene-d4 (S)	%	102	80-120		10/23/23 20:16	
4-Bromofluorobenzene (S)	%	101	80-120		10/23/23 20:16	
Toluene-d8 (S)	%	97	80-120		10/23/23 20:16	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

LABORATORY CONTROL SAMPLE: 3446239

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.9	100	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	20.1	101	70-130	
1,1,2-Trichloroethane	ug/L	20	20.5	103	75-125	
1,1-Dichloroethane	ug/L	20	20.6	103	75-120	
1,1-Dichloroethene	ug/L	20	18.3	91	75-120	
1,2-Dichloroethane	ug/L	20	21.2	106	80-120	
1,2-Dichloropropane	ug/L	20	20.5	103	80-120	
2-Butanone (MEK)	ug/L	100	101	101	60-140	
2-Hexanone	ug/L	100	109	109	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	99.6	100	70-135	
Acetone	ug/L	100	104	104	25-185	
Benzene	ug/L	20	20.8	104	80-120	
Bromodichloromethane	ug/L	20	23.0	115	80-120	
Bromoform	ug/L	20	21.1	105	70-135	
Bromomethane	ug/L	20	15.9	80	50-145	
Carbon disulfide	ug/L	20	19.1	95	70-130	
Carbon tetrachloride	ug/L	20	20.2	101	80-130	
Chlorobenzene	ug/L	20	21.9	110	80-120	
Chloroethane	ug/L	20	20.4	102	60-135	
Chloroform	ug/L	20	20.3	102	75-125	
Chloromethane	ug/L	20	16.8	84	60-130	
cis-1,2-Dichloroethene	ug/L	20	20.5	103	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.9	104	75-125	
Dibromochloromethane	ug/L	20	20.9	104	80-120	
Ethylbenzene	ug/L	20	21.8	109	80-120	
Methylene Chloride	ug/L	20	24.4	122	70-130	
Styrene	ug/L	20	23.0	115	80-155	
Tetrachloroethene	ug/L	20	20.8	104	80-125	
Toluene	ug/L	20	21.2	106	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.2	96	75-125	
trans-1,3-Dichloropropene	ug/L	20	20.0	100	70-125	
Trichloroethene	ug/L	20	20.3	101	80-125	
Vinyl chloride	ug/L	20	18.6	93	65-130	
Xylene (Total)	ug/L	60	66.3	111	80-120	
1,2-Dichlorobenzene-d4 (S)	%			101	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.: 60440028

QC Batch: 870433
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440028028, 60440028029, 60440028030, 60440028031, 60440028032, 60440028033, 60440028034

METHOD BLANK: 3447097 Matrix: Water
Associated Lab Samples: 60440028028, 60440028029, 60440028030, 60440028031, 60440028032, 60440028033, 60440028034

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/25/23 00:47	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/25/23 00:47	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/25/23 00:47	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/25/23 00:47	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/25/23 00:47	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/25/23 00:47	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/25/23 00:47	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/25/23 00:47	
2-Hexanone	ug/L	ND	10.0	1.1	10/25/23 00:47	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/25/23 00:47	
Acetone	ug/L	ND	10.0	2.5	10/25/23 00:47	
Benzene	ug/L	ND	1.0	0.14	10/25/23 00:47	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/25/23 00:47	
Bromoform	ug/L	ND	1.0	0.68	10/25/23 00:47	
Bromomethane	ug/L	ND	5.0	0.46	10/25/23 00:47	
Carbon disulfide	ug/L	ND	5.0	0.98	10/25/23 00:47	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/25/23 00:47	
Chlorobenzene	ug/L	ND	1.0	0.089	10/25/23 00:47	
Chloroethane	ug/L	ND	1.0	0.37	10/25/23 00:47	
Chloroform	ug/L	ND	1.0	0.22	10/25/23 00:47	
Chloromethane	ug/L	ND	1.0	0.28	10/25/23 00:47	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/25/23 00:47	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/25/23 00:47	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/25/23 00:47	
Ethylbenzene	ug/L	ND	1.0	0.12	10/25/23 00:47	
Methylene Chloride	ug/L	ND	1.0	0.39	10/25/23 00:47	
Styrene	ug/L	ND	1.0	0.12	10/25/23 00:47	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/25/23 00:47	
Toluene	ug/L	ND	1.0	0.25	10/25/23 00:47	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/25/23 00:47	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/25/23 00:47	
Trichloroethene	ug/L	ND	1.0	0.21	10/25/23 00:47	
Vinyl chloride	ug/L	ND	1.0	0.17	10/25/23 00:47	
Xylene (Total)	ug/L	ND	3.0	0.28	10/25/23 00:47	
1,2-Dichlorobenzene-d4 (S)	%	98	80-120		10/25/23 00:47	
4-Bromofluorobenzene (S)	%	102	80-120		10/25/23 00:47	
Toluene-d8 (S)	%	99	80-120		10/25/23 00:47	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

LABORATORY CONTROL SAMPLE: 3447098

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.4	102	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	19.0	95	70-130	
1,1,2-Trichloroethane	ug/L	20	18.8	94	75-125	
1,1-Dichloroethane	ug/L	20	19.9	99	75-120	
1,1-Dichloroethene	ug/L	20	20.8	104	75-120	
1,2-Dichloroethane	ug/L	20	20.1	101	80-120	
1,2-Dichloropropane	ug/L	20	19.8	99	80-120	
2-Butanone (MEK)	ug/L	100	67.8	68	60-140	
2-Hexanone	ug/L	100	75.4	75	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	90.0	90	70-135	
Acetone	ug/L	100	58.9	59	25-185	
Benzene	ug/L	20	19.8	99	80-120	
Bromodichloromethane	ug/L	20	20.7	103	80-120	
Bromoform	ug/L	20	18.0	90	70-135	
Bromomethane	ug/L	20	16.0	80	50-145	
Carbon disulfide	ug/L	20	19.9	99	70-130	
Carbon tetrachloride	ug/L	20	19.9	100	80-130	
Chlorobenzene	ug/L	20	20.1	100	80-120	
Chloroethane	ug/L	20	20.6	103	60-135	
Chloroform	ug/L	20	20.5	102	75-125	
Chloromethane	ug/L	20	18.2	91	60-130	
cis-1,2-Dichloroethene	ug/L	20	20.5	103	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.9	100	75-125	
Dibromochloromethane	ug/L	20	19.9	99	80-120	
Ethylbenzene	ug/L	20	20.4	102	80-120	
Methylene Chloride	ug/L	20	23.6	118	70-130	
Styrene	ug/L	20	20.6	103	80-155	
Tetrachloroethene	ug/L	20	19.9	99	80-125	
Toluene	ug/L	20	19.6	98	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.9	99	75-125	
trans-1,3-Dichloropropene	ug/L	20	19.3	97	70-125	
Trichloroethene	ug/L	20	20.1	100	80-125	
Vinyl chloride	ug/L	20	20.6	103	65-130	
Xylene (Total)	ug/L	60	61.7	103	80-120	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			102	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3447099 3447100

Parameter	Units	60440028029 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	20.9	20.2	105	101	75-125	4	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	18.3	18.2	92	91	80-120	1	15	
1,1,2-Trichloroethane	ug/L	ND	20	20	18.9	18.2	94	91	80-120	4	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3447099 3447100

Parameter	Units	60440028029 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	ND	20	20	20.2	19.7	101	98	75-120	2	15	
1,1-Dichloroethene	ug/L	ND	20	20	21.9	21.0	109	105	75-120	4	25	
1,2-Dichloroethane	ug/L	ND	20	20	20.4	19.2	102	96	80-120	6	25	
1,2-Dichloropropane	ug/L	ND	20	20	19.0	18.5	95	92	80-120	3	20	
2-Butanone (MEK)	ug/L	ND	100	100	68.2	65.5	68	65	50-155	4	25	
2-Hexanone	ug/L	ND	100	100	71.1	72.8	71	73	55-145	2	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	86.3	86.6	86	87	70-130	0	20	
Acetone	ug/L	ND	100	100	57.6	56.1	58	56	35-160	3	25	
Benzene	ug/L	ND	20	20	19.3	19.3	96	97	80-120	0	25	
Bromodichloromethane	ug/L	ND	20	20	19.2	18.9	96	94	80-120	2	15	
Bromoform	ug/L	ND	20	20	17.1	16.9	85	85	60-130	1	20	
Bromomethane	ug/L	ND	20	20	12.4	13.1	62	66	50-140	6	45	
Carbon disulfide	ug/L	ND	20	20	19.8	19.0	99	95	75-125	4	25	
Carbon tetrachloride	ug/L	ND	20	20	20.1	19.8	101	99	70-130	2	20	
Chlorobenzene	ug/L	ND	20	20	19.3	18.9	96	95	80-120	2	20	
Chloroethane	ug/L	ND	20	20	22.0	20.9	110	105	70-130	5	20	
Chloroform	ug/L	ND	20	20	20.1	19.1	100	96	75-120	5	20	
Chloromethane	ug/L	ND	20	20	18.1	17.8	91	89	45-145	2	30	
cis-1,2-Dichloroethene	ug/L	ND	20	20	20.6	18.9	103	94	80-120	9	20	
cis-1,3-Dichloropropene	ug/L	ND	20	20	18.4	18.7	92	94	75-125	2	20	
Dibromochloromethane	ug/L	ND	20	20	18.1	18.7	90	93	75-125	3	20	
Ethylbenzene	ug/L	ND	20	20	19.1	19.2	95	96	80-120	1	25	
Methylene Chloride	ug/L	ND	20	20	18.6	20.7	93	104	70-140	11	25	
Styrene	ug/L	ND	20	20	9.5	9.5	48	48	80-120	0	30	M1
Tetrachloroethene	ug/L	ND	20	20	19.9	19.6	100	98	80-125	1	25	
Toluene	ug/L	ND	20	20	19.2	19.2	96	96	80-120	0	25	
trans-1,2-Dichloroethene	ug/L	ND	20	20	17.9	19.4	89	97	80-120	8	20	
trans-1,3-Dichloropropene	ug/L	ND	20	20	18.0	17.6	90	88	75-125	3	15	
Trichloroethene	ug/L	ND	20	20	19.3	19.3	97	97	80-125	0	20	
Vinyl chloride	ug/L	ND	20	20	22.0	21.2	110	106	65-140	4	25	
Xylene (Total)	ug/L	ND	60	60	58.7	59.0	98	98	80-120	1	30	
1,2-Dichlorobenzene-d4 (S)	%						99	102	80-120			
4-Bromofluorobenzene (S)	%						101	100	80-120			
Toluene-d8 (S)	%						101	101	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.: 60440028

QC Batch: 870617
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City

Associated Lab Samples: 60440028028

METHOD BLANK: 3448129 Matrix: Water
Associated Lab Samples: 60440028028

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/25/23 12:05	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/25/23 12:05	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/25/23 12:05	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/25/23 12:05	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/25/23 12:05	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/25/23 12:05	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/25/23 12:05	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/25/23 12:05	
2-Hexanone	ug/L	ND	10.0	1.1	10/25/23 12:05	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/25/23 12:05	
Acetone	ug/L	ND	10.0	2.5	10/25/23 12:05	
Benzene	ug/L	ND	1.0	0.14	10/25/23 12:05	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/25/23 12:05	
Bromoform	ug/L	ND	1.0	0.68	10/25/23 12:05	
Bromomethane	ug/L	ND	5.0	0.46	10/25/23 12:05	
Carbon disulfide	ug/L	ND	5.0	0.98	10/25/23 12:05	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/25/23 12:05	
Chlorobenzene	ug/L	ND	1.0	0.089	10/25/23 12:05	
Chloroethane	ug/L	ND	1.0	0.37	10/25/23 12:05	
Chloroform	ug/L	ND	1.0	0.22	10/25/23 12:05	
Chloromethane	ug/L	ND	1.0	0.28	10/25/23 12:05	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/25/23 12:05	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/25/23 12:05	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/25/23 12:05	
Ethylbenzene	ug/L	ND	1.0	0.12	10/25/23 12:05	
Methylene Chloride	ug/L	ND	1.0	0.39	10/25/23 12:05	
Styrene	ug/L	ND	1.0	0.12	10/25/23 12:05	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/25/23 12:05	
Toluene	ug/L	ND	1.0	0.25	10/25/23 12:05	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/25/23 12:05	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/25/23 12:05	
Vinyl chloride	ug/L	ND	1.0	0.17	10/25/23 12:05	
Xylene (Total)	ug/L	ND	3.0	0.28	10/25/23 12:05	
1,2-Dichlorobenzene-d4 (S)	%	99	80-120		10/25/23 12:05	
4-Bromofluorobenzene (S)	%	97	80-120		10/25/23 12:05	
Toluene-d8 (S)	%	100	80-120		10/25/23 12:05	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

LABORATORY CONTROL SAMPLE: 3448130

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	21.1	106	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	19.3	97	70-130	
1,1,2-Trichloroethane	ug/L	20	21.0	105	75-125	
1,1-Dichloroethane	ug/L	20	18.3	92	75-120	
1,1-Dichloroethene	ug/L	20	20.0	100	75-120	
1,2-Dichloroethane	ug/L	20	21.1	106	80-120	
1,2-Dichloropropane	ug/L	20	21.3	106	80-120	
2-Butanone (MEK)	ug/L	100	106	106	60-140	
2-Hexanone	ug/L	100	75.3	75	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	90.5	91	70-135	
Acetone	ug/L	100	104	104	25-185	
Benzene	ug/L	20	21.5	108	80-120	
Bromodichloromethane	ug/L	20	20.6	103	80-120	
Bromoform	ug/L	20	22.1	110	70-135	
Bromomethane	ug/L	20	17.9	90	50-145	
Carbon disulfide	ug/L	20	19.4	97	70-130	
Carbon tetrachloride	ug/L	20	20.9	105	80-130	
Chlorobenzene	ug/L	20	20.4	102	80-120	
Chloroethane	ug/L	20	19.3	97	60-135	
Chloroform	ug/L	20	21.6	108	75-125	
Chloromethane	ug/L	20	18.2	91	60-130	
cis-1,2-Dichloroethene	ug/L	20	21.0	105	80-120	
cis-1,3-Dichloropropene	ug/L	20	21.0	105	75-125	
Dibromochloromethane	ug/L	20	20.6	103	80-120	
Ethylbenzene	ug/L	20	19.9	100	80-120	
Methylene Chloride	ug/L	20	20.3	101	70-130	
Styrene	ug/L	20	20.2	101	80-155	
Tetrachloroethene	ug/L	20	20.2	101	80-125	
Toluene	ug/L	20	21.0	105	80-120	
trans-1,2-Dichloroethene	ug/L	20	17.8	89	75-125	
trans-1,3-Dichloropropene	ug/L	20	19.7	98	70-125	
Vinyl chloride	ug/L	20	19.4	97	65-130	
Xylene (Total)	ug/L	60	61.3	102	80-120	
1,2-Dichlorobenzene-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			94	80-120	
Toluene-d8 (S)	%			100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3448131 3448132

Parameter	Units	60440186023 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	17.4	15.7	87	79	75-125	10	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	15.7	14.2	79	71	80-120	11	15	M1
1,1,2-Trichloroethane	ug/L	ND	20	20	16.2	15.5	81	78	80-120	4	20	M1
1,1-Dichloroethane	ug/L	ND	20	20	15.5	13.4	77	67	75-120	14	15	M1

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3448131 3448132

Parameter	Units	60440186023 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethene	ug/L	ND	20	20	17.2	16.2	86	81	75-120	6	25	
1,2-Dichloroethane	ug/L	ND	20	20	16.0	14.7	80	74	80-120	8	25	M1
1,2-Dichloropropane	ug/L	ND	20	20	16.9	15.2	85	76	80-120	11	20	M1
2-Butanone (MEK)	ug/L	ND	100	100	79.1	66.6	79	67	50-155	17	25	
2-Hexanone	ug/L	ND	100	100	57.3	50.6	57	51	55-145	12	20	M1
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	66.5	58.8	66	59	70-130	12	20	M1
Acetone	ug/L	ND	100	100	83.6	58.2	84	58	35-160	36	25	R1
Benzene	ug/L	ND	20	20	17.0	15.1	85	76	80-120	11	25	M1
Bromodichloromethane	ug/L	ND	20	20	16.7	15.6	84	78	80-120	7	15	M1
Bromoform	ug/L	ND	20	20	16.7	15.6	83	78	60-130	7	20	
Bromomethane	ug/L	ND	20	20	13.2	12.7	66	63	50-140	4	45	
Carbon disulfide	ug/L	ND	20	20	17.7	16.0	89	80	75-125	10	25	
Carbon tetrachloride	ug/L	ND	20	20	17.2	15.6	86	78	70-130	10	20	
Chlorobenzene	ug/L	ND	20	20	16.6	15.5	83	77	80-120	7	20	M1
Chloroethane	ug/L	ND	20	20	17.8	15.3	89	77	70-130	15	20	
Chloroform	ug/L	0.37J	20	20	17.6	15.9	86	78	75-120	10	20	
Chloromethane	ug/L	ND	20	20	15.9	14.7	79	73	45-145	8	30	
cis-1,2-Dichloroethene	ug/L	0.24J	20	20	17.1	15.0	84	74	80-120	13	20	M1
cis-1,3-Dichloropropene	ug/L	ND	20	20	16.0	14.2	80	71	75-125	12	20	M1
Dibromochloromethane	ug/L	ND	20	20	16.5	14.9	82	74	75-125	10	20	M1
Ethylbenzene	ug/L	ND	20	20	16.5	15.1	82	75	80-120	9	25	M1
Methylene Chloride	ug/L	ND	20	20	16.2	14.2	81	71	70-140	14	25	
Styrene	ug/L	ND	20	20	15.8	14.6	79	73	80-120	8	30	M1
Tetrachloroethene	ug/L	ND	20	20	17.1	15.8	84	78	80-125	7	25	M1
Toluene	ug/L	ND	20	20	17.0	15.8	85	79	80-120	7	25	M1
trans-1,2-Dichloroethene	ug/L	ND	20	20	14.8	13.1	74	66	80-120	12	20	M1
trans-1,3-Dichloropropene	ug/L	ND	20	20	15.8	14.3	79	72	75-125	10	15	M1
Vinyl chloride	ug/L	ND	20	20	18.1	16.8	91	84	65-140	7	25	
Xylene (Total)	ug/L	ND	60	60	48.1	45.4	80	76	80-120	6	30	MS
1,2-Dichlorobenzene-d4 (S)	%						100	99	80-120			
4-Bromofluorobenzene (S)	%						97	94	80-120			
Toluene-d8 (S)	%						101	105	80-120			
Preservation pH		1.0			1.0	1.0				0		

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3448133 3448134

Parameter	Units	60440430053 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	16.8	14.0	84	70	75-125	19	15	M1,R1
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	15.9	12.3	79	61	80-120	26	15	M1,R1
1,1,2-Trichloroethane	ug/L	ND	20	20	16.4	13.0	82	65	80-120	23	20	M1,R1
1,1-Dichloroethane	ug/L	ND	20	20	15.5	12.0	78	60	75-120	26	15	M1,R1
1,1-Dichloroethene	ug/L	ND	20	20	17.1	13.6	86	68	75-120	23	25	M1

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3448133 3448134

Parameter	Units	60440430053 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,2-Dichloroethane	ug/L	ND	20	20	15.5	13.1	78	66	80-120	17	25	M1
1,2-Dichloropropane	ug/L	ND	20	20	16.3	13.1	81	66	80-120	22	20	M1,R1
2-Butanone (MEK)	ug/L	ND	100	100	77.2	65.0	77	65	50-155	17	25	
2-Hexanone	ug/L	ND	100	100	55.1	46.6	55	47	55-145	17	20	M1
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	66.0	53.6	66	54	70-130	21	20	M1,R1
Acetone	ug/L	ND	100	100	81.2	57.1	81	57	35-160	35	25	R1
Benzene	ug/L	ND	20	20	16.5	13.7	83	68	80-120	19	25	M1
Bromodichloromethane	ug/L	ND	20	20	16.5	13.7	82	68	80-120	19	15	M1,R1
Bromoform	ug/L	ND	20	20	16.3	14.2	82	71	60-130	14	20	
Bromomethane	ug/L	ND	20	20	14.4	11.2	72	56	50-140	25	45	
Carbon disulfide	ug/L	ND	20	20	16.6	13.6	83	68	75-125	20	25	M1
Carbon tetrachloride	ug/L	ND	20	20	17.5	13.4	87	67	70-130	26	20	M1,R1
Chlorobenzene	ug/L	ND	20	20	16.5	13.1	82	66	80-120	23	20	M1,R1
Chloroethane	ug/L	ND	20	20	16.6	13.9	83	70	70-130	18	20	
Chloroform	ug/L	ND	20	20	16.7	13.3	83	67	75-120	22	20	M1,R1
Chloromethane	ug/L	ND	20	20	15.6	12.9	78	65	45-145	19	30	
cis-1,2-Dichloroethene	ug/L	45.2	20	20	60.4	58.1	76	64	80-120	4	20	M1
cis-1,3-Dichloropropene	ug/L	ND	20	20	15.7	12.4	78	62	75-125	23	20	M1,R1
Dibromochloromethane	ug/L	ND	20	20	16.4	13.6	82	68	75-125	19	20	M1
Ethylbenzene	ug/L	ND	20	20	15.7	13.3	78	67	80-120	16	25	M1
Methylene Chloride	ug/L	ND	20	20	15.4	12.3	77	61	70-140	23	25	M1
Styrene	ug/L	ND	20	20	15.6	12.6	78	63	80-120	21	30	M1
Tetrachloroethene	ug/L	ND	20	20	17.1	13.7	85	68	80-125	22	25	M1
Toluene	ug/L	ND	20	20	16.8	13.6	84	68	80-120	22	25	M1
trans-1,2-Dichloroethene	ug/L	3.2	20	20	20.4	16.5	86	67	80-120	21	20	M1,R1
trans-1,3-Dichloropropene	ug/L	ND	20	20	15.3	12.8	77	64	75-125	18	15	M1,R1
Vinyl chloride	ug/L	0.26J	20	20	18.2	14.9	90	73	65-140	20	25	
Xylene (Total)	ug/L	ND	60	60	48.7	39.0	81	65	80-120	22	30	MS
1,2-Dichlorobenzene-d4 (S)	%						98	98	80-120			
4-Bromofluorobenzene (S)	%						96	95	80-120			
Toluene-d8 (S)	%						104	104	80-120			
Preservation pH		1.0			1.0	1.0				0		

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

QC Batch: 871224
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440028030, 60440028031, 60440028032, 60440028033, 60440028034

METHOD BLANK: 3450783 Matrix: Water
Associated Lab Samples: 60440028030, 60440028031, 60440028032, 60440028033, 60440028034

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.53	10/30/23 16:47	
Sulfate	mg/L	ND	1.0	0.55	10/30/23 16:47	

METHOD BLANK: 3453231 Matrix: Water
Associated Lab Samples: 60440028030, 60440028031, 60440028032, 60440028033, 60440028034

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.53	11/01/23 20:02	
Sulfate	mg/L	ND	1.0	0.55	11/01/23 20:02	

METHOD BLANK: 3454850 Matrix: Water
Associated Lab Samples: 60440028030, 60440028031, 60440028032, 60440028033, 60440028034

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.53	11/04/23 18:13	
Sulfate	mg/L	ND	1.0	0.55	11/04/23 18:13	

LABORATORY CONTROL SAMPLE: 3450784

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	95	90-110	
Sulfate	mg/L	5	4.8	95	90-110	

LABORATORY CONTROL SAMPLE: 3453232

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.7	94	90-110	
Sulfate	mg/L	5	4.8	95	90-110	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

LABORATORY CONTROL SAMPLE: 3454851

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	99	90-110	
Sulfate	mg/L	5	5.1	102	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3450795 3450796

Parameter	Units	60440813003 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	1280	250	250	1490	1510	83	93	80-120	2	15	
Sulfate	mg/L	238	250	250	175	288	-25	20	80-120	49	15	M1,R1

SAMPLE DUPLICATE: 3450797

Parameter	Units	60440813003 Result	Dup Result	RPD	Max RPD	Qualifiers
Chloride	mg/L	1280	1240	3	15	
Sulfate	mg/L	238	211	12	15	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

QC Batch: 869795
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440028030, 60440028031, 60440028032, 60440028033, 60440028034

METHOD BLANK: 3444324 Matrix: Water
Associated Lab Samples: 60440028030, 60440028031, 60440028032, 60440028033, 60440028034

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	0.069	10/19/23 09:53	
Nitrogen, Nitrite	mg/L	ND	0.10	0.069	10/19/23 09:53	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	0.069	10/19/23 09:53	

LABORATORY CONTROL SAMPLE: 3444325

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1	0.87	87	70-130	
Nitrogen, Nitrite	mg/L	1	1.1	106	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	1.9	96	90-110	

MATRIX SPIKE SAMPLE: 3444326

Parameter	Units	60440028033 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	75.7	50	74.7	-2	70-130	M1
Nitrogen, Nitrite	mg/L	ND	50	ND	0	90-110	M1
Nitrogen, NO2 plus NO3	mg/L	75.7	100	74.7	-1	90-110	M1

SAMPLE DUPLICATE: 3444327

Parameter	Units	60440072004 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	ND	ND		20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

QC Batch: 870575
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440028030, 60440028031, 60440028032

METHOD BLANK: 3447767 Matrix: Water
Associated Lab Samples: 60440028030, 60440028031, 60440028032

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	0.54	11/07/23 11:37	

LABORATORY CONTROL SAMPLE: 3447768

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	4.7	94	80-120	

MATRIX SPIKE SAMPLE: 3447769

Parameter	Units	60440159001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	ND	5	5.6	109	80-120	

SAMPLE DUPLICATE: 3447770

Parameter	Units	60439770001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	3.6	3.6	1	25	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

QC Batch: 872968
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440028033, 60440028034

METHOD BLANK: 3457505 Matrix: Water
Associated Lab Samples: 60440028033, 60440028034

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	0.54	11/10/23 12:23	

LABORATORY CONTROL SAMPLE: 3457506

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	4.6	92	80-120	

MATRIX SPIKE SAMPLE: 3457507

Parameter	Units	60440028033 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	0.66J	5	6.2	110	80-120	

SAMPLE DUPLICATE: 3457508

Parameter	Units	60439939001 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	1.9	1.8	2	25	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

QC Batch: 873477
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Dissolved Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440028030, 60440028031, 60440028032, 60440028033, 60440028034

METHOD BLANK: 3459571 Matrix: Water
Associated Lab Samples: 60440028030, 60440028031, 60440028032, 60440028033, 60440028034

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dissolved Organic Carbon	mg/L	ND	1.0	0.54	11/17/23 14:06	

LABORATORY CONTROL SAMPLE: 3459572

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	5	5.1	103	80-120	

MATRIX SPIKE SAMPLE: 3459573

Parameter	Units	60439898011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	0.92J	5	5.9	100	80-120	H1

SAMPLE DUPLICATE: 3459574

Parameter	Units	60440028030 Result	Dup Result	RPD	Max RPD	Qualifiers
Dissolved Organic Carbon	mg/L	3.1	3.1	2	25	H1

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QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

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.

TNTC - Too Numerous To Count

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

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BATCH QUALIFIERS

Batch: 870274

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

ANALYTE QUALIFIERS

D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
H1	Analysis conducted outside the EPA method holding time.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
MS	Analyte recovery in the matrix spike was outside QC limits for one or more of the constituent analytes used in the calculated result.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.
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.: 60440028

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60440028033	**MW-89-202310**	AM20	305317		
60440028034	**MW-50R-202310**	AM20	305317		
60440028030	**MW-91-202310**	RSK175	305247		
60440028031	**TMW-21-202310**	RSK175	305247		
60440028032	**TMW-19-202310**	RSK175	305247		
60440028033	**MW-89-202310**	RSK175	305247		
60440028034	**MW-50R-202310**	RSK175	305247		
60440028030	**MW-91-202310**	Pace ENV-SOP-BTRO-0042	304657		
60440028031	**TMW-21-202310**	Pace ENV-SOP-BTRO-0042	304657		
60440028032	**TMW-19-202310**	Pace ENV-SOP-BTRO-0042	304657		
60440028030	**MW-91-202310**	EPA 3010	870794	EPA 6010	870841
60440028031	**TMW-21-202310**	EPA 3010	870794	EPA 6010	870841
60440028032	**TMW-19-202310**	EPA 3010	870794	EPA 6010	870841
60440028033	**MW-89-202310**	EPA 3010	870794	EPA 6010	870841
60440028034	**MW-50R-202310**	EPA 3010	870794	EPA 6010	870841
60440028001	**TMW-20-202310**	EPA 5030B/8260	869971		
60440028002	**MW-184-202310**	EPA 5030B/8260	869971		
60440028003	**DUP-01-202310**	EPA 5030B/8260	869971		
60440028004	**MW-26-202310**	EPA 5030B/8260	869971		
60440028005	**MW-22-202310**	EPA 5030B/8260	869971		
60440028006	**MW-176-202310**	EPA 5030B/8260	869971		
60440028006	**MW-176-202310**	EPA 5030B/8260	870274		
60440028007	**MW-196-202310**	EPA 5030B/8260	869971		
60440028008	**TMW-35-202310**	EPA 5030B/8260	869971		
60440028009	**DUP-11-202310**	EPA 5030B/8260	870044		
60440028010	**ITMW-20-202310**	EPA 5030B/8260	870044		
60440028011	**DUP-02-202310**	EPA 5030B/8260	870044		
60440028012	**MW-195-202310**	EPA 5030B/8260	870044		
60440028013	**DUP-05-202310**	EPA 5030B/8260	870044		
60440028014	**MW-28-202310**	EPA 5030B/8260	870044		
60440028015	**MW-206-202310**	EPA 5030B/8260	870044		
60440028016	**MW-97-202310**	EPA 5030B/8260	870044		
60440028017	**MW-201-202310**	EPA 5030B/8260	870044		
60440028018	**TMW-14-202310**	EPA 5030B/8260	870044		
60440028019	**MW-183R-202310**	EPA 5030B/8260	870044		
60440028020	**MW-192-202310**	EPA 5030B/8260	870044		
60440028021	**MW-40R-202310**	EPA 5030B/8260	870044		
60440028022	**MW-200-202310**	EPA 5030B/8260	870044		
60440028023	**MW-190-202310**	EPA 5030B/8260	870044		
60440028023	**MW-190-202310**	EPA 5030B/8260	870274		
60440028024	**ITMW-2R-202310**	EPA 5030B/8260	870044		
60440028025	**TB-02-202310**	EPA 5030B/8260	870274		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440028

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60440028026	**EB-02-202310**	EPA 5030B/8260	870274		
60440028027	**TB-03-202310**	EPA 5030B/8260	870274		
60440028028	**MW-203-202310**	EPA 5030B/8260	870433		
60440028028	**MW-203-202310**	EPA 5030B/8260	870617		
60440028029	**MW-60R-202310**	EPA 5030B/8260	870433		
60440028030	**MW-91-202310**	EPA 5030B/8260	870433		
60440028031	**TMW-21-202310**	EPA 5030B/8260	870433		
60440028032	**TMW-19-202310**	EPA 5030B/8260	870433		
60440028033	**MW-89-202310**	EPA 5030B/8260	870433		
60440028034	**MW-50R-202310**	EPA 5030B/8260	870433		
60440028030	**MW-91-202310**	EPA 300.0	871224		
60440028031	**TMW-21-202310**	EPA 300.0	871224		
60440028032	**TMW-19-202310**	EPA 300.0	871224		
60440028033	**MW-89-202310**	EPA 300.0	871224		
60440028034	**MW-50R-202310**	EPA 300.0	871224		
60440028030	**MW-91-202310**	EPA 353.2	869795		
60440028031	**TMW-21-202310**	EPA 353.2	869795		
60440028032	**TMW-19-202310**	EPA 353.2	869795		
60440028033	**MW-89-202310**	EPA 353.2	869795		
60440028034	**MW-50R-202310**	EPA 353.2	869795		
60440028030	**MW-91-202310**	SM 5310C	870575		
60440028031	**TMW-21-202310**	SM 5310C	870575		
60440028032	**TMW-19-202310**	SM 5310C	870575		
60440028033	**MW-89-202310**	SM 5310C	872968		
60440028034	**MW-50R-202310**	SM 5310C	872968		
60440028030	**MW-91-202310**	SM 5310C	873477		
60440028031	**TMW-21-202310**	SM 5310C	873477		
60440028032	**TMW-19-202310**	SM 5310C	873477		
60440028033	**MW-89-202310**	SM 5310C	873477		
60440028034	**MW-50R-202310**	SM 5310C	873477		

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Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_San	WO# : 60440028
	Revision: 2	Effective Date: 01/12/

Client Name: Ramboll

Courier: FedEx ☐ UPS ☐ VIA ☑ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☑ No ☐

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

Packing Material: Bubble Wrap ☑ Bubble Bags ☑ Foam ☐ None ☐ Other ☐ ZPLC

Thermometer Used: T298 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 2-2 **Corr. Factor** -0.3 **Corrected** 1.9 2.4

Date and initials of person examining contents: 10/18/23 JA

Temperature should be above freezing to 6°C 2-7

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☑Yes ☐No ☐N/A	NOX
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO3, H2SO4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) **LOT#:** 67181,62071	☑Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☑No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☑No	
Trip Blank present:	☑Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 5

Section A Required Client Information:

Company:	Ramboll
Address:	10851 Mastin Blvd., Ste. 100
	Overland Park, KS 66210
Email To:	jfullmer@ramboll.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STD TAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	VOC ONLY

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

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

Valid Matrix Codes

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TMW-20-202310	WT	G	10-17-23	0935				3									X		
2	MW-184-202310	WT	G	10-16-23	1746				3									X		
3	Dup-01-202310	WT	G	10-16-23	1746				3									X		
4	MW-26-202310	WT	G	10-17-23	0936				3									X		
5	MW-22-202310	WT	G	10-17-23	1116				3									X		
6	MW-176-202310	WT	G	10-17-23	1119				3									X		
7	MW-196-202310	WT	G	10-17-23	1125				3									X		
8	TMW-35-202310	WT	G	10-17-23	1215				3									X		
9	Dup-11-202310	WT	G	10-17-23	1220				3									X		
10	ITMW-20-202310	WT	G	10-17-23	1400				3									X		
11	Dup-02-202310	WT	G	10-17-23	1400				3									X		
12	MW-195-202310	WT	G	10-17-23	1355				3									X		

JA Pace 10/18
~~60439002~~ 8
60440028

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Ramboll	10-17-23	1800	JA Pace	10/18/23	0550	1-9	T	T	T

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-17-23

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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

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Section A Required Client Information:

Company:	Ramboll
Address:	10851 Mastin Blvd., Ste. 100
	Overland Park, KS 66210
Email To:	JZellmer@ramboll.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STD TAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	VOC ONLY

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

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

Valid Matrix Codes

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

Requested Analysis Filtered (Y/N)

ITEM #	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Dup-05-202310	WT G	10-17-23	1355				3										X		60440028
2	MW-28-202310	WT G	10-17-23	1055				3										X		
3	MW-206-202310	WT G	10-17-23	1250				3										X		
4	MW-97-202310	WT G	10-17-23	1345				3										X		
5	MW-201-202310	WT G	10-17-23	1442				3										X		
6	TMW-14-202310	WT G	10-17-23	1526				3										X		
7	MW-183R-202310	WT G	10-17-23	1301				3										X		
8	MW-183R-202310 MS	WT G	10-17-23	1304				2										X		
9	MW-183R-202310 MSD	WT G	10-17-23	1306				2										X		
10	MW-192-202310	WT G	10-17-23	1530				3										X		
11	MW-40R-202310	WT G	10-17-23	1603				3										X		
12	MW-200-202310	WT G	10-17-23	1600				3										X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Ramboll	101723	1800	JA Pace	10/18/23	0550	1.9	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-17-23

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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Address:	10851 Mastin Blvd., Ste. 100
	Overland Park, KS 66210
Email To:	JZellmer@ramboll.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STD TAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	VOC ONLY

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-190-202310	WT	G	10-17-23	1710				3									X			60440028
2	ITMW-2R-202310	WT	G	10-17-23	1722				3									X			
3	TB-02-202310	WT	G	10-17-23	0900				2									X			
4	EB-02-202310	WT	G	10-17-23	1750				3									X			
5	TB-03-202310	WT	G	10-17-23	0705				2									X			
6	MW-205-202310	WT	G	10-17-23	1745				3									X			
7	MW-60R-202310	WT	G	10-16-23	1810				3									X			
8	MW-60R-202310 MS	WT	G	10-16-23	1810				3									X			
9	MW-60R-202310 MSD	WT	G	10-16-23	1810				3									X			
10																					
11																					
12																					

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Ramboll	10-17-23	1800	JA Pace	10/18/23	0830	1.9	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-17-23

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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Address:	10851 Mastin Blvd., Ste. 100
	Overland Park, KS 66210
Email To:	JZellmer@ramboll.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STD TAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	ISCR

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

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

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	6010 Iron	300.0 Sulfate	300.0 Chloride	353.2 Nitrate+Nitrite, unpres.	6310 TOC	6310 DOC (Lab Filtered)	RSK175 Methane/Ethane/Ethene	AM23G Volatile Fatty Acids	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-91-202310	WT	G	10-17-23	1248	—	—		12										X	X	X	X	X	X	X	X		60449028
2	TMW-21-202310	WT	G	10-17-23	1535	—	—		12										X	X	X	X	X	X	X	X		
3	TMW-19-202310	WT	G	10-17-23	1720	—	—		12										X	X	X	X	X	X	X	X		
4		~~WT~~	~~G~~	~~10-17-23~~																								
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
RSK 175 Methane/Ethane/Ethene & VFAs to Pace Baton Rouge	Ramboll	10-17-23	1800	JA Pace	10/18/23	0550	1.9	Y	Y	Y

SAMPLER NAME AND SIGNATURE		Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
PRINT Name of SAMPLER:	Jackie Zellmer				
SIGNATURE of SAMPLER:		DATE Signed (MM/DD/YY): 10-17-23			

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

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Page: 5 of 5

Section A Required Client Information:

Company:	Ramboll
Address:	10851 Mastin Blvd., Ste. 100
	Overland Park, KS 66210
Email To:	JZellmer@ramboll.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STD TAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	MNA

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 3

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	6010 Iron	300.0 Sulfate	4500 Sulfide	353.2 Nitrate+Nitrite, unpres.	5310 TOC	Dissolved Hydrogen, Bubblestrip	RSK175 Methane/Ethane/Ethene	RSK175 Acetylene	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-89-202310	WT	G	10-17-23	1018	—			11										X	X	X	X	X	X	X	X	X	
2	MW-50R-202310	WT	G	10-17-23	1428	—			11										X	X	X	X	X	X	X	X	X	
3																												
4																												
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

Requested Analysis Filtered (Y/N)

Pace Project No./ Lab I.D.: 60440028

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
RSK 175 Methane/Ethane/Ethene+ Acetylene & Dissolved Hyrdrogen to Pace Baton Rouge	Ramboll	10-17-23	1800	JA Pace	10/18/23	0550	1.9	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-17-23

*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.

DC#_Title: ENV-FRM-LENE-0001_Sample Container Count
Revision: 3 | Effective Date: | Issued by: Lenexa

Client: Ramboll

Profile # 7444, line 1 and 3

Site: Whirlpool Fort Smith, AR

Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	WT		3																													
2																																
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1C	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2C	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3C	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60440028

Client: Ramboll

Profile # 7444, line 1 and 3

Site: Whirlpool Fort Smith, AR

Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	WT		3																													
2	↓		↓																													
3																																
4																																
5																																
6			↓																													
7	↓		7	MS/MSD																												
8																																
9																																
10	WT		3																													
11	↓		↓																													
12	↓		↓																													

Container Codes

Glass				Plastic		Misc.	
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar	BP1C	1L NAOH plastic	I	Wipe/Swab
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar	BP1N	1L HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar	BP1S	1L H2SO4 plastic	ZPLC	Ziploc Bag
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide	BP1U	1L unpreserved plastic	AF	Air Filter
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass	BP1Z	1L NaOH, Zn Acetate	C	Air Cassettes
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass	BP2C	500mL NAOH plastic	R	Terracore Kit
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass	BP2N	500mL HNO3 plastic	U	Summa Can
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass	BP2S	500mL H2SO4 plastic		
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass	BP2U	500mL unpreserved plastic		
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass	BP2Z	500mL NaOH, Zn Acetate	Matrix	
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass	BP3C	250mL NaOH plastic		
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass	BP3F	250mL HNO3 plastic - field filtered	WT	Water
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass	BP3N	250mL HNO3 plastic	SL	Solid
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass	BP3U	250mL unpreserved plastic	NAL	Non-aqueous Liquid
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass	BP3S	250mL H2SO4 plastic	OL	OIL
		AG5U	100mL unpres amber glass	BP3Z	250mL NaOH, Zn Acetate	WP	Wipe
				BP4U	125mL unpreserved plastic	DW	Drinking Water
				BP4N	125mL HNO3 plastic		
				BP4S	125mL H2SO4 plastic		
				WPDU	16oz unpresserved plstic		

Work Order Number: 60449028

DC#_Title: ENV-FRM-LENE-0001_Sample Container Count
Revision: 3 | Effective Date: | Issued by: Lenexa

Client: Ramboll

Profile # 7444, line 1 and 3

Site: Whirlpool Fort Smith, AR

Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	WT		3																													
2			3																													
3		2	Trip Blank																													
4			3																													
5		2	Trip Blank																													
6			3																													
7	↓		9 MS/MSD																													
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass				Plastic		Misc.	
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar	BP1C	1L NAOH plastic	I	Wipe/Swab
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar	BP1N	1L HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar	BP1S	1L H2SO4 plastic	ZPLC	Ziploc Bag
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide	BP1U	1L unpreserved plastic	AF	Air Filter
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass	BP1Z	1L NaOH, Zn Acetate	C	Air Cassettes
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass	BP2C	500mL NAOH plastic	R	Terracore Kit
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass	BP2N	500mL HNO3 plastic	U	Summa Can
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass	BP2S	500mL H2SO4 plastic		
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass	BP2U	500mL unpreserved plastic		
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass	BP2Z	500mL NaOH, Zn Acetate	Matrix	
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass	BP3C	250mL NaOH plastic		
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass	BP3F	250mL HNO3 plastic - field filtered	WT	Water
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass	BP3N	250mL HNO3 plastic	SL	Solid
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass	BP3U	250mL unpreserved plastic	NAL	Non-aqueous Liquid
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass	BP3S	250mL H2SO4 plastic	OL	OIL
		AG5U	100mL unpres amber glass	BP3Z	250mL NaOH, Zn Acetate	WP	Wipe
				BP4U	125mL unpreserved plastic	DW	Drinking Water
				BP4N	125mL HNO3 plastic		
				BP4S	125mL H2SO4 plastic		
				WPDU	16oz unpresserved plstic		

Work Order Number: 66440028

DC#_Title: ENV-FRM-LENE-0001_Sample Container Count
Revision: 3 | Effective Date: | Issued by: Lenexa

Client: Ramboll

Profile # 7444, line 1 and 3

Site: Whirlpool Fort Smith, AR

Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	WT	3	3									1	1								1		1							2		
2	WT	3	3									1	1								1		1							2		
3	WT	3	3									1	1								1		1							2		
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1C	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2C	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3C	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60440028

DC#_Title: ENV-FRM-LENE-0001_Sample Container Count
Revision: 3 | Effective Date: | Issued by: Lenexa

Client: Ramboll

Profile # 7444, line 1 and 3

Site: Whirlpool Fort Smith, AR

Notes OTHR will have dissolved Hydrogen, Bubblestrip

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	WT	3	3										1								1		1				1			1		
2	WT	3	3										1								1		1				1			1		
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass				Plastic		Misc.	
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar	BP1C	1L NAOH plastic	I	Wipe/Swab
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar	BP1N	1L HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar	BP1S	1L H2SO4 plastic	ZPLC	Ziploc Bag
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide	BP1U	1L unpreserved plastic	AF	Air Filter
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass	BP1Z	1L NaOH, Zn Acetate	C	Air Cassettes
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass	BP2C	500mL NAOH plastic	R	Terracore Kit
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass	BP2N	500mL HNO3 plastic	U	Summa Can
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass	BP2S	500mL H2SO4 plastic		
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass	BP2U	500mL unpreserved plastic		
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass	BP2Z	500mL NaOH, Zn Acetate	Matrix	
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass	BP3C	250mL NaOH plastic		
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass	BP3F	250mL HNO3 plastic - field filtered	WT	Water
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass	BP3N	250mL HNO3 plastic	SL	Solid
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass	BP3U	250mL unpreserved plastic	NAL	Non-aqueous Liquid
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass	BP3S	250mL H2SO4 plastic	OL	OIL
		AG5U	100mL unpres amber glass	BP3Z	250mL NaOH, Zn Acetate	WP	Wipe
				BP4U	125mL unpreserved plastic	DW	Drinking Water
				BP4N	125mL HNO3 plastic		
				BP4S	125mL H2SO4 plastic		
				WPDU	16oz unpresserved plstic		

Work Order Number: 60449028

WO# : 20294013

20294013

Internal Transfer Chain of Custody

☐ Rush Multiplier_____X

☐ Samples Pre-Logged into eCOC

State Of Origin: AR

Cert. Needed: ☒ Yes ☐ .

Workorder: 60440028 Workorder Name: WHIRLPOOL FORT SMITH, AR

Owner Received Date: 10/18/2023 Results Requested By: 11/1/2023

Report To	Subcontract To
Jamie Church Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 314-838-7223	Pace Analytical Baton Rouge 7979 Innovation Park Road Baton Rouge, LA 70809 Phone (225)678-1833

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HCL	Other	VG9U				AM23G Volatile Fatty Acids	Dissolved Hydrogen-Bubblestrip	RSK 175 Methane/Ethane/Ethene	RSK 175 Methane/Ethane/Ethene	RSK 175 Acetylene								LAB USE ONLY
1	MW-91-202310	PS	10/17/2023 12:48	60440028030	Water		2					X			X									1
2	TMW-21-202310	PS	10/17/2023 15:35	60440028031	Water		2					X			X									2
3	TMW-19-202310	PS	10/17/2023 17:20	60440028032	Water		2					X			X									3
4	MW-89-202310	PS	10/17/2023 10:18	60440028033	Water	3		2					X		X	X								4 6
5	MW-50R-202310	PS	10/17/2023 14:28	60440028034	Water	3		2					X		X	X								5 7

Transfers	Released By	Date/Time	Received By	Date/Time
1	[signature]	10.19.23 1700		
2	[signature] Fedex	10/20/23 10:12	[signature]	10/20/23
3				

Comments: 10:12

Cooler Temperature on Receipt _____ °C	Custody Seal Y or N	Received on Ice Y or N	Samples Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.
This chain of custody is considered complete as is since this information is available in the owner laboratory.

WO# : 20294013

PM: DRM **Due Date: 10/27/23**

CLIENT: BR-PACE LENX

Pace

Sample Condition Upon Reciep

Workorder #: _____

7979 Innovation Park Dr. Baton Rouge, LA 70806

Cooler Inspected by/date: BRP / 10/20/23

Means of receipt: ☐ Pace ☐ Client ☐ UPS ☑ FedEx ☐ Other: _____

☑ Yes	☐ No		Were custody seals present on the cooler?
☑ Yes	☐ No	☐ NA	If custody seals were present, were they intact and unbroken?

Method: ☐ Temperature Blank ☑ Against Bottles IR Gun ID: 847 IR Gun Correction Factor: 0 °C

Cooler #1	Cooler Temp °C: 0.1	(Actual/True)	Samples on ice: ☑ Yes ☐ No
Cooler #2	Cooler Temp °C: _____	(Actual/True)	pH Strip Lot #
Cooler #3	Cooler Temp °C: _____	(Actual/True)	Method of coolant: ☑ Wet ☐ Ice Packs ☐ Dry Ice ☐ None
Cooler #4	Cooler Temp °C: _____	(Actual/True)	

Tracking #: 6432 1393 8404

☐ Yes	☑ No	☐ NA	Is a temperature blank present?	
☐ Yes	☐ No	☐ NA	Was a chain of custody (COC) recieved?	
☐ Yes	☑ No	☐ NA	Was the line and profile number listed on the COC?	
☑ Yes	☐ No	☐ NA	Were all coolers received at or below 6.0°C? If no, notify Project Manager notified via email.	
☑ Yes	☐ No		Were proper custody procedures (relinquished/received) followed?	
☐ Yes	☐ No	☑ NA	Is the sampler name and signature on the COC?	
☑ Yes	☐ No		Were sample IDs listed on the COC and all sample containers?	
☑ Yes	☐ No		Was collection date & time listed on the COC and all sample containers?	
☑ Yes	☐ No		Did all container label information (ID, date, time) agree with the COC?	
☑ Yes	☐ No		Were tests to be performed listed on the COC?	
☑ Yes	☐ No		Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?	
☑ Yes	☐ No		Was adequate sample volume available?	
☑ Yes	☐ No		Were all samples received within ½ the holding time or 48 hours, whichever comes first?	
☑ Yes	☐ No		Were all samples containers accounted for? (No missing / excess)	
☑ Yes	☐ No	☐ NA	Were VOA, 8015C (GRO/VPH), and RSK-175 samples free of bubbles > "pea size" (1/4" or 6mm in diameter) in any of the VOA vials?	
☐ Yes	☐ No	☑ NA	Trip blank present?	
☐ Yes	☐ No	☑ NA	Filtered volume received for dissolved tests? *If no, list affected sample(s) in comments below.*	
☐ Yes	☐ No	☑ NA	Were all metals/nutrient samples received at a pH of < 2?	If No, was preservative added? ☐ Yes ☐ No If added, record lots. Dispenser/pipette lot #: _____
☐ Yes	☐ No	☑ NA	Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?	HNO_3 _____ H_2SO_4 _____ NaOH _____ Date: _____ Time: _____

Comments:

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

October 25, 2023

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440093

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 18, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

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

Sincerely,



Jamie Church
jamie.church@pacelabs.com
314-838-7223
Project Manager

Enclosures

cc: Caroline Chavers, Ramboll US Consulting, Inc.
Kristen Drucquer, Ramboll US Consulting, Inc.
Jackie Zellmer, Ramboll

REPORT OF LABORATORY ANALYSIS

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

SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440093

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60440093001	**MW-89-202310**	Water	10/17/23 10:18	10/18/23 08:00
60440093002	**MW-50R-202310**	Water	10/17/23 14:28	10/18/23 08:00

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PROJECT NARRATIVE

Project:
Pace Project No.:

Method:
Description:
Client:
Date:

This data package has been reviewed for quality and completeness and is approved for release.

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REPORT TO:
Name: David Meyer
Company: Ramboll
Address: 10851 Mastin Blvd.
Overland Park, KS 66210
email: Dmeyer@ramboll.com
Phone: 913-498-6963

Project Manager:
PM Email:
Project Name:
Project No.:

INVOICE TO: (For Invoices paid by a third party it is imperative that all information be provided)
Name:
Company:
Address:
email:
Phone:

Purchase Order No.
Subcontract No.
MI Quote No.

microbialinsights
10515 Research Dr
Knoxville, TN 37932
865-573-8188
www.microbe.com

Please Check One:
☒ More samples to follow
☐ No Additional Samples

Report Type: ☒ Standard (default) ☐ Microbial Insights Level III raw data(15% surcharge) ☐ Microbial Insights Level IV (25% surcharge) ☐ Comprehensive Report(15%)
EDD type: ☒ Microbial Insights Standard (default) ☐ Specialty EDDs (5% surcharge) Specialty EDD Type:

Please contact us with any questions about the analyses or filling out the COC at (865) 573-8188 (9:00 am to 5:00 pm EST, M-F). After hours email: customerservice@microbe.com

Sample Information						Analyses																											
MI ID (Laboratory Use Only)	Sample Name	Date Sampled	Time Sampled	Matrix	Total Number of Containers	PLFA	NGS	QuantArray Chlor [1]	QuantArray Petro [1]	QuantArray NSZD [1]	QuantArray BGC [1]	DHC (Dehalococcoides)	DHC Functional genes (bvc, tce, vcr)	DHBt (Dehalobacter)	DHG (Dehalogenimonas)	DSM (Desulfuromonas)	DSB (Desulfitobacterium)	EBAC (Total)	SRB (Sulfate Reducing Bacteria-APS)	MGN (Methanogens)	MOB (Methanotrophs)	SMMO (Soluble Methane Monooxi)	DNF (Dentrifiers-nirS and nirK)	PM1 (MTBE aerobic)	RMO (Toluene Monooxygenase)	RDEG (Toluene Monooxygenase)	PHE (Phenol Hydroxylase)	NAH (Napthalene-aerobic)	BSSA (Toluene/Xylene-Anaerobic)	~~Add. qPCR:~~ VC reductase	add. qPCR:	add. qPCR:	RNA (Expression Option) [2]
053V51	MW-89-202310	10-17-23	1018	GW	1							X	X																	X			
2	MW-50R-202310	10-17-23	1428	GW	1							X	X																	X			

27

Relinquished by: Date 10-17-23
Received by: (lab use only) Date 10/18/23

It is vital that chain of custody is filled out correctly & that all information is provided. Failure to provide sufficient and/or correct information regarding reporting, invoicing & analyses requested may result in delays for which MI will not be liable.

[1] If a QuantArray is selected only additional targets not already included need to be marked. [2] Additional cost and sample preservation are associated with RNA samples

SATURDAY DELIVERY: See sampling protocol for the alternate shipping address and special instructions.

10515 Research Drive
Knoxville, TN 37932
Phone: (865) 573-8188
Fax: (865) 573-8133

Client: Jamie Church
Pace Analytical Labs
9608 Loiret Blvd
Lenexa, KS 66219

Phone:

Fax:

Identifier: 053UJ **Date Rec:** 10/18/2023 **Report Date:** 10/24/2023

Client Project #: **Client Project Name:**

Purchase Order #: WO#60440093

Test results provided for: CENSUS

Reviewed By:



NOTICE: This report is intended only for the addressee shown above and may contain confidential or privileged information. If the recipient of this material is not the intended recipient or if you have received this in error, please notify Microbial Insights, Inc. immediately. The data and other information in this report represent only the sample(s) analyzed and are rendered upon condition that it is not to be reproduced without approval from Microbial Insights, Inc. Thank you for your cooperation.

Results relate only to the items tested and the sample(s) as received by the laboratory.

MICROBIAL INSIGHTS, INC.

10515 Research Dr., Knoxville, TN 37932
Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: **Pace Analytical Labs**
Project:

MI Project Number: **053UJ**
Date Received: 10/18/2023

Sample Information

Client Sample ID:		**MW-89-202310**	**MW-50R-202310**
Sample Date:		10/17/2023	10/17/2023
Units:		cells/mL	cells/mL
Analyst/Reviewer:		SK/AR	SK/AR
Dechlorinating Bacteria			
Dehalococcoides	*DHC*	**1.50E+00**	**1.40E+00**
tceA Reductase	TCE	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<5.00E-01	<5.00E-01
Vinyl Chloride Reductase	VCR	<5.00E-01	<5.00E-01

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

Quality Assurance/Quality Control Data

Samples Received **10/18/2023**

Component	Date Prepared	Date Analyzed	Arrival Temperature	Positive Control	Extraction Blank	Negative Control
BVC	10/18/2023	10/24/2023	0 °C	102%	non-detect	non-detect
DHC	10/18/2023	10/24/2023	0 °C	106%	non-detect	non-detect
TCE	10/18/2023	10/24/2023	0 °C	102%	non-detect	non-detect
VCR	10/18/2023	10/24/2023	0 °C	112%	non-detect	non-detect

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

November 19, 2023

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 19, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Baton Rouge
- Pace Analytical Services - Kansas City

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

Sincerely,



Jamie Church
jamie.church@pacelabs.com
314-838-7223
Project Manager

Enclosures

cc: Caroline Chavers, Ramboll US Consulting, Inc.
Kristen Drucquer, Ramboll US Consulting, Inc.
Jackie Zellmer, Ramboll

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CERTIFICATIONS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 88-00679
Illinois Certification #: 2000302023-5
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212023-1
Oklahoma Certification #: 2022-057
Florida: Cert E871149 SEKS WET
Texas Certification #: T104704407-22-16
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

Pace Analytical Services Baton Rouge
7979 Innovation Park Drive Ste A, Baton Rouge, LA 70820-7402
Louisiana Dept of Enviromental Quality (NELAC/LELAP): 01979
Florida Dept of Health (NELAC/FELAP): E87854
DoD ELAP (A2LA) #: 6429.01
Alabama DEM #: 41900
Alaska DEC-DW #: LA00024
Alaska DEC CS-LAP #: 21-001
Arkansas DEQ #: 88-0655
California ELAP #: 3063
Georgia DPD #: C050
Hawaii DOH State Laboratories Division
Illinois EPA #: 200048
Kansas DoHE #: E-10354
Kentucky DEP UST Branch #: 123054
Louisiana DOH #: LA036
Minnesota DOH #: 2233799
Mississippi State Dept of Health
Montana Department of Environmental Quality
Nebraska DHHS #: NE-OS-35.21
Nevada DCNR DEP #: LA00024
New York DOH #: 12149
North Carolina DEQ - WW & GW #: 618
North Dakota DEQ #: R195
Ohio EPA #: 87782
Oklahoma Dept of Environmental Quality #: 9403
Oregon ELAP #: 4168
Pennsylvania Dept of Environmental Protection #: 68-05973
South Carolina DHEC #: 73006001
Texas CEQ #: T104704178-23-15
Utah DOH #: LA00024
Virginia DCLS #: 6460215
Washington Dept of Ecology #: C929
Wisconsin DNR #: 399139510

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SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60440158001	**MW-84-202310**	Water	10/18/23 08:50	10/19/23 02:50
60440158002	**MW-98-202310**	Water	10/18/23 09:20	10/19/23 02:50
60440158003	**TMW-21-202310**	Water	10/18/23 11:45	10/19/23 02:50
60440158004	**DUP-03-202310**	Water	10/18/23 11:45	10/19/23 02:50
60440158005	**ITMW-7-202310**	Water	10/18/23 12:15	10/19/23 02:50
60440158006	**MW-24-202310**	Water	10/18/23 13:35	10/19/23 02:50
60440158007	**DUP-08-202310**	Water	10/18/23 13:35	10/19/23 02:50
60440158008	**IW-78-202310**	Water	10/18/23 13:45	10/19/23 02:50
60440158009	**DUP-04-202310**	Water	10/18/23 13:45	10/19/23 02:50
60440158010	**ITMW-1R-202310**	Water	10/18/23 15:00	10/19/23 02:50
60440158011	**MW-55R-202310**	Water	10/18/23 14:40	10/19/23 02:50
60440158012	**TMW-12-202310**	Water	10/18/23 15:37	10/19/23 02:50
60440158013	**DUP-09-202310**	Water	10/18/23 15:40	10/19/23 02:50
60440158014	**MW-63R-202310**	Water	10/18/23 12:18	10/19/23 02:50
60440158015	**RW-1-202310**	Water	10/18/23 16:05	10/19/23 02:50
60440158016	**MW-82-202310**	Water	10/18/23 16:40	10/19/23 02:50
60440158017	**EB-03-202310**	Water	10/18/23 16:45	10/19/23 02:50
60440158018	**TB-04-202310**	Water	10/18/23 07:00	10/19/23 02:50
60440158019	**TB-05-202310**	Water	10/18/23 07:00	10/19/23 02:50
60440158020	**TB-06-202310**	Water	10/18/23 07:00	10/19/23 02:50
60440158021	**MW-204-202310**	Water	10/18/23 16:50	10/19/23 02:50
60440158022	**TMW-10-202310**	Water	10/18/23 09:31	10/19/23 02:50
60440158023	**TMW-11-202310**	Water	10/18/23 11:21	10/19/23 02:50
60440158024	**MW-87-202310**	Water	10/18/23 14:40	10/19/23 02:50
60440158025	**MW-25R-202310**	Water	10/18/23 16:06	10/19/23 02:50
60440158026	**MW-99-202310**	Water	10/18/23 08:30	10/19/23 02:50
60440158027	**MW-61R-202310**	Water	10/18/23 10:10	10/19/23 02:50
60440158028	**TMW-34-202310**	Water	10/18/23 11:05	10/19/23 02:50
60440158029	**MW-194-202310**	Water	10/18/23 10:12	10/19/23 02:50
60440158030	**MW-197-202310**	Water	10/18/23 10:55	10/19/23 02:50
60440158031	**MW-27-202310**	Water	10/18/23 08:41	10/19/23 02:50
60440158032	**TMW-23-202310**	Water	10/18/23 14:07	10/19/23 02:50
60440158033	**MW-83-202310**	Water	10/18/23 16:15	10/19/23 02:50

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60440158001	**MW-84-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158002	**MW-98-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158003	**TMW-21-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158004	**DUP-03-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158005	**ITMW-7-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158006	**MW-24-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158007	**DUP-08-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158008	**IW-78-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158009	**DUP-04-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158010	**ITMW-1R-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158011	**MW-55R-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158012	**TMW-12-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158013	**DUP-09-202310**	EPA 5030B/8260	AML, PGH	38	PASI-K
60440158014	**MW-63R-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158015	**RW-1-202310**	EPA 5030B/8260	AML, PGH	38	PASI-K
60440158016	**MW-82-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158017	**EB-03-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158018	**TB-04-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158019	**TB-05-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158020	**TB-06-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158021	**MW-204-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440158022	**TMW-10-202310**	AM20	LB	1	PASI-BR
		RSK175	BDP	5	PASI-BR
		Pace ENV-SOP-BTRO-0042	LHM	10	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 4500-S-2 D	CRN2	1	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K
60440158023	**TMW-11-202310**	AM20	LB	1	PASI-BR
		RSK175	BDP	5	PASI-BR
		Pace ENV-SOP-BTRO-0042	LHM	10	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 4500-S-2 D	CRN2	1	PASI-K

REPORT OF LABORATORY ANALYSIS

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K
60440158024	**MW-87-202310**	AM20	LB	1	PASI-BR
		RSK175	BDP	5	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	AML, PGH	38	PASI-K
		SM 4500-S-2 D	CRN2	1	PASI-K
		EPA 300.0	MLD	1	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
60440158025	**MW-25R-202310**	RSK175	BDP	5	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	AML, PGH	38	PASI-K
		SM 4500-S-2 D	CRN2	1	PASI-K
		EPA 300.0	MLD	1	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
60440158026	**MW-99-202310**	RSK175	BDP	4	PASI-BR
		Pace ENV-SOP-BTRO-0042	LHM	10	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K
60440158027	**MW-61R-202310**	RSK175	BDP	4	PASI-BR
		Pace ENV-SOP-BTRO-0042	LHM	10	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K
60440158028	**TMW-34-202310**	RSK175	BDP	4	PASI-BR
		Pace ENV-SOP-BTRO-0042	LHM	10	PASI-BR

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K
60440158029	**MW-194-202310**	RSK175	BDP	4	PASI-BR
		Pace ENV-SOP-BTRO-0042	LHM	10	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K
60440158030	**MW-197-202310**	RSK175	BDP	5	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	1	PASI-K
		EPA 353.2	BMT	3	PASI-K
60440158031	**MW-27-202310**	RSK175	BDP	5	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	1	PASI-K
		EPA 353.2	BMT	3	PASI-K
60440158032	**TMW-23-202310**	RSK175	BDP	5	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	1	PASI-K
		EPA 353.2	BMT	3	PASI-K
60440158033	**MW-83-202310**	RSK175	BDP	5	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	1	PASI-K
		EPA 353.2	BMT	3	PASI-K

PASI-BR = Pace Analytical Services - Baton Rouge
PASI-K = Pace Analytical Services - Kansas City

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(913)599-5665

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Method: **AM20**
Description: BR Hydrogen by AM20 in Vapor
Client: Ramboll_AR
Date: November 19, 2023

General Information:
3 samples were analyzed for AM20 by Pace Analytical Services Baton Rouge. 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.

Additional Comments:

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Method: **RSK175**
Description: BR RSK175 Headspace
Client: Ramboll_AR
Date: November 19, 2023

General Information:
12 samples were analyzed for RSK175 by Pace Analytical Services Baton Rouge. 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.

Additional Comments:

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Method: **Pace ENV-SOP-BTRO-0042**
Description: BR AM23G Low Level VFA
Client: Ramboll_AR
Date: November 19, 2023

General Information:
6 samples were analyzed for Pace ENV-SOP-BTRO-0042 by Pace Analytical Services Baton Rouge. 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.

QC Batch: 305046

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 1460182)
  - Hexanoic Acid
  - Pentanoic Acid

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

QC Batch: 305046

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 20294259001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 1460480)
  - Hexanoic Acid
  - Pentanoic Acid
- MSD (Lab ID: 1460481)
  - Hexanoic Acid
  - Pentanoic Acid

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Method: **Pace ENV-SOP-BTRO-0042**
Description: BR AM23G Low Level VFA
Client: Ramboll_AR
Date: November 19, 2023

QC Batch: 305046

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 20294259001

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

- MS (Lab ID: 1460480)
  - i-Hexanoic Acid
- MSD (Lab ID: 1460481)
  - i-Hexanoic Acid

Additional Comments:

Analyte Comments:

QC Batch: 305046

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- MW-194-202310 (Lab ID: 60440158029)
  - Lactic Acid
- MW-61R-202310 (Lab ID: 60440158027)
  - Lactic Acid
- MW-99-202310 (Lab ID: 60440158026)
  - Lactic Acid
- TMW-10-202310 (Lab ID: 60440158022)
  - Lactic Acid
- TMW-11-202310 (Lab ID: 60440158023)
  - Lactic Acid
- TMW-34-202310 (Lab ID: 60440158028)
  - Lactic Acid

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- BLANK (Lab ID: 1460181)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- LCS (Lab ID: 1460182)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- MS (Lab ID: 1460480)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- MSD (Lab ID: 1460481)
  - Hexanoic Acid
  - i-Hexanoic Acid

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Method: **Pace ENV-SOP-BTRO-0042**
Description: BR AM23G Low Level VFA
Client: Ramboll_AR
Date: November 19, 2023

Analyte Comments:

QC Batch: 305046

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- MSD (Lab ID: 1460481)
  - i-Pentanoic Acid
  - Pentanoic Acid
- MW-194-202310 (Lab ID: 60440158029)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- MW-61R-202310 (Lab ID: 60440158027)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- MW-99-202310 (Lab ID: 60440158026)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- TMW-10-202310 (Lab ID: 60440158022)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- TMW-11-202310 (Lab ID: 60440158023)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- TMW-34-202310 (Lab ID: 60440158028)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Ramboll_AR
Date: November 19, 2023

General Information:
12 samples were analyzed for EPA 6010 by Pace Analytical Services Kansas City. 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.

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.: 60440158

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Ramboll_AR
Date: November 19, 2023

General Information:
33 samples were analyzed for EPA 5030B/8260 by Pace Analytical Services Kansas City. 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.

QC Batch: 870439

B: Analyte was detected in the associated method blank.

- BLANK for HBN 870439 [MSV/1314 (Lab ID: 3447114)
  - Bromomethane

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

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

QC Batch: 870439

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

QC Batch: 870457

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.: 60440158

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Ramboll_AR
Date: November 19, 2023

General Information:
4 samples were analyzed for SM 4500-S-2 D by Pace Analytical Services Kansas City. 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.

Method Blank:
All analytes were below the report limit in the method blank, 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.: 60440158

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Ramboll_AR
Date: November 19, 2023

General Information:
12 samples were analyzed for EPA 300.0 by Pace Analytical Services Kansas City. 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.

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

QC Batch: 871775

B: Analyte was detected in the associated method blank.

- BLANK for HBN 871775 [WETA/101 (Lab ID: 3454848)
  - Chloride

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

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

QC Batch: 871775

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60440040002,60440158027

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

- MS (Lab ID: 3452749)
  - Sulfate

Additional Comments:

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Ramboll_AR
Date: November 19, 2023

General Information:
12 samples were analyzed for EPA 353.2 by Pace Analytical Services Kansas City. 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.

Method Blank:
All analytes were below the report limit in the method blank, 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: 869938

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60440104001,60440107001

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

- MS (Lab ID: 3444836)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrate
  - Nitrogen, Nitrite
- MS (Lab ID: 3444838)
  - 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.: 60440158

Method: **SM 5310C**
Description: 5310C TOC
Client: Ramboll_AR
Date: November 19, 2023

General Information:
8 samples were analyzed for SM 5310C by Pace Analytical Services Kansas City. 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.

Method Blank:
All analytes were below the report limit in the method blank, 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.: 60440158

Method: **SM 5310C**
Description: 5310C Diss. Organic Carbon LF
Client: Ramboll_AR
Date: November 19, 2023

General Information:
6 samples were analyzed for SM 5310C by Pace Analytical Services Kansas City. 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.

H1: Analysis conducted outside the EPA method holding time.
- MW-194-202310 (Lab ID: 60440158029)
- MW-61R-202310 (Lab ID: 60440158027)
- MW-99-202310 (Lab ID: 60440158026)
- TMW-10-202310 (Lab ID: 60440158022)
- TMW-11-202310 (Lab ID: 60440158023)
- TMW-34-202310 (Lab ID: 60440158028)

Method Blank:
All analytes were below the report limit in the method blank, 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:

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.: 60440158

Sample: MW-84-202310 **Lab ID: 60440158001** Collected: 10/18/23 08:50 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 12:51	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 12:51	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 12:51	75-27-4	
Bromoform	**2.5**	ug/L	1.0	0.68	1		10/24/23 12:51	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 12:51	74-83-9	B
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 12:51	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 12:51	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 12:51	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 12:51	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 12:51	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 12:51	67-66-3	
Chloromethane	**1.1**	ug/L	1.0	0.28	1		10/24/23 12:51	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 12:51	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 12:51	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 12:51	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 12:51	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/24/23 12:51	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 12:51	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 12:51	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 12:51	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 12:51	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 12:51	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 12:51	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 12:51	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 12:51	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 12:51	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 12:51	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 12:51	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 12:51	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 12:51	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 12:51	79-00-5	
Trichloroethene	**2.7**	ug/L	1.0	0.21	1		10/24/23 12:51	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 12:51	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 12:51	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%	80-120		1		10/24/23 12:51	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/24/23 12:51	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/24/23 12:51	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 12:51		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-98-202310 **Lab ID: 60440158002** Collected: 10/18/23 09:20 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 13:05	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 13:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 13:05	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 13:05	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 13:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 13:05	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 13:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 13:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 13:05	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 13:05	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 13:05	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 13:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 13:05	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 13:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 13:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 13:05	75-35-4	
cis-1,2-Dichloroethene	**0.20J**	ug/L	1.0	0.13	1		10/24/23 13:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 13:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 13:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 13:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 13:05	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 13:05	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 13:05	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 13:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 13:05	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 13:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 13:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 13:05	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 13:05	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 13:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 13:05	79-00-5	
Trichloroethene	**1.2**	ug/L	1.0	0.21	1		10/24/23 13:05	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 13:05	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 13:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/24/23 13:05	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/24/23 13:05	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/24/23 13:05	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 13:05		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: TMW-21-202310 **Lab ID: 60440158003** Collected: 10/18/23 11:45 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 13:18	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 13:18	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 13:18	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 13:18	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 13:18	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 13:18	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 13:18	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 13:18	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 13:18	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 13:18	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 13:18	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 13:18	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 13:18	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 13:18	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 13:18	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 13:18	75-35-4	
cis-1,2-Dichloroethene	**0.17J**	ug/L	1.0	0.13	1		10/24/23 13:18	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 13:18	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 13:18	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 13:18	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 13:18	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 13:18	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 13:18	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 13:18	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 13:18	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 13:18	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 13:18	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 13:18	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 13:18	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 13:18	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 13:18	79-00-5	
Trichloroethene	**7.3**	ug/L	1.0	0.21	1		10/24/23 13:18	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 13:18	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 13:18	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		10/24/23 13:18	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/24/23 13:18	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/24/23 13:18	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 13:18		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: DUP-03-202310 **Lab ID: 60440158004** Collected: 10/18/23 11:45 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 13:32	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 13:32	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 13:32	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 13:32	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 13:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 13:32	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 13:32	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 13:32	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 13:32	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 13:32	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 13:32	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 13:32	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 13:32	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 13:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 13:32	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 13:32	75-35-4	
cis-1,2-Dichloroethene	**0.19J**	ug/L	1.0	0.13	1		10/24/23 13:32	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 13:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 13:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 13:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 13:32	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 13:32	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 13:32	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 13:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 13:32	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 13:32	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 13:32	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 13:32	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 13:32	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 13:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 13:32	79-00-5	
Trichloroethene	**7.6**	ug/L	1.0	0.21	1		10/24/23 13:32	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 13:32	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 13:32	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/24/23 13:32	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/24/23 13:32	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/24/23 13:32	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 13:32		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: ITMW-7-202310 **Lab ID: 60440158005** Collected: 10/18/23 12:15 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 13:45	67-64-1	
Benzene	**0.17J**	ug/L	1.0	0.14	1		10/24/23 13:45	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 13:45	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 13:45	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 13:45	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 13:45	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 13:45	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 13:45	56-23-5	
Chlorobenzene	**6.9**	ug/L	1.0	0.089	1		10/24/23 13:45	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 13:45	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 13:45	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 13:45	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 13:45	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 13:45	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 13:45	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 13:45	75-35-4	
cis-1,2-Dichloroethene	**6.2**	ug/L	1.0	0.13	1		10/24/23 13:45	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 13:45	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 13:45	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 13:45	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 13:45	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 13:45	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 13:45	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 13:45	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 13:45	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 13:45	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 13:45	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 13:45	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 13:45	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 13:45	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 13:45	79-00-5	
Trichloroethene	**16.1**	ug/L	1.0	0.21	1		10/24/23 13:45	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 13:45	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 13:45	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/24/23 13:45	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/24/23 13:45	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		10/24/23 13:45	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 13:45		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-24-202310 **Lab ID: 60440158006** Collected: 10/18/23 13:35 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 15:34	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 15:34	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 15:34	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 15:34	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 15:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 15:34	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 15:34	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 15:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 15:34	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 15:34	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 15:34	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 15:34	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 15:34	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 15:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 15:34	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 15:34	75-35-4	
cis-1,2-Dichloroethene	**0.29J**	ug/L	1.0	0.13	1		10/24/23 15:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 15:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 15:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 15:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 15:34	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 15:34	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 15:34	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 15:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 15:34	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 15:34	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 15:34	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 15:34	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 15:34	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 15:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 15:34	79-00-5	
Trichloroethene	**16.0**	ug/L	1.0	0.21	1		10/24/23 15:34	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 15:34	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 15:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		10/24/23 15:34	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/24/23 15:34	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/24/23 15:34	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 15:34		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: DUP-08-202310 **Lab ID: 60440158007** Collected: 10/18/23 13:35 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 15:47	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 15:47	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 15:47	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 15:47	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 15:47	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 15:47	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 15:47	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 15:47	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 15:47	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 15:47	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 15:47	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 15:47	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 15:47	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 15:47	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 15:47	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 15:47	75-35-4	
cis-1,2-Dichloroethene	**0.32J**	ug/L	1.0	0.13	1		10/24/23 15:47	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 15:47	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 15:47	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 15:47	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 15:47	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 15:47	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 15:47	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 15:47	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 15:47	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 15:47	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 15:47	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 15:47	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 15:47	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 15:47	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 15:47	79-00-5	
Trichloroethene	**16.1**	ug/L	1.0	0.21	1		10/24/23 15:47	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 15:47	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 15:47	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/24/23 15:47	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/24/23 15:47	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/24/23 15:47	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 15:47		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: IW-78-202310 **Lab ID: 60440158008** Collected: 10/18/23 13:45 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 13:59	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 13:59	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 13:59	75-27-4	
Bromoform	**16.6**	ug/L	1.0	0.68	1		10/24/23 13:59	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 13:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 13:59	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 13:59	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 13:59	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 13:59	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 13:59	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 13:59	67-66-3	
Chloromethane	**0.29J**	ug/L	1.0	0.28	1		10/24/23 13:59	74-87-3	
Dibromochloromethane	**0.77J**	ug/L	1.0	0.30	1		10/24/23 13:59	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 13:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 13:59	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 13:59	75-35-4	
cis-1,2-Dichloroethene	**0.58J**	ug/L	1.0	0.13	1		10/24/23 13:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 13:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 13:59	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 13:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 13:59	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 13:59	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 13:59	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 13:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 13:59	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 13:59	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 13:59	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 13:59	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 13:59	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 13:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 13:59	79-00-5	
Trichloroethene	**24.8**	ug/L	1.0	0.21	1		10/24/23 13:59	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 13:59	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 13:59	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/24/23 13:59	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/24/23 13:59	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/24/23 13:59	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 13:59		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: DUP-04-202310 **Lab ID: 60440158009** Collected: 10/18/23 13:45 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 14:12	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 14:12	71-43-2	
Bromodichloromethane	**0.27J**	ug/L	1.0	0.16	1		10/24/23 14:12	75-27-4	
Bromoform	**18.9**	ug/L	1.0	0.68	1		10/24/23 14:12	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 14:12	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 14:12	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 14:12	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 14:12	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 14:12	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 14:12	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 14:12	67-66-3	
Chloromethane	**0.32J**	ug/L	1.0	0.28	1		10/24/23 14:12	74-87-3	
Dibromochloromethane	**0.83J**	ug/L	1.0	0.30	1		10/24/23 14:12	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 14:12	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 14:12	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 14:12	75-35-4	
cis-1,2-Dichloroethene	**0.52J**	ug/L	1.0	0.13	1		10/24/23 14:12	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 14:12	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 14:12	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 14:12	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 14:12	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 14:12	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 14:12	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 14:12	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 14:12	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 14:12	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 14:12	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 14:12	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 14:12	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 14:12	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 14:12	79-00-5	
Trichloroethene	**23.9**	ug/L	1.0	0.21	1		10/24/23 14:12	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 14:12	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 14:12	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		10/24/23 14:12	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/24/23 14:12	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/24/23 14:12	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 14:12		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: ITMW-1R-202310 **Lab ID: 60440158010** Collected: 10/18/23 15:00 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 14:26	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 14:26	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 14:26	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 14:26	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 14:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 14:26	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 14:26	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 14:26	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 14:26	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 14:26	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 14:26	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 14:26	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 14:26	124-48-1	
1,1-Dichloroethane	**6.8**	ug/L	1.0	0.12	1		10/24/23 14:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 14:26	107-06-2	
1,1-Dichloroethene	**0.45J**	ug/L	1.0	0.22	1		10/24/23 14:26	75-35-4	
cis-1,2-Dichloroethene	**31.0**	ug/L	1.0	0.13	1		10/24/23 14:26	156-59-2	
trans-1,2-Dichloroethene	**0.24J**	ug/L	1.0	0.10	1		10/24/23 14:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 14:26	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 14:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 14:26	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 14:26	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 14:26	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 14:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 14:26	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 14:26	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 14:26	79-34-5	
Tetrachloroethene	**0.38J**	ug/L	1.0	0.33	1		10/24/23 14:26	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 14:26	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 14:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 14:26	79-00-5	
Trichloroethene	**22.3**	ug/L	1.0	0.21	1		10/24/23 14:26	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 14:26	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 14:26	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		10/24/23 14:26	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/24/23 14:26	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/24/23 14:26	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 14:26		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-55R-202310 **Lab ID: 60440158011** Collected: 10/18/23 14:40 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 14:39	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 14:39	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 14:39	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 14:39	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 14:39	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 14:39	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 14:39	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 14:39	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 14:39	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 14:39	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 14:39	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 14:39	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 14:39	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 14:39	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 14:39	107-06-2	
1,1-Dichloroethene	**0.39J**	ug/L	1.0	0.22	1		10/24/23 14:39	75-35-4	
cis-1,2-Dichloroethene	**1.1**	ug/L	1.0	0.13	1		10/24/23 14:39	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 14:39	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 14:39	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 14:39	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 14:39	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 14:39	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 14:39	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 14:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 14:39	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 14:39	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 14:39	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 14:39	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 14:39	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 14:39	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 14:39	79-00-5	
Trichloroethene	**26.9**	ug/L	1.0	0.21	1		10/24/23 14:39	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 14:39	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 14:39	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		1		10/24/23 14:39	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/24/23 14:39	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/24/23 14:39	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 14:39		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: TMW-12-202310 **Lab ID: 60440158012** Collected: 10/18/23 15:37 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 16:00	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 16:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 16:00	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 16:00	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 16:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 16:00	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 16:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 16:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 16:00	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 16:00	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 16:00	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 16:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 16:00	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 16:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 16:00	107-06-2	
1,1-Dichloroethene	**1.3**	ug/L	1.0	0.22	1		10/24/23 16:00	75-35-4	
cis-1,2-Dichloroethene	**8.5**	ug/L	1.0	0.13	1		10/24/23 16:00	156-59-2	
trans-1,2-Dichloroethene	**0.22J**	ug/L	1.0	0.10	1		10/24/23 16:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 16:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 16:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 16:00	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 16:00	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 16:00	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 16:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 16:00	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 16:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 16:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 16:00	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 16:00	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 16:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 16:00	79-00-5	
Trichloroethene	**323**	ug/L	10.0	2.1	10		10/24/23 16:14	79-01-6	
Vinyl chloride	**0.19J**	ug/L	1.0	0.17	1		10/24/23 16:00	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 16:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/24/23 16:00	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/24/23 16:00	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/24/23 16:00	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 16:00		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: DUP-09-202310 **Lab ID: 60440158013** Collected: 10/18/23 15:40 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 15:20	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 15:20	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 15:20	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 15:20	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 15:20	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 15:20	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 15:20	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 15:20	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 15:20	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 15:20	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 15:20	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 15:20	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 15:20	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 15:20	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 15:20	107-06-2	
1,1-Dichloroethene	**1.3**	ug/L	1.0	0.22	1		10/24/23 15:20	75-35-4	
cis-1,2-Dichloroethene	**8.8**	ug/L	1.0	0.13	1		10/24/23 15:20	156-59-2	
trans-1,2-Dichloroethene	**0.23J**	ug/L	1.0	0.10	1		10/24/23 15:20	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 15:20	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 15:20	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 15:20	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 15:20	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 15:20	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 15:20	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 15:20	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 15:20	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 15:20	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 15:20	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 15:20	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 15:20	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 15:20	79-00-5	
Trichloroethene	**328**	ug/L	10.0	2.1	10		10/27/23 18:23	79-01-6	
Vinyl chloride	**0.20J**	ug/L	1.0	0.17	1		10/24/23 15:20	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 15:20	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/24/23 15:20	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/24/23 15:20	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/24/23 15:20	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 15:20		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-63R-202310 **Lab ID: 60440158014** Collected: 10/18/23 12:18 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 14:53	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 14:53	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 14:53	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 14:53	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 14:53	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 14:53	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 14:53	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 14:53	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 14:53	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 14:53	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 14:53	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 14:53	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 14:53	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 14:53	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 14:53	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 14:53	75-35-4	
cis-1,2-Dichloroethene	**0.87J**	ug/L	1.0	0.13	1		10/24/23 14:53	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 14:53	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 14:53	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 14:53	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 14:53	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 14:53	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 14:53	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 14:53	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 14:53	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 14:53	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 14:53	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 14:53	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 14:53	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 14:53	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 14:53	79-00-5	
Trichloroethene	**7.2**	ug/L	1.0	0.21	1		10/24/23 14:53	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 14:53	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 14:53	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		10/24/23 14:53	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/24/23 14:53	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/24/23 14:53	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 14:53		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: RW-1-202310 **Lab ID: 60440158015** Collected: 10/18/23 16:05 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	**6.9J**	ug/L	10.0	2.5	1		10/27/23 18:55	67-64-1	
Benzene	**0.41J**	ug/L	1.0	0.14	1		10/27/23 18:55	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/27/23 18:55	75-27-4	
Bromoform	**0.77J**	ug/L	1.0	0.68	1		10/27/23 18:55	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/27/23 18:55	74-83-9	
2-Butanone (MEK)	**1.6J**	ug/L	10.0	0.98	1		10/27/23 18:55	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/27/23 18:55	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/27/23 18:55	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/27/23 18:55	108-90-7	
Chloroethane	**0.90J**	ug/L	1.0	0.37	1		10/27/23 18:55	75-00-3	
Chloroform	**18.4**	ug/L	1.0	0.22	1		10/27/23 18:55	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/27/23 18:55	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/27/23 18:55	124-48-1	
1,1-Dichloroethane	**3.7**	ug/L	1.0	0.12	1		10/27/23 18:55	75-34-3	
1,2-Dichloroethane	**0.64J**	ug/L	1.0	0.21	1		10/27/23 18:55	107-06-2	
1,1-Dichloroethene	**359J**	ug/L	1000	219	1000		10/24/23 16:28	75-35-4	
cis-1,2-Dichloroethene	**55700**	ug/L	1000	129	1000		10/24/23 16:28	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1000	102	1000		10/24/23 16:28	156-60-5	
1,2-Dichloropropane	**0.19J**	ug/L	1.0	0.14	1		10/27/23 18:55	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/27/23 18:55	10061-01-5	
trans-1,3-Dichloropropene	**0.26J**	ug/L	1.0	0.18	1		10/27/23 18:55	10061-02-6	
Ethylbenzene	**0.24J**	ug/L	1.0	0.12	1		10/27/23 18:55	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/27/23 18:55	591-78-6	
Methylene Chloride	**0.83J**	ug/L	1.0	0.39	1		10/27/23 18:55	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.80J**	ug/L	10.0	0.74	1		10/27/23 18:55	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/27/23 18:55	100-42-5	
1,1,2,2-Tetrachloroethane	**1.1**	ug/L	1.0	0.15	1		10/27/23 18:55	79-34-5	
Tetrachloroethene	**18.2**	ug/L	1.0	0.33	1		10/27/23 18:55	127-18-4	
Toluene	**11.6**	ug/L	1.0	0.25	1		10/27/23 18:55	108-88-3	
1,1,1-Trichloroethane	**8.3**	ug/L	1.0	0.11	1		10/27/23 18:55	71-55-6	
1,1,2-Trichloroethane	**4.4**	ug/L	1.0	0.14	1		10/27/23 18:55	79-00-5	
Trichloroethene	**62300**	ug/L	1000	210	1000		10/24/23 16:28	79-01-6	
Vinyl chloride	**389J**	ug/L	1000	167	1000		10/24/23 16:28	75-01-4	
Xylene (Total)	**2.3J**	ug/L	3.0	0.28	1		10/27/23 18:55	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/27/23 18:55	460-00-4	
Toluene-d8 (S)	94	%	80-120		1		10/27/23 18:55	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/27/23 18:55	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/27/23 18:55		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-82-202310 **Lab ID: 60440158016** Collected: 10/18/23 16:40 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 15:06	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 15:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 15:06	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 15:06	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 15:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 15:06	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 15:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 15:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 15:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 15:06	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 15:06	67-66-3	
Chloromethane	**0.91J**	ug/L	1.0	0.28	1		10/24/23 15:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 15:06	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 15:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 15:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 15:06	75-35-4	
cis-1,2-Dichloroethene	**0.67J**	ug/L	1.0	0.13	1		10/24/23 15:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 15:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 15:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 15:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 15:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 15:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 15:06	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 15:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 15:06	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 15:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 15:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 15:06	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 15:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 15:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 15:06	79-00-5	
Trichloroethene	**31.5**	ug/L	1.0	0.21	1		10/24/23 15:06	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 15:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 15:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/24/23 15:06	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/24/23 15:06	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/24/23 15:06	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 15:06		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: EB-03-202310 **Lab ID: 60440158017** Collected: 10/18/23 16:45 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 12:38	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 12:38	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 12:38	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 12:38	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 12:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 12:38	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 12:38	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 12:38	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 12:38	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 12:38	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 12:38	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 12:38	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 12:38	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 12:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 12:38	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 12:38	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/24/23 12:38	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 12:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 12:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 12:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 12:38	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 12:38	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 12:38	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 12:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 12:38	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 12:38	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 12:38	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 12:38	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 12:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 12:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 12:38	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/24/23 12:38	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 12:38	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 12:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		1		10/24/23 12:38	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/24/23 12:38	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	103	%	80-120		1		10/24/23 12:38	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 12:38		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: TB-04-202310 **Lab ID: 60440158018** Collected: 10/18/23 07:00 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 11:57	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 11:57	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 11:57	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 11:57	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 11:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 11:57	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 11:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 11:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 11:57	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 11:57	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 11:57	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 11:57	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 11:57	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 11:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 11:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 11:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/24/23 11:57	156-59-2	
trans-1,2-Dichloroethene	**0.49J**	ug/L	1.0	0.10	1		10/24/23 11:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 11:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 11:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 11:57	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 11:57	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 11:57	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 11:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 11:57	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 11:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 11:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 11:57	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 11:57	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 11:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 11:57	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/24/23 11:57	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 11:57	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 11:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/24/23 11:57	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/24/23 11:57	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/24/23 11:57	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 11:57		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: TB-05-202310 **Lab ID: 60440158019** Collected: 10/18/23 07:00 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 12:11	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 12:11	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 12:11	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 12:11	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 12:11	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 12:11	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 12:11	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 12:11	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 12:11	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 12:11	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 12:11	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 12:11	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 12:11	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 12:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 12:11	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 12:11	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/24/23 12:11	156-59-2	
trans-1,2-Dichloroethene	**0.46J**	ug/L	1.0	0.10	1		10/24/23 12:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 12:11	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 12:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 12:11	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 12:11	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 12:11	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 12:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 12:11	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 12:11	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 12:11	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 12:11	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 12:11	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 12:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 12:11	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/24/23 12:11	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 12:11	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 12:11	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/24/23 12:11	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/24/23 12:11	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		10/24/23 12:11	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 12:11		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: TB-06-202310 **Lab ID: 60440158020** Collected: 10/18/23 07:00 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 12:24	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 12:24	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 12:24	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 12:24	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 12:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 12:24	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 12:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 12:24	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 12:24	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 12:24	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 12:24	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 12:24	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 12:24	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 12:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 12:24	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 12:24	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/24/23 12:24	156-59-2	
trans-1,2-Dichloroethene	**0.50J**	ug/L	1.0	0.10	1		10/24/23 12:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 12:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 12:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 12:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 12:24	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 12:24	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 12:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 12:24	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 12:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 12:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 12:24	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 12:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 12:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 12:24	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/24/23 12:24	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 12:24	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 12:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/24/23 12:24	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/24/23 12:24	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/24/23 12:24	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 12:24		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-204-202310 **Lab ID: 60440158021** Collected: 10/18/23 16:50 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 20:04	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 20:04	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 20:04	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 20:04	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 20:04	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 20:04	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 20:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 20:04	56-23-5	
Chlorobenzene	**2.0**	ug/L	1.0	0.089	1		10/24/23 20:04	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 20:04	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 20:04	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 20:04	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 20:04	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 20:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 20:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 20:04	75-35-4	
cis-1,2-Dichloroethene	**3.1**	ug/L	1.0	0.13	1		10/24/23 20:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 20:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 20:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 20:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 20:04	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 20:04	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 20:04	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 20:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 20:04	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 20:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 20:04	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 20:04	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 20:04	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 20:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 20:04	79-00-5	
Trichloroethene	**40.7**	ug/L	1.0	0.21	1		10/24/23 20:04	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 20:04	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 20:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		10/24/23 20:04	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/24/23 20:04	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/24/23 20:04	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 20:04		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: TMW-10-202310 **Lab ID: 60440158022** Collected: 10/18/23 09:31 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR Hydrogen by AM20 in Vapor	Analytical Method: AM20 Pace Analytical Services - Baton Rouge								
Hydrogen	**1.8J**	nMoles	1.9	0.49	1		10/26/23 10:18	1333-74-0	
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	ND	ug/L	2.0	0.39	1		10/30/23 20:34	74-86-2	
Ethane	**2.1J**	ug/L	5.0	0.90	1		10/30/23 20:34	74-84-0	
Ethene	**5.7**	ug/L	5.0	0.79	1		10/30/23 20:34	74-85-1	
Methane	**3320**	ug/L	10.0	3.8	1		10/30/23 20:34	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	86	%.	70-130		1		10/30/23 20:34		
BR AM23G Low Level VFA	Analytical Method: Pace ENV-SOP-BTRO-0042 Pace Analytical Services - Baton Rouge								
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/27/23 18:41	109-52-4	L2,N2
Acetic Acid	ND	mg/L	5.0	1.2	10		10/27/23 18:41	64-19-7	
Butyric Acid	ND	mg/L	5.0	0.58	10		10/27/23 18:41	107-92-6	
Formic acid	ND	mg/L	5.0	0.55	10		10/27/23 18:41	64-18-6	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/27/23 18:41	142-62-1	L2,N2
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/27/23 18:41	646-07-1	N2
Lactic Acid	**4.8J**	mg/L	5.0	0.53	10		10/27/23 18:41	50-21-5	D3
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/27/23 18:41	503-74-2	N2
Propionic Acid	ND	mg/L	5.0	0.53	10		10/27/23 18:41	79-09-4	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/27/23 18:41	127-17-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**11400**	ug/L	50.0	9.1	1	10/27/23 12:35	10/30/23 17:39	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 20:17	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 20:17	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 20:17	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 20:17	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 20:17	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 20:17	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 20:17	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 20:17	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 20:17	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 20:17	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 20:17	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 20:17	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 20:17	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 20:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 20:17	107-06-2	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: TMW-10-202310 **Lab ID: 60440158022** Collected: 10/18/23 09:31 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 20:17	75-35-4	
cis-1,2-Dichloroethene	**1.6**	ug/L	1.0	0.13	1		10/24/23 20:17	156-59-2	
trans-1,2-Dichloroethene	**0.31J**	ug/L	1.0	0.10	1		10/24/23 20:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 20:17	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 20:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 20:17	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 20:17	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 20:17	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 20:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 20:17	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 20:17	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 20:17	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 20:17	127-18-4	
Toluene	**0.44J**	ug/L	1.0	0.25	1		10/24/23 20:17	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 20:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 20:17	79-00-5	
Trichloroethene	**4.4**	ug/L	1.0	0.21	1		10/24/23 20:17	79-01-6	
Vinyl chloride	**4.8**	ug/L	1.0	0.17	1		10/24/23 20:17	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 20:17	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/24/23 20:17	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/24/23 20:17	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/24/23 20:17	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 20:17		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
	Pace Analytical Services - Kansas City								
Sulfide, Total	**0.033J**	mg/L	0.050	0.016	1		10/24/23 10:00	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**146**	mg/L	20.0	10.5	20		11/02/23 20:27	16887-00-6	
Sulfate	**2.1**	mg/L	1.0	0.55	1		11/02/23 20:14	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.069	1		10/19/23 16:59		
Nitrogen, Nitrate	ND	mg/L	0.10	0.069	1		10/19/23 16:59	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/19/23 16:59	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	**1.3**	mg/L	1.0	0.54	1		11/15/23 07:23	7440-44-0	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: TMW-10-202310 **Lab ID: 60440158022** Collected: 10/18/23 09:31 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**1.2**	mg/L	1.0	0.54	1		11/17/23 17:18		H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: TMW-11-202310 **Lab ID: 60440158023** Collected: 10/18/23 11:21 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR Hydrogen by AM20 in Vapor	Analytical Method: AM20 Pace Analytical Services - Baton Rouge								
Hydrogen	ND	nMoles	1.9	0.49	1		10/26/23 11:15	1333-74-0	
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	ND	ug/L	2.0	0.39	1		10/30/23 20:50	74-86-2	
Ethane	**0.91J**	ug/L	5.0	0.90	1		10/30/23 20:50	74-84-0	
Ethene	ND	ug/L	5.0	0.79	1		10/30/23 20:50	74-85-1	
Methane	**3380**	ug/L	10.0	3.8	1		10/30/23 20:50	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	89	%.	70-130		1		10/30/23 20:50		
BR AM23G Low Level VFA	Analytical Method: Pace ENV-SOP-BTRO-0042 Pace Analytical Services - Baton Rouge								
Pentanoic Acid	ND	mg/L	2.5	0.28	5		10/27/23 19:05	109-52-4	L2,N2
Acetic Acid	ND	mg/L	2.5	0.62	5		10/27/23 19:05	64-19-7	
Butyric Acid	ND	mg/L	2.5	0.29	5		10/27/23 19:05	107-92-6	
Formic acid	ND	mg/L	2.5	0.27	5		10/27/23 19:05	64-18-6	
Hexanoic Acid	ND	mg/L	2.5	0.29	5		10/27/23 19:05	142-62-1	L2,N2
i-Hexanoic Acid	ND	mg/L	2.5	0.28	5		10/27/23 19:05	646-07-1	N2
Lactic Acid	**6.8**	mg/L	2.5	0.26	5		10/27/23 19:05	50-21-5	D3
i-Pentanoic Acid	ND	mg/L	2.5	0.30	5		10/27/23 19:05	503-74-2	N2
Propionic Acid	ND	mg/L	2.5	0.26	5		10/27/23 19:05	79-09-4	
Pyruvic Acid	ND	mg/L	2.5	0.30	5		10/27/23 19:05	127-17-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**4200**	ug/L	50.0	9.1	1	10/27/23 12:35	10/30/23 17:41	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 20:31	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 20:31	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 20:31	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 20:31	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 20:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 20:31	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 20:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 20:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 20:31	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 20:31	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 20:31	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 20:31	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 20:31	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 20:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 20:31	107-06-2	

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Lenexa, KS 66219
(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: TMW-11-202310 **Lab ID: 60440158023** Collected: 10/18/23 11:21 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 20:31	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/24/23 20:31	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 20:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 20:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 20:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 20:31	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 20:31	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 20:31	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 20:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 20:31	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 20:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 20:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 20:31	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 20:31	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 20:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 20:31	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/24/23 20:31	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 20:31	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 20:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/24/23 20:31	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/24/23 20:31	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		10/24/23 20:31	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 20:31		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
	Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.016	1		10/24/23 10:01	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**43.7**	mg/L	10.0	5.3	10		11/04/23 15:55	16887-00-6	B
Sulfate	**2.0**	mg/L	1.0	0.55	1		11/02/23 20:41	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.069	1		10/19/23 17:11		
Nitrogen, Nitrate	ND	mg/L	0.10	0.069	1		10/19/23 17:11	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/19/23 17:11	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	**3.1**	mg/L	1.0	0.54	1		11/15/23 07:54	7440-44-0	

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: TMW-11-202310 **Lab ID: 60440158023** Collected: 10/18/23 11:21 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**3.3**	mg/L	1.0	0.54	1		11/17/23 17:32		H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-87-202310 **Lab ID: 60440158024** Collected: 10/18/23 14:40 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR Hydrogen by AM20 in Vapor	Analytical Method: AM20 Pace Analytical Services - Baton Rouge								
Hydrogen	**1.1J**	nMoles	1.9	0.49	1		10/26/23 11:28	1333-74-0	
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	ND	ug/L	2.0	0.39	1		10/30/23 21:05	74-86-2	
Ethane	ND	ug/L	5.0	0.90	1		10/30/23 21:05	74-84-0	
Ethene	**1.1J**	ug/L	5.0	0.79	1		10/30/23 21:05	74-85-1	
Methane	**6.1J**	ug/L	10.0	3.8	1		10/30/23 21:05	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	94	%.	70-130		1		10/30/23 21:05		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**3510**	ug/L	50.0	9.1	1	10/27/23 12:35	10/30/23 17:43	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 23:40	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 23:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 23:40	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 23:40	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 23:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 23:40	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 23:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 23:40	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 23:40	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 23:40	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 23:40	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 23:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 23:40	124-48-1	
1,1-Dichloroethane	**0.73J**	ug/L	1.0	0.12	1		10/24/23 23:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 23:40	107-06-2	
1,1-Dichloroethene	**2.5**	ug/L	1.0	0.22	1		10/24/23 23:40	75-35-4	
cis-1,2-Dichloroethene	**14.8**	ug/L	1.0	0.13	1		10/24/23 23:40	156-59-2	
trans-1,2-Dichloroethene	**0.44J**	ug/L	1.0	0.10	1		10/24/23 23:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 23:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 23:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 23:40	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 23:40	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 23:40	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 23:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 23:40	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 23:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 23:40	79-34-5	
Tetrachloroethene	**2.9**	ug/L	1.0	0.33	1		10/24/23 23:40	127-18-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-87-202310 **Lab ID: 60440158024** Collected: 10/18/23 14:40 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 23:40	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 23:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 23:40	79-00-5	
Trichloroethene	**257**	ug/L	5.0	1.0	5		10/27/23 18:07	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 23:40	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 23:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/24/23 23:40	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/24/23 23:40	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/24/23 23:40	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 23:40		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
	Pace Analytical Services - Kansas City								
Sulfide, Total	**0.062**	mg/L	0.050	0.016	1		10/24/23 10:01	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Sulfate	**14.6**	mg/L	1.0	0.55	1		11/02/23 21:07	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**0.74**	mg/L	0.10	0.069	1		10/20/23 08:53		
Nitrogen, Nitrate	**0.74**	mg/L	0.10	0.069	1		10/20/23 08:53	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/20/23 08:53	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	ND	mg/L	1.0	0.54	1		11/15/23 08:09	7440-44-0	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-25R-202310 **Lab ID: 60440158025** Collected: 10/18/23 16:06 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	**0.39J**	ug/L	2.0	0.39	1		10/30/23 21:21	74-86-2	
Ethane	**5.8**	ug/L	5.0	0.90	1		10/30/23 21:21	74-84-0	
Ethene	**2.5J**	ug/L	5.0	0.79	1		10/30/23 21:21	74-85-1	
Methane	**185**	ug/L	10.0	3.8	1		10/30/23 21:21	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	85	%.	70-130		1		10/30/23 21:21		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**4040**	ug/L	50.0	9.1	1	10/27/23 12:35	10/30/23 17:45	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/27/23 18:39	67-64-1	
Benzene	**0.20J**	ug/L	1.0	0.14	1		10/27/23 18:39	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/27/23 18:39	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/27/23 18:39	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/27/23 18:39	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/27/23 18:39	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/27/23 18:39	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/27/23 18:39	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/27/23 18:39	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/27/23 18:39	75-00-3	
Chloroform	**4.4**	ug/L	1.0	0.22	1		10/27/23 18:39	67-66-3	
Chloromethane	**0.73J**	ug/L	1.0	0.28	1		10/27/23 18:39	74-87-3	
Dibromochloromethane	**2.0**	ug/L	1.0	0.30	1		10/27/23 18:39	124-48-1	
1,1-Dichloroethane	**1.3**	ug/L	1.0	0.12	1		10/27/23 18:39	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/27/23 18:39	107-06-2	
1,1-Dichloroethene	**12.2**	ug/L	1.0	0.22	1		10/27/23 18:39	75-35-4	
cis-1,2-Dichloroethene	**3120**	ug/L	50.0	6.4	50		10/24/23 23:53	156-59-2	
trans-1,2-Dichloroethene	**92.4**	ug/L	1.0	0.10	1		10/27/23 18:39	156-60-5	
1,2-Dichloropropane	**0.41J**	ug/L	1.0	0.14	1		10/27/23 18:39	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/27/23 18:39	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/27/23 18:39	10061-02-6	
Ethylbenzene	**0.34J**	ug/L	1.0	0.12	1		10/27/23 18:39	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/27/23 18:39	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/27/23 18:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	**0.85J**	ug/L	10.0	0.74	1		10/27/23 18:39	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/27/23 18:39	100-42-5	
1,1,2,2-Tetrachloroethane	**0.79J**	ug/L	1.0	0.15	1		10/27/23 18:39	79-34-5	
Tetrachloroethene	**1.7**	ug/L	1.0	0.33	1		10/27/23 18:39	127-18-4	
Toluene	**2.0**	ug/L	1.0	0.25	1		10/27/23 18:39	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/27/23 18:39	71-55-6	
1,1,2-Trichloroethane	**0.31J**	ug/L	1.0	0.14	1		10/27/23 18:39	79-00-5	
Trichloroethene	**6300**	ug/L	50.0	10.5	50		10/24/23 23:53	79-01-6	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-25R-202310 **Lab ID: 60440158025** Collected: 10/18/23 16:06 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Vinyl chloride	**88.4**	ug/L	1.0	0.17	1		10/27/23 18:39	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/27/23 18:39	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	107	%	80-120		1		10/27/23 18:39	460-00-4	
Toluene-d8 (S)	97	%	80-120		1		10/27/23 18:39	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/27/23 18:39	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/27/23 18:39		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
	Pace Analytical Services - Kansas City								
Sulfide, Total	**0.10**	mg/L	0.050	0.016	1		10/24/23 10:02	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Sulfate	**754**	mg/L	50.0	27.5	50		11/04/23 16:07	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**0.57**	mg/L	0.10	0.069	1		10/20/23 08:53		
Nitrogen, Nitrate	**0.57**	mg/L	0.10	0.069	1		10/20/23 08:53	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/20/23 08:53	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	**4.4J**	mg/L	5.0	2.7	5		11/15/23 08:40	7440-44-0	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-99-202310 **Lab ID: 60440158026** Collected: 10/18/23 08:30 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Ethane	**1.4J**	ug/L	5.0	0.90	1		10/30/23 21:37	74-84-0	
Ethene	ND	ug/L	5.0	0.79	1		10/30/23 21:37	74-85-1	
Methane	**5780**	ug/L	10.0	3.8	1		10/30/23 21:37	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	101	%.	70-130		1		10/30/23 21:37		
BR AM23G Low Level VFA	Analytical Method: Pace ENV-SOP-BTRO-0042 Pace Analytical Services - Baton Rouge								
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/27/23 19:30	109-52-4	L2,N2
Acetic Acid	ND	mg/L	5.0	1.2	10		10/27/23 19:30	64-19-7	
Butyric Acid	ND	mg/L	5.0	0.58	10		10/27/23 19:30	107-92-6	
Formic acid	ND	mg/L	5.0	0.55	10		10/27/23 19:30	64-18-6	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/27/23 19:30	142-62-1	L2,N2
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/27/23 19:30	646-07-1	N2
Lactic Acid	**7.0**	mg/L	5.0	0.53	10		10/27/23 19:30	50-21-5	D3
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/27/23 19:30	503-74-2	N2
Propionic Acid	ND	mg/L	5.0	0.53	10		10/27/23 19:30	79-09-4	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/27/23 19:30	127-17-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**5490**	ug/L	50.0	9.1	1	10/27/23 12:35	10/30/23 17:54	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 22:05	67-64-1	
Benzene	**0.48J**	ug/L	1.0	0.14	1		10/24/23 22:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 22:05	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 22:05	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 22:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 22:05	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 22:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 22:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 22:05	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 22:05	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 22:05	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 22:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 22:05	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 22:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 22:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 22:05	75-35-4	
cis-1,2-Dichloroethene	**10.2**	ug/L	1.0	0.13	1		10/24/23 22:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 22:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 22:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 22:05	10061-01-5	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-99-202310 **Lab ID: 60440158026** Collected: 10/18/23 08:30 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 22:05	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 22:05	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 22:05	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 22:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	**1.1J**	ug/L	10.0	0.74	1		10/24/23 22:05	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 22:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 22:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 22:05	127-18-4	
Toluene	**0.99J**	ug/L	1.0	0.25	1		10/24/23 22:05	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 22:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 22:05	79-00-5	
Trichloroethene	**0.37J**	ug/L	1.0	0.21	1		10/24/23 22:05	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 22:05	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 22:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		10/24/23 22:05	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/24/23 22:05	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/24/23 22:05	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 22:05		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**71.5**	mg/L	20.0	10.5	20		11/02/23 22:41	16887-00-6	B
Sulfate	**5.5**	mg/L	1.0	0.55	1		11/02/23 22:28	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.069	1		10/19/23 16:56		
Nitrogen, Nitrate	ND	mg/L	0.10	0.069	1		10/19/23 16:56	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/19/23 16:56	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	**6.0**	mg/L	1.0	0.54	1		11/15/23 08:55	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**30.9**	mg/L	5.0	2.7	5		11/17/23 17:47		H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-61R-202310 **Lab ID: 60440158027** Collected: 10/18/23 10:10 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175								
	Pace Analytical Services - Baton Rouge								
Ethane	ND	ug/L	5.0	0.90	1		10/30/23 21:53	74-84-0	
Ethene	ND	ug/L	5.0	0.79	1		10/30/23 21:53	74-85-1	
Methane	**1170**	ug/L	10.0	3.8	1		10/30/23 21:53	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	78	%.	70-130		1		10/30/23 21:53		
BR AM23G Low Level VFA	Analytical Method: Pace ENV-SOP-BTRO-0042								
	Pace Analytical Services - Baton Rouge								
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/27/23 19:55	109-52-4	L2,N2
Acetic Acid	ND	mg/L	5.0	1.2	10		10/27/23 19:55	64-19-7	
Butyric Acid	ND	mg/L	5.0	0.58	10		10/27/23 19:55	107-92-6	
Formic acid	ND	mg/L	5.0	0.55	10		10/27/23 19:55	64-18-6	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/27/23 19:55	142-62-1	L2,N2
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/27/23 19:55	646-07-1	N2
Lactic Acid	**3.1J**	mg/L	5.0	0.53	10		10/27/23 19:55	50-21-5	D3
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/27/23 19:55	503-74-2	N2
Propionic Acid	ND	mg/L	5.0	0.53	10		10/27/23 19:55	79-09-4	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/27/23 19:55	127-17-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Pace Analytical Services - Kansas City								
Iron	**9550**	ug/L	50.0	9.1	1	10/27/23 12:35	10/30/23 17:56	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 20:44	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 20:44	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 20:44	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 20:44	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 20:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 20:44	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 20:44	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 20:44	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 20:44	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 20:44	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 20:44	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 20:44	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 20:44	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 20:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 20:44	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 20:44	75-35-4	
cis-1,2-Dichloroethene	**1.3**	ug/L	1.0	0.13	1		10/24/23 20:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 20:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 20:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 20:44	10061-01-5	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-61R-202310 **Lab ID: 60440158027** Collected: 10/18/23 10:10 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 20:44	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 20:44	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 20:44	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 20:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 20:44	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 20:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 20:44	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 20:44	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 20:44	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 20:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 20:44	79-00-5	
Trichloroethene	**1.7**	ug/L	1.0	0.21	1		10/24/23 20:44	79-01-6	
Vinyl chloride	**1.7**	ug/L	1.0	0.17	1		10/24/23 20:44	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 20:44	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		1		10/24/23 20:44	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/24/23 20:44	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/24/23 20:44	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 20:44		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**140**	mg/L	20.0	10.5	20		11/02/23 23:21	16887-00-6	
Sulfate	**3.1**	mg/L	1.0	0.55	1		11/02/23 22:54	14808-79-8	M1
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.069	1		10/19/23 17:01		
Nitrogen, Nitrate	ND	mg/L	0.10	0.069	1		10/19/23 17:01	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/19/23 17:01	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	**1.3**	mg/L	1.0	0.54	1		11/15/23 09:11	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**1.1**	mg/L	1.0	0.54	1		11/17/23 18:01		H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: TMW-34-202310 **Lab ID: 60440158028** Collected: 10/18/23 11:05 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175								
	Pace Analytical Services - Baton Rouge								
Ethane	ND	ug/L	5.0	0.90	1		10/30/23 22:09	74-84-0	
Ethene	ND	ug/L	5.0	0.79	1		10/30/23 22:09	74-85-1	
Methane	**523**	ug/L	10.0	3.8	1		10/30/23 22:09	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	79	%.	70-130		1		10/30/23 22:09		
BR AM23G Low Level VFA	Analytical Method: Pace ENV-SOP-BTRO-0042								
	Pace Analytical Services - Baton Rouge								
Pentanoic Acid	ND	mg/L	2.5	0.28	5		10/27/23 20:19	109-52-4	L2,N2
Acetic Acid	ND	mg/L	2.5	0.62	5		10/27/23 20:19	64-19-7	
Butyric Acid	ND	mg/L	2.5	0.29	5		10/27/23 20:19	107-92-6	
Formic acid	ND	mg/L	2.5	0.27	5		10/27/23 20:19	64-18-6	
Hexanoic Acid	ND	mg/L	2.5	0.29	5		10/27/23 20:19	142-62-1	L2,N2
i-Hexanoic Acid	ND	mg/L	2.5	0.28	5		10/27/23 20:19	646-07-1	N2
Lactic Acid	**3.2**	mg/L	2.5	0.26	5		10/27/23 20:19	50-21-5	D3
i-Pentanoic Acid	ND	mg/L	2.5	0.30	5		10/27/23 20:19	503-74-2	N2
Propionic Acid	ND	mg/L	2.5	0.26	5		10/27/23 20:19	79-09-4	
Pyruvic Acid	ND	mg/L	2.5	0.30	5		10/27/23 20:19	127-17-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010								
	Pace Analytical Services - Kansas City								
Iron	**1010**	ug/L	50.0	9.1	1	10/27/23 12:35	10/30/23 17:58	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 20:58	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 20:58	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 20:58	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 20:58	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 20:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 20:58	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 20:58	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 20:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 20:58	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 20:58	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 20:58	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 20:58	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 20:58	124-48-1	
1,1-Dichloroethane	**0.50J**	ug/L	1.0	0.12	1		10/24/23 20:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 20:58	107-06-2	
1,1-Dichloroethene	**1.2**	ug/L	1.0	0.22	1		10/24/23 20:58	75-35-4	
cis-1,2-Dichloroethene	**24.3**	ug/L	1.0	0.13	1		10/24/23 20:58	156-59-2	
trans-1,2-Dichloroethene	**0.21J**	ug/L	1.0	0.10	1		10/24/23 20:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 20:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 20:58	10061-01-5	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: TMW-34-202310 **Lab ID: 60440158028** Collected: 10/18/23 11:05 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 20:58	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 20:58	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 20:58	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 20:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 20:58	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 20:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 20:58	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 20:58	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 20:58	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 20:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 20:58	79-00-5	
Trichloroethene	**147**	ug/L	1.0	0.21	1		10/24/23 20:58	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 20:58	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 20:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/24/23 20:58	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/24/23 20:58	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/24/23 20:58	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 20:58		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**49.8**	mg/L	10.0	5.3	10		11/04/23 16:20	16887-00-6	B
Sulfate	**11.0**	mg/L	1.0	0.55	1		11/02/23 23:48	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**3.0**	mg/L	0.10	0.069	1		10/19/23 17:09		
Nitrogen, Nitrate	**3.0**	mg/L	0.10	0.069	1		10/19/23 17:09	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/19/23 17:09	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	ND	mg/L	1.0	0.54	1		11/15/23 09:57	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	ND	mg/L	1.0	0.54	1		11/17/23 18:15		H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-194-202310 **Lab ID: 60440158029** Collected: 10/18/23 10:12 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Ethane	**0.96J**	ug/L	5.0	0.90	1		10/30/23 22:25	74-84-0	
Ethene	**0.81J**	ug/L	5.0	0.79	1		10/30/23 22:25	74-85-1	
Methane	**550**	ug/L	10.0	3.8	1		10/30/23 22:25	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	79	%.	70-130		1		10/30/23 22:25		
BR AM23G Low Level VFA	Analytical Method: Pace ENV-SOP-BTRO-0042 Pace Analytical Services - Baton Rouge								
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/27/23 20:44	109-52-4	L2,N2
Acetic Acid	ND	mg/L	5.0	1.2	10		10/27/23 20:44	64-19-7	
Butyric Acid	ND	mg/L	5.0	0.58	10		10/27/23 20:44	107-92-6	
Formic acid	ND	mg/L	5.0	0.55	10		10/27/23 20:44	64-18-6	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/27/23 20:44	142-62-1	L2,N2
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/27/23 20:44	646-07-1	N2
Lactic Acid	**3.4J**	mg/L	5.0	0.53	10		10/27/23 20:44	50-21-5	D3
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/27/23 20:44	503-74-2	N2
Propionic Acid	ND	mg/L	5.0	0.53	10		10/27/23 20:44	79-09-4	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/27/23 20:44	127-17-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**10800**	ug/L	50.0	9.1	1	10/27/23 12:35	10/30/23 18:00	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 21:11	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 21:11	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 21:11	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 21:11	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 21:11	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 21:11	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 21:11	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 21:11	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 21:11	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 21:11	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 21:11	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 21:11	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 21:11	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 21:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 21:11	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 21:11	75-35-4	
cis-1,2-Dichloroethene	**2.6**	ug/L	1.0	0.13	1		10/24/23 21:11	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 21:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 21:11	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 21:11	10061-01-5	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-194-202310 **Lab ID: 60440158029** Collected: 10/18/23 10:12 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 21:11	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 21:11	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 21:11	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 21:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 21:11	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 21:11	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 21:11	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 21:11	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 21:11	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 21:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 21:11	79-00-5	
Trichloroethene	**7.1**	ug/L	1.0	0.21	1		10/24/23 21:11	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 21:11	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 21:11	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/24/23 21:11	460-00-4	
Toluene-d8 (S)	97	%	80-120		1		10/24/23 21:11	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/24/23 21:11	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 21:11		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**155**	mg/L	20.0	10.5	20		11/03/23 00:28	16887-00-6	
Sulfate	**10.3**	mg/L	1.0	0.55	1		11/03/23 00:14	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.069	1		10/19/23 17:04		
Nitrogen, Nitrate	ND	mg/L	0.10	0.069	1		10/19/23 17:04	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/19/23 17:04	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	ND	mg/L	1.0	0.54	1		11/15/23 10:12	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	ND	mg/L	1.0	0.54	1		11/17/23 18:30		H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-197-202310 **Lab ID: 60440158030** Collected: 10/18/23 10:55 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	ND	ug/L	2.0	0.39	1		10/30/23 22:41	74-86-2	
Ethane	**1.0J**	ug/L	5.0	0.90	1		10/30/23 22:41	74-84-0	
Ethene	**0.91J**	ug/L	5.0	0.79	1		10/30/23 22:41	74-85-1	
Methane	**716**	ug/L	10.0	3.8	1		10/30/23 22:41	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	101	%.	70-130		1		10/30/23 22:41		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**15100**	ug/L	50.0	9.1	1	10/27/23 12:35	10/30/23 18:02	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 21:25	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 21:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 21:25	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 21:25	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 21:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 21:25	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 21:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 21:25	56-23-5	
Chlorobenzene	**1.2**	ug/L	1.0	0.089	1		10/24/23 21:25	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 21:25	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 21:25	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 21:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 21:25	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 21:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 21:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 21:25	75-35-4	
cis-1,2-Dichloroethene	**14.7**	ug/L	1.0	0.13	1		10/24/23 21:25	156-59-2	
trans-1,2-Dichloroethene	**0.12J**	ug/L	1.0	0.10	1		10/24/23 21:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 21:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 21:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 21:25	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 21:25	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 21:25	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 21:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 21:25	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 21:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 21:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 21:25	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 21:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 21:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 21:25	79-00-5	
Trichloroethene	**1.3**	ug/L	1.0	0.21	1		10/24/23 21:25	79-01-6	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-197-202310 **Lab ID: 60440158030** Collected: 10/18/23 10:55 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 21:25	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 21:25	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/24/23 21:25	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/24/23 21:25	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/24/23 21:25	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 21:25		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Sulfate	**21.3**	mg/L	2.0	1.1	2		11/04/23 16:33	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.069	1		10/19/23 17:08		
Nitrogen, Nitrate	ND	mg/L	0.10	0.069	1		10/19/23 17:08	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/19/23 17:08	14797-65-0	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-27-202310 **Lab ID: 60440158031** Collected: 10/18/23 08:41 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	ND	ug/L	2.0	0.39	1		10/30/23 22:57	74-86-2	
Ethane	**1.2J**	ug/L	5.0	0.90	1		10/30/23 22:57	74-84-0	
Ethene	**1.1J**	ug/L	5.0	0.79	1		10/30/23 22:57	74-85-1	
Methane	**6.2J**	ug/L	10.0	3.8	1		10/30/23 22:57	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	94	%.	70-130		1		10/30/23 22:57		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**191**	ug/L	50.0	9.1	1	10/27/23 12:35	10/30/23 18:04	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 21:38	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 21:38	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 21:38	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 21:38	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 21:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 21:38	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 21:38	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 21:38	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 21:38	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 21:38	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 21:38	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 21:38	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 21:38	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 21:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 21:38	107-06-2	
1,1-Dichloroethene	**0.27J**	ug/L	1.0	0.22	1		10/24/23 21:38	75-35-4	
cis-1,2-Dichloroethene	**3.1**	ug/L	1.0	0.13	1		10/24/23 21:38	156-59-2	
trans-1,2-Dichloroethene	**0.37J**	ug/L	1.0	0.10	1		10/24/23 21:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 21:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 21:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 21:38	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 21:38	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 21:38	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 21:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 21:38	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 21:38	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 21:38	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 21:38	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 21:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 21:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 21:38	79-00-5	
Trichloroethene	**123**	ug/L	1.0	0.21	1		10/24/23 21:38	79-01-6	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-27-202310 **Lab ID: 60440158031** Collected: 10/18/23 08:41 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 21:38	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 21:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/24/23 21:38	460-00-4	
Toluene-d8 (S)	97	%	80-120		1		10/24/23 21:38	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/24/23 21:38	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 21:38		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Sulfate	**314**	mg/L	20.0	11.0	20		11/03/23 01:48	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**0.16**	mg/L	0.10	0.069	1		10/19/23 16:58		
Nitrogen, Nitrate	**0.16**	mg/L	0.10	0.069	1		10/19/23 16:58	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/19/23 16:58	14797-65-0	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: TMW-23-202310 **Lab ID: 60440158032** Collected: 10/18/23 14:07 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	ND	ug/L	2.0	0.39	1		10/30/23 23:13	74-86-2	
Ethane	**29.1**	ug/L	5.0	0.90	1		10/30/23 23:13	74-84-0	
Ethene	**8.2**	ug/L	5.0	0.79	1		10/30/23 23:13	74-85-1	
Methane	**318**	ug/L	10.0	3.8	1		10/30/23 23:13	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	97	%.	70-130		1		10/30/23 23:13		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**819**	ug/L	50.0	9.1	1	10/27/23 12:35	10/30/23 18:07	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 23:26	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 23:26	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 23:26	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 23:26	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 23:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 23:26	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 23:26	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 23:26	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 23:26	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 23:26	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 23:26	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 23:26	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 23:26	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 23:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 23:26	107-06-2	
1,1-Dichloroethene	**0.39J**	ug/L	1.0	0.22	1		10/24/23 23:26	75-35-4	
cis-1,2-Dichloroethene	**2.8**	ug/L	1.0	0.13	1		10/24/23 23:26	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 23:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 23:26	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 23:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 23:26	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 23:26	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 23:26	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 23:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 23:26	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 23:26	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 23:26	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 23:26	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 23:26	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 23:26	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 23:26	79-00-5	
Trichloroethene	**191**	ug/L	1.0	0.21	1		10/24/23 23:26	79-01-6	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: TMW-23-202310 **Lab ID: 60440158032** Collected: 10/18/23 14:07 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 23:26	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 23:26	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		10/24/23 23:26	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/24/23 23:26	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/24/23 23:26	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 23:26		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Sulfate	**1.5**	mg/L	1.0	0.55	1		11/03/23 02:01	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.069	1		10/20/23 08:51		
Nitrogen, Nitrate	ND	mg/L	0.10	0.069	1		10/20/23 08:51	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/20/23 08:51	14797-65-0	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-83-202310 **Lab ID: 60440158033** Collected: 10/18/23 16:15 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	**0.99J**	ug/L	2.0	0.39	1		10/30/23 23:29	74-86-2	
Ethane	**35.4**	ug/L	5.0	0.90	1		10/30/23 23:29	74-84-0	
Ethene	**13.5**	ug/L	5.0	0.79	1		10/30/23 23:29	74-85-1	
Methane	**709**	ug/L	10.0	3.8	1		10/30/23 23:29	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	90	%.	70-130		1		10/30/23 23:29		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**13.7J**	ug/L	50.0	9.1	1	10/27/23 12:35	10/30/23 18:09	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 21:52	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 21:52	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 21:52	75-27-4	
Bromoform	**3.3**	ug/L	1.0	0.68	1		10/24/23 21:52	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 21:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 21:52	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 21:52	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 21:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 21:52	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 21:52	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 21:52	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 21:52	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 21:52	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 21:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 21:52	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/24/23 21:52	75-35-4	
cis-1,2-Dichloroethene	**0.54J**	ug/L	1.0	0.13	1		10/24/23 21:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 21:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 21:52	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 21:52	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 21:52	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 21:52	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 21:52	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 21:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 21:52	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 21:52	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 21:52	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 21:52	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 21:52	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 21:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 21:52	79-00-5	
Trichloroethene	**27.5**	ug/L	1.0	0.21	1		10/24/23 21:52	79-01-6	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Sample: MW-83-202310 **Lab ID: 60440158033** Collected: 10/18/23 16:15 Received: 10/19/23 02:50 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 21:52	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 21:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/24/23 21:52	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/24/23 21:52	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/24/23 21:52	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 21:52		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Sulfate	**590**	mg/L	50.0	27.5	50		11/04/23 16:45	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.069	1		10/20/23 08:55		
Nitrogen, Nitrate	ND	mg/L	0.10	0.069	1		10/20/23 08:55	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/20/23 08:55	14797-65-0	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

QC Batch: 305317
QC Batch Method: AM20
Analysis Method: AM20
Analysis Description: BR Hydrogen by AM20 in Vapor
Laboratory: Pace Analytical Services - Baton Rouge
Associated Lab Samples: 60440158022, 60440158023, 60440158024

METHOD BLANK: 1461434 Matrix: Air
Associated Lab Samples: 60440158022, 60440158023, 60440158024

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Hydrogen	nMoles	ND	1.9	0.49	10/26/23 07:03	

LABORATORY CONTROL SAMPLE & LCSD: 1461435 1461433

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Hydrogen	nMoles	11.9	12.0	13.1	101	110	70-130	9	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

QC Batch: 305570
QC Batch Method: RSK175
Analysis Method: RSK175
Analysis Description: BR RSK175W Headspace
Laboratory: Pace Analytical Services - Baton Rouge
Associated Lab Samples: 60440158022, 60440158023, 60440158024, 60440158025, 60440158026, 60440158027, 60440158028, 60440158029, 60440158030, 60440158031, 60440158032, 60440158033

METHOD BLANK: 1462636 Matrix: Water
Associated Lab Samples: 60440158022, 60440158023, 60440158024, 60440158025, 60440158026, 60440158027, 60440158028, 60440158029, 60440158030, 60440158031, 60440158032, 60440158033

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetylene	ug/L	ND	2.0	0.39	10/30/23 18:09	
Ethane	ug/L	ND	5.0	0.90	10/30/23 18:09	
Ethene	ug/L	ND	5.0	0.79	10/30/23 18:09	
Methane	ug/L	ND	10.0	3.8	10/30/23 18:09	
Methyl-tert-butyl-ether-d3 (S)	%.	96	70-130		10/30/23 18:09	

LABORATORY CONTROL SAMPLE & LCSD: 1462637 1462638

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Acetylene	ug/L	75	64.1	67.1	85	89	70-130	5	20	
Ethane	ug/L	243	231	207	95	85	70-130	11	20	
Ethene	ug/L	296	272	254	92	86	70-130	7	20	
Methane	ug/L	945	841	797	89	84	70-130	5	20	
Methyl-tert-butyl-ether-d3 (S)	%.				92	101	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

QC Batch: 305046
QC Batch Method: Pace ENV-SOP-BTRO-0042
Analysis Method: Pace ENV-SOP-BTRO-0042
Analysis Description: BR AM23G Low Level VFA
Laboratory: Pace Analytical Services - Baton Rouge
Associated Lab Samples: 60440158022, 60440158023, 60440158026, 60440158027, 60440158028, 60440158029

METHOD BLANK: 1460181 Matrix: Water
Associated Lab Samples: 60440158022, 60440158023, 60440158026, 60440158027, 60440158028, 60440158029

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetic Acid	mg/L	ND	0.50	0.12	10/27/23 16:13	
Butyric Acid	mg/L	ND	0.50	0.058	10/27/23 16:13	
Formic acid	mg/L	ND	0.50	0.055	10/27/23 16:13	
Hexanoic Acid	mg/L	ND	0.50	0.058	10/27/23 16:13	N2
i-Hexanoic Acid	mg/L	ND	0.50	0.056	10/27/23 16:13	N2
i-Pentanoic Acid	mg/L	ND	0.50	0.061	10/27/23 16:13	N2
Lactic Acid	mg/L	ND	0.50	0.053	10/27/23 16:13	
Pentanoic Acid	mg/L	ND	0.50	0.056	10/27/23 16:13	N2
Propionic Acid	mg/L	ND	0.50	0.053	10/27/23 16:13	
Pyruvic Acid	mg/L	ND	0.50	0.060	10/27/23 16:13	

LABORATORY CONTROL SAMPLE: 1460182

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acetic Acid	mg/L	2	2.1	103	70-130	
Butyric Acid	mg/L	2	1.8	89	70-130	
Formic acid	mg/L	2	2.0	98	70-130	
Hexanoic Acid	mg/L	2	1.0	50	70-130	L2,N2
i-Hexanoic Acid	mg/L	2	1.4	71	70-130	N2
i-Pentanoic Acid	mg/L	2	1.8	88	70-130	N2
Lactic Acid	mg/L	2	2.1	104	70-130	
Pentanoic Acid	mg/L	2	1.4	69	70-130	L2,N2
Propionic Acid	mg/L	2	2.0	98	70-130	
Pyruvic Acid	mg/L	2	1.8	92	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1460480 1460481

Parameter	Units	20294259001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acetic Acid	mg/L	66.9	100	100	164	164	97	97	70-130	0	30	H3
Butyric Acid	mg/L	ND	100	100	91.2	91.8	90	91	70-130	1	30	H3
Formic acid	mg/L	ND	100	100	99.2	99.1	98	98	70-130	0	30	H3
Hexanoic Acid	mg/L	ND	100	100	50.5	50.0	50	49	70-130	1	30	H3,M0, N2
i-Hexanoic Acid	mg/L	ND	100	100	67.2	68.7	67	69	70-130	2	30	H3,M1, N2
i-Pentanoic Acid	mg/L	ND	100	100	86.2	86.8	85	85	70-130	1	30	H3,N2
Lactic Acid	mg/L	3.5J	100	100	104	104	101	100	70-130	0	30	H3

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1460480 1460481

Parameter	Units	20294259001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Pentanoic Acid	mg/L	ND	100	100	70.0	69.6	69	69	70-130	1	30	H3,M0, N2
Propionic Acid	mg/L	28.3	100	100	125	125	97	97	70-130	0	30	H3
Pyruvic Acid	mg/L	ND	100	100	96.4	97.1	95	96	70-130	1	30	H3

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

QC Batch: 871020
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440158022, 60440158023, 60440158024, 60440158025, 60440158026, 60440158027, 60440158028, 60440158029, 60440158030, 60440158031, 60440158032, 60440158033

METHOD BLANK: 3449642 Matrix: Water
Associated Lab Samples: 60440158022, 60440158023, 60440158024, 60440158025, 60440158026, 60440158027, 60440158028, 60440158029, 60440158030, 60440158031, 60440158032, 60440158033

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	9.1	10/30/23 17:28	

LABORATORY CONTROL SAMPLE: 3449643

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	9950	100	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3449644 3449645

Parameter	Units	60440325002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	15600	10000	10000	26400	26800	108	112	75-125	2	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

QC Batch: 870439
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440158001, 60440158002, 60440158003, 60440158004, 60440158005, 60440158006, 60440158007, 60440158008, 60440158009, 60440158010, 60440158011, 60440158012, 60440158013, 60440158014, 60440158015, 60440158016, 60440158017, 60440158018, 60440158019, 60440158020

METHOD BLANK: 3447114
Matrix: Water
Associated Lab Samples: 60440158001, 60440158002, 60440158003, 60440158004, 60440158005, 60440158006, 60440158007, 60440158008, 60440158009, 60440158010, 60440158011, 60440158012, 60440158013, 60440158014, 60440158015, 60440158016, 60440158017, 60440158018, 60440158019, 60440158020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/24/23 11:44	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/24/23 11:44	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/24/23 11:44	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/24/23 11:44	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/24/23 11:44	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/24/23 11:44	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/24/23 11:44	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/24/23 11:44	
2-Hexanone	ug/L	ND	10.0	1.1	10/24/23 11:44	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/24/23 11:44	
Acetone	ug/L	ND	10.0	2.5	10/24/23 11:44	
Benzene	ug/L	ND	1.0	0.14	10/24/23 11:44	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/24/23 11:44	
Bromoform	ug/L	ND	1.0	0.68	10/24/23 11:44	
Bromomethane	ug/L	0.50J	5.0	0.46	10/24/23 11:44	
Carbon disulfide	ug/L	ND	5.0	0.98	10/24/23 11:44	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/24/23 11:44	
Chlorobenzene	ug/L	ND	1.0	0.089	10/24/23 11:44	
Chloroethane	ug/L	ND	1.0	0.37	10/24/23 11:44	
Chloroform	ug/L	ND	1.0	0.22	10/24/23 11:44	
Chloromethane	ug/L	ND	1.0	0.28	10/24/23 11:44	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/24/23 11:44	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/24/23 11:44	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/24/23 11:44	
Ethylbenzene	ug/L	ND	1.0	0.12	10/24/23 11:44	
Methylene Chloride	ug/L	ND	1.0	0.39	10/24/23 11:44	
Styrene	ug/L	ND	1.0	0.12	10/24/23 11:44	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/24/23 11:44	
Toluene	ug/L	ND	1.0	0.25	10/24/23 11:44	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/24/23 11:44	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/24/23 11:44	
Trichloroethene	ug/L	ND	1.0	0.21	10/24/23 11:44	
Vinyl chloride	ug/L	ND	1.0	0.17	10/24/23 11:44	
Xylene (Total)	ug/L	ND	3.0	0.28	10/24/23 11:44	
1,2-Dichlorobenzene-d4 (S)	%	100	80-120		10/24/23 11:44	
4-Bromofluorobenzene (S)	%	97	80-120		10/24/23 11:44	
Toluene-d8 (S)	%	101	80-120		10/24/23 11:44	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

LABORATORY CONTROL SAMPLE: 3447115

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.2	96	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	17.9	89	70-130	
1,1,2-Trichloroethane	ug/L	20	18.2	91	75-125	
1,1-Dichloroethane	ug/L	20	19.2	96	75-120	
1,1-Dichloroethene	ug/L	20	19.0	95	75-120	
1,2-Dichloroethane	ug/L	20	19.4	97	80-120	
1,2-Dichloropropane	ug/L	20	18.8	94	80-120	
2-Butanone (MEK)	ug/L	100	83.0	83	60-140	
2-Hexanone	ug/L	100	80.7	81	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	90.0	90	70-135	
Acetone	ug/L	100	83.1	83	25-185	
Benzene	ug/L	20	19.2	96	80-120	
Bromodichloromethane	ug/L	20	20.3	102	80-120	
Bromoform	ug/L	20	18.6	93	70-135	
Bromomethane	ug/L	20	19.8	99	50-145	
Carbon disulfide	ug/L	20	18.3	92	70-130	
Carbon tetrachloride	ug/L	20	18.8	94	80-130	
Chlorobenzene	ug/L	20	18.7	94	80-120	
Chloroethane	ug/L	20	19.8	99	60-135	
Chloroform	ug/L	20	19.6	98	75-125	
Chloromethane	ug/L	20	18.9	94	60-130	
cis-1,2-Dichloroethene	ug/L	20	19.7	98	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.5	97	75-125	
Dibromochloromethane	ug/L	20	18.5	93	80-120	
Ethylbenzene	ug/L	20	19.0	95	80-120	
Methylene Chloride	ug/L	20	21.2	106	70-130	
Styrene	ug/L	20	19.3	96	80-155	
Tetrachloroethene	ug/L	20	18.2	91	80-125	
Toluene	ug/L	20	18.4	92	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.7	98	75-125	
trans-1,3-Dichloropropene	ug/L	20	18.1	91	70-125	
Trichloroethene	ug/L	20	18.9	94	80-125	
Vinyl chloride	ug/L	20	19.9	100	65-130	
Xylene (Total)	ug/L	60	57.6	96	80-120	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			98	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

QC Batch: 870457
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440158021, 60440158022, 60440158023, 60440158024, 60440158025, 60440158026, 60440158027, 60440158028, 60440158029, 60440158030, 60440158031, 60440158032, 60440158033

METHOD BLANK: 3447166
Matrix: Water
Associated Lab Samples: 60440158021, 60440158022, 60440158023, 60440158024, 60440158025, 60440158026, 60440158027, 60440158028, 60440158029, 60440158030, 60440158031, 60440158032, 60440158033

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/24/23 19:50	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/24/23 19:50	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/24/23 19:50	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/24/23 19:50	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/24/23 19:50	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/24/23 19:50	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/24/23 19:50	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/24/23 19:50	
2-Hexanone	ug/L	ND	10.0	1.1	10/24/23 19:50	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/24/23 19:50	
Acetone	ug/L	ND	10.0	2.5	10/24/23 19:50	
Benzene	ug/L	ND	1.0	0.14	10/24/23 19:50	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/24/23 19:50	
Bromoform	ug/L	ND	1.0	0.68	10/24/23 19:50	
Bromomethane	ug/L	ND	5.0	0.46	10/24/23 19:50	
Carbon disulfide	ug/L	ND	5.0	0.98	10/24/23 19:50	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/24/23 19:50	
Chlorobenzene	ug/L	ND	1.0	0.089	10/24/23 19:50	
Chloroethane	ug/L	ND	1.0	0.37	10/24/23 19:50	
Chloroform	ug/L	ND	1.0	0.22	10/24/23 19:50	
Chloromethane	ug/L	ND	1.0	0.28	10/24/23 19:50	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/24/23 19:50	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/24/23 19:50	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/24/23 19:50	
Ethylbenzene	ug/L	ND	1.0	0.12	10/24/23 19:50	
Methylene Chloride	ug/L	ND	1.0	0.39	10/24/23 19:50	
Styrene	ug/L	ND	1.0	0.12	10/24/23 19:50	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/24/23 19:50	
Toluene	ug/L	ND	1.0	0.25	10/24/23 19:50	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/24/23 19:50	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/24/23 19:50	
Trichloroethene	ug/L	ND	1.0	0.21	10/24/23 19:50	
Vinyl chloride	ug/L	ND	1.0	0.17	10/24/23 19:50	
Xylene (Total)	ug/L	ND	3.0	0.28	10/24/23 19:50	
1,2-Dichlorobenzene-d4 (S)	%	102	80-120		10/24/23 19:50	
4-Bromofluorobenzene (S)	%	101	80-120		10/24/23 19:50	
Toluene-d8 (S)	%	98	80-120		10/24/23 19:50	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

LABORATORY CONTROL SAMPLE: 3447167

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	18.7	93	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	18.1	91	70-130	
1,1,2-Trichloroethane	ug/L	20	18.3	91	75-125	
1,1-Dichloroethane	ug/L	20	18.2	91	75-120	
1,1-Dichloroethene	ug/L	20	19.1	96	75-120	
1,2-Dichloroethane	ug/L	20	18.6	93	80-120	
1,2-Dichloropropane	ug/L	20	18.5	93	80-120	
2-Butanone (MEK)	ug/L	100	68.5	69	60-140	
2-Hexanone	ug/L	100	74.7	75	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	86.4	86	70-135	
Acetone	ug/L	100	71.3	71	25-185	
Benzene	ug/L	20	18.5	92	80-120	
Bromodichloromethane	ug/L	20	19.1	96	80-120	
Bromoform	ug/L	20	17.1	85	70-135	
Bromomethane	ug/L	20	17.5	88	50-145	
Carbon disulfide	ug/L	20	17.9	89	70-130	
Carbon tetrachloride	ug/L	20	18.2	91	80-130	
Chlorobenzene	ug/L	20	18.7	94	80-120	
Chloroethane	ug/L	20	19.3	96	60-135	
Chloroform	ug/L	20	18.6	93	75-125	
Chloromethane	ug/L	20	18.1	91	60-130	
cis-1,2-Dichloroethene	ug/L	20	18.0	90	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.7	93	75-125	
Dibromochloromethane	ug/L	20	18.4	92	80-120	
Ethylbenzene	ug/L	20	18.4	92	80-120	
Methylene Chloride	ug/L	20	20.8	104	70-130	
Styrene	ug/L	20	19.2	96	80-155	
Tetrachloroethene	ug/L	20	18.6	93	80-125	
Toluene	ug/L	20	18.8	94	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.4	92	75-125	
trans-1,3-Dichloropropene	ug/L	20	18.5	92	70-125	
Trichloroethene	ug/L	20	18.4	92	80-125	
Vinyl chloride	ug/L	20	19.0	95	65-130	
Xylene (Total)	ug/L	60	58.3	97	80-120	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			102	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

QC Batch: 871011
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440158013, 60440158015, 60440158024, 60440158025

METHOD BLANK: 3449590 Matrix: Water
Associated Lab Samples: 60440158013, 60440158015, 60440158024, 60440158025

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/27/23 14:41	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/27/23 14:41	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/27/23 14:41	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/27/23 14:41	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/27/23 14:41	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/27/23 14:41	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/27/23 14:41	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/27/23 14:41	
2-Hexanone	ug/L	ND	10.0	1.1	10/27/23 14:41	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/27/23 14:41	
Acetone	ug/L	ND	10.0	2.5	10/27/23 14:41	
Benzene	ug/L	ND	1.0	0.14	10/27/23 14:41	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/27/23 14:41	
Bromoform	ug/L	ND	1.0	0.68	10/27/23 14:41	
Bromomethane	ug/L	ND	5.0	0.46	10/27/23 14:41	
Carbon disulfide	ug/L	ND	5.0	0.98	10/27/23 14:41	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/27/23 14:41	
Chlorobenzene	ug/L	ND	1.0	0.089	10/27/23 14:41	
Chloroethane	ug/L	ND	1.0	0.37	10/27/23 14:41	
Chloroform	ug/L	ND	1.0	0.22	10/27/23 14:41	
Chloromethane	ug/L	ND	1.0	0.28	10/27/23 14:41	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/27/23 14:41	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/27/23 14:41	
Ethylbenzene	ug/L	ND	1.0	0.12	10/27/23 14:41	
Methylene Chloride	ug/L	ND	1.0	0.39	10/27/23 14:41	
Styrene	ug/L	ND	1.0	0.12	10/27/23 14:41	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/27/23 14:41	
Toluene	ug/L	ND	1.0	0.25	10/27/23 14:41	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/27/23 14:41	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/27/23 14:41	
Trichloroethene	ug/L	1.3	1.0	0.21	10/27/23 14:41	
Vinyl chloride	ug/L	ND	1.0	0.17	10/27/23 14:41	
Xylene (Total)	ug/L	ND	3.0	0.28	10/27/23 14:41	
1,2-Dichlorobenzene-d4 (S)	%	100	80-120		10/27/23 14:41	
4-Bromofluorobenzene (S)	%	106	80-120		10/27/23 14:41	
Toluene-d8 (S)	%	95	80-120		10/27/23 14:41	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

LABORATORY CONTROL SAMPLE: 3449591

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	18.7	94	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	19.4	97	70-130	
1,1,2-Trichloroethane	ug/L	20	18.7	94	75-125	
1,1-Dichloroethane	ug/L	20	19.0	95	75-120	
1,1-Dichloroethene	ug/L	20	18.8	94	75-120	
1,2-Dichloroethane	ug/L	20	20.8	104	80-120	
1,2-Dichloropropane	ug/L	20	20.6	103	80-120	
2-Butanone (MEK)	ug/L	100	102	102	60-140	
2-Hexanone	ug/L	100	95.4	95	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	97.3	97	70-135	
Acetone	ug/L	100	115	115	25-185	
Benzene	ug/L	20	20.6	103	80-120	
Bromodichloromethane	ug/L	20	20.7	104	80-120	
Bromoform	ug/L	20	15.7	78	70-135	
Bromomethane	ug/L	20	24.1	121	50-145	
Carbon disulfide	ug/L	20	19.1	96	70-130	
Carbon tetrachloride	ug/L	20	18.8	94	80-130	
Chlorobenzene	ug/L	20	18.5	93	80-120	
Chloroethane	ug/L	20	20.8	104	60-135	
Chloroform	ug/L	20	19.4	97	75-125	
Chloromethane	ug/L	20	20.4	102	60-130	
cis-1,3-Dichloropropene	ug/L	20	20.1	100	75-125	
Dibromochloromethane	ug/L	20	19.4	97	80-120	
Ethylbenzene	ug/L	20	19.0	95	80-120	
Methylene Chloride	ug/L	20	18.7	94	70-130	
Styrene	ug/L	20	18.2	91	80-155	
Tetrachloroethene	ug/L	20	16.4	82	80-125	
Toluene	ug/L	20	18.2	91	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.2	96	75-125	
trans-1,3-Dichloropropene	ug/L	20	20.6	103	70-125	
Trichloroethene	ug/L	20	20.2	101	80-125	
Vinyl chloride	ug/L	20	20.5	103	65-130	
Xylene (Total)	ug/L	60	60.5	101	80-120	
1,2-Dichlorobenzene-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			108	80-120	
Toluene-d8 (S)	%			95	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

QC Batch: 870249
QC Batch Method: SM 4500-S-2 D
Analysis Method: SM 4500-S-2 D
Analysis Description: 4500S2D Sulfide, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440158022, 60440158023, 60440158024, 60440158025

METHOD BLANK: 3446128 Matrix: Water
Associated Lab Samples: 60440158022, 60440158023, 60440158024, 60440158025

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	0.016	10/24/23 09:23	

LABORATORY CONTROL SAMPLE: 3446129

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.5	0.54	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3446130 3446131

Parameter	Units	60440296004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide, Total	mg/L	ND	0.5	0.5	0.43	0.49	87	98	75-125	12	20	H1

SAMPLE DUPLICATE: 3446132

Parameter	Units	60440296005 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	0.025J		20	H1

SAMPLE DUPLICATE: 3446777

Parameter	Units	60440161002 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	0.24	0.22	6	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

QC Batch: 871775
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440158022, 60440158023, 60440158024, 60440158025, 60440158026, 60440158027, 60440158028, 60440158029, 60440158030, 60440158031, 60440158032, 60440158033

METHOD BLANK: 3452745 Matrix: Water
Associated Lab Samples: 60440158022, 60440158023, 60440158024, 60440158025, 60440158026, 60440158027, 60440158028, 60440158029, 60440158030, 60440158031, 60440158032, 60440158033

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.53	11/02/23 09:14	
Sulfate	mg/L	ND	1.0	0.55	11/02/23 09:14	

METHOD BLANK: 3454848 Matrix: Water
Associated Lab Samples: 60440158022, 60440158023, 60440158024, 60440158025, 60440158026, 60440158027, 60440158028, 60440158029, 60440158030, 60440158031, 60440158032, 60440158033

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	0.58J	1.0	0.53	11/04/23 13:49	
Sulfate	mg/L	ND	1.0	0.55	11/04/23 13:49	

METHOD BLANK: 3455627 Matrix: Water
Associated Lab Samples: 60440158022, 60440158023, 60440158024, 60440158025, 60440158026, 60440158027, 60440158028, 60440158029, 60440158030, 60440158031, 60440158032, 60440158033

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.53	11/07/23 00:34	
Sulfate	mg/L	ND	1.0	0.55	11/07/23 00:34	

LABORATORY CONTROL SAMPLE: 3452746

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	98	90-110	
Sulfate	mg/L	5	5.4	108	90-110	

LABORATORY CONTROL SAMPLE: 3454849

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.0	100	90-110	
Sulfate	mg/L	5	5.2	104	90-110	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

LABORATORY CONTROL SAMPLE: 3455628

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	98	90-110	
Sulfate	mg/L	5	5.0	101	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3452747 3452748

Parameter	Units	60440040002 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	480	250	250	739	738	103	103	80-120	0	15	
Sulfate	mg/L	260	250	250	539	538	112	111	80-120	0	15	

MATRIX SPIKE SAMPLE: 3452749

Parameter	Units	60440158027 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	140	100	253	114	80-120	
Sulfate	mg/L	3.1	5	9.4	125	80-120	M1

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

QC Batch: 869938
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440158022, 60440158023, 60440158026, 60440158027, 60440158028, 60440158029, 60440158030, 60440158031

METHOD BLANK: 3444834 Matrix: Water
Associated Lab Samples: 60440158022, 60440158023, 60440158026, 60440158027, 60440158028, 60440158029, 60440158030, 60440158031

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	0.069	10/19/23 16:50	
Nitrogen, Nitrite	mg/L	ND	0.10	0.069	10/19/23 16:50	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	0.069	10/19/23 16:50	

LABORATORY CONTROL SAMPLE: 3444835

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1	1.0	104	70-130	
Nitrogen, Nitrite	mg/L	1	1.1	108	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	106	90-110	

MATRIX SPIKE SAMPLE: 3444836

Parameter	Units	60440107001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	21.2	10	23.7	25	70-130	M1
Nitrogen, Nitrite	mg/L	ND	10	0.83J	8	90-110	M1
Nitrogen, NO2 plus NO3	mg/L	21.2	20	23.7	13	90-110	M1

MATRIX SPIKE SAMPLE: 3444838

Parameter	Units	60440104001 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	11.9	5	13.6	35	70-130	M1
Nitrogen, Nitrite	mg/L	0.44J	5	1.8	27	90-110	M1
Nitrogen, NO2 plus NO3	mg/L	12.3	10	15.4	31	90-110	M1

SAMPLE DUPLICATE: 3444837

Parameter	Units	60440158026 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	ND	ND		20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	ND	ND		20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

QC Batch: 869981
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440158024, 60440158025, 60440158032, 60440158033

METHOD BLANK: 3445042 Matrix: Water
Associated Lab Samples: 60440158024, 60440158025, 60440158032, 60440158033

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	0.069	10/20/23 08:49	
Nitrogen, Nitrite	mg/L	ND	0.10	0.069	10/20/23 08:49	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	0.069	10/20/23 08:49	

LABORATORY CONTROL SAMPLE: 3445043

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1	1.0	104	70-130	
Nitrogen, Nitrite	mg/L	1	1.1	108	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	106	90-110	

MATRIX SPIKE SAMPLE: 3445044

Parameter	Units	60440158032 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	ND	1	1.1	113	70-130	
Nitrogen, Nitrite	mg/L	ND	1	1.1	110	90-110	
Nitrogen, NO2 plus NO3	mg/L	ND	2	2.2	110	90-110	

SAMPLE DUPLICATE: 3445045

Parameter	Units	60440158025 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	0.57	0.57	0	20	
Nitrogen, Nitrite	mg/L	ND	ND		20	
Nitrogen, NO2 plus NO3	mg/L	0.57	0.57	0	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

QC Batch: 873295
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440158022, 60440158023, 60440158024, 60440158025, 60440158026, 60440158027, 60440158028, 60440158029

METHOD BLANK: 3458904 Matrix: Water
Associated Lab Samples: 60440158022, 60440158023, 60440158024, 60440158025, 60440158026, 60440158027, 60440158028, 60440158029

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	0.54	11/15/23 06:52	

LABORATORY CONTROL SAMPLE: 3458905

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.2	103	80-120	

MATRIX SPIKE SAMPLE: 3458906

Parameter	Units	60440158022 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	1.3	5	6.3	101	80-120	

SAMPLE DUPLICATE: 3458907

Parameter	Units	60440158022 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	1.3	ND		25	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

QC Batch: 873477
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Dissolved Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440158022, 60440158023, 60440158026, 60440158027, 60440158028, 60440158029

METHOD BLANK: 3459571 Matrix: Water
Associated Lab Samples: 60440158022, 60440158023, 60440158026, 60440158027, 60440158028, 60440158029

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dissolved Organic Carbon	mg/L	ND	1.0	0.54	11/17/23 14:06	

LABORATORY CONTROL SAMPLE: 3459572

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	5	5.1	103	80-120	

MATRIX SPIKE SAMPLE: 3459573

Parameter	Units	60439898011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	0.92J	5	5.9	100	80-120	H1

SAMPLE DUPLICATE: 3459574

Parameter	Units	60440028030 Result	Dup Result	RPD	Max RPD	Qualifiers
Dissolved Organic Carbon	mg/L	3.1	3.1	2	25	H1

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QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

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.

TNTC - Too Numerous To Count

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 870439

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

Batch: 870457

[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.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
H1	Analysis conducted outside the EPA method holding time.
H3	Sample was received or analysis requested beyond the recognized method holding time.
L2	Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60440158022	**TMW-10-202310**	AM20	305317		
60440158023	**TMW-11-202310**	AM20	305317		
60440158024	**MW-87-202310**	AM20	305317		
60440158022	**TMW-10-202310**	RSK175	305570		
60440158023	**TMW-11-202310**	RSK175	305570		
60440158024	**MW-87-202310**	RSK175	305570		
60440158025	**MW-25R-202310**	RSK175	305570		
60440158026	**MW-99-202310**	RSK175	305570		
60440158027	**MW-61R-202310**	RSK175	305570		
60440158028	**TMW-34-202310**	RSK175	305570		
60440158029	**MW-194-202310**	RSK175	305570		
60440158030	**MW-197-202310**	RSK175	305570		
60440158031	**MW-27-202310**	RSK175	305570		
60440158032	**TMW-23-202310**	RSK175	305570		
60440158033	**MW-83-202310**	RSK175	305570		
60440158022	**TMW-10-202310**	Pace ENV-SOP-BTRO-0042	305046		
60440158023	**TMW-11-202310**	Pace ENV-SOP-BTRO-0042	305046		
60440158026	**MW-99-202310**	Pace ENV-SOP-BTRO-0042	305046		
60440158027	**MW-61R-202310**	Pace ENV-SOP-BTRO-0042	305046		
60440158028	**TMW-34-202310**	Pace ENV-SOP-BTRO-0042	305046		
60440158029	**MW-194-202310**	Pace ENV-SOP-BTRO-0042	305046		
60440158022	**TMW-10-202310**	EPA 3010	871020	EPA 6010	871055
60440158023	**TMW-11-202310**	EPA 3010	871020	EPA 6010	871055
60440158024	**MW-87-202310**	EPA 3010	871020	EPA 6010	871055
60440158025	**MW-25R-202310**	EPA 3010	871020	EPA 6010	871055
60440158026	**MW-99-202310**	EPA 3010	871020	EPA 6010	871055
60440158027	**MW-61R-202310**	EPA 3010	871020	EPA 6010	871055
60440158028	**TMW-34-202310**	EPA 3010	871020	EPA 6010	871055
60440158029	**MW-194-202310**	EPA 3010	871020	EPA 6010	871055
60440158030	**MW-197-202310**	EPA 3010	871020	EPA 6010	871055
60440158031	**MW-27-202310**	EPA 3010	871020	EPA 6010	871055
60440158032	**TMW-23-202310**	EPA 3010	871020	EPA 6010	871055
60440158033	**MW-83-202310**	EPA 3010	871020	EPA 6010	871055
60440158001	**MW-84-202310**	EPA 5030B/8260	870439		
60440158002	**MW-98-202310**	EPA 5030B/8260	870439		
60440158003	**TMW-21-202310**	EPA 5030B/8260	870439		
60440158004	**DUP-03-202310**	EPA 5030B/8260	870439		
60440158005	**ITMW-7-202310**	EPA 5030B/8260	870439		
60440158006	**MW-24-202310**	EPA 5030B/8260	870439		
60440158007	**DUP-08-202310**	EPA 5030B/8260	870439		
60440158008	**IW-78-202310**	EPA 5030B/8260	870439		
60440158009	**DUP-04-202310**	EPA 5030B/8260	870439		
60440158010	**ITMW-1R-202310**	EPA 5030B/8260	870439		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60440158011	**MW-55R-202310**	EPA 5030B/8260	870439		
60440158012	**TMW-12-202310**	EPA 5030B/8260	870439		
60440158013	**DUP-09-202310**	EPA 5030B/8260	870439		
60440158013	**DUP-09-202310**	EPA 5030B/8260	871011		
60440158014	**MW-63R-202310**	EPA 5030B/8260	870439		
60440158015	**RW-1-202310**	EPA 5030B/8260	870439		
60440158015	**RW-1-202310**	EPA 5030B/8260	871011		
60440158016	**MW-82-202310**	EPA 5030B/8260	870439		
60440158017	**EB-03-202310**	EPA 5030B/8260	870439		
60440158018	**TB-04-202310**	EPA 5030B/8260	870439		
60440158019	**TB-05-202310**	EPA 5030B/8260	870439		
60440158020	**TB-06-202310**	EPA 5030B/8260	870439		
60440158021	**MW-204-202310**	EPA 5030B/8260	870457		
60440158022	**TMW-10-202310**	EPA 5030B/8260	870457		
60440158023	**TMW-11-202310**	EPA 5030B/8260	870457		
60440158024	**MW-87-202310**	EPA 5030B/8260	870457		
60440158024	**MW-87-202310**	EPA 5030B/8260	871011		
60440158025	**MW-25R-202310**	EPA 5030B/8260	870457		
60440158025	**MW-25R-202310**	EPA 5030B/8260	871011		
60440158026	**MW-99-202310**	EPA 5030B/8260	870457		
60440158027	**MW-61R-202310**	EPA 5030B/8260	870457		
60440158028	**TMW-34-202310**	EPA 5030B/8260	870457		
60440158029	**MW-194-202310**	EPA 5030B/8260	870457		
60440158030	**MW-197-202310**	EPA 5030B/8260	870457		
60440158031	**MW-27-202310**	EPA 5030B/8260	870457		
60440158032	**TMW-23-202310**	EPA 5030B/8260	870457		
60440158033	**MW-83-202310**	EPA 5030B/8260	870457		
60440158022	**TMW-10-202310**	SM 4500-S-2 D	870249		
60440158023	**TMW-11-202310**	SM 4500-S-2 D	870249		
60440158024	**MW-87-202310**	SM 4500-S-2 D	870249		
60440158025	**MW-25R-202310**	SM 4500-S-2 D	870249		
60440158022	**TMW-10-202310**	EPA 300.0	871775		
60440158023	**TMW-11-202310**	EPA 300.0	871775		
60440158024	**MW-87-202310**	EPA 300.0	871775		
60440158025	**MW-25R-202310**	EPA 300.0	871775		
60440158026	**MW-99-202310**	EPA 300.0	871775		
60440158027	**MW-61R-202310**	EPA 300.0	871775		
60440158028	**TMW-34-202310**	EPA 300.0	871775		
60440158029	**MW-194-202310**	EPA 300.0	871775		
60440158030	**MW-197-202310**	EPA 300.0	871775		
60440158031	**MW-27-202310**	EPA 300.0	871775		
60440158032	**TMW-23-202310**	EPA 300.0	871775		
60440158033	**MW-83-202310**	EPA 300.0	871775		

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440158

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60440158022	**TMW-10-202310**	EPA 353.2	869938		
60440158023	**TMW-11-202310**	EPA 353.2	869938		
60440158024	**MW-87-202310**	EPA 353.2	869981		
60440158025	**MW-25R-202310**	EPA 353.2	869981		
60440158026	**MW-99-202310**	EPA 353.2	869938		
60440158027	**MW-61R-202310**	EPA 353.2	869938		
60440158028	**TMW-34-202310**	EPA 353.2	869938		
60440158029	**MW-194-202310**	EPA 353.2	869938		
60440158030	**MW-197-202310**	EPA 353.2	869938		
60440158031	**MW-27-202310**	EPA 353.2	869938		
60440158032	**TMW-23-202310**	EPA 353.2	869981		
60440158033	**MW-83-202310**	EPA 353.2	869981		
60440158022	**TMW-10-202310**	SM 5310C	873295		
60440158023	**TMW-11-202310**	SM 5310C	873295		
60440158024	**MW-87-202310**	SM 5310C	873295		
60440158025	**MW-25R-202310**	SM 5310C	873295		
60440158026	**MW-99-202310**	SM 5310C	873295		
60440158027	**MW-61R-202310**	SM 5310C	873295		
60440158028	**TMW-34-202310**	SM 5310C	873295		
60440158029	**MW-194-202310**	SM 5310C	873295		
60440158022	**TMW-10-202310**	SM 5310C	873477		
60440158023	**TMW-11-202310**	SM 5310C	873477		
60440158026	**MW-99-202310**	SM 5310C	873477		
60440158027	**MW-61R-202310**	SM 5310C	873477		
60440158028	**TMW-34-202310**	SM 5310C	873477		
60440158029	**MW-194-202310**	SM 5310C	873477		

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WO# : 60440158

60440158

DC#_Title: ENV-FRM-LENE-0009_Sample Co		
	Revision: 2	Effective Date: 01/12/2022

Client Name: Rambol

Courier: FedEx ☐ UPS ☐ VIA ☒ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☒ No ☐

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

Packing Material: Bubble Wrap ☒ Bubble Bags ☒ Foam ☐ None ☐ Other ☐

Thermometer Used: T-298 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): As-read 1.7 Corr. Factor 0.3 Corrected 1.4

Date and initials of person examining contents: VF 10/19

Temperature should be above freezing to 6°C

Chain of Custody present:	☒Yes ☐No ☐N/A	
Chain of Custody relinquished:	☒Yes ☐No ☐N/A	
Samples arrived within holding time:	☒Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☒Yes ☐No ☐N/A	NOX
Rush Turn Around Time requested:	☐Yes ☒No ☐N/A	
Sufficient volume:	☒Yes ☐No ☐N/A	
Correct containers used:	☒Yes ☐No ☐N/A	
Pace containers used:	☒Yes ☐No ☐N/A	
Containers intact:	☒Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☒N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☒N/A	
Sample labels match COC: Date / time / ID / analyses	☒Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☒No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) LOT#: 606203 67187	☒Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added. MW-27 : 1/3 VG9H } headspace MW-83: 1/3 VG9H }
Cyanide water sample checks: 62072 55197 Lead acetate strip turns dark? (Record only)	☐Yes ☒No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☒No	
Trip Blank present:	☒Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☐No ☒N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☒N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☒N/A	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

Qualtrax Document ID: 30468

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 5

Section A Required Client Information:

Company:	Ramboll
Address:	10851 Mastin Blvd., Ste. 100
	Overland Park, KS 66210
Email To:	JTchurch@ramboll.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STDTAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	VOC ONLY

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: 8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-84-202310	WT	G	10-18-23	0850				3								X		60440158
2	MW-98-202310	WT	G	10-18-23	0920				3								X		
3	ITMW-21-202310	WT	G	10-18-23	1145				3								X		
4	Dup-03-202310	WT	G	10-18-23	1145				3								X		
5	ITMW-7-202310	WT	G	10-18-23	1215				3								X		
6	MW-24-202310	WT	G	10-18-23	1335				3								X		
7	Dup-08-202310	WT	G	10-18-23	1335				3								X		
8	IW-78-202310	WT	G	10-18-23	1345				3								X		
9	Dup-04-202310	WT	G	10-18-23	1345				3								X		
10	ITMW-1R-202310	WT	G	10-18-23	1500				3								X		
11	MW-55R-202310	WT	G	10-18-23	1440				3								X		
12	TMW-12-202310	WT	G	10-18-23	1537				3								X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
	Ramboll	10-18-23	1800							
				VPaul	10/19	0250	1.4	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-18-23

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

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CHAIN-OF-CUSTODY / Analytical Request Document

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Section A Required Client Information:

Company:	Ramboll
Address:	10851 Mastin Blvd., Ste. 100
	Overland Park, KS 662[illegible]0
Email To:	jzellmer@ramboll.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STD TAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	VOC ONLY

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

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

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: 8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	Dup-09-202310	WT	G	10-18-23	1540				3									X		
2	MW-63R-202310	WT	G	10-18-23	1218				3									X		
3	RW-1-202310	WT	G	10-18-23	1605				3									X		
4	MW-82-202310	WT	G	10-18-23	1640				3									X		
5	EB-03-202310	WT	G	10-18-23	1645				3									X		
6	TB-04-202310	WT	G	10-18-23	0700				2									X		
7	TB-05-202310	WT	G	10-18-23	0700				2									X		
8	TB-06-202310	WT	G	10-18-23	0700				2									X		
9	MW-204-202310	WT	G	10-18-23	1650				3									X		
10																				
11																				
12																				

60440158

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Ramboll	10-18-23	1800							
					10/19	0250	4	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-18-23

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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

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CHAIN-OF-CUSTODY / Analytical Request Document

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Section A Required Client Information:

Company:	Ramboll
Address:	10851 Mastin Blvd., Ste. 100
	Overland Park, KS 66210
Email To:	jzellmer@ramboll.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STD TAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	MNA

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 3

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	6010 Iron	300.0 Sulfate	4500 Sulfide	353.2 Nitrate+Nitrite, unpres.	5310 TOC	Dissolved Hydrogen, Bubblestrip	RSK175 Methane/Ethane/Ethene	RSK175 Acetylene	300.0 Chloride	5310 DOC (lab filt)	AM23G Vol. Fatt. Acids	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TMW-10-202310	WT	G	10-18-23	0931	—	—		15										X	X	X	X	X	X	X	X	X	X	X	60440158
2	TMW-11-202310	WT	G	10-18-23	1121	—	—		15										X	X	X	X	X	X	X	X	X	X	X	
3	MW-87-202310	WT	G	10-18-23	1440	—	—		12										X	X	X	X	X	X	X	X	X			
4	MW-25R-202310	WT	G	10-18-23	1606	—	—		10										X	X	X	X	X	X		X	X			
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
RSK 175 Methane/Ethane/Ethene+ Acetylene & Dissolved Hyrdrogen to Pace Baton Rouge	Ramboll	10-18-23	1800							
				VF Pace	10/19	0850	1.4	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 10-18-23

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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

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	Overland Park, KS 66210
Email To:	JZellmer@ramboll.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STD TAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	ISCR

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

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

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	6010 Iron	300.0 Sulfate	300.0 Chloride	353.2 Nitrate+Nitrite, unpres.	5310 TOC	5310 DOC (Lab Filtered)	RSK175 Methane/Ethane/Ethene	AM23G Volatile Fatty Acids	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-99-202310	WT	G	10-18-23	0830				12										X	X	X	X	X	X	X	X	X	
2	MW-61R-202310	WT	G	10-18-23	1010				12										X	X	X	X	X	X	X	X	X	
3	TMW-34-202310	WT	G	10-18-23	1105				12										X	X	X	X	X	X	X	X	X	
4	MW-194-202310	WT	G	10-18-23	1012				12										X	X	X	X	X	X	X	X	X	
5																												
6																												
7																												
8																												
9																												
10																												
11																												
12																												

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
RSK 175 Methane/Ethane/Ethene & VFAs to Pace Baton Rouge	Ramboll	10-18-23	1800							
				VFPace	10/19	0250	4.4	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-18-23

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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

Pace Analytical
www.pacelabs.com

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:	Ramboll
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	JZellmer@ramboll.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STDTAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	BASELINE

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 4

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	353.2 Nitrate+Nitrite unpres.	300.0 Sulfate	6010 Iron	RSK175 Methane/Ethane/Ethene	RSK175 Acetylene	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-197-202310	WT	G	10-18-23	1055				8									X	X	X	X	X	X		60440158
2	MW-27-202310	WT	G	10-18-23	0841				8									X	X	X	X	X	X		
3	TMW-23-202310	WT	G	10-18-23	1407				8									X	X	X	X	X	X		
4	MW-83-202310	WT	G	10-18-23	1615				8									X	X	X	X	X	X		
5																									
6																									
7																									
8																									
9																									
10																									
11																									
12																									

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
RSK 175 Methane/Ethane/Ethene+ Acetylene to Pace Baton Rouge	Ramboll	10-18-23	1800							
				VF Pace	10/19	0850	1.4	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 10-18-23

*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.

1/5

Client: Ramboll

Profile # 7444 Line1

Site: Whirlpool Fort Smith AR

Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1			3																													
2			|																												
3			|																												
4			|																												
5			|																												
6			|																												
7			|																												
8			|																												
9			|																												
10			|																												
11			|																												
12			V																												

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1C	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2C	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3C	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60440158

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Client: Ramboll

Profile # 7444 Line 1

Site: Whirlpool Fort Smith AZ

Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1			3																													
2			|																													
3			|																													
4			|																													
5			|																													
6		2	2																													
7		2																														
8		2																														
9			3																													
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1C	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2C	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3C	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60440158

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Client: Ramboll

Profile # 74144 Line 1

Site: Whirlpool Fort Smith AR

Notes 3VG9H:SI-21WET / 2OTHR:SI-31GKSV / 1OTHR:SI-3

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1		3	3									1	1								2		1				1			1		
2		3	3									1	1								2		1				1			1		
3		3	3										1								1		1				1			1		
4		3	3										1								1		1				1					
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1C	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2C	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3C	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60440158

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Client: Ramboll

Profile # 7444 Line 1

Site: Whirlpool Fort Smith AR

Notes 2 OTHR: SI-31QCSV / 3 VG9H: SI-21WET

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1		3	3									1	1								1		1							2		
2		3	3									1	1								1		1							2		
3		3	3									1	1								1		1							2		
4		3	3									1	1								1		1							2		
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1C	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2C	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3C	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60440158

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Client: Ramboll

Profile # 7444 Line 1

Site: Whirlpool Fort Smith AR

Notes 3 VG9H: SI-21WET

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1		3	3																		1		1									
2		3	3																		1		1									
3		3	3																		1		1									
4		3	3																		1		1									
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Th o amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Th o. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1C	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2C	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3C	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60440158

WO# : 20294138

20294138

Internal Transfer Chain of Custody

☐ Rush Multiplier_____X

☐ Samples Pre-Logged into eCOC

State Of Origin: AR

Cert. Needed: ☒ Yes ☐ No

Workorder: 60440158 Workorder Name: WHIRLPOOL FORT SMITH, AR

Owner Received Date: 10/19/2023 Results Requested By: 11/2/2023

Report To	Subcontract To
Jamie Church Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 314-838-7223	Pace Analytical Baton Rouge 7979 Innovation Park Road Baton Rouge, LA 70809 Phone (225)678-1833

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HCL	Other	Unpreserved				Requested Analysis: AM23G Volatile Fatty Acides	Dissolved Hydrogen-Bubblestrip	RSK 175 M/E/E + Acetylene	RSK 175 Methane/Ethane/Ethene									LAB USE ONLY
1	TMW-10-202310	PS	10/18/2023 09:31	60440158022	Water	3	2	1				X	X	X										1
2	TMW-11-202310	PS	10/18/2023 11:21	60440158023	Water	3	2	1				X	X	X										2
3	MW-87-202310	PS	10/18/2023 14:40	60440158024	Water	3		1					X	X										3
4	MW-25R-202310	PS	10/18/2023 16:06	60440158025	Water	3								X										4
5	MW-99-202310	PS	10/18/2023 08:30	60440158026	Water	3	2					X			X									5
6	MW-61R-202310	PS	10/18/2023 10:10	60440158027	Water	3	2					X			X									6
7	TMW-34-202310	PS	10/18/2023 11:05	60440158028	Water	3	2					X			X									7
8	MW-194-202310	PS	10/18/2023 10:12	60440158029	Water	3	2					X			X									8
9	MW-197-202310	PS	10/18/2023 10:55	60440158030	Water	3								X										9
10	MW-27-202310	PS	10/18/2023 08:41	60440158031	Water	3								X										10
11	TMW-23-202310	PS	10/18/2023 14:07	60440158032	Water	3								X										11
12	MW-83-202310	PS	10/18/2023 16:15	60440158033	Water	3								X										12

(H) 10 11 12 13 14 15

Transfers	Released By	Date/Time	Received By	Date/Time
1		10.20.23 1700		
2	FedEx	10/21/23 10:21		10/21/23 10.21
3				

Comments

(N)

Cooler Temperature on Receipt ____ °C	Custody Seal Y or N	Received on Ice Y or N	Samples Intact Y or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*

This chain of custody is considered complete as is since this information is available in the owner laboratory.

WO#: 20294138
PM: DRM Due Date: 11/06/23
CLIENT: BR-PACE LENX

Pace

Sample Condition Upon Reciept

Workorder #: _____

7979 Innovation Park Dr. Baton Rouge, LA 70806

Cooler Inspected by/date: BSR 12/21/23

Means of receipt: ☐Pace ☐Client ☐UPS ☑FedEx ☐Other: _____

☑Yes	☐No		Were custody seals present on the cooler?
☑Yes	☐No	☐NA	If custody seals were present, were they intact and unbroken?

Method: ☐Temperature Blank ☑Against Bottles IR Gun ID: IR106 IR Gun Correction Factor: 0 °C

Cooler #1	Cooler Temp °C: 2.7	(Actual/True)	Samples on ice ☑Yes ☐No
Cooler #2	Cooler Temp °C: _____	(Actual/True)	pH Strip Lot #
Cooler #3	Cooler Temp °C: _____	(Actual/True)	Method of coolant: ☑Wet ☐Ice Packs ☐Dry Ice ☐None
Cooler #4	Cooler Temp °C: _____	(Actual/True)	

Tracking #: 6432 1393 8790

☐Yes	☑No	☐NA	Is a temperature blank present?	
☑Yes	☐No	☐NA	Was a chain of custody (COC) recieved?	
☐Yes	☑No	☐NA	Was the line and profile number listed on the COC?	
☑Yes	☐No	☐NA	Were all coolers received at or below 6.0°C? If no, notify Project Manager notified via email.	
☑Yes	☐No		Were proper custody procedures (relinquished/received) followed?	
☐Yes	☐No	☑NA	Is the sampler name and signature on the COC?	
☑Yes	☐No		Were sample IDs listed on the COC and all sample containers?	
☑Yes	☐No		Was collection date & time listed on the COC and all sample containers?	
☑Yes	☐No		Did all container label information (ID, date, time) agree with the COC?	
☑Yes	☐No		Were tests to be performed listed on the COC?	
☑Yes	☐No		Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?	
☑Yes	☐No		Was adequate sample volume available?	
☑Yes	☐No		Were all samples received within ½ the holding time or 48 hours, whichever comes first?	
☑Yes	☐No		Were all samples containers accounted for? (No missing / excess)	
☑Yes	☐No	☐NA	Were VOA, 8015C (GRO/VPH), and RSK-175 samples free of bubbles > "pea size" (1/4" or 6mm in diameter) in any of the VOA vials?	
☐Yes	☑No	☐NA	Trip blank present?	
☐Yes	☐No	☑NA	Filtered volume received for dissolved tests? *If no, list affected sample(s) in comments below.*	
☐Yes	☐No	☑NA	Were all metals/nutrient samples received at a pH of < 2?	If No, was preservative added? ☐Yes ☐No If added, record lots. Dispenser/pipette lot #: _____
☐Yes	☐No	☑NA	Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?	HNO_3_____ H_2SO_4 _____ NaOH_____ Date: _____ Time:_____

Comments:

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

October 27, 2023

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440213

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 19, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

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

Sincerely,



Jamie Church
jamie.church@pacelabs.com
314-838-7223
Project Manager

Enclosures

cc: Caroline Chavers, Ramboll US Consulting, Inc.
Kristen Drucquer, Ramboll US Consulting, Inc.
Jackie Zellmer, Ramboll

REPORT OF LABORATORY ANALYSIS

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440213

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60440213001	**TMW-10-202310**	Water	10/18/23 09:31	10/19/23 00:00
60440213002	**TMW-11-202311**	Water	10/18/23 09:31	10/19/23 00:00
60440213003	**MW-87-202310**	Water	10/18/23 14:40	10/19/23 00:00

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

PROJECT NARRATIVE

Project:
Pace Project No.:

Method:
Description:
Client:
Date:

This data package has been reviewed for quality and completeness and is approved for release.

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REPORT TO:
Name: David Meyer
Company: Ramboll
Address: 10851 Mastin Blvd, Ste 100
Overland Park, KS 66210
email: Dmeyer@ramboll.com
Phone: 913-998-6963

INVOICE TO: (For Invoices paid by a third party it is imperative that all information be provided)
Name:
Company:
Address:
email:
Phone:

microbialinsights
10515 Research Dr
Knoxville, TN 37932
865-573-8188
www.microbe.com

Project Manager:
PM Email:
Project Name:
Project No.:

Purchase Order No.
Subcontract No.
MI Quote No.

Please Check One:
☒ More samples to follow
☐ No Additional Samples

Report Type: ☒ Standard (default) ☐ Microbial Insights Level III raw data(15% surcharge) ☐ Microbial Insights Level IV (25% surcharge) ☐ Comprehensive Report(15%)
EDD type: ☒ Microbial Insights Standard (default) ☐ Specialty EDDs (5% surcharge) Specialty EDD Type:

Please contact us with any questions about the analyses or filling out the COC at (865) 573-8188 (9:00 am to 5:00 pm EST, M-F). After hours email: customerservice@microbe.com

Sample Information						Analyses																										
MI ID (Laboratory Use Only)	Sample Name	Date Sampled	Time Sampled	Matrix	Total Number of Containers	PLFA	NGS	QuantArray Chlor [1]	QuantArray Petro [1]	QuantArray NSZD [1]	QuantArray BGC [1]	DHC (Dehalococcoides)	DHC Functional genes (bvc, tce, vcr)	DHBt (Dehalobacter)	DHG (Dehalogenimonas)	DSM (Desulfuromonas)	DSB (Desulfitobacterium)	EBAC (Total)	SRB (Sulfate Reducing Bacteria-APS)	MGN (Methanogens)	MOB (Methanotrophs)	SMMO (Soluble Methane Monooxi)	DNF (Denitrifiers-nirS and nirK)	PM1 (MTBE aerobic)	RMO (Toluene Monooxygenase)	RDEG (Toluene Monooxygenase)	PHE (Phenol Hydroxylase)	NAH (Napthalene-aerobic)	BSSA (Toluene/Xylene-Anaerobic)	add. qPCR: vcrductase	add. qPCR:	add. qPCR:	RNA (Expression Option) [2]
055051	TMW-10-202310	10-18-23	0931	GW	1							X	X																	X			
2	TMW-11-202310	10-18-23	0931	GW	1							X	X																	X			
3	MW-87-202310	10-18-23	1440	GW	1							X	X																	X			

Relinquished by: Date 10-18-23
Received by: (lab use only) Date 10/19/23

It is vital that chain of custody is filled out correctly & that all information is provided. Failure to provide sufficient and/or correct information regarding reporting, invoicing & analyses requested may result in delays for which MI will not be liable.

[1] If a QuantArray is selected only additional targets not already included need to be marked.

[2] Additional cost and sample preservation are associated with RNA samples

SATURDAY DELIVERY: See sampling protocol for the alternate shipping address and special instructions.

10515 Research Drive
Knoxville, TN 37932
Phone: (865) 573-8188
Fax: (865) 573-8133

Client: Jamie Church
Pace Analytical Labs
9608 Loiret Blvd
Lenexa, KS 66219

Phone:

Fax:

Identifier: 055UJ **Date Rec:** 10/19/2023 **Report Date:** 10/26/2023

Client Project #: **Client Project Name:**

Purchase Order #: WO# 60440213

Test results provided for: CENSUS

Reviewed By:



NOTICE: This report is intended only for the addressee shown above and may contain confidential or privileged information. If the recipient of this material is not the intended recipient or if you have received this in error, please notify Microbial Insights, Inc. immediately. The data and other information in this report represent only the sample(s) analyzed and are rendered upon condition that it is not to be reproduced without approval from Microbial Insights, Inc. Thank you for your cooperation.

Results relate only to the items tested and the sample(s) as received by the laboratory.

MICROBIAL INSIGHTS, INC.

10515 Research Dr., Knoxville, TN 37932
Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: **Pace Analytical Labs**
Project:

MI Project Number: **055UJ**
Date Received: 10/19/2023

Sample Information

Client Sample ID:		**TMW-10-202310**	**TMW-11-202310**	**MW-87-202310**
Sample Date:		10/18/2023	10/18/2023	10/18/2023
Units:		cells/mL	cells/mL	cells/mL
Analyst/Reviewer:		AR/OR	AR/OR	AR/OR
Dechlorinating Bacteria				
Dehalococcoides	*DHC*	**5.80E+01**	**5.78E+01**	**2.00E-01(J)**
tceA Reductase	TCE	**1.81E+01**	**7.80E+00**	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<5.00E-01	<5.00E-01	<5.00E-01
Vinyl Chloride Reductase	VCR	**9.00E-01**	**4.00E-01 (J)**	<5.00E-01

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

Quality Assurance/Quality Control Data

Samples Received **10/19/2023**

Component	Date Prepared	Date Analyzed	Arrival Temperature	Positive Control	Extraction Blank	Negative Control
BVC	10/19/2023	10/26/2023	0 °C	96%	non-detect	non-detect
TCE	10/19/2023	10/26/2023	0 °C	95%	non-detect	non-detect
VCR	10/19/2023	10/26/2023	0 °C	90%	non-detect	non-detect
DHC	10/19/2023	10/26/2023	0 °C	113%	non-detect	non-detect

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

December 12, 2023

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 20, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Baton Rouge
- Pace Analytical Services - Kansas City

REV-1, 12/12/23: Per client request, TB-06-202310 sample ID changed to TB-11-202310.

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

Sincerely,

Jamie Church
jamie.church@pacelabs.com
314-838-7223
Project Manager

Enclosures

cc: Caroline Chavers, Ramboll US Consulting, Inc.
Kristen Drucquer, Ramboll US Consulting, Inc.
Jackie Zellmer, Ramboll

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Lenexa, KS 66219
(913)599-5665

CERTIFICATIONS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 88-00679
Illinois Certification #: 2000302023-5
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212023-1
Oklahoma Certification #: 2022-057
Florida: Cert E871149 SEKS WET
Texas Certification #: T104704407-22-16
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

Pace Analytical Services Baton Rouge
7979 Innovation Park Drive Ste A, Baton Rouge, LA 70820-7402
Louisiana Dept of Enviromental Quality (NELAC/LELAP): 01979
Florida Dept of Health (NELAC/FELAP): E87854
DoD ELAP (A2LA) #: 6429.01
Alabama DEM #: 41900
Alaska DEC-DW #: LA00024
Alaska DEC CS-LAP #: 21-001
Arkansas DEQ #: 88-0655
California ELAP #: 3063
Georgia DPD #: C050
Hawaii DOH State Laboratories Division
Illinois EPA #: 200048
Kansas DoHE #: E-10354
Kentucky DEP UST Branch #: 123054
Louisiana DOH #: LA036
Minnesota DOH #: 2233799
Mississippi State Dept of Health
Montana Department of Environmental Quality
Nebraska DHHS #: NE-OS-35.21
Nevada DCNR DEP #: LA00024
New York DOH #: 12149
North Carolina DEQ - WW & GW #: 618
North Dakota DEQ #: R195
Ohio EPA #: 87782
Oklahoma Dept of Environmental Quality #: 9403
Oregon ELAP #: 4168
Pennsylvania Dept of Environmental Protection #: 68-05973
South Carolina DHEC #: 73006001
Texas CEQ #: T104704178-23-15
Utah DOH #: LA00024
Virginia DCLS #: 6460215
Washington Dept of Ecology #: C929
Wisconsin DNR #: 399139510

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Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60440221001	**MW-202-202310**	Water	10/19/23 09:15	10/20/23 03:00
60440221002	**MW-205-202310**	Water	10/19/23 11:25	10/20/23 03:00
60440221003	**IW-77-202310**	Water	10/19/23 11:34	10/20/23 03:00
60440221004	**ITMW-10-202310**	Water	10/19/23 10:47	10/20/23 03:00
60440221005	**MW-46R-202310**	Water	10/19/23 11:19	10/20/23 03:00
60440221006	**MW-199-202310**	Water	10/19/23 11:25	10/20/23 03:00
60440221007	**MW-189-202310**	Water	10/19/23 11:45	10/20/23 03:00
60440221008	**MW-175-202310**	Water	10/19/23 11:55	10/20/23 03:00
60440221009	**VP-8-202310**	Water	10/19/23 12:07	10/20/23 03:00
60440221010	**MW-57R-202310**	Water	10/19/23 12:35	10/20/23 03:00
60440221011	**MW-178-202310**	Water	10/19/23 12:38	10/20/23 03:00
60440221012	**MW-179-202310**	Water	10/19/23 12:46	10/20/23 03:00
60440221013	**VP-14-202310**	Water	10/19/23 12:56	10/20/23 03:00
60440221014	**VP-12-202310**	Water	10/19/23 13:20	10/20/23 03:00
60440221015	**MW-56R-202310**	Water	10/19/23 13:35	10/20/23 03:00
60440221016	**ITMW-18-202310**	Water	10/19/23 13:55	10/20/23 03:00
60440221017	**MW-93-202310**	Water	10/19/23 14:30	10/20/23 03:00
60440221018	**ITMW-5-202310**	Water	10/19/23 15:45	10/20/23 03:00
60440221019	**ITMW-6-202310**	Water	10/19/23 13:25	10/20/23 03:00
60440221020	**TB-11-202310**	Water	10/19/23 07:00	10/20/23 03:00
60440221021	**TB-07-202310**	Water	10/19/23 07:05	10/20/23 03:00
60440221022	**TB-08-202310**	Water	10/19/23 07:06	10/20/23 03:00
60440221023	**EB-04-202310**	Water	10/19/23 17:55	10/20/23 03:00
60440221024	**RW-69-202310**	Water	10/19/23 09:48	10/20/23 03:00
60440221025	**MW-58R-202310**	Water	10/19/23 10:00	10/20/23 03:00
60440221026	**MW-198-202310**	Water	10/19/23 11:10	10/20/23 03:00
60440221027	**IW-73-202310**	Water	10/19/23 13:08	10/20/23 03:00
60440221028	**ITMW-9-202310**	Water	10/19/23 14:52	10/20/23 03:00
60440221029	**MW-95-202310**	Water	10/19/23 14:16	10/20/23 03:00
60440221030	**MW-38-202310**	Water	10/19/23 16:13	10/20/23 03:00
60440221031	**TMW-22R-202310**	Water	10/19/23 09:05	10/20/23 03:00
60440221032	**MW-185-202310**	Water	10/19/23 09:29	10/20/23 03:00
60440221033	**MW-92-202310**	Water	10/19/23 09:25	10/20/23 03:00
60440221034	**TMW-24-202310**	Water	10/19/23 09:04	10/20/23 03:00
60440221035	**ITMW-19-202310**	Water	10/19/23 12:57	10/20/23 03:00

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60440221001	**MW-202-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221002	**MW-205-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221003	**IW-77-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221004	**ITMW-10-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221005	**MW-46R-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221006	**MW-199-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221007	**MW-189-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221008	**MW-175-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221009	**VP-8-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221010	**MW-57R-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221011	**MW-178-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221012	**MW-179-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221013	**VP-14-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221014	**VP-12-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221015	**MW-56R-202310**	EPA 5030B/8260	HM1, PGH	38	PASI-K
60440221016	**ITMW-18-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221017	**MW-93-202310**	EPA 5030B/8260	HM1, PGH	38	PASI-K
60440221018	**ITMW-5-202310**	EPA 5030B/8260	HM1, PGH	38	PASI-K
60440221019	**ITMW-6-202310**	EPA 5030B/8260	HM1, PGH	38	PASI-K
60440221020	**TB-11-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221021	**TB-07-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221022	**TB-08-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221023	**EB-04-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440221024	**RW-69-202310**	AM20	LB	1	PASI-BR
		RSK175	BDP	5	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 4500-S-2 D	BDH1	1	PASI-K
		EPA 300.0	MLD	1	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
60440221025	**MW-58R-202310**	AM20	LB	1	PASI-BR
		RSK175	BDP	5	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 4500-S-2 D	BDH1	1	PASI-K
		EPA 300.0	MLD	1	PASI-K

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
60440221026	**MW-198-202310**	AM20	LB	1	PASI-BR
		RSK175	BDP	5	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	HM1, PGH	38	PASI-K
		SM 4500-S-2 D	BDH1	1	PASI-K
		EPA 300.0	MLD	1	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
60440221027	**IW-73-202310**	AM20	LB	1	PASI-BR
		RSK175	BDP	5	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		SM 4500-S-2 D	BDH1	1	PASI-K
		EPA 300.0	MLD	1	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
60440221028	**ITMW-9-202310**	AM20	LB	1	PASI-BR
		RSK175	BDP	5	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	HM1, PGH	38	PASI-K
		SM 4500-S-2 D	BDH1	1	PASI-K
		EPA 300.0	MLD	1	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
60440221029	**MW-95-202310**	AM20	LB	1	PASI-BR
		RSK175	BDP	5	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	JLO, PGH	38	PASI-K
		SM 4500-S-2 D	BDH1	1	PASI-K
		EPA 300.0	MLD	1	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
60440221030	**MW-38-202310**	AM20	LB	1	PASI-BR
		RSK175	BDP	5	PASI-BR
		EPA 6010	JXD	1	PASI-K

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 5030B/8260	HM1, PGH	38	PASI-K
		SM 4500-S-2 D	BDH1	1	PASI-K
		EPA 300.0	MLD	1	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
60440221031	**TMW-22R-202310**	RSK175	BDP	4	PASI-BR
		Pace ENV-SOP-BTRO-0042	LHM	10	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K
60440221032	**MW-185-202310**	RSK175	BDP	5	PASI-BR
		Pace ENV-SOP-BTRO-0042	LHM	10	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K
60440221033	**MW-92-202310**	RSK175	BDP	5	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	HM1, PGH	38	PASI-K
		EPA 300.0	MLD	1	PASI-K
		EPA 353.2	BMT	3	PASI-K
60440221034	**TMW-24-202310**	RSK175	BDP	5	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	1	PASI-K
		EPA 353.2	BMT	3	PASI-K
60440221035	**ITMW-19-202310**	RSK175	BDP	5	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	1	PASI-K
		EPA 353.2	BMT	3	PASI-K

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SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory

PASI-BR = Pace Analytical Services - Baton Rouge
PASI-K = Pace Analytical Services - Kansas City

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Method: **AM20**
Description: BR Hydrogen by AM20 in Vapor
Client: Ramboll_AR
Date: December 12, 2023

General Information:
7 samples were analyzed for AM20 by Pace Analytical Services Baton Rouge. 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.

Additional Comments:

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Method: **RSK175**
Description: BR RSK175 Headspace
Client: Ramboll_AR
Date: December 12, 2023

General Information:
12 samples were analyzed for RSK175 by Pace Analytical Services Baton Rouge. 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: 306252

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 20294108004

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

- MS (Lab ID: 1465734)
  - Methane

Additional Comments:

Batch Comments:

The sample storage unit holding samples in Analytical Batch 306361 had a temperature excursion from 10/31 - 14:20 to 11/1 - 10:18.

- QC Batch: 306252

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Method: **Pace ENV-SOP-BTRO-0042**
Description: BR AM23G Low Level VFA
Client: Ramboll_AR
Date: December 12, 2023

General Information:
2 samples were analyzed for Pace ENV-SOP-BTRO-0042 by Pace Analytical Services Baton Rouge. 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.

QC Batch: 305046

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

- LCS (Lab ID: 1460182)
  - Hexanoic Acid
  - Pentanoic Acid

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

QC Batch: 305046

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 20294259001

M0: Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.

- MS (Lab ID: 1460480)
  - Hexanoic Acid
  - Pentanoic Acid
- MSD (Lab ID: 1460481)
  - Hexanoic Acid
  - Pentanoic Acid

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Method: **Pace ENV-SOP-BTRO-0042**
Description: BR AM23G Low Level VFA
Client: Ramboll_AR
Date: December 12, 2023

QC Batch: 305046

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 20294259001

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

- MS (Lab ID: 1460480)
  - i-Hexanoic Acid
- MSD (Lab ID: 1460481)
  - i-Hexanoic Acid

Additional Comments:

Analyte Comments:

QC Batch: 305046

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- MW-185-202310 (Lab ID: 60440221032)
  - Lactic Acid
- TMW-22R-202310 (Lab ID: 60440221031)
  - Lactic Acid

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- BLANK (Lab ID: 1460181)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- LCS (Lab ID: 1460182)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- MS (Lab ID: 1460480)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- MSD (Lab ID: 1460481)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- MW-185-202310 (Lab ID: 60440221032)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Method: **Pace ENV-SOP-BTRO-0042**
Description: BR AM23G Low Level VFA
Client: Ramboll_AR
Date: December 12, 2023

Analyte Comments:

QC Batch: 305046

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- TMW-22R-202310 (Lab ID: 60440221031)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Ramboll_AR
Date: December 12, 2023

General Information:
12 samples were analyzed for EPA 6010 by Pace Analytical Services Kansas City. 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.

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.: 60440221

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Ramboll_AR
Date: December 12, 2023

General Information:
35 samples were analyzed for EPA 5030B/8260 by Pace Analytical Services Kansas City. 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.

H1: Analysis conducted outside the EPA method holding time.
- MW-95-202310 (Lab ID: 60440221029)

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: 871438

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
- LCS (Lab ID: 3451732)
  - 1,1,2-Trichloroethane

QC Batch: 871516

L2: Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.
- LCS (Lab ID: 3451976)
  - 1,1,2-Trichloroethane

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

QC Batch: 870457

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.: 60440221

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Ramboll_AR
Date: December 12, 2023

QC Batch: 871014

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

QC Batch: 871440

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

QC Batch: 871523

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.: 60440221

Method: **SM 4500-S-2 D**
Description: 4500S2D Sulfide, Total
Client: Ramboll_AR
Date: December 12, 2023

General Information:
7 samples were analyzed for SM 4500-S-2 D by Pace Analytical Services Kansas City. 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.

Method Blank:
All analytes were below the report limit in the method blank, 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: 870739

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60440168006

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

- MS (Lab ID: 3448677)
  - Sulfide, Total
- MSD (Lab ID: 3448678)
  - 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.: 60440221

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Ramboll_AR
Date: December 12, 2023

General Information:
12 samples were analyzed for EPA 300.0 by Pace Analytical Services Kansas City. 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.

Method Blank:
All analytes were below the report limit in the method blank, 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.: 60440221

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Ramboll_AR
Date: December 12, 2023

General Information:
12 samples were analyzed for EPA 353.2 by Pace Analytical Services Kansas City. 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.

Method Blank:
All analytes were below the report limit in the method blank, 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: 870129

A matrix spike and/or matrix spike duplicate (MS/MSD) were performed on the following sample(s): 60440140003,60440221025

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

- MS (Lab ID: 3445601)
  - Nitrogen, NO2 plus NO3
  - Nitrogen, Nitrite

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

Additional Comments:

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Method: **SM 5310C**
Description: 5310C TOC
Client: Ramboll_AR
Date: December 12, 2023

General Information:
9 samples were analyzed for SM 5310C by Pace Analytical Services Kansas City. 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.

H1: Analysis conducted outside the EPA method holding time.
- ITMW-9-202310 (Lab ID: 60440221028)
- MW-185-202310 (Lab ID: 60440221032)
- MW-38-202310 (Lab ID: 60440221030)
- MW-58R-202310 (Lab ID: 60440221025)
- MW-95-202310 (Lab ID: 60440221029)
- RW-69-202310 (Lab ID: 60440221024)
- TMW-22R-202310 (Lab ID: 60440221031)

Method Blank:
All analytes were below the report limit in the method blank, 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.: 60440221

Method: **SM 5310C**
Description: 5310C Diss. Organic Carbon LF
Client: Ramboll_AR
Date: December 12, 2023

General Information:
2 samples were analyzed for SM 5310C by Pace Analytical Services Kansas City. 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.

H1: Analysis conducted outside the EPA method holding time.
- MW-185-202310 (Lab ID: 60440221032)
- TMW-22R-202310 (Lab ID: 60440221031)

Method Blank:
All analytes were below the report limit in the method blank, 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:

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.: 60440221

Sample: MW-202-202310 **Lab ID: 60440221001** Collected: 10/19/23 09:15 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 22:19	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 22:19	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 22:19	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 22:19	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 22:19	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 22:19	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 22:19	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 22:19	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 22:19	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 22:19	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 22:19	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 22:19	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 22:19	124-48-1	
1,1-Dichloroethane	**0.46J**	ug/L	1.0	0.12	1		10/24/23 22:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 22:19	107-06-2	
1,1-Dichloroethene	**1.6**	ug/L	1.0	0.22	1		10/24/23 22:19	75-35-4	
cis-1,2-Dichloroethene	**24.0**	ug/L	1.0	0.13	1		10/24/23 22:19	156-59-2	
trans-1,2-Dichloroethene	**0.22J**	ug/L	1.0	0.10	1		10/24/23 22:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 22:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 22:19	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 22:19	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 22:19	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 22:19	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 22:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 22:19	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 22:19	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 22:19	79-34-5	
Tetrachloroethene	**0.40J**	ug/L	1.0	0.33	1		10/24/23 22:19	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 22:19	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 22:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 22:19	79-00-5	
Trichloroethene	**276**	ug/L	5.0	1.0	5		10/27/23 21:51	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 22:19	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 22:19	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/24/23 22:19	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/24/23 22:19	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/24/23 22:19	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 22:19		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-205-202310 **Lab ID: 60440221002** Collected: 10/19/23 11:25 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 22:46	67-64-1	
Benzene	**0.20J**	ug/L	1.0	0.14	1		10/24/23 22:46	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 22:46	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 22:46	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 22:46	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 22:46	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 22:46	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 22:46	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 22:46	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 22:46	75-00-3	
Chloroform	**0.23J**	ug/L	1.0	0.22	1		10/24/23 22:46	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 22:46	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 22:46	124-48-1	
1,1-Dichloroethane	**1.4**	ug/L	1.0	0.12	1		10/24/23 22:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 22:46	107-06-2	
1,1-Dichloroethene	**4.6**	ug/L	1.0	0.22	1		10/24/23 22:46	75-35-4	
cis-1,2-Dichloroethene	**122**	ug/L	1.0	0.13	1		10/24/23 22:46	156-59-2	
trans-1,2-Dichloroethene	**0.70J**	ug/L	1.0	0.10	1		10/24/23 22:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 22:46	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 22:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 22:46	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 22:46	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 22:46	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 22:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 22:46	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 22:46	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 22:46	79-34-5	
Tetrachloroethene	**1.5**	ug/L	1.0	0.33	1		10/24/23 22:46	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 22:46	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 22:46	71-55-6	
1,1,2-Trichloroethane	**0.38J**	ug/L	1.0	0.14	1		10/24/23 22:46	79-00-5	
Trichloroethene	**582**	ug/L	10.0	2.1	10		10/27/23 22:05	79-01-6	
Vinyl chloride	**0.90J**	ug/L	1.0	0.17	1		10/24/23 22:46	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 22:46	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/24/23 22:46	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/24/23 22:46	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		10/24/23 22:46	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 22:46		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: IW-77-202310 **Lab ID: 60440221003** Collected: 10/19/23 11:34 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 22:32	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 22:32	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 22:32	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 22:32	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 22:32	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 22:32	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 22:32	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 22:32	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 22:32	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 22:32	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 22:32	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 22:32	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 22:32	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 22:32	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 22:32	107-06-2	
1,1-Dichloroethene	**1.0**	ug/L	1.0	0.22	1		10/24/23 22:32	75-35-4	
cis-1,2-Dichloroethene	**5.3**	ug/L	1.0	0.13	1		10/24/23 22:32	156-59-2	
trans-1,2-Dichloroethene	**0.16J**	ug/L	1.0	0.10	1		10/24/23 22:32	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 22:32	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 22:32	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 22:32	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 22:32	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 22:32	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 22:32	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 22:32	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 22:32	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 22:32	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 22:32	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 22:32	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 22:32	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 22:32	79-00-5	
Trichloroethene	**181**	ug/L	5.0	1.0	5		10/27/23 22:18	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 22:32	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 22:32	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		10/24/23 22:32	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/24/23 22:32	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/24/23 22:32	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 22:32		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: ITMW-10-202310 **Lab ID: 60440221004** Collected: 10/19/23 10:47 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 22:59	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 22:59	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 22:59	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 22:59	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 22:59	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 22:59	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 22:59	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 22:59	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 22:59	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 22:59	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 22:59	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 22:59	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 22:59	124-48-1	
1,1-Dichloroethane	**0.27J**	ug/L	1.0	0.12	1		10/24/23 22:59	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 22:59	107-06-2	
1,1-Dichloroethene	**0.96J**	ug/L	1.0	0.22	1		10/24/23 22:59	75-35-4	
cis-1,2-Dichloroethene	**5.5**	ug/L	1.0	0.13	1		10/24/23 22:59	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/24/23 22:59	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 22:59	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 22:59	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 22:59	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 22:59	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 22:59	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 22:59	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 22:59	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 22:59	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 22:59	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 22:59	127-18-4	
Toluene	**0.30J**	ug/L	1.0	0.25	1		10/24/23 22:59	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 22:59	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 22:59	79-00-5	
Trichloroethene	**344**	ug/L	10.0	2.1	10		10/27/23 22:32	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/24/23 22:59	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 22:59	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/24/23 22:59	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/24/23 22:59	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/24/23 22:59	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 22:59		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-46R-202310 **Lab ID: 60440221005** Collected: 10/19/23 11:19 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/24/23 23:13	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/24/23 23:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/24/23 23:13	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/24/23 23:13	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/24/23 23:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/24/23 23:13	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/24/23 23:13	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/24/23 23:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/24/23 23:13	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/24/23 23:13	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/24/23 23:13	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/24/23 23:13	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/24/23 23:13	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/24/23 23:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/24/23 23:13	107-06-2	
1,1-Dichloroethene	**1.1**	ug/L	1.0	0.22	1		10/24/23 23:13	75-35-4	
cis-1,2-Dichloroethene	**8.8**	ug/L	1.0	0.13	1		10/24/23 23:13	156-59-2	
trans-1,2-Dichloroethene	**0.34J**	ug/L	1.0	0.10	1		10/24/23 23:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/24/23 23:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/24/23 23:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/24/23 23:13	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/24/23 23:13	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/24/23 23:13	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/24/23 23:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/24/23 23:13	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/24/23 23:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/24/23 23:13	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/24/23 23:13	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/24/23 23:13	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/24/23 23:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/24/23 23:13	79-00-5	
Trichloroethene	**288**	ug/L	10.0	2.1	10		10/27/23 22:45	79-01-6	
Vinyl chloride	**0.47J**	ug/L	1.0	0.17	1		10/24/23 23:13	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/24/23 23:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/24/23 23:13	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/24/23 23:13	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/24/23 23:13	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/24/23 23:13		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-199-202310 **Lab ID: 60440221006** Collected: 10/19/23 11:25 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/27/23 19:37	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/27/23 19:37	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/27/23 19:37	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/27/23 19:37	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/27/23 19:37	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/27/23 19:37	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/27/23 19:37	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/27/23 19:37	56-23-5	
Chlorobenzene	**0.94J**	ug/L	1.0	0.089	1		10/27/23 19:37	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/27/23 19:37	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/27/23 19:37	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/27/23 19:37	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/27/23 19:37	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/27/23 19:37	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/27/23 19:37	107-06-2	
1,1-Dichloroethene	**0.43J**	ug/L	1.0	0.22	1		10/27/23 19:37	75-35-4	
cis-1,2-Dichloroethene	**10.5**	ug/L	1.0	0.13	1		10/27/23 19:37	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/27/23 19:37	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/27/23 19:37	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/27/23 19:37	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/27/23 19:37	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/27/23 19:37	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/27/23 19:37	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/27/23 19:37	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/27/23 19:37	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/27/23 19:37	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/27/23 19:37	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/27/23 19:37	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/27/23 19:37	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/27/23 19:37	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/27/23 19:37	79-00-5	
Trichloroethene	**93.1**	ug/L	1.0	0.21	1		10/27/23 19:37	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/27/23 19:37	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/27/23 19:37	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/27/23 19:37	460-00-4	
Toluene-d8 (S)	103	%	80-120		1		10/27/23 19:37	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/27/23 19:37	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/27/23 19:37		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-189-202310 **Lab ID: 60440221007** Collected: 10/19/23 11:45 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/27/23 21:24	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/27/23 21:24	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/27/23 21:24	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/27/23 21:24	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/27/23 21:24	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/27/23 21:24	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/27/23 21:24	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/27/23 21:24	56-23-5	
Chlorobenzene	**0.45J**	ug/L	1.0	0.089	1		10/27/23 21:24	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/27/23 21:24	75-00-3	
Chloroform	**1.2**	ug/L	1.0	0.22	1		10/27/23 21:24	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/27/23 21:24	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/27/23 21:24	124-48-1	
1,1-Dichloroethane	**0.19J**	ug/L	1.0	0.12	1		10/27/23 21:24	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/27/23 21:24	107-06-2	
1,1-Dichloroethene	**0.45J**	ug/L	1.0	0.22	1		10/27/23 21:24	75-35-4	
cis-1,2-Dichloroethene	**9.6**	ug/L	1.0	0.13	1		10/27/23 21:24	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/27/23 21:24	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/27/23 21:24	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/27/23 21:24	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/27/23 21:24	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/27/23 21:24	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/27/23 21:24	591-78-6	
Methylene Chloride	**0.70J**	ug/L	1.0	0.39	1		10/27/23 21:24	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/27/23 21:24	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/27/23 21:24	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/27/23 21:24	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/27/23 21:24	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/27/23 21:24	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/27/23 21:24	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/27/23 21:24	79-00-5	
Trichloroethene	**261**	ug/L	10.0	2.1	10		11/01/23 10:53	79-01-6	
Vinyl chloride	**0.27J**	ug/L	1.0	0.17	1		10/27/23 21:24	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/27/23 21:24	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/27/23 21:24	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/27/23 21:24	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		10/27/23 21:24	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/27/23 21:24		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-175-202310 **Lab ID: 60440221008** Collected: 10/19/23 11:55 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/27/23 19:50	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/27/23 19:50	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/27/23 19:50	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/27/23 19:50	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/27/23 19:50	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/27/23 19:50	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/27/23 19:50	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/27/23 19:50	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/27/23 19:50	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/27/23 19:50	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/27/23 19:50	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/27/23 19:50	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/27/23 19:50	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/27/23 19:50	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/27/23 19:50	107-06-2	
1,1-Dichloroethene	**0.47J**	ug/L	1.0	0.22	1		10/27/23 19:50	75-35-4	
cis-1,2-Dichloroethene	**3.1**	ug/L	1.0	0.13	1		10/27/23 19:50	156-59-2	
trans-1,2-Dichloroethene	**0.13J**	ug/L	1.0	0.10	1		10/27/23 19:50	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/27/23 19:50	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/27/23 19:50	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/27/23 19:50	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/27/23 19:50	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/27/23 19:50	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/27/23 19:50	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/27/23 19:50	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/27/23 19:50	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/27/23 19:50	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/27/23 19:50	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/27/23 19:50	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/27/23 19:50	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/27/23 19:50	79-00-5	
Trichloroethene	**133**	ug/L	1.0	0.21	1		10/27/23 19:50	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/27/23 19:50	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/27/23 19:50	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/27/23 19:50	460-00-4	
Toluene-d8 (S)	103	%	80-120		1		10/27/23 19:50	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/27/23 19:50	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/27/23 19:50		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: VP-8-202310 **Lab ID: 60440221009** Collected: 10/19/23 12:07 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	**31.0**	ug/L	10.0	2.5	1		10/27/23 20:04	67-64-1	
Benzene	**0.43J**	ug/L	1.0	0.14	1		10/27/23 20:04	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/27/23 20:04	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/27/23 20:04	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/27/23 20:04	74-83-9	
2-Butanone (MEK)	**6.0J**	ug/L	10.0	0.98	1		10/27/23 20:04	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/27/23 20:04	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/27/23 20:04	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/27/23 20:04	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/27/23 20:04	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/27/23 20:04	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/27/23 20:04	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/27/23 20:04	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/27/23 20:04	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/27/23 20:04	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/27/23 20:04	75-35-4	
cis-1,2-Dichloroethene	**0.25J**	ug/L	1.0	0.13	1		10/27/23 20:04	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/27/23 20:04	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/27/23 20:04	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/27/23 20:04	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/27/23 20:04	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/27/23 20:04	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/27/23 20:04	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/27/23 20:04	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/27/23 20:04	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/27/23 20:04	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/27/23 20:04	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/27/23 20:04	127-18-4	
Toluene	**0.27J**	ug/L	1.0	0.25	1		10/27/23 20:04	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/27/23 20:04	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/27/23 20:04	79-00-5	
Trichloroethene	**5.5**	ug/L	1.0	0.21	1		10/27/23 20:04	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/27/23 20:04	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/27/23 20:04	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/27/23 20:04	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/27/23 20:04	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/27/23 20:04	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/27/23 20:04		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-57R-202310 **Lab ID: 60440221010** Collected: 10/19/23 12:35 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/27/23 21:11	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/27/23 21:11	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/27/23 21:11	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/27/23 21:11	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/27/23 21:11	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/27/23 21:11	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/27/23 21:11	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/27/23 21:11	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/27/23 21:11	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/27/23 21:11	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/27/23 21:11	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/27/23 21:11	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/27/23 21:11	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/27/23 21:11	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/27/23 21:11	107-06-2	
1,1-Dichloroethene	**1.6**	ug/L	1.0	0.22	1		10/27/23 21:11	75-35-4	
cis-1,2-Dichloroethene	**16.4**	ug/L	1.0	0.13	1		10/27/23 21:11	156-59-2	
trans-1,2-Dichloroethene	**0.16J**	ug/L	1.0	0.10	1		10/27/23 21:11	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/27/23 21:11	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/27/23 21:11	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/27/23 21:11	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/27/23 21:11	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/27/23 21:11	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/27/23 21:11	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/27/23 21:11	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/27/23 21:11	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/27/23 21:11	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/27/23 21:11	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/27/23 21:11	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/27/23 21:11	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/27/23 21:11	79-00-5	
Trichloroethene	**240**	ug/L	5.0	1.0	5		11/01/23 11:07	79-01-6	
Vinyl chloride	**2.8**	ug/L	1.0	0.17	1		10/27/23 21:11	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/27/23 21:11	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/27/23 21:11	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/27/23 21:11	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/27/23 21:11	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/27/23 21:11		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-178-202310 **Lab ID: 60440221011** Collected: 10/19/23 12:38 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/27/23 20:17	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/27/23 20:17	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/27/23 20:17	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/27/23 20:17	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/27/23 20:17	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/27/23 20:17	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/27/23 20:17	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/27/23 20:17	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/27/23 20:17	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/27/23 20:17	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/27/23 20:17	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/27/23 20:17	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/27/23 20:17	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/27/23 20:17	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/27/23 20:17	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/27/23 20:17	75-35-4	
cis-1,2-Dichloroethene	**0.26J**	ug/L	1.0	0.13	1		10/27/23 20:17	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/27/23 20:17	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/27/23 20:17	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/27/23 20:17	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/27/23 20:17	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/27/23 20:17	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/27/23 20:17	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/27/23 20:17	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/27/23 20:17	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/27/23 20:17	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/27/23 20:17	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/27/23 20:17	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/27/23 20:17	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/27/23 20:17	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/27/23 20:17	79-00-5	
Trichloroethene	**0.34J**	ug/L	1.0	0.21	1		10/27/23 20:17	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/27/23 20:17	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/27/23 20:17	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/27/23 20:17	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/27/23 20:17	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		10/27/23 20:17	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/27/23 20:17		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-179-202310 **Lab ID: 60440221012** Collected: 10/19/23 12:46 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/27/23 20:31	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/27/23 20:31	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/27/23 20:31	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/27/23 20:31	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/27/23 20:31	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/27/23 20:31	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/27/23 20:31	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/27/23 20:31	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/27/23 20:31	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/27/23 20:31	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/27/23 20:31	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/27/23 20:31	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/27/23 20:31	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/27/23 20:31	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/27/23 20:31	107-06-2	
1,1-Dichloroethene	**0.51J**	ug/L	1.0	0.22	1		10/27/23 20:31	75-35-4	
cis-1,2-Dichloroethene	**1.3**	ug/L	1.0	0.13	1		10/27/23 20:31	156-59-2	
trans-1,2-Dichloroethene	**0.11J**	ug/L	1.0	0.10	1		10/27/23 20:31	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/27/23 20:31	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/27/23 20:31	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/27/23 20:31	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/27/23 20:31	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/27/23 20:31	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/27/23 20:31	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/27/23 20:31	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/27/23 20:31	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/27/23 20:31	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/27/23 20:31	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/27/23 20:31	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/27/23 20:31	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/27/23 20:31	79-00-5	
Trichloroethene	**32.6**	ug/L	1.0	0.21	1		10/27/23 20:31	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/27/23 20:31	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/27/23 20:31	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/27/23 20:31	460-00-4	
Toluene-d8 (S)	103	%	80-120		1		10/27/23 20:31	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		10/27/23 20:31	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/27/23 20:31		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: VP-14-202310 **Lab ID: 60440221013** Collected: 10/19/23 12:56 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/27/23 20:44	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/27/23 20:44	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/27/23 20:44	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/27/23 20:44	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/27/23 20:44	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/27/23 20:44	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/27/23 20:44	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/27/23 20:44	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/27/23 20:44	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/27/23 20:44	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/27/23 20:44	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/27/23 20:44	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/27/23 20:44	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/27/23 20:44	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/27/23 20:44	107-06-2	
1,1-Dichloroethene	**0.31J**	ug/L	1.0	0.22	1		10/27/23 20:44	75-35-4	
cis-1,2-Dichloroethene	**1.1**	ug/L	1.0	0.13	1		10/27/23 20:44	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/27/23 20:44	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/27/23 20:44	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/27/23 20:44	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/27/23 20:44	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/27/23 20:44	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/27/23 20:44	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/27/23 20:44	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/27/23 20:44	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/27/23 20:44	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/27/23 20:44	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/27/23 20:44	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/27/23 20:44	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/27/23 20:44	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/27/23 20:44	79-00-5	
Trichloroethene	**21.7**	ug/L	1.0	0.21	1		10/27/23 20:44	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/27/23 20:44	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/27/23 20:44	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/27/23 20:44	460-00-4	
Toluene-d8 (S)	103	%	80-120		1		10/27/23 20:44	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/27/23 20:44	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/27/23 20:44		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: VP-12-202310 **Lab ID: 60440221014** Collected: 10/19/23 13:20 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/27/23 20:57	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/27/23 20:57	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/27/23 20:57	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/27/23 20:57	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/27/23 20:57	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/27/23 20:57	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/27/23 20:57	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/27/23 20:57	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/27/23 20:57	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/27/23 20:57	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/27/23 20:57	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/27/23 20:57	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/27/23 20:57	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/27/23 20:57	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/27/23 20:57	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/27/23 20:57	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/27/23 20:57	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/27/23 20:57	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/27/23 20:57	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/27/23 20:57	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/27/23 20:57	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/27/23 20:57	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/27/23 20:57	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/27/23 20:57	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/27/23 20:57	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/27/23 20:57	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/27/23 20:57	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/27/23 20:57	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/27/23 20:57	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/27/23 20:57	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/27/23 20:57	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/27/23 20:57	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/27/23 20:57	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/27/23 20:57	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/27/23 20:57	460-00-4	
Toluene-d8 (S)	103	%	80-120		1		10/27/23 20:57	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/27/23 20:57	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/27/23 20:57		

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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-56R-202310 **Lab ID: 60440221015** Collected: 10/19/23 13:35 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/31/23 20:06	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/23 20:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/23 20:06	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/31/23 20:06	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/23 20:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/23 20:06	78-93-3	
Carbon disulfide	**1.1J**	ug/L	5.0	0.98	1		10/31/23 20:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/23 20:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/31/23 20:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/23 20:06	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/31/23 20:06	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/23 20:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/23 20:06	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/31/23 20:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/23 20:06	107-06-2	
1,1-Dichloroethene	**1.5**	ug/L	1.0	0.22	1		10/31/23 20:06	75-35-4	
cis-1,2-Dichloroethene	**10.7**	ug/L	1.0	0.13	1		10/31/23 20:06	156-59-2	
trans-1,2-Dichloroethene	**0.50J**	ug/L	1.0	0.10	1		10/31/23 20:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/23 20:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/23 20:06	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/23 20:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/23 20:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/23 20:06	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/31/23 20:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/23 20:06	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/23 20:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/23 20:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/31/23 20:06	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/31/23 20:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/23 20:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/23 20:06	79-00-5	L2
Trichloroethene	**552**	ug/L	20.0	4.2	20		10/27/23 22:59	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/31/23 20:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/23 20:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		1		10/31/23 20:06	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/31/23 20:06	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/31/23 20:06	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/23 20:06		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: ITMW-18-202310 **Lab ID: 60440221016** Collected: 10/19/23 13:55 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/27/23 21:38	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/27/23 21:38	71-43-2	
Bromodichloromethane	**0.53J**	ug/L	1.0	0.16	1		10/27/23 21:38	75-27-4	
Bromoform	**2.1**	ug/L	1.0	0.68	1		10/27/23 21:38	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/27/23 21:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/27/23 21:38	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/27/23 21:38	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/27/23 21:38	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/27/23 21:38	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/27/23 21:38	75-00-3	
Chloroform	**2.3**	ug/L	1.0	0.22	1		10/27/23 21:38	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/27/23 21:38	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/27/23 21:38	124-48-1	
1,1-Dichloroethane	**0.47J**	ug/L	1.0	0.12	1		10/27/23 21:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/27/23 21:38	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/27/23 21:38	75-35-4	
cis-1,2-Dichloroethene	**215**	ug/L	25.0	3.2	25		11/01/23 11:20	156-59-2	
trans-1,2-Dichloroethene	**42.2**	ug/L	1.0	0.10	1		10/27/23 21:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/27/23 21:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/27/23 21:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/27/23 21:38	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/27/23 21:38	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/27/23 21:38	591-78-6	
Methylene Chloride	**0.92J**	ug/L	1.0	0.39	1		10/27/23 21:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/27/23 21:38	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/27/23 21:38	100-42-5	
1,1,2,2-Tetrachloroethane	**0.25J**	ug/L	1.0	0.15	1		10/27/23 21:38	79-34-5	
Tetrachloroethene	**1.4**	ug/L	1.0	0.33	1		10/27/23 21:38	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/27/23 21:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/27/23 21:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/27/23 21:38	79-00-5	
Trichloroethene	**2380**	ug/L	25.0	5.2	25		11/01/23 11:20	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/27/23 21:38	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/27/23 21:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/27/23 21:38	460-00-4	
Toluene-d8 (S)	103	%	80-120		1		10/27/23 21:38	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		10/27/23 21:38	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/27/23 21:38		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-93-202310 **Lab ID: 60440221017** Collected: 10/19/23 14:30 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/31/23 20:22	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/23 20:22	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/23 20:22	75-27-4	
Bromoform	**0.72J**	ug/L	1.0	0.68	1		10/31/23 20:22	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/23 20:22	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/23 20:22	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/23 20:22	75-15-0	
Carbon tetrachloride	**0.49J**	ug/L	1.0	0.17	1		10/31/23 20:22	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/31/23 20:22	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/23 20:22	75-00-3	
Chloroform	**1.6**	ug/L	1.0	0.22	1		10/31/23 20:22	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/23 20:22	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/23 20:22	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/31/23 20:22	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/23 20:22	107-06-2	
1,1-Dichloroethene	**7.3**	ug/L	1.0	0.22	1		10/31/23 20:22	75-35-4	
cis-1,2-Dichloroethene	**48.9**	ug/L	1.0	0.13	1		10/31/23 20:22	156-59-2	
trans-1,2-Dichloroethene	**2.7**	ug/L	1.0	0.10	1		10/31/23 20:22	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/23 20:22	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/23 20:22	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/23 20:22	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/23 20:22	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/23 20:22	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/31/23 20:22	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/23 20:22	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/23 20:22	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/23 20:22	79-34-5	
Tetrachloroethene	**2.6**	ug/L	1.0	0.33	1		10/31/23 20:22	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/31/23 20:22	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/23 20:22	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/23 20:22	79-00-5	L2
Trichloroethene	**8370**	ug/L	200	42.0	200		10/27/23 23:39	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/31/23 20:22	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/23 20:22	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		1		10/31/23 20:22	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/31/23 20:22	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/31/23 20:22	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/23 20:22		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: ITMW-5-202310 **Lab ID: 60440221018** Collected: 10/19/23 15:45 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/31/23 20:38	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/23 20:38	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/23 20:38	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/31/23 20:38	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/23 20:38	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/23 20:38	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/23 20:38	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/23 20:38	56-23-5	
Chlorobenzene	**0.10J**	ug/L	1.0	0.089	1		10/31/23 20:38	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/23 20:38	75-00-3	
Chloroform	**0.73J**	ug/L	1.0	0.22	1		10/31/23 20:38	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/23 20:38	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/23 20:38	124-48-1	
1,1-Dichloroethane	**0.61J**	ug/L	1.0	0.12	1		10/31/23 20:38	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/23 20:38	107-06-2	
1,1-Dichloroethene	**4.6**	ug/L	1.0	0.22	1		10/31/23 20:38	75-35-4	
cis-1,2-Dichloroethene	**22.6**	ug/L	1.0	0.13	1		10/31/23 20:38	156-59-2	
trans-1,2-Dichloroethene	**0.50J**	ug/L	1.0	0.10	1		10/31/23 20:38	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/23 20:38	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/23 20:38	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/23 20:38	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/23 20:38	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/23 20:38	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/31/23 20:38	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/23 20:38	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/23 20:38	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/23 20:38	79-34-5	
Tetrachloroethene	**1.6**	ug/L	1.0	0.33	1		10/31/23 20:38	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/31/23 20:38	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/23 20:38	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/23 20:38	79-00-5	L2
Trichloroethene	**2690**	ug/L	20.0	4.2	20		10/27/23 23:12	79-01-6	
Vinyl chloride	**0.90J**	ug/L	1.0	0.17	1		10/31/23 20:38	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/23 20:38	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/31/23 20:38	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/31/23 20:38	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/31/23 20:38	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/23 20:38		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: ITMW-6-202310 **Lab ID: 60440221019** Collected: 10/19/23 13:25 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/31/23 20:54	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/23 20:54	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/23 20:54	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/31/23 20:54	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/23 20:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/23 20:54	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/23 20:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/23 20:54	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/31/23 20:54	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/23 20:54	75-00-3	
Chloroform	**0.42J**	ug/L	1.0	0.22	1		10/31/23 20:54	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/23 20:54	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/23 20:54	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/31/23 20:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/23 20:54	107-06-2	
1,1-Dichloroethene	**2.1**	ug/L	1.0	0.22	1		10/31/23 20:54	75-35-4	
cis-1,2-Dichloroethene	**11.3**	ug/L	1.0	0.13	1		10/31/23 20:54	156-59-2	
trans-1,2-Dichloroethene	**0.41J**	ug/L	1.0	0.10	1		10/31/23 20:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/23 20:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/23 20:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/23 20:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/23 20:54	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/23 20:54	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/31/23 20:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/23 20:54	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/23 20:54	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/23 20:54	79-34-5	
Tetrachloroethene	**0.65J**	ug/L	1.0	0.33	1		10/31/23 20:54	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/31/23 20:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/23 20:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/23 20:54	79-00-5	L2
Trichloroethene	**1630**	ug/L	20.0	4.2	20		10/27/23 23:26	79-01-6	
Vinyl chloride	**0.81J**	ug/L	1.0	0.17	1		10/31/23 20:54	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/23 20:54	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/31/23 20:54	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/31/23 20:54	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		10/31/23 20:54	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/23 20:54		

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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: TB-11-202310 **Lab ID: 60440221020** Collected: 10/19/23 07:00 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/27/23 19:23	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/27/23 19:23	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/27/23 19:23	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/27/23 19:23	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/27/23 19:23	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/27/23 19:23	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/27/23 19:23	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/27/23 19:23	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/27/23 19:23	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/27/23 19:23	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/27/23 19:23	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/27/23 19:23	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/27/23 19:23	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/27/23 19:23	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/27/23 19:23	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/27/23 19:23	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/27/23 19:23	156-59-2	
trans-1,2-Dichloroethene	**0.44J**	ug/L	1.0	0.10	1		10/27/23 19:23	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/27/23 19:23	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/27/23 19:23	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/27/23 19:23	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/27/23 19:23	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/27/23 19:23	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/27/23 19:23	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/27/23 19:23	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/27/23 19:23	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/27/23 19:23	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/27/23 19:23	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/27/23 19:23	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/27/23 19:23	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/27/23 19:23	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/27/23 19:23	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/27/23 19:23	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/27/23 19:23	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/27/23 19:23	460-00-4	
Toluene-d8 (S)	103	%	80-120		1		10/27/23 19:23	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/27/23 19:23	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/27/23 19:23		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: TB-07-202310 **Lab ID: 60440221021** Collected: 10/19/23 07:05 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/28/23 00:46	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/28/23 00:46	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/28/23 00:46	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/28/23 00:46	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/28/23 00:46	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/28/23 00:46	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/28/23 00:46	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/28/23 00:46	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/28/23 00:46	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/28/23 00:46	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/28/23 00:46	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/28/23 00:46	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/28/23 00:46	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/28/23 00:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/28/23 00:46	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/28/23 00:46	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/28/23 00:46	156-59-2	
trans-1,2-Dichloroethene	**0.39J**	ug/L	1.0	0.10	1		10/28/23 00:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/28/23 00:46	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/28/23 00:46	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/28/23 00:46	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/28/23 00:46	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/28/23 00:46	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/28/23 00:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/28/23 00:46	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/28/23 00:46	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/28/23 00:46	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/28/23 00:46	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/28/23 00:46	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/28/23 00:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/28/23 00:46	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/28/23 00:46	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/28/23 00:46	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/28/23 00:46	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/28/23 00:46	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/28/23 00:46	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/28/23 00:46	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/28/23 00:46		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: TB-08-202310 **Lab ID: 60440221022** Collected: 10/19/23 07:06 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/28/23 01:00	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/28/23 01:00	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/28/23 01:00	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/28/23 01:00	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/28/23 01:00	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/28/23 01:00	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/28/23 01:00	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/28/23 01:00	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/28/23 01:00	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/28/23 01:00	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/28/23 01:00	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/28/23 01:00	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/28/23 01:00	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/28/23 01:00	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/28/23 01:00	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/28/23 01:00	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/28/23 01:00	156-59-2	
trans-1,2-Dichloroethene	**0.42J**	ug/L	1.0	0.10	1		10/28/23 01:00	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/28/23 01:00	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/28/23 01:00	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/28/23 01:00	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/28/23 01:00	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/28/23 01:00	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/28/23 01:00	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/28/23 01:00	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/28/23 01:00	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/28/23 01:00	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/28/23 01:00	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/28/23 01:00	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/28/23 01:00	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/28/23 01:00	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/28/23 01:00	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/28/23 01:00	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/28/23 01:00	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/28/23 01:00	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/28/23 01:00	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/28/23 01:00	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/28/23 01:00		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: EB-04-202310 **Lab ID: 60440221023** Collected: 10/19/23 17:55 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/28/23 01:13	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/28/23 01:13	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/28/23 01:13	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/28/23 01:13	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/28/23 01:13	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/28/23 01:13	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/28/23 01:13	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/28/23 01:13	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/28/23 01:13	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/28/23 01:13	75-00-3	
Chloroform	**0.24J**	ug/L	1.0	0.22	1		10/28/23 01:13	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/28/23 01:13	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/28/23 01:13	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/28/23 01:13	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/28/23 01:13	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/28/23 01:13	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/28/23 01:13	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/28/23 01:13	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/28/23 01:13	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/28/23 01:13	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/28/23 01:13	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/28/23 01:13	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/28/23 01:13	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/28/23 01:13	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/28/23 01:13	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/28/23 01:13	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/28/23 01:13	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/28/23 01:13	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/28/23 01:13	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/28/23 01:13	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/28/23 01:13	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/28/23 01:13	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/28/23 01:13	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/28/23 01:13	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	103	%	80-120		1		10/28/23 01:13	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/28/23 01:13	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/28/23 01:13	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/28/23 01:13		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: RW-69-202310 **Lab ID: 60440221024** Collected: 10/19/23 09:48 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR Hydrogen by AM20 in Vapor	Analytical Method: AM20 Pace Analytical Services - Baton Rouge								
Hydrogen	**5.1**	nMoles	1.9	0.49	1		10/26/23 08:27	1333-74-0	
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	ND	ug/L	2.0	0.39	1		10/31/23 17:36	74-86-2	
Ethane	ND	ug/L	5.0	0.90	1		10/31/23 17:36	74-84-0	
Ethene	ND	ug/L	5.0	0.79	1		10/31/23 17:36	74-85-1	
Methane	**33.2**	ug/L	10.0	3.8	1		10/31/23 17:36	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	93	%.	70-130		1		10/31/23 17:36		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**543**	ug/L	50.0	9.1	1	10/29/23 10:15	10/31/23 14:48	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/28/23 02:07	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/28/23 02:07	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/28/23 02:07	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/28/23 02:07	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/28/23 02:07	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/28/23 02:07	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/28/23 02:07	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/28/23 02:07	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/28/23 02:07	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/28/23 02:07	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/28/23 02:07	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/28/23 02:07	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/28/23 02:07	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/28/23 02:07	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/28/23 02:07	107-06-2	
1,1-Dichloroethene	**1.7**	ug/L	1.0	0.22	1		10/28/23 02:07	75-35-4	
cis-1,2-Dichloroethene	**6.1**	ug/L	1.0	0.13	1		10/28/23 02:07	156-59-2	
trans-1,2-Dichloroethene	**0.18J**	ug/L	1.0	0.10	1		10/28/23 02:07	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/28/23 02:07	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/28/23 02:07	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/28/23 02:07	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/28/23 02:07	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/28/23 02:07	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/28/23 02:07	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/28/23 02:07	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/28/23 02:07	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/28/23 02:07	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/28/23 02:07	127-18-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: RW-69-202310 **Lab ID: 60440221024** Collected: 10/19/23 09:48 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Toluene	ND	ug/L	1.0	0.25	1		10/28/23 02:07	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/28/23 02:07	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/28/23 02:07	79-00-5	
Trichloroethene	**89.0**	ug/L	1.0	0.21	1		10/28/23 02:07	79-01-6	
Vinyl chloride	**0.43J**	ug/L	1.0	0.17	1		10/28/23 02:07	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/28/23 02:07	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/28/23 02:07	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/28/23 02:07	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/28/23 02:07	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/28/23 02:07		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
	Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.016	1		10/26/23 15:10	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Sulfate	**2.0**	mg/L	1.0	0.55	1		11/05/23 17:19	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.069	1		10/20/23 16:13		
Nitrogen, Nitrate	ND	mg/L	0.10	0.069	1		10/20/23 16:13	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/20/23 16:13	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	ND	mg/L	1.0	0.54	1		11/17/23 21:52	7440-44-0	H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-58R-202310 **Lab ID: 60440221025** Collected: 10/19/23 10:00 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR Hydrogen by AM20 in Vapor	Analytical Method: AM20 Pace Analytical Services - Baton Rouge								
Hydrogen	**0.87J**	nMoles	1.9	0.49	1		10/26/23 08:40	1333-74-0	
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	ND	ug/L	2.0	0.39	1		10/31/23 17:52	74-86-2	
Ethane	**1.3J**	ug/L	5.0	0.90	1		10/31/23 17:52	74-84-0	
Ethene	**0.96J**	ug/L	5.0	0.79	1		10/31/23 17:52	74-85-1	
Methane	**21.3**	ug/L	10.0	3.8	1		10/31/23 17:52	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	87	%.	70-130		1		10/31/23 17:52		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**320**	ug/L	50.0	9.1	1	10/29/23 10:15	10/31/23 14:53	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/28/23 03:01	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/28/23 03:01	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/28/23 03:01	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/28/23 03:01	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/28/23 03:01	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/28/23 03:01	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/28/23 03:01	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/28/23 03:01	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/28/23 03:01	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/28/23 03:01	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/28/23 03:01	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/28/23 03:01	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/28/23 03:01	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/28/23 03:01	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/28/23 03:01	107-06-2	
1,1-Dichloroethene	**1.8**	ug/L	1.0	0.22	1		10/28/23 03:01	75-35-4	
cis-1,2-Dichloroethene	**7.3**	ug/L	1.0	0.13	1		10/28/23 03:01	156-59-2	
trans-1,2-Dichloroethene	**0.17J**	ug/L	1.0	0.10	1		10/28/23 03:01	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/28/23 03:01	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/28/23 03:01	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/28/23 03:01	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/28/23 03:01	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/28/23 03:01	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/28/23 03:01	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/28/23 03:01	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/28/23 03:01	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/28/23 03:01	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/28/23 03:01	127-18-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-58R-202310 **Lab ID: 60440221025** Collected: 10/19/23 10:00 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Toluene	ND	ug/L	1.0	0.25	1		10/28/23 03:01	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/28/23 03:01	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/28/23 03:01	79-00-5	
Trichloroethene	**218**	ug/L	5.0	1.0	5		11/01/23 11:34	79-01-6	
Vinyl chloride	**0.42J**	ug/L	1.0	0.17	1		10/28/23 03:01	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/28/23 03:01	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/28/23 03:01	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/28/23 03:01	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/28/23 03:01	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/28/23 03:01		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
	Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.016	1		10/26/23 15:10	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Sulfate	**2.2**	mg/L	1.0	0.55	1		11/05/23 18:59	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.069	1		10/20/23 16:14		
Nitrogen, Nitrate	ND	mg/L	0.10	0.069	1		10/20/23 16:14	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/20/23 16:14	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	ND	mg/L	1.0	0.54	1		11/17/23 22:21	7440-44-0	H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-198-202310 **Lab ID: 60440221026** Collected: 10/19/23 11:10 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR Hydrogen by AM20 in Vapor	Analytical Method: AM20 Pace Analytical Services - Baton Rouge								
Hydrogen	ND	nMoles	1.9	0.49	1		10/26/23 08:53	1333-74-0	
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	**0.42J**	ug/L	2.0	0.39	1		10/31/23 18:07	74-86-2	
Ethane	**9.3**	ug/L	5.0	0.90	1		10/31/23 18:07	74-84-0	
Ethene	**5.1**	ug/L	5.0	0.79	1		10/31/23 18:07	74-85-1	
Methane	**16.7**	ug/L	10.0	3.8	1		10/31/23 18:07	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	100	%.	70-130		1		10/31/23 18:07		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**121**	ug/L	50.0	9.1	1	10/29/23 10:15	10/31/23 14:55	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/31/23 21:10	67-64-1	
Benzene	**0.24J**	ug/L	1.0	0.14	1		10/31/23 21:10	71-43-2	
Bromodichloromethane	**1.1**	ug/L	1.0	0.16	1		10/31/23 21:10	75-27-4	
Bromoform	**1.7**	ug/L	1.0	0.68	1		10/31/23 21:10	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/23 21:10	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/23 21:10	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/23 21:10	75-15-0	
Carbon tetrachloride	**1.0**	ug/L	1.0	0.17	1		10/31/23 21:10	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/31/23 21:10	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/23 21:10	75-00-3	
Chloroform	**11.7**	ug/L	1.0	0.22	1		10/31/23 21:10	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/23 21:10	74-87-3	
Dibromochloromethane	**0.57J**	ug/L	1.0	0.30	1		10/31/23 21:10	124-48-1	
1,1-Dichloroethane	**1.7**	ug/L	1.0	0.12	1		10/31/23 21:10	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/23 21:10	107-06-2	
1,1-Dichloroethene	**41.4**	ug/L	1.0	0.22	1		10/31/23 21:10	75-35-4	
cis-1,2-Dichloroethene	**2650**	ug/L	250	32.2	250		10/28/23 04:36	156-59-2	
trans-1,2-Dichloroethene	**58.6**	ug/L	1.0	0.10	1		10/31/23 21:10	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/23 21:10	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/23 21:10	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/23 21:10	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/23 21:10	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/23 21:10	591-78-6	
Methylene Chloride	**2.1**	ug/L	1.0	0.39	1		10/31/23 21:10	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/23 21:10	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/23 21:10	100-42-5	
1,1,2,2-Tetrachloroethane	**20.7**	ug/L	1.0	0.15	1		10/31/23 21:10	79-34-5	
Tetrachloroethene	**11.1**	ug/L	1.0	0.33	1		10/31/23 21:10	127-18-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-198-202310 **Lab ID: 60440221026** Collected: 10/19/23 11:10 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Toluene	**0.95J**	ug/L	1.0	0.25	1		10/31/23 21:10	108-88-3	
1,1,1-Trichloroethane	**21.9**	ug/L	1.0	0.11	1		10/31/23 21:10	71-55-6	
1,1,2-Trichloroethane	**1.3**	ug/L	1.0	0.14	1		10/31/23 21:10	79-00-5	L2
Trichloroethene	**31400**	ug/L	250	52.5	250		10/28/23 04:36	79-01-6	
Vinyl chloride	**129J**	ug/L	250	41.8	250		10/28/23 04:36	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/23 21:10	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/31/23 21:10	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/31/23 21:10	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/31/23 21:10	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/23 21:10		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
	Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.016	1		10/26/23 15:11	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Sulfate	**247**	mg/L	20.0	11.0	20		11/06/23 23:14	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**1.4**	mg/L	0.10	0.069	1		10/20/23 16:16		
Nitrogen, Nitrate	**1.4**	mg/L	0.10	0.069	1		10/20/23 16:16	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/20/23 16:16	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.65J**	mg/L	1.0	0.54	1		11/15/23 10:28	7440-44-0	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: IW-73-202310 **Lab ID: 60440221027** Collected: 10/19/23 13:08 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR Hydrogen by AM20 in Vapor	Analytical Method: AM20 Pace Analytical Services - Baton Rouge								
Hydrogen	**1.7J**	nMoles	1.9	0.49	1		10/26/23 09:21	1333-74-0	
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	ND	ug/L	2.0	0.39	1		10/31/23 18:23	74-86-2	
Ethane	**1.4J**	ug/L	5.0	0.90	1		10/31/23 18:23	74-84-0	
Ethene	**1.1J**	ug/L	5.0	0.79	1		10/31/23 18:23	74-85-1	
Methane	**4.2J**	ug/L	10.0	3.8	1		10/31/23 18:23	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	84	%.	70-130		1		10/31/23 18:23		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**216**	ug/L	50.0	9.1	1	10/29/23 10:15	10/31/23 14:57	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/28/23 02:34	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/28/23 02:34	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/28/23 02:34	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/28/23 02:34	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/28/23 02:34	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/28/23 02:34	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/28/23 02:34	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/28/23 02:34	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/28/23 02:34	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/28/23 02:34	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/28/23 02:34	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/28/23 02:34	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/28/23 02:34	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/28/23 02:34	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/28/23 02:34	107-06-2	
1,1-Dichloroethene	**0.83J**	ug/L	1.0	0.22	1		10/28/23 02:34	75-35-4	
cis-1,2-Dichloroethene	**6.2**	ug/L	1.0	0.13	1		10/28/23 02:34	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/28/23 02:34	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/28/23 02:34	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/28/23 02:34	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/28/23 02:34	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/28/23 02:34	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/28/23 02:34	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/28/23 02:34	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/28/23 02:34	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/28/23 02:34	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/28/23 02:34	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/28/23 02:34	127-18-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: IW-73-202310 **Lab ID: 60440221027** Collected: 10/19/23 13:08 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Toluene	ND	ug/L	1.0	0.25	1		10/28/23 02:34	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/28/23 02:34	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/28/23 02:34	79-00-5	
Trichloroethene	**195**	ug/L	5.0	1.0	5		10/31/23 23:17	79-01-6	
Vinyl chloride	**0.23J**	ug/L	1.0	0.17	1		10/28/23 02:34	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/28/23 02:34	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/28/23 02:34	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/28/23 02:34	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/28/23 02:34	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/28/23 02:34		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
	Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.016	1		10/26/23 15:11	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Sulfate	**5.7**	mg/L	1.0	0.55	1		11/05/23 19:52	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**0.23**	mg/L	0.10	0.069	1		10/20/23 16:18		
Nitrogen, Nitrate	**0.23**	mg/L	0.10	0.069	1		10/20/23 16:18	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/20/23 16:18	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.61J**	mg/L	1.0	0.54	1		11/15/23 10:43	7440-44-0	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: ITMW-9-202310 **Lab ID: 60440221028** Collected: 10/19/23 14:52 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR Hydrogen by AM20 in Vapor	Analytical Method: AM20 Pace Analytical Services - Baton Rouge								
Hydrogen	**10.9**	nMoles	1.9	0.49	1		10/26/23 09:34	1333-74-0	
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	ND	ug/L	2.0	0.39	1		10/31/23 18:39	74-86-2	
Ethane	**1.8J**	ug/L	5.0	0.90	1		10/31/23 18:39	74-84-0	
Ethene	**1.9J**	ug/L	5.0	0.79	1		10/31/23 18:39	74-85-1	
Methane	**15.8**	ug/L	10.0	3.8	1		10/31/23 18:39	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	83	%.	70-130		1		10/31/23 18:39		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**99.7**	ug/L	50.0	9.1	1	10/29/23 10:15	10/31/23 14:59	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/31/23 21:26	67-64-1	
Benzene	**1.4**	ug/L	1.0	0.14	1		10/31/23 21:26	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/23 21:26	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/31/23 21:26	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/23 21:26	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/23 21:26	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/23 21:26	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/23 21:26	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/31/23 21:26	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/23 21:26	75-00-3	
Chloroform	**1.2**	ug/L	1.0	0.22	1		10/31/23 21:26	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/23 21:26	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/23 21:26	124-48-1	
1,1-Dichloroethane	**3.0**	ug/L	1.0	0.12	1		10/31/23 21:26	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/23 21:26	107-06-2	
1,1-Dichloroethene	**12.2**	ug/L	1.0	0.22	1		10/31/23 21:26	75-35-4	
cis-1,2-Dichloroethene	**92.0**	ug/L	1.0	0.13	1		10/31/23 21:26	156-59-2	
trans-1,2-Dichloroethene	**6.0**	ug/L	1.0	0.10	1		10/31/23 21:26	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/23 21:26	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/23 21:26	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/23 21:26	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/23 21:26	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/23 21:26	591-78-6	
Methylene Chloride	**0.44J**	ug/L	1.0	0.39	1		10/31/23 21:26	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/23 21:26	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/23 21:26	100-42-5	
1,1,2,2-Tetrachloroethane	**0.44J**	ug/L	1.0	0.15	1		10/31/23 21:26	79-34-5	
Tetrachloroethene	**3.9**	ug/L	1.0	0.33	1		10/31/23 21:26	127-18-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: ITMW-9-202310 **Lab ID: 60440221028** Collected: 10/19/23 14:52 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Toluene	ND	ug/L	1.0	0.25	1		10/31/23 21:26	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/23 21:26	71-55-6	
1,1,2-Trichloroethane	**0.69J**	ug/L	1.0	0.14	1		10/31/23 21:26	79-00-5	L2
Trichloroethene	**4190**	ug/L	50.0	10.5	50		10/28/23 03:55	79-01-6	
Vinyl chloride	**2.0**	ug/L	1.0	0.17	1		10/31/23 21:26	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/23 21:26	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		10/31/23 21:26	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		10/31/23 21:26	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/31/23 21:26	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/23 21:26		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
	Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.016	1		10/26/23 15:11	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Sulfate	**33.1**	mg/L	10.0	5.5	10		11/05/23 20:30	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.20	0.14	2		10/20/23 16:27		
Nitrogen, Nitrate	ND	mg/L	0.20	0.14	2		10/20/23 16:27	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.20	0.14	2		10/20/23 16:27	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.68J**	mg/L	1.0	0.54	1		11/17/23 22:35	7440-44-0	H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-95-202310 **Lab ID: 60440221029** Collected: 10/19/23 14:16 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR Hydrogen by AM20 in Vapor	Analytical Method: AM20 Pace Analytical Services - Baton Rouge								
Hydrogen	**0.51J**	nMoles	1.9	0.49	1		10/26/23 09:53	1333-74-0	
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	**0.46J**	ug/L	2.0	0.39	1		11/02/23 09:02	74-86-2	
Ethane	**1.4J**	ug/L	5.0	0.90	1		11/02/23 09:02	74-84-0	
Ethene	ND	ug/L	5.0	0.79	1		11/02/23 09:02	74-85-1	
Methane	**5.9J**	ug/L	10.0	3.8	1		11/02/23 09:02	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	101	%.	70-130		1		11/02/23 09:02		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**16.2J**	ug/L	50.0	9.1	1	10/29/23 10:15	10/31/23 15:01	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		11/03/23 19:44	67-64-1	H1
Benzene	**0.20J**	ug/L	1.0	0.14	1		11/03/23 19:44	71-43-2	H1
Bromodichloromethane	**0.43J**	ug/L	1.0	0.16	1		11/03/23 19:44	75-27-4	H1
Bromoform	ND	ug/L	1.0	0.68	1		11/03/23 19:44	75-25-2	H1
Bromomethane	ND	ug/L	5.0	0.46	1		11/03/23 19:44	74-83-9	H1
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/03/23 19:44	78-93-3	H1
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/03/23 19:44	75-15-0	H1
Carbon tetrachloride	**0.74J**	ug/L	1.0	0.17	1		11/03/23 19:44	56-23-5	H1
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/03/23 19:44	108-90-7	H1
Chloroethane	ND	ug/L	1.0	0.37	1		11/03/23 19:44	75-00-3	H1
Chloroform	**7.8**	ug/L	1.0	0.22	1		11/03/23 19:44	67-66-3	H1
Chloromethane	ND	ug/L	1.0	0.28	1		11/03/23 19:44	74-87-3	H1
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/03/23 19:44	124-48-1	H1
1,1-Dichloroethane	**0.79J**	ug/L	1.0	0.12	1		11/03/23 19:44	75-34-3	H1
1,2-Dichloroethane	**0.27J**	ug/L	1.0	0.21	1		11/03/23 19:44	107-06-2	H1
1,1-Dichloroethene	**79.1**	ug/L	1.0	0.22	1		11/03/23 19:44	75-35-4	H1
cis-1,2-Dichloroethene	**828**	ug/L	200	25.8	200		10/28/23 04:22	156-59-2	
trans-1,2-Dichloroethene	**20.0**	ug/L	1.0	0.10	1		11/03/23 19:44	156-60-5	H1
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/03/23 19:44	78-87-5	H1
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/03/23 19:44	10061-01-5	H1
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/03/23 19:44	10061-02-6	H1
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/03/23 19:44	100-41-4	H1
2-Hexanone	ND	ug/L	10.0	1.1	1		11/03/23 19:44	591-78-6	H1
Methylene Chloride	**1.5**	ug/L	1.0	0.39	1		11/03/23 19:44	75-09-2	H1
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/03/23 19:44	108-10-1	H1
Styrene	ND	ug/L	1.0	0.12	1		11/03/23 19:44	100-42-5	H1
1,1,2,2-Tetrachloroethane	**1.1**	ug/L	1.0	0.15	1		11/03/23 19:44	79-34-5	H1
Tetrachloroethene	**16.3**	ug/L	1.0	0.33	1		11/03/23 19:44	127-18-4	H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-95-202310 **Lab ID: 60440221029** Collected: 10/19/23 14:16 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Toluene	**1.7**	ug/L	1.0	0.25	1		11/03/23 19:44	108-88-3	H1
1,1,1-Trichloroethane	**167**	ug/L	1.0	0.11	1		11/03/23 19:44	71-55-6	H1
1,1,2-Trichloroethane	**3.2**	ug/L	1.0	0.14	1		11/03/23 19:44	79-00-5	H1
Trichloroethene	**44300**	ug/L	200	42.0	200		10/28/23 04:22	79-01-6	
Vinyl chloride	**3.7**	ug/L	1.0	0.17	1		11/03/23 19:44	75-01-4	H1
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/03/23 19:44	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		200		10/28/23 04:22	460-00-4	
4-Bromofluorobenzene (S)	96	%	80-120		1		11/03/23 19:44	460-00-4	
Toluene-d8 (S)	102	%	80-120		200		10/28/23 04:22	2037-26-5	
Toluene-d8 (S)	102	%	80-120		1		11/03/23 19:44	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	108	%	80-120		1		11/03/23 19:44	2199-69-1	
1,2-Dichlorobenzene-d4 (S)	104	%	80-120		200		10/28/23 04:22	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/03/23 19:44		H1
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
	Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.016	1		10/26/23 12:49	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Sulfate	**125**	mg/L	10.0	5.5	10		11/05/23 20:55	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**0.65**	mg/L	0.10	0.069	1		10/20/23 16:19		
Nitrogen, Nitrate	**0.65**	mg/L	0.10	0.069	1		10/20/23 16:19	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/20/23 16:19	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	ND	mg/L	1.0	0.54	1		11/17/23 23:04	7440-44-0	H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-38-202310 **Lab ID: 60440221030** Collected: 10/19/23 16:13 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR Hydrogen by AM20 in Vapor	Analytical Method: AM20 Pace Analytical Services - Baton Rouge								
Hydrogen	ND	nMoles	1.9	0.49	1		10/26/23 10:06	1333-74-0	
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	ND	ug/L	2.0	0.39	1		10/31/23 19:11	74-86-2	
Ethane	**1.5J**	ug/L	5.0	0.90	1		10/31/23 19:11	74-84-0	
Ethene	**1.3J**	ug/L	5.0	0.79	1		10/31/23 19:11	74-85-1	
Methane	ND	ug/L	10.0	3.8	1		10/31/23 19:11	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	108	%.	70-130		1		10/31/23 19:11		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**173**	ug/L	50.0	9.1	1	10/29/23 10:15	10/31/23 15:03	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/31/23 21:42	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/23 21:42	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/23 21:42	75-27-4	
Bromoform	**2.2**	ug/L	1.0	0.68	1		10/31/23 21:42	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/23 21:42	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/23 21:42	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/23 21:42	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/23 21:42	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/31/23 21:42	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/23 21:42	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/31/23 21:42	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/23 21:42	74-87-3	
Dibromochloromethane	**0.48J**	ug/L	1.0	0.30	1		10/31/23 21:42	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/31/23 21:42	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/23 21:42	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/31/23 21:42	75-35-4	
cis-1,2-Dichloroethene	**2.2**	ug/L	1.0	0.13	1		10/31/23 21:42	156-59-2	
trans-1,2-Dichloroethene	**0.37J**	ug/L	1.0	0.10	1		10/31/23 21:42	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/23 21:42	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/23 21:42	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/23 21:42	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/23 21:42	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/23 21:42	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/31/23 21:42	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/23 21:42	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/23 21:42	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/23 21:42	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/31/23 21:42	127-18-4	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-38-202310 **Lab ID: 60440221030** Collected: 10/19/23 16:13 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Toluene	ND	ug/L	1.0	0.25	1		10/31/23 21:42	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/23 21:42	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/23 21:42	79-00-5	L2
Trichloroethene	**108**	ug/L	50.0	10.5	50		10/28/23 04:09	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/31/23 21:42	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/23 21:42	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	104	%	80-120		1		10/31/23 21:42	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/31/23 21:42	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/31/23 21:42	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/23 21:42		
4500S2D Sulfide, Total	Analytical Method: SM 4500-S-2 D								
	Pace Analytical Services - Kansas City								
Sulfide, Total	ND	mg/L	0.050	0.016	1		10/26/23 12:59	18496-25-8	
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Sulfate	**410**	mg/L	50.0	27.5	50		11/06/23 23:27	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**0.82**	mg/L	0.10	0.069	1		10/20/23 16:22		
Nitrogen, Nitrate	**0.82**	mg/L	0.10	0.069	1		10/20/23 16:22	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/20/23 16:22	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	ND	mg/L	1.0	0.54	1		11/17/23 23:18	7440-44-0	H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: TMW-22R-202310 **Lab ID: 60440221031** Collected: 10/19/23 09:05 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Ethane	**2.8J**	ug/L	5.0	0.90	1		10/31/23 19:27	74-84-0	
Ethene	**17.9**	ug/L	5.0	0.79	1		10/31/23 19:27	74-85-1	
Methane	**4350**	ug/L	10.0	3.8	1		10/31/23 19:27	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	94	%.	70-130		1		10/31/23 19:27		
BR AM23G Low Level VFA	Analytical Method: Pace ENV-SOP-BTRO-0042 Pace Analytical Services - Baton Rouge								
Pentanoic Acid	ND	mg/L	5.0	0.56	10		10/27/23 22:47	109-52-4	L2,N2
Acetic Acid	ND	mg/L	5.0	1.2	10		10/27/23 22:47	64-19-7	
Butyric Acid	ND	mg/L	5.0	0.58	10		10/27/23 22:47	107-92-6	
Formic acid	ND	mg/L	5.0	0.55	10		10/27/23 22:47	64-18-6	
Hexanoic Acid	ND	mg/L	5.0	0.58	10		10/27/23 22:47	142-62-1	L2,N2
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		10/27/23 22:47	646-07-1	N2
Lactic Acid	**4.0J**	mg/L	5.0	0.53	10		10/27/23 22:47	50-21-5	D3
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		10/27/23 22:47	503-74-2	N2
Propionic Acid	ND	mg/L	5.0	0.53	10		10/27/23 22:47	79-09-4	
Pyruvic Acid	ND	mg/L	5.0	0.60	10		10/27/23 22:47	127-17-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**10400**	ug/L	50.0	9.1	1	10/29/23 10:15	10/31/23 15:12	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/28/23 02:21	67-64-1	
Benzene	**0.14J**	ug/L	1.0	0.14	1		10/28/23 02:21	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/28/23 02:21	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/28/23 02:21	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/28/23 02:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/28/23 02:21	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/28/23 02:21	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/28/23 02:21	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/28/23 02:21	108-90-7	
Chloroethane	**2.5**	ug/L	1.0	0.37	1		10/28/23 02:21	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/28/23 02:21	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/28/23 02:21	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/28/23 02:21	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/28/23 02:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/28/23 02:21	107-06-2	
1,1-Dichloroethene	**0.59J**	ug/L	1.0	0.22	1		10/28/23 02:21	75-35-4	
cis-1,2-Dichloroethene	**37.8**	ug/L	1.0	0.13	1		10/28/23 02:21	156-59-2	
trans-1,2-Dichloroethene	**1.3**	ug/L	1.0	0.10	1		10/28/23 02:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/28/23 02:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/28/23 02:21	10061-01-5	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: TMW-22R-202310 **Lab ID: 60440221031** Collected: 10/19/23 09:05 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/28/23 02:21	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/28/23 02:21	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/28/23 02:21	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/28/23 02:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/28/23 02:21	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/28/23 02:21	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/28/23 02:21	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/28/23 02:21	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/28/23 02:21	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/28/23 02:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/28/23 02:21	79-00-5	
Trichloroethene	**52.2**	ug/L	1.0	0.21	1		10/28/23 02:21	79-01-6	
Vinyl chloride	**21.0**	ug/L	1.0	0.17	1		10/28/23 02:21	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/28/23 02:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/28/23 02:21	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/28/23 02:21	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/28/23 02:21	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/28/23 02:21		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0 Pace Analytical Services - Kansas City								
Chloride	**192**	mg/L	10.0	5.3	10		11/05/23 22:11	16887-00-6	
Sulfate	**4.3**	mg/L	1.0	0.55	1		11/05/23 21:58	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2 Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.069	1		10/20/23 16:08		
Nitrogen, Nitrate	ND	mg/L	0.10	0.069	1		10/20/23 16:08	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/20/23 16:08	14797-65-0	
5310C TOC	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.61J**	mg/L	1.0	0.54	1		11/17/23 23:32	7440-44-0	H1
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**0.92J**	mg/L	1.0	0.54	1		11/17/23 18:44		H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-185-202310 **Lab ID: 60440221032** Collected: 10/19/23 09:29 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	ND	ug/L	2.0	0.39	1		10/31/23 19:43	74-86-2	
Ethane	**1.6J**	ug/L	5.0	0.90	1		10/31/23 19:43	74-84-0	
Ethene	**1.3J**	ug/L	5.0	0.79	1		10/31/23 19:43	74-85-1	
Methane	**5.6J**	ug/L	10.0	3.8	1		10/31/23 19:43	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	103	%.	70-130		1		10/31/23 19:43		
BR AM23G Low Level VFA	Analytical Method: Pace ENV-SOP-BTRO-0042 Pace Analytical Services - Baton Rouge								
Pentanoic Acid	ND	mg/L	2.5	0.28	5		10/27/23 23:12	109-52-4	L2,N2
Acetic Acid	ND	mg/L	2.5	0.62	5		10/27/23 23:12	64-19-7	
Butyric Acid	ND	mg/L	2.5	0.29	5		10/27/23 23:12	107-92-6	
Formic acid	ND	mg/L	2.5	0.27	5		10/27/23 23:12	64-18-6	
Hexanoic Acid	ND	mg/L	2.5	0.29	5		10/27/23 23:12	142-62-1	L2,N2
i-Hexanoic Acid	ND	mg/L	2.5	0.28	5		10/27/23 23:12	646-07-1	N2
Lactic Acid	**2.1J**	mg/L	2.5	0.26	5		10/27/23 23:12	50-21-5	D3
i-Pentanoic Acid	ND	mg/L	2.5	0.30	5		10/27/23 23:12	503-74-2	N2
Propionic Acid	ND	mg/L	2.5	0.26	5		10/27/23 23:12	79-09-4	
Pyruvic Acid	ND	mg/L	2.5	0.30	5		10/27/23 23:12	127-17-3	
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**59.3**	ug/L	50.0	9.1	1	10/29/23 10:15	10/31/23 15:14	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/28/23 02:48	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/28/23 02:48	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/28/23 02:48	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/28/23 02:48	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/28/23 02:48	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/28/23 02:48	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/28/23 02:48	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/28/23 02:48	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/28/23 02:48	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/28/23 02:48	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/28/23 02:48	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/28/23 02:48	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/28/23 02:48	124-48-1	
1,1-Dichloroethane	**0.55J**	ug/L	1.0	0.12	1		10/28/23 02:48	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/28/23 02:48	107-06-2	
1,1-Dichloroethene	**1.3**	ug/L	1.0	0.22	1		10/28/23 02:48	75-35-4	
cis-1,2-Dichloroethene	**8.5**	ug/L	1.0	0.13	1		10/28/23 02:48	156-59-2	
trans-1,2-Dichloroethene	**0.11J**	ug/L	1.0	0.10	1		10/28/23 02:48	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/28/23 02:48	78-87-5	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-185-202310 **Lab ID: 60440221032** Collected: 10/19/23 09:29 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/28/23 02:48	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/28/23 02:48	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/28/23 02:48	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/28/23 02:48	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/28/23 02:48	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/28/23 02:48	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/28/23 02:48	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/28/23 02:48	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/28/23 02:48	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/28/23 02:48	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/28/23 02:48	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/28/23 02:48	79-00-5	
Trichloroethene	**177**	ug/L	1.0	0.21	1		10/28/23 02:48	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/28/23 02:48	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/28/23 02:48	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/28/23 02:48	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/28/23 02:48	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		10/28/23 02:48	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/28/23 02:48		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**50.2**	mg/L	10.0	5.3	10		11/05/23 22:36	16887-00-6	
Sulfate	**11.0**	mg/L	1.0	0.55	1		11/05/23 22:23	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**4.8**	mg/L	0.10	0.069	1		10/20/23 16:12		
Nitrogen, Nitrate	**4.8**	mg/L	0.10	0.069	1		10/20/23 16:12	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/20/23 16:12	14797-65-0	
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	ND	mg/L	1.0	0.54	1		11/18/23 00:16	7440-44-0	H1
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	ND	mg/L	1.0	0.54	1		11/17/23 18:59		H1

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-92-202310 **Lab ID: 60440221033** Collected: 10/19/23 09:25 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	ND	ug/L	2.0	0.39	1		10/31/23 19:59	74-86-2	
Ethane	**1.7J**	ug/L	5.0	0.90	1		10/31/23 19:59	74-84-0	
Ethene	**1.4J**	ug/L	5.0	0.79	1		10/31/23 19:59	74-85-1	
Methane	**6.2J**	ug/L	10.0	3.8	1		10/31/23 19:59	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	113	%.	70-130		1		10/31/23 19:59		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**84.2**	ug/L	50.0	9.1	1	10/29/23 10:15	10/31/23 15:16	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/31/23 21:58	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/23 21:58	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/23 21:58	75-27-4	
Bromoform	**0.73J**	ug/L	1.0	0.68	1		10/31/23 21:58	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/23 21:58	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/23 21:58	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/23 21:58	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/23 21:58	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/31/23 21:58	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/23 21:58	75-00-3	
Chloroform	**0.28J**	ug/L	1.0	0.22	1		10/31/23 21:58	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/23 21:58	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/23 21:58	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/31/23 21:58	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/23 21:58	107-06-2	
1,1-Dichloroethene	**0.69J**	ug/L	1.0	0.22	1		10/31/23 21:58	75-35-4	
cis-1,2-Dichloroethene	**2.3**	ug/L	1.0	0.13	1		10/31/23 21:58	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/31/23 21:58	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/23 21:58	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/23 21:58	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/23 21:58	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/23 21:58	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/23 21:58	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/31/23 21:58	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/23 21:58	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/23 21:58	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/23 21:58	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/31/23 21:58	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/31/23 21:58	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/23 21:58	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/23 21:58	79-00-5	L2
Trichloroethene	**404**	ug/L	20.0	4.2	20		10/28/23 03:42	79-01-6	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: MW-92-202310 **Lab ID: 60440221033** Collected: 10/19/23 09:25 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/31/23 21:58	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/23 21:58	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		10/31/23 21:58	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		10/31/23 21:58	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/31/23 21:58	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/23 21:58		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Sulfate	**204**	mg/L	50.0	27.5	50		11/06/23 23:40	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**0.77**	mg/L	0.10	0.069	1		10/20/23 16:11		
Nitrogen, Nitrate	**0.77**	mg/L	0.10	0.069	1		10/20/23 16:11	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/20/23 16:11	14797-65-0	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: TMW-24-202310 **Lab ID: 60440221034** Collected: 10/19/23 09:04 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	ND	ug/L	2.0	0.39	1		10/31/23 20:31	74-86-2	
Ethane	**1.7J**	ug/L	5.0	0.90	1		10/31/23 20:31	74-84-0	
Ethene	**1.6J**	ug/L	5.0	0.79	1		10/31/23 20:31	74-85-1	
Methane	**16.6**	ug/L	10.0	3.8	1		10/31/23 20:31	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	79	%.	70-130		1		10/31/23 20:31		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**381**	ug/L	50.0	9.1	1	10/29/23 10:15	10/31/23 15:18	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/28/23 03:15	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/28/23 03:15	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/28/23 03:15	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/28/23 03:15	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/28/23 03:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/28/23 03:15	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/28/23 03:15	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/28/23 03:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/28/23 03:15	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/28/23 03:15	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/28/23 03:15	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/28/23 03:15	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/28/23 03:15	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/28/23 03:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/28/23 03:15	107-06-2	
1,1-Dichloroethene	**1.2**	ug/L	1.0	0.22	1		10/28/23 03:15	75-35-4	
cis-1,2-Dichloroethene	**11.2**	ug/L	1.0	0.13	1		10/28/23 03:15	156-59-2	
trans-1,2-Dichloroethene	**0.17J**	ug/L	1.0	0.10	1		10/28/23 03:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/28/23 03:15	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/28/23 03:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/28/23 03:15	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/28/23 03:15	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/28/23 03:15	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/28/23 03:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/28/23 03:15	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/28/23 03:15	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/28/23 03:15	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/28/23 03:15	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/28/23 03:15	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/28/23 03:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/28/23 03:15	79-00-5	
Trichloroethene	**445**	ug/L	10.0	2.1	10		11/01/23 11:47	79-01-6	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: TMW-24-202310 **Lab ID: 60440221034** Collected: 10/19/23 09:04 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/28/23 03:15	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/28/23 03:15	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		10/28/23 03:15	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/28/23 03:15	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/28/23 03:15	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/28/23 03:15		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Sulfate	**7.6**	mg/L	1.0	0.55	1		11/06/23 09:40	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**0.11**	mg/L	0.10	0.069	1		10/20/23 16:07		
Nitrogen, Nitrate	**0.11**	mg/L	0.10	0.069	1		10/20/23 16:07	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/20/23 16:07	14797-65-0	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: ITMW-19-202310 **Lab ID: 60440221035** Collected: 10/19/23 12:57 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Acetylene	ND	ug/L	2.0	0.39	1		10/31/23 20:47	74-86-2	
Ethane	**1.8J**	ug/L	5.0	0.90	1		10/31/23 20:47	74-84-0	
Ethene	**1.1J**	ug/L	5.0	0.79	1		10/31/23 20:47	74-85-1	
Methane	**5.1J**	ug/L	10.0	3.8	1		10/31/23 20:47	74-82-8	
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	102	%.	70-130		1		10/31/23 20:47		
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**49.4J**	ug/L	50.0	9.1	1	10/29/23 10:15	10/31/23 15:20	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/28/23 03:28	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/28/23 03:28	71-43-2	
Bromodichloromethane	**0.47J**	ug/L	1.0	0.16	1		10/28/23 03:28	75-27-4	
Bromoform	**10.3**	ug/L	1.0	0.68	1		10/28/23 03:28	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/28/23 03:28	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/28/23 03:28	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/28/23 03:28	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/28/23 03:28	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/28/23 03:28	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/28/23 03:28	75-00-3	
Chloroform	**1.6**	ug/L	1.0	0.22	1		10/28/23 03:28	67-66-3	
Chloromethane	**0.68J**	ug/L	1.0	0.28	1		10/28/23 03:28	74-87-3	
Dibromochloromethane	**0.79J**	ug/L	1.0	0.30	1		10/28/23 03:28	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/28/23 03:28	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/28/23 03:28	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/28/23 03:28	75-35-4	
cis-1,2-Dichloroethene	**11.4**	ug/L	1.0	0.13	1		10/28/23 03:28	156-59-2	
trans-1,2-Dichloroethene	**2.1**	ug/L	1.0	0.10	1		10/28/23 03:28	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/28/23 03:28	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/28/23 03:28	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/28/23 03:28	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/28/23 03:28	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/28/23 03:28	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/28/23 03:28	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/28/23 03:28	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/28/23 03:28	100-42-5	
1,1,2,2-Tetrachloroethane	**0.45J**	ug/L	1.0	0.15	1		10/28/23 03:28	79-34-5	
Tetrachloroethene	**0.66J**	ug/L	1.0	0.33	1		10/28/23 03:28	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/28/23 03:28	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/28/23 03:28	71-55-6	
1,1,2-Trichloroethane	**0.21J**	ug/L	1.0	0.14	1		10/28/23 03:28	79-00-5	
Trichloroethene	**1150**	ug/L	20.0	4.2	20		11/01/23 12:00	79-01-6	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Sample: ITMW-19-202310 **Lab ID: 60440221035** Collected: 10/19/23 12:57 Received: 10/20/23 03:00 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/28/23 03:28	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/28/23 03:28	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/28/23 03:28	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/28/23 03:28	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	102	%	80-120		1		10/28/23 03:28	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/28/23 03:28		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Sulfate	**1780**	mg/L	400	220	400		11/07/23 10:20	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**2.5**	mg/L	0.10	0.069	1		10/20/23 16:17		
Nitrogen, Nitrate	**2.5**	mg/L	0.10	0.069	1		10/20/23 16:17	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/20/23 16:17	14797-65-0	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

QC Batch: 305317
QC Batch Method: AM20
Analysis Method: AM20
Analysis Description: BR Hydrogen by AM20 in Vapor
Laboratory: Pace Analytical Services - Baton Rouge
Associated Lab Samples: 60440221024, 60440221025, 60440221026, 60440221027, 60440221028, 60440221029, 60440221030

METHOD BLANK: 1461434 Matrix: Air
Associated Lab Samples: 60440221024, 60440221025, 60440221026, 60440221027, 60440221028, 60440221029, 60440221030

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Hydrogen	nMoles	ND	1.9	0.49	10/26/23 07:03	

LABORATORY CONTROL SAMPLE & LCSD: 1461435 1461433

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Hydrogen	nMoles	11.9	12.0	13.1	101	110	70-130	9	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

QC Batch: 305951
QC Batch Method: RSK175
Analysis Method: RSK175
Analysis Description: BR RSK175W Headspace
Laboratory: Pace Analytical Services - Baton Rouge
Associated Lab Samples: 60440221024, 60440221025, 60440221026, 60440221027, 60440221028, 60440221030, 60440221031, 60440221032, 60440221033, 60440221034, 60440221035

METHOD BLANK: 1464164 Matrix: Water
Associated Lab Samples: 60440221024, 60440221025, 60440221026, 60440221027, 60440221028, 60440221030, 60440221031, 60440221032, 60440221033, 60440221034, 60440221035

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetylene	ug/L	ND	2.0	0.39	10/31/23 17:20	
Ethane	ug/L	ND	5.0	0.90	10/31/23 17:20	
Ethene	ug/L	ND	5.0	0.79	10/31/23 17:20	
Methane	ug/L	ND	10.0	3.8	10/31/23 17:20	
Methyl-tert-butyl-ether-d3 (S)	%.	91	70-130		10/31/23 17:20	

LABORATORY CONTROL SAMPLE & LCSD: 1464165 1464166

Parameter	Units	Spike Conc.	LCS Result	LCSD Result	LCS % Rec	LCSD % Rec	% Rec Limits	RPD	Max RPD	Qualifiers
Acetylene	ug/L	75	75.4	77.6	101	103	70-130	3	20	
Ethane	ug/L	243	278	272	114	112	70-130	2	20	
Ethene	ug/L	296	322	321	109	108	70-130	0	20	
Methane	ug/L	945	1010	992	107	105	70-130	2	20	
Methyl-tert-butyl-ether-d3 (S)	%.				97	95	70-130			

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

QC Batch: 306252
QC Batch Method: RSK175
Analysis Method: RSK175
Analysis Description: BR RSK175W Headspace
Laboratory: Pace Analytical Services - Baton Rouge
Associated Lab Samples: 60440221029

METHOD BLANK: 1465732 Matrix: Water
Associated Lab Samples: 60440221029

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetylene	ug/L	ND	2.0	0.39	11/02/23 07:44	
Ethane	ug/L	ND	5.0	0.90	11/02/23 07:44	
Ethene	ug/L	ND	5.0	0.79	11/02/23 07:44	
Methane	ug/L	ND	10.0	3.8	11/02/23 07:44	
Methyl-tert-butyl-ether-d3 (S)	%.	95	70-130		11/02/23 07:44	

LABORATORY CONTROL SAMPLE: 1465733

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acetylene	ug/L	75	74.8	100	70-130	
Ethane	ug/L	243	266	110	70-130	
Ethene	ug/L	296	320	108	70-130	
Methane	ug/L	945	945	100	70-130	
Methyl-tert-butyl-ether-d3 (S)	%.			105	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1465734 1465735

Parameter	Units	20294108004 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acetylene	ug/L	2.0U	75	75	63.9	69.8	85	93	70-130	9	20	
Ethane	ug/L	5.0U	243	243	180	205	74	85	70-130	13	20	
Ethene	ug/L	5.0U	296	296	214	243	72	82	70-130	12	20	
Methane	ug/L	11.1	945	945	652	733	68	76	70-130	12	20	M1
Methyl-tert-butyl-ether-d3 (S)	%.						117	100	70-130			

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

QC Batch: 305046
QC Batch Method: Pace ENV-SOP-BTRO-0042
Analysis Method: Pace ENV-SOP-BTRO-0042
Analysis Description: BR AM23G Low Level VFA
Laboratory: Pace Analytical Services - Baton Rouge
Associated Lab Samples: 60440221031, 60440221032

METHOD BLANK: 1460181 Matrix: Water
Associated Lab Samples: 60440221031, 60440221032

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetic Acid	mg/L	ND	0.50	0.12	10/27/23 16:13	
Butyric Acid	mg/L	ND	0.50	0.058	10/27/23 16:13	
Formic acid	mg/L	ND	0.50	0.055	10/27/23 16:13	
Hexanoic Acid	mg/L	ND	0.50	0.058	10/27/23 16:13	N2
i-Hexanoic Acid	mg/L	ND	0.50	0.056	10/27/23 16:13	N2
i-Pentanoic Acid	mg/L	ND	0.50	0.061	10/27/23 16:13	N2
Lactic Acid	mg/L	ND	0.50	0.053	10/27/23 16:13	
Pentanoic Acid	mg/L	ND	0.50	0.056	10/27/23 16:13	N2
Propionic Acid	mg/L	ND	0.50	0.053	10/27/23 16:13	
Pyruvic Acid	mg/L	ND	0.50	0.060	10/27/23 16:13	

LABORATORY CONTROL SAMPLE: 1460182

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acetic Acid	mg/L	2	2.1	103	70-130	
Butyric Acid	mg/L	2	1.8	89	70-130	
Formic acid	mg/L	2	2.0	98	70-130	
Hexanoic Acid	mg/L	2	1.0	50	70-130	L2,N2
i-Hexanoic Acid	mg/L	2	1.4	71	70-130	N2
i-Pentanoic Acid	mg/L	2	1.8	88	70-130	N2
Lactic Acid	mg/L	2	2.1	104	70-130	
Pentanoic Acid	mg/L	2	1.4	69	70-130	L2,N2
Propionic Acid	mg/L	2	2.0	98	70-130	
Pyruvic Acid	mg/L	2	1.8	92	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1460480 1460481

Parameter	Units	20294259001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acetic Acid	mg/L	66.9	100	100	164	164	97	97	70-130	0	30	H3
Butyric Acid	mg/L	ND	100	100	91.2	91.8	90	91	70-130	1	30	H3
Formic acid	mg/L	ND	100	100	99.2	99.1	98	98	70-130	0	30	H3
Hexanoic Acid	mg/L	ND	100	100	50.5	50.0	50	49	70-130	1	30	H3,M0, N2
i-Hexanoic Acid	mg/L	ND	100	100	67.2	68.7	67	69	70-130	2	30	H3,M1, N2
i-Pentanoic Acid	mg/L	ND	100	100	86.2	86.8	85	85	70-130	1	30	H3,N2
Lactic Acid	mg/L	3.5J	100	100	104	104	101	100	70-130	0	30	H3

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1460480 1460481

Parameter	Units	20294259001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Pentanoic Acid	mg/L	ND	100	100	70.0	69.6	69	69	70-130	1	30	H3,M0, N2
Propionic Acid	mg/L	28.3	100	100	125	125	97	97	70-130	0	30	H3
Pyruvic Acid	mg/L	ND	100	100	96.4	97.1	95	96	70-130	1	30	H3

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

QC Batch: 871145
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440221024, 60440221025, 60440221026, 60440221027, 60440221028, 60440221029, 60440221030, 60440221031, 60440221032, 60440221033, 60440221034, 60440221035

METHOD BLANK: 3450454 Matrix: Water
Associated Lab Samples: 60440221024, 60440221025, 60440221026, 60440221027, 60440221028, 60440221029, 60440221030, 60440221031, 60440221032, 60440221033, 60440221034, 60440221035

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	9.1	10/31/23 14:21	

LABORATORY CONTROL SAMPLE: 3450455

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	10100	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3450456 3450457

Parameter	Units	60440396008 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	6640	10000	10000	16700	16100	101	94	75-125	4	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

QC Batch: 870457
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440221001, 60440221002, 60440221003, 60440221004, 60440221005

METHOD BLANK: 3447166 Matrix: Water
Associated Lab Samples: 60440221001, 60440221002, 60440221003, 60440221004, 60440221005

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/24/23 19:50	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/24/23 19:50	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/24/23 19:50	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/24/23 19:50	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/24/23 19:50	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/24/23 19:50	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/24/23 19:50	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/24/23 19:50	
2-Hexanone	ug/L	ND	10.0	1.1	10/24/23 19:50	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/24/23 19:50	
Acetone	ug/L	ND	10.0	2.5	10/24/23 19:50	
Benzene	ug/L	ND	1.0	0.14	10/24/23 19:50	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/24/23 19:50	
Bromoform	ug/L	ND	1.0	0.68	10/24/23 19:50	
Bromomethane	ug/L	ND	5.0	0.46	10/24/23 19:50	
Carbon disulfide	ug/L	ND	5.0	0.98	10/24/23 19:50	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/24/23 19:50	
Chlorobenzene	ug/L	ND	1.0	0.089	10/24/23 19:50	
Chloroethane	ug/L	ND	1.0	0.37	10/24/23 19:50	
Chloroform	ug/L	ND	1.0	0.22	10/24/23 19:50	
Chloromethane	ug/L	ND	1.0	0.28	10/24/23 19:50	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/24/23 19:50	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/24/23 19:50	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/24/23 19:50	
Ethylbenzene	ug/L	ND	1.0	0.12	10/24/23 19:50	
Methylene Chloride	ug/L	ND	1.0	0.39	10/24/23 19:50	
Styrene	ug/L	ND	1.0	0.12	10/24/23 19:50	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/24/23 19:50	
Toluene	ug/L	ND	1.0	0.25	10/24/23 19:50	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/24/23 19:50	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/24/23 19:50	
Vinyl chloride	ug/L	ND	1.0	0.17	10/24/23 19:50	
Xylene (Total)	ug/L	ND	3.0	0.28	10/24/23 19:50	
1,2-Dichlorobenzene-d4 (S)	%	102	80-120		10/24/23 19:50	
4-Bromofluorobenzene (S)	%	101	80-120		10/24/23 19:50	
Toluene-d8 (S)	%	98	80-120		10/24/23 19:50	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

LABORATORY CONTROL SAMPLE: 3447167

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	18.7	93	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	18.1	91	70-130	
1,1,2-Trichloroethane	ug/L	20	18.3	91	75-125	
1,1-Dichloroethane	ug/L	20	18.2	91	75-120	
1,1-Dichloroethene	ug/L	20	19.1	96	75-120	
1,2-Dichloroethane	ug/L	20	18.6	93	80-120	
1,2-Dichloropropane	ug/L	20	18.5	93	80-120	
2-Butanone (MEK)	ug/L	100	68.5	69	60-140	
2-Hexanone	ug/L	100	74.7	75	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	86.4	86	70-135	
Acetone	ug/L	100	71.3	71	25-185	
Benzene	ug/L	20	18.5	92	80-120	
Bromodichloromethane	ug/L	20	19.1	96	80-120	
Bromoform	ug/L	20	17.1	85	70-135	
Bromomethane	ug/L	20	17.5	88	50-145	
Carbon disulfide	ug/L	20	17.9	89	70-130	
Carbon tetrachloride	ug/L	20	18.2	91	80-130	
Chlorobenzene	ug/L	20	18.7	94	80-120	
Chloroethane	ug/L	20	19.3	96	60-135	
Chloroform	ug/L	20	18.6	93	75-125	
Chloromethane	ug/L	20	18.1	91	60-130	
cis-1,2-Dichloroethene	ug/L	20	18.0	90	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.7	93	75-125	
Dibromochloromethane	ug/L	20	18.4	92	80-120	
Ethylbenzene	ug/L	20	18.4	92	80-120	
Methylene Chloride	ug/L	20	20.8	104	70-130	
Styrene	ug/L	20	19.2	96	80-155	
Tetrachloroethene	ug/L	20	18.6	93	80-125	
Toluene	ug/L	20	18.8	94	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.4	92	75-125	
trans-1,3-Dichloropropene	ug/L	20	18.5	92	70-125	
Vinyl chloride	ug/L	20	19.0	95	65-130	
Xylene (Total)	ug/L	60	58.3	97	80-120	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			102	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

QC Batch: 871014
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440221001, 60440221002, 60440221003, 60440221004, 60440221005, 60440221006, 60440221007, 60440221008, 60440221009, 60440221010, 60440221011, 60440221012, 60440221013, 60440221014, 60440221015, 60440221016, 60440221017, 60440221018, 60440221019, 60440221020

METHOD BLANK: 3449610
Matrix: Water
Associated Lab Samples: 60440221001, 60440221002, 60440221003, 60440221004, 60440221005, 60440221006, 60440221007, 60440221008, 60440221009, 60440221010, 60440221011, 60440221012, 60440221013, 60440221014, 60440221015, 60440221016, 60440221017, 60440221018, 60440221019, 60440221020

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/27/23 19:10	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/27/23 19:10	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/27/23 19:10	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/27/23 19:10	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/27/23 19:10	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/27/23 19:10	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/27/23 19:10	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/27/23 19:10	
2-Hexanone	ug/L	ND	10.0	1.1	10/27/23 19:10	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/27/23 19:10	
Acetone	ug/L	ND	10.0	2.5	10/27/23 19:10	
Benzene	ug/L	ND	1.0	0.14	10/27/23 19:10	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/27/23 19:10	
Bromoform	ug/L	ND	1.0	0.68	10/27/23 19:10	
Bromomethane	ug/L	ND	5.0	0.46	10/27/23 19:10	
Carbon disulfide	ug/L	ND	5.0	0.98	10/27/23 19:10	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/27/23 19:10	
Chlorobenzene	ug/L	ND	1.0	0.089	10/27/23 19:10	
Chloroethane	ug/L	ND	1.0	0.37	10/27/23 19:10	
Chloroform	ug/L	ND	1.0	0.22	10/27/23 19:10	
Chloromethane	ug/L	ND	1.0	0.28	10/27/23 19:10	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/27/23 19:10	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/27/23 19:10	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/27/23 19:10	
Ethylbenzene	ug/L	ND	1.0	0.12	10/27/23 19:10	
Methylene Chloride	ug/L	ND	1.0	0.39	10/27/23 19:10	
Styrene	ug/L	ND	1.0	0.12	10/27/23 19:10	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/27/23 19:10	
Toluene	ug/L	ND	1.0	0.25	10/27/23 19:10	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/27/23 19:10	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/27/23 19:10	
Trichloroethene	ug/L	ND	1.0	0.21	10/27/23 19:10	
Vinyl chloride	ug/L	ND	1.0	0.17	10/27/23 19:10	
Xylene (Total)	ug/L	ND	3.0	0.28	10/27/23 19:10	
1,2-Dichlorobenzene-d4 (S)	%	99	80-120		10/27/23 19:10	
4-Bromofluorobenzene (S)	%	99	80-120		10/27/23 19:10	
Toluene-d8 (S)	%	99	80-120		10/27/23 19:10	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

LABORATORY CONTROL SAMPLE: 3449611

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.5	97	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	17.7	88	70-130	
1,1,2-Trichloroethane	ug/L	20	17.3	87	75-125	
1,1-Dichloroethane	ug/L	20	18.2	91	75-120	
1,1-Dichloroethene	ug/L	20	18.7	94	75-120	
1,2-Dichloroethane	ug/L	20	18.6	93	80-120	
1,2-Dichloropropane	ug/L	20	17.8	89	80-120	
2-Butanone (MEK)	ug/L	100	67.8	68	60-140	
2-Hexanone	ug/L	100	70.8	71	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	78.5	79	70-135	
Acetone	ug/L	100	69.2	69	25-185	
Benzene	ug/L	20	18.7	93	80-120	
Bromodichloromethane	ug/L	20	19.1	95	80-120	
Bromoform	ug/L	20	17.9	89	70-135	
Bromomethane	ug/L	20	15.0	75	50-145	
Carbon disulfide	ug/L	20	19.3	97	70-130	
Carbon tetrachloride	ug/L	20	19.1	96	80-130	
Chlorobenzene	ug/L	20	19.2	96	80-120	
Chloroethane	ug/L	20	17.5	87	60-135	
Chloroform	ug/L	20	18.8	94	75-125	
Chloromethane	ug/L	20	14.6	73	60-130	
cis-1,2-Dichloroethene	ug/L	20	18.5	93	80-120	
cis-1,3-Dichloropropene	ug/L	20	17.9	89	75-125	
Dibromochloromethane	ug/L	20	18.5	92	80-120	
Ethylbenzene	ug/L	20	19.1	96	80-120	
Methylene Chloride	ug/L	20	20.2	101	70-130	
Styrene	ug/L	20	19.3	96	80-155	
Tetrachloroethene	ug/L	20	19.3	96	80-125	
Toluene	ug/L	20	18.4	92	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.6	93	75-125	
trans-1,3-Dichloropropene	ug/L	20	18.1	91	70-125	
Trichloroethene	ug/L	20	18.2	91	80-125	
Vinyl chloride	ug/L	20	17.4	87	65-130	
Xylene (Total)	ug/L	60	57.6	96	80-120	
1,2-Dichlorobenzene-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			97	80-120	
Toluene-d8 (S)	%			100	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

QC Batch: 871015
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440221021, 60440221022, 60440221023, 60440221024, 60440221025, 60440221026, 60440221027, 60440221028, 60440221029, 60440221030, 60440221031, 60440221032, 60440221033, 60440221034, 60440221035

METHOD BLANK: 3449613
Matrix: Water
Associated Lab Samples: 60440221021, 60440221022, 60440221023, 60440221024, 60440221025, 60440221026, 60440221027, 60440221028, 60440221029, 60440221030, 60440221031, 60440221032, 60440221033, 60440221034, 60440221035

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/28/23 00:33	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/28/23 00:33	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/28/23 00:33	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/28/23 00:33	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/28/23 00:33	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/28/23 00:33	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/28/23 00:33	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/28/23 00:33	
2-Hexanone	ug/L	ND	10.0	1.1	10/28/23 00:33	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/28/23 00:33	
Acetone	ug/L	ND	10.0	2.5	10/28/23 00:33	
Benzene	ug/L	ND	1.0	0.14	10/28/23 00:33	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/28/23 00:33	
Bromoform	ug/L	ND	1.0	0.68	10/28/23 00:33	
Bromomethane	ug/L	ND	5.0	0.46	10/28/23 00:33	
Carbon disulfide	ug/L	ND	5.0	0.98	10/28/23 00:33	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/28/23 00:33	
Chlorobenzene	ug/L	ND	1.0	0.089	10/28/23 00:33	
Chloroethane	ug/L	ND	1.0	0.37	10/28/23 00:33	
Chloroform	ug/L	ND	1.0	0.22	10/28/23 00:33	
Chloromethane	ug/L	ND	1.0	0.28	10/28/23 00:33	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/28/23 00:33	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/28/23 00:33	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/28/23 00:33	
Ethylbenzene	ug/L	ND	1.0	0.12	10/28/23 00:33	
Methylene Chloride	ug/L	ND	1.0	0.39	10/28/23 00:33	
Styrene	ug/L	ND	1.0	0.12	10/28/23 00:33	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/28/23 00:33	
Toluene	ug/L	ND	1.0	0.25	10/28/23 00:33	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/28/23 00:33	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/28/23 00:33	
Trichloroethene	ug/L	ND	1.0	0.21	10/28/23 00:33	
Vinyl chloride	ug/L	ND	1.0	0.17	10/28/23 00:33	
Xylene (Total)	ug/L	ND	3.0	0.28	10/28/23 00:33	
1,2-Dichlorobenzene-d4 (S)	%	96	80-120		10/28/23 00:33	
4-Bromofluorobenzene (S)	%	98	80-120		10/28/23 00:33	
Toluene-d8 (S)	%	103	80-120		10/28/23 00:33	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

LABORATORY CONTROL SAMPLE: 3449614

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.9	100	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	17.2	86	70-130	
1,1,2-Trichloroethane	ug/L	20	18.1	90	75-125	
1,1-Dichloroethane	ug/L	20	18.4	92	75-120	
1,1-Dichloroethene	ug/L	20	18.7	94	75-120	
1,2-Dichloroethane	ug/L	20	18.7	93	80-120	
1,2-Dichloropropane	ug/L	20	18.0	90	80-120	
2-Butanone (MEK)	ug/L	100	79.3	79	60-140	
2-Hexanone	ug/L	100	83.6	84	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	77.9	78	70-135	
Acetone	ug/L	100	95.7	96	25-185	
Benzene	ug/L	20	18.9	94	80-120	
Bromodichloromethane	ug/L	20	19.4	97	80-120	
Bromoform	ug/L	20	17.7	89	70-135	
Bromomethane	ug/L	20	14.6	73	50-145	
Carbon disulfide	ug/L	20	19.9	99	70-130	
Carbon tetrachloride	ug/L	20	19.7	99	80-130	
Chlorobenzene	ug/L	20	19.9	100	80-120	
Chloroethane	ug/L	20	18.5	93	60-135	
Chloroform	ug/L	20	19.6	98	75-125	
Chloromethane	ug/L	20	15.4	77	60-130	
cis-1,2-Dichloroethene	ug/L	20	19.0	95	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.2	91	75-125	
Dibromochloromethane	ug/L	20	19.4	97	80-120	
Ethylbenzene	ug/L	20	19.8	99	80-120	
Methylene Chloride	ug/L	20	20.8	104	70-130	
Styrene	ug/L	20	20.0	100	80-155	
Tetrachloroethene	ug/L	20	20.0	100	80-125	
Toluene	ug/L	20	19.2	96	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.8	94	75-125	
trans-1,3-Dichloropropene	ug/L	20	17.7	89	70-125	
Trichloroethene	ug/L	20	19.3	97	80-125	
Vinyl chloride	ug/L	20	17.6	88	65-130	
Xylene (Total)	ug/L	60	59.8	100	80-120	
1,2-Dichlorobenzene-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			96	80-120	
Toluene-d8 (S)	%			99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3449615 3449616

Parameter	Units	60440541001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	19.7	20.1	98	100	75-125	2	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	16.4	17.0	82	85	80-120	4	15	
1,1,2-Trichloroethane	ug/L	ND	20	20	17.3	17.5	87	87	80-120	1	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		3449615			3449616							
Parameter	Units	60440541001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	0.59J	20	20	19.5	18.4	95	89	75-120	6	15	
1,1-Dichloroethene	ug/L	0.46J	20	20	20.6	19.5	101	95	75-120	5	25	
1,2-Dichloroethane	ug/L	ND	20	20	19.0	18.1	95	91	80-120	5	25	
1,2-Dichloropropane	ug/L	ND	20	20	17.6	17.6	88	88	80-120	0	20	
2-Butanone (MEK)	ug/L	ND	100	100	58.8	55.4	59	55	50-155	6	25	
2-Hexanone	ug/L	ND	100	100	64.7	64.7	65	65	55-145	0	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	77.2	78.5	77	78	70-130	2	20	
Acetone	ug/L	ND	100	100	50.7	48.7	51	49	35-160	4	25	
Benzene	ug/L	ND	20	20	18.3	18.3	91	91	80-120	0	25	
Bromodichloromethane	ug/L	ND	20	20	19.3	18.8	96	94	80-120	2	15	
Bromoform	ug/L	ND	20	20	16.9	17.9	85	89	60-130	5	20	
Bromomethane	ug/L	ND	20	20	14.9	13.7	74	69	50-140	8	45	
Carbon disulfide	ug/L	ND	20	20	18.0	19.9	90	99	75-125	10	25	
Carbon tetrachloride	ug/L	ND	20	20	19.9	19.4	100	97	70-130	2	20	
Chlorobenzene	ug/L	ND	20	20	18.5	18.2	93	91	80-120	2	20	
Chloroethane	ug/L	ND	20	20	18.8	18.8	94	94	70-130	0	20	
Chloroform	ug/L	ND	20	20	19.6	19.0	97	94	75-120	3	20	
Chloromethane	ug/L	ND	20	20	14.6	15.7	73	78	45-145	7	30	
cis-1,2-Dichloroethene	ug/L	3.5	20	20	23.1	21.8	98	91	80-120	6	20	
cis-1,3-Dichloropropene	ug/L	ND	20	20	17.0	17.1	85	85	75-125	0	20	
Dibromochloromethane	ug/L	ND	20	20	18.4	17.7	92	89	75-125	4	20	
Ethylbenzene	ug/L	ND	20	20	19.3	18.4	97	92	80-120	5	25	
Methylene Chloride	ug/L	ND	20	20	17.7	19.7	88	99	70-140	11	25	
Styrene	ug/L	ND	20	20	18.5	19.2	92	96	80-120	4	30	
Tetrachloroethene	ug/L	ND	20	20	20.0	19.2	100	96	80-125	4	25	
Toluene	ug/L	ND	20	20	18.1	18.2	91	91	80-120	1	25	
trans-1,2-Dichloroethene	ug/L	ND	20	20	19.4	18.5	97	92	80-120	5	20	
trans-1,3-Dichloropropene	ug/L	ND	20	20	16.9	16.3	85	82	75-125	4	15	
Trichloroethene	ug/L	96.0	20	20	116	117	99	106	80-125	1	20	
Vinyl chloride	ug/L	ND	20	20	18.7	17.6	93	87	65-140	6	25	
Xylene (Total)	ug/L	ND	60	60	55.9	57.1	93	95	80-120	2	30	
1,2-Dichlorobenzene-d4 (S)	%						100	101	80-120			
4-Bromofluorobenzene (S)	%						96	100	80-120			
Toluene-d8 (S)	%						102	101	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.: 60440221

QC Batch: 871438
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440221033

METHOD BLANK: 3451731 Matrix: Water
Associated Lab Samples: 60440221033

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/31/23 19:18	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/31/23 19:18	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/31/23 19:18	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/31/23 19:18	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/31/23 19:18	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/31/23 19:18	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/31/23 19:18	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/31/23 19:18	
2-Hexanone	ug/L	ND	10.0	1.1	10/31/23 19:18	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/31/23 19:18	
Acetone	ug/L	ND	10.0	2.5	10/31/23 19:18	
Benzene	ug/L	ND	1.0	0.14	10/31/23 19:18	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/31/23 19:18	
Bromoform	ug/L	ND	1.0	0.68	10/31/23 19:18	
Bromomethane	ug/L	ND	5.0	0.46	10/31/23 19:18	
Carbon disulfide	ug/L	ND	5.0	0.98	10/31/23 19:18	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/31/23 19:18	
Chlorobenzene	ug/L	ND	1.0	0.089	10/31/23 19:18	
Chloroethane	ug/L	ND	1.0	0.37	10/31/23 19:18	
Chloroform	ug/L	ND	1.0	0.22	10/31/23 19:18	
Chloromethane	ug/L	ND	1.0	0.28	10/31/23 19:18	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/31/23 19:18	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/31/23 19:18	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/31/23 19:18	
Ethylbenzene	ug/L	ND	1.0	0.12	10/31/23 19:18	
Methylene Chloride	ug/L	ND	1.0	0.39	10/31/23 19:18	
Styrene	ug/L	ND	1.0	0.12	10/31/23 19:18	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/31/23 19:18	
Toluene	ug/L	ND	1.0	0.25	10/31/23 19:18	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/31/23 19:18	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/31/23 19:18	
Vinyl chloride	ug/L	ND	1.0	0.17	10/31/23 19:18	
Xylene (Total)	ug/L	ND	3.0	0.28	10/31/23 19:18	
1,2-Dichlorobenzene-d4 (S)	%	98	80-120		10/31/23 19:18	
4-Bromofluorobenzene (S)	%	101	80-120		10/31/23 19:18	
Toluene-d8 (S)	%	100	80-120		10/31/23 19:18	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

LABORATORY CONTROL SAMPLE: 3451732

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	18.5	92	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	18.8	94	70-130	
1,1,2-Trichloroethane	ug/L	20	14.3	72	75-125	L2
1,1-Dichloroethane	ug/L	20	18.3	91	75-120	
1,1-Dichloroethene	ug/L	20	19.7	99	75-120	
1,2-Dichloroethane	ug/L	20	17.9	90	80-120	
1,2-Dichloropropane	ug/L	20	20.0	100	80-120	
2-Butanone (MEK)	ug/L	100	81.8	82	60-140	
2-Hexanone	ug/L	100	96.3	96	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	98.7	99	70-135	
Acetone	ug/L	100	96.0	96	25-185	
Benzene	ug/L	20	19.7	98	80-120	
Bromodichloromethane	ug/L	20	17.4	87	80-120	
Bromoform	ug/L	20	18.1	91	70-135	
Bromomethane	ug/L	20	16.5	83	50-145	
Carbon disulfide	ug/L	20	20.0	100	70-130	
Carbon tetrachloride	ug/L	20	18.1	90	80-130	
Chlorobenzene	ug/L	20	19.4	97	80-120	
Chloroethane	ug/L	20	19.0	95	60-135	
Chloroform	ug/L	20	18.9	94	75-125	
Chloromethane	ug/L	20	18.8	94	60-130	
cis-1,2-Dichloroethene	ug/L	20	19.9	99	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.4	97	75-125	
Dibromochloromethane	ug/L	20	15.9	80	80-120	
Ethylbenzene	ug/L	20	19.1	95	80-120	
Methylene Chloride	ug/L	20	21.4	107	70-130	
Styrene	ug/L	20	19.5	97	80-155	
Tetrachloroethene	ug/L	20	20.1	100	80-125	
Toluene	ug/L	20	19.3	97	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.1	95	75-125	
trans-1,3-Dichloropropene	ug/L	20	15.2	76	70-125	
Vinyl chloride	ug/L	20	19.2	96	65-130	
Xylene (Total)	ug/L	60	57.1	95	80-120	
1,2-Dichlorobenzene-d4 (S)	%			97	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.: 60440221

QC Batch: 871440
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440221027

METHOD BLANK: 3451733 Matrix: Water
Associated Lab Samples: 60440221027

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Trichloroethene	ug/L	ND	1.0	0.21	10/31/23 18:46	
1,2-Dichlorobenzene-d4 (S)	%	98	80-120		10/31/23 18:46	
4-Bromofluorobenzene (S)	%	102	80-120		10/31/23 18:46	
Toluene-d8 (S)	%	105	80-120		10/31/23 18:46	

LABORATORY CONTROL SAMPLE: 3451734

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Trichloroethene	ug/L	20	17.5	88	80-125	
1,2-Dichlorobenzene-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			106	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

QC Batch: 871516
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440221015, 60440221017, 60440221018, 60440221019, 60440221026, 60440221028, 60440221030

METHOD BLANK: 3451975 Matrix: Water
Associated Lab Samples: 60440221015, 60440221017, 60440221018, 60440221019, 60440221026, 60440221028, 60440221030

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/31/23 19:18	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/31/23 19:18	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/31/23 19:18	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/31/23 19:18	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/31/23 19:18	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/31/23 19:18	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/31/23 19:18	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/31/23 19:18	
2-Hexanone	ug/L	ND	10.0	1.1	10/31/23 19:18	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/31/23 19:18	
Acetone	ug/L	ND	10.0	2.5	10/31/23 19:18	
Benzene	ug/L	ND	1.0	0.14	10/31/23 19:18	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/31/23 19:18	
Bromoform	ug/L	ND	1.0	0.68	10/31/23 19:18	
Bromomethane	ug/L	ND	5.0	0.46	10/31/23 19:18	
Carbon disulfide	ug/L	ND	5.0	0.98	10/31/23 19:18	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/31/23 19:18	
Chlorobenzene	ug/L	ND	1.0	0.089	10/31/23 19:18	
Chloroethane	ug/L	ND	1.0	0.37	10/31/23 19:18	
Chloroform	ug/L	ND	1.0	0.22	10/31/23 19:18	
Chloromethane	ug/L	ND	1.0	0.28	10/31/23 19:18	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/31/23 19:18	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/31/23 19:18	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/31/23 19:18	
Ethylbenzene	ug/L	ND	1.0	0.12	10/31/23 19:18	
Methylene Chloride	ug/L	ND	1.0	0.39	10/31/23 19:18	
Styrene	ug/L	ND	1.0	0.12	10/31/23 19:18	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/31/23 19:18	
Toluene	ug/L	ND	1.0	0.25	10/31/23 19:18	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/31/23 19:18	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/31/23 19:18	
Vinyl chloride	ug/L	ND	1.0	0.17	10/31/23 19:18	
Xylene (Total)	ug/L	ND	3.0	0.28	10/31/23 19:18	
1,2-Dichlorobenzene-d4 (S)	%	98	80-120		10/31/23 19:18	
4-Bromofluorobenzene (S)	%	101	80-120		10/31/23 19:18	
Toluene-d8 (S)	%	100	80-120		10/31/23 19:18	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

LABORATORY CONTROL SAMPLE: 3451976

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	18.5	92	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	18.8	94	70-130	
1,1,2-Trichloroethane	ug/L	20	14.3	72	75-125	L2
1,1-Dichloroethane	ug/L	20	18.3	91	75-120	
1,1-Dichloroethene	ug/L	20	19.7	99	75-120	
1,2-Dichloroethane	ug/L	20	17.9	90	80-120	
1,2-Dichloropropane	ug/L	20	20.0	100	80-120	
2-Butanone (MEK)	ug/L	100	81.8	82	60-140	
2-Hexanone	ug/L	100	96.3	96	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	98.7	99	70-135	
Acetone	ug/L	100	96.0	96	25-185	
Benzene	ug/L	20	19.7	98	80-120	
Bromodichloromethane	ug/L	20	17.4	87	80-120	
Bromoform	ug/L	20	18.1	91	70-135	
Bromomethane	ug/L	20	16.5	83	50-145	
Carbon disulfide	ug/L	20	20.0	100	70-130	
Carbon tetrachloride	ug/L	20	18.1	90	80-130	
Chlorobenzene	ug/L	20	19.4	97	80-120	
Chloroethane	ug/L	20	19.0	95	60-135	
Chloroform	ug/L	20	18.9	94	75-125	
Chloromethane	ug/L	20	18.8	94	60-130	
cis-1,2-Dichloroethene	ug/L	20	19.9	99	80-120	
cis-1,3-Dichloropropene	ug/L	20	19.4	97	75-125	
Dibromochloromethane	ug/L	20	15.9	80	80-120	
Ethylbenzene	ug/L	20	19.1	95	80-120	
Methylene Chloride	ug/L	20	21.4	107	70-130	
Styrene	ug/L	20	19.5	97	80-155	
Tetrachloroethene	ug/L	20	20.1	100	80-125	
Toluene	ug/L	20	19.3	97	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.1	95	75-125	
trans-1,3-Dichloropropene	ug/L	20	15.2	76	70-125	
Vinyl chloride	ug/L	20	19.2	96	65-130	
Xylene (Total)	ug/L	60	57.1	95	80-120	
1,2-Dichlorobenzene-d4 (S)	%			97	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.: 60440221

QC Batch: 871523
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440221007, 60440221010, 60440221016, 60440221025, 60440221034, 60440221035

METHOD BLANK: 3451982 Matrix: Water
Associated Lab Samples: 60440221007, 60440221010, 60440221016, 60440221025, 60440221034, 60440221035

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	11/01/23 07:43	
Trichloroethene	ug/L	ND	1.0	0.21	11/01/23 07:43	
1,2-Dichlorobenzene-d4 (S)	%	96	80-120		11/01/23 07:43	
4-Bromofluorobenzene (S)	%	98	80-120		11/01/23 07:43	
Toluene-d8 (S)	%	101	80-120		11/01/23 07:43	

LABORATORY CONTROL SAMPLE: 3451983

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
cis-1,2-Dichloroethene	ug/L	20	18.3	92	80-120	
Trichloroethene	ug/L	20	18.0	90	80-125	
1,2-Dichlorobenzene-d4 (S)	%			98	80-120	
4-Bromofluorobenzene (S)	%			101	80-120	
Toluene-d8 (S)	%			104	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

QC Batch: 872006
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440221029

METHOD BLANK: 3453737 Matrix: Water
Associated Lab Samples: 60440221029

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	11/03/23 11:07	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	11/03/23 11:07	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	11/03/23 11:07	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	11/03/23 11:07	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	11/03/23 11:07	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	11/03/23 11:07	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	11/03/23 11:07	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	11/03/23 11:07	
2-Hexanone	ug/L	ND	10.0	1.1	11/03/23 11:07	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	11/03/23 11:07	
Acetone	ug/L	ND	10.0	2.5	11/03/23 11:07	
Benzene	ug/L	ND	1.0	0.14	11/03/23 11:07	
Bromodichloromethane	ug/L	ND	1.0	0.16	11/03/23 11:07	
Bromoform	ug/L	ND	1.0	0.68	11/03/23 11:07	
Bromomethane	ug/L	ND	5.0	0.46	11/03/23 11:07	
Carbon disulfide	ug/L	ND	5.0	0.98	11/03/23 11:07	
Carbon tetrachloride	ug/L	ND	1.0	0.17	11/03/23 11:07	
Chlorobenzene	ug/L	ND	1.0	0.089	11/03/23 11:07	
Chloroethane	ug/L	ND	1.0	0.37	11/03/23 11:07	
Chloroform	ug/L	ND	1.0	0.22	11/03/23 11:07	
Chloromethane	ug/L	ND	1.0	0.28	11/03/23 11:07	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	11/03/23 11:07	
Dibromochloromethane	ug/L	ND	1.0	0.30	11/03/23 11:07	
Ethylbenzene	ug/L	ND	1.0	0.12	11/03/23 11:07	
Methylene Chloride	ug/L	ND	1.0	0.39	11/03/23 11:07	
Styrene	ug/L	ND	1.0	0.12	11/03/23 11:07	
Tetrachloroethene	ug/L	ND	1.0	0.33	11/03/23 11:07	
Toluene	ug/L	ND	1.0	0.25	11/03/23 11:07	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	11/03/23 11:07	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	11/03/23 11:07	
Vinyl chloride	ug/L	ND	1.0	0.17	11/03/23 11:07	
Xylene (Total)	ug/L	ND	3.0	0.28	11/03/23 11:07	
1,2-Dichlorobenzene-d4 (S)	%	100	80-120		11/03/23 11:07	
4-Bromofluorobenzene (S)	%	100	80-120		11/03/23 11:07	
Toluene-d8 (S)	%	95	80-120		11/03/23 11:07	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

LABORATORY CONTROL SAMPLE: 3453738

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.2	96	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	19.8	99	70-130	
1,1,2-Trichloroethane	ug/L	20	19.2	96	75-125	
1,1-Dichloroethane	ug/L	20	18.6	93	75-120	
1,1-Dichloroethene	ug/L	20	24.0	120	75-120	
1,2-Dichloroethane	ug/L	20	19.7	99	80-120	
1,2-Dichloropropane	ug/L	20	20.2	101	80-120	
2-Butanone (MEK)	ug/L	100	90.9	91	60-140	
2-Hexanone	ug/L	100	104	104	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	106	106	70-135	
Acetone	ug/L	100	118	118	25-185	
Benzene	ug/L	20	19.4	97	80-120	
Bromodichloromethane	ug/L	20	21.2	106	80-120	
Bromoform	ug/L	20	20.3	102	70-135	
Bromomethane	ug/L	20	17.3	86	50-145	
Carbon disulfide	ug/L	20	21.5	108	70-130	
Carbon tetrachloride	ug/L	20	20.1	101	80-130	
Chlorobenzene	ug/L	20	19.0	95	80-120	
Chloroethane	ug/L	20	24.0	120	60-135	
Chloroform	ug/L	20	19.4	97	75-125	
Chloromethane	ug/L	20	19.1	95	60-130	
cis-1,3-Dichloropropene	ug/L	20	20.9	104	75-125	
Dibromochloromethane	ug/L	20	20.3	102	80-120	
Ethylbenzene	ug/L	20	19.4	97	80-120	
Methylene Chloride	ug/L	20	20.2	101	70-130	
Styrene	ug/L	20	21.1	105	80-155	
Tetrachloroethene	ug/L	20	19.7	98	80-125	
Toluene	ug/L	20	18.5	92	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.0	95	75-125	
trans-1,3-Dichloropropene	ug/L	20	20.5	102	70-125	
Vinyl chloride	ug/L	20	22.6	113	65-130	
Xylene (Total)	ug/L	60	61.2	102	80-120	
1,2-Dichlorobenzene-d4 (S)	%			100	80-120	
4-Bromofluorobenzene (S)	%			104	80-120	
Toluene-d8 (S)	%			99	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

QC Batch: 870739
QC Batch Method: SM 4500-S-2 D
Analysis Method: SM 4500-S-2 D
Analysis Description: 4500S2D Sulfide, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440221024, 60440221025, 60440221026, 60440221027, 60440221028

METHOD BLANK: 3448675 Matrix: Water
Associated Lab Samples: 60440221024, 60440221025, 60440221026, 60440221027, 60440221028

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	0.016	10/26/23 14:50	

LABORATORY CONTROL SAMPLE: 3448676

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.5	0.54	109	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3448677 3448678

Parameter	Units	60440168006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide, Total	mg/L	ND	0.5	0.5	0.22	0.24	43	48	75-125	10	20	M1

SAMPLE DUPLICATE: 3448679

Parameter	Units	60440170003 Result	Dup Result	RPD	Max RPD	Qualifiers
Sulfide, Total	mg/L	ND	ND		20	

SAMPLE DUPLICATE: 3448680

Parameter	Units	60440197002 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.: 60440221

QC Batch: 870740
QC Batch Method: SM 4500-S-2 D
Analysis Method: SM 4500-S-2 D
Analysis Description: 4500S2D Sulfide, Total
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440221029, 60440221030

METHOD BLANK: 3448684 Matrix: Water
Associated Lab Samples: 60440221029, 60440221030

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Sulfide, Total	mg/L	ND	0.050	0.016	10/26/23 12:38	

LABORATORY CONTROL SAMPLE: 3448685

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Sulfide, Total	mg/L	0.5	0.54	107	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3448686 3448687

Parameter	Units	60440221029 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Sulfide, Total	mg/L	ND	0.5	0.5	0.45	0.44	90	89	75-125	1	20	

SAMPLE DUPLICATE: 3448688

Parameter	Units	60440221030 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.: 60440221

QC Batch: 872055
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440221024, 60440221025, 60440221026, 60440221027, 60440221028, 60440221029, 60440221030, 60440221031, 60440221032, 60440221033, 60440221034, 60440221035

METHOD BLANK: 3453965 Matrix: Water
Associated Lab Samples: 60440221024, 60440221025, 60440221026, 60440221027, 60440221028, 60440221029, 60440221030, 60440221031, 60440221032, 60440221033, 60440221034, 60440221035

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.53	11/05/23 16:53	
Sulfate	mg/L	ND	1.0	0.55	11/05/23 16:53	

METHOD BLANK: 3455617 Matrix: Water
Associated Lab Samples: 60440221024, 60440221025, 60440221026, 60440221027, 60440221028, 60440221029, 60440221030, 60440221031, 60440221032, 60440221033, 60440221034, 60440221035

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.53	11/06/23 09:14	
Sulfate	mg/L	ND	1.0	0.55	11/06/23 09:14	

METHOD BLANK: 3456467 Matrix: Water
Associated Lab Samples: 60440221024, 60440221025, 60440221026, 60440221027, 60440221028, 60440221029, 60440221030, 60440221031, 60440221032, 60440221033, 60440221034, 60440221035

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.53	11/07/23 08:52	
Sulfate	mg/L	ND	1.0	0.55	11/07/23 08:52	

LABORATORY CONTROL SAMPLE: 3453966

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	99	90-110	
Sulfate	mg/L	5	5.1	102	90-110	

LABORATORY CONTROL SAMPLE: 3455618

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.0	99	90-110	
Sulfate	mg/L	5	5.1	102	90-110	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

LABORATORY CONTROL SAMPLE: 3456468

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	96	90-110	
Sulfate	mg/L	5	4.7	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3453967 3453968

Parameter	Units	60440221024 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	269	50	50	325	326	110	113	80-120	0	15	
Sulfate	mg/L	2.0	5	5	7.3	7.1	106	102	80-120	3	15	

MATRIX SPIKE SAMPLE: 3453969

Parameter	Units	60440221033 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	441	250	681	96	80-120	
Sulfate	mg/L	204	250	470	107	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

QC Batch: 870129
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440221024, 60440221025, 60440221026, 60440221027, 60440221028, 60440221029, 60440221030, 60440221031, 60440221032, 60440221033, 60440221034, 60440221035

METHOD BLANK: 3445599 Matrix: Water
Associated Lab Samples: 60440221024, 60440221025, 60440221026, 60440221027, 60440221028, 60440221029, 60440221030, 60440221031, 60440221032, 60440221033, 60440221034, 60440221035

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	0.069	10/20/23 16:00	
Nitrogen, Nitrite	mg/L	ND	0.10	0.069	10/20/23 16:00	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	0.069	10/20/23 16:00	

LABORATORY CONTROL SAMPLE: 3445600

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1	1.0	103	70-130	
Nitrogen, Nitrite	mg/L	1	1.1	107	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	2.1	105	90-110	

MATRIX SPIKE SAMPLE: 3445601

Parameter	Units	60440140003 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	26.6	20	29.2	13	70-130	
Nitrogen, Nitrite	mg/L	<2.0	20	ND	0	90-110	M1
Nitrogen, NO2 plus NO3	mg/L	26.6	40	29.2	6	90-110	M1

MATRIX SPIKE SAMPLE: 3445603

Parameter	Units	60440221025 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	ND	1	1.1	105	70-130	
Nitrogen, Nitrite	mg/L	ND	1	1.1	106	90-110	
Nitrogen, NO2 plus NO3	mg/L	ND	2	2.1	105	90-110	

SAMPLE DUPLICATE: 3445602

Parameter	Units	60440200001 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	3.1	3.1	0	20	
Nitrogen, Nitrite	mg/L	0.67	0.68	0	20	
Nitrogen, NO2 plus NO3	mg/L	3.8	3.8	0	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

QC Batch: 873295
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Total Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440221026, 60440221027

METHOD BLANK: 3458904 Matrix: Water
Associated Lab Samples: 60440221026, 60440221027

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	0.54	11/15/23 06:52	

LABORATORY CONTROL SAMPLE: 3458905

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.2	103	80-120	

MATRIX SPIKE SAMPLE: 3458906

Parameter	Units	60440158022 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	1.3	5	6.3	101	80-120	

SAMPLE DUPLICATE: 3458907

Parameter	Units	60440158022 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	1.3	ND		25	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

QC Batch: 873454 Analysis Method: SM 5310C
QC Batch Method: SM 5310C Analysis Description: 5310C Total Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440221024, 60440221025, 60440221028, 60440221029, 60440221030, 60440221031, 60440221032

METHOD BLANK: 3459487 Matrix: Water
Associated Lab Samples: 60440221024, 60440221025, 60440221028, 60440221029, 60440221030, 60440221031, 60440221032

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	0.54	11/17/23 21:22	

LABORATORY CONTROL SAMPLE: 3459488

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	5	5.2	104	80-120	

MATRIX SPIKE SAMPLE: 3459489

Parameter	Units	60440221024 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	ND	5	4.6	91	80-120	H1

SAMPLE DUPLICATE: 3459490

Parameter	Units	60440221028 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	0.68J	0.71J		25	H1

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

QC Batch: 873477
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Dissolved Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440221031, 60440221032

METHOD BLANK: 3459571 Matrix: Water
Associated Lab Samples: 60440221031, 60440221032

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dissolved Organic Carbon	mg/L	ND	1.0	0.54	11/17/23 14:06	

LABORATORY CONTROL SAMPLE: 3459572

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	5	5.1	103	80-120	

MATRIX SPIKE SAMPLE: 3459573

Parameter	Units	60439898011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	0.92J	5	5.9	100	80-120	H1

SAMPLE DUPLICATE: 3459574

Parameter	Units	60440028030 Result	Dup Result	RPD	Max RPD	Qualifiers
Dissolved Organic Carbon	mg/L	3.1	3.1	2	25	H1

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QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

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.

TNTC - Too Numerous To Count

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 306252

[1] The sample storage unit holding samples in Analytical Batch 306361 had a temperature excursion from 10/31 - 14:20 to 11/1 - 10:18.

Batch: 870457

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

Batch: 871014

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

Batch: 871440

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

Batch: 871523

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

ANALYTE QUALIFIERS

D3 Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

H1 Analysis conducted outside the EPA method holding time.

H3 Sample was received or analysis requested beyond the recognized method holding time.

L2 Analyte recovery in the laboratory control sample (LCS) was below QC limits. Results for this analyte in associated samples may be biased low.

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QUALIFIERS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

ANALYTE QUALIFIERS

M0	Matrix spike recovery and/or matrix spike duplicate recovery was outside laboratory control limits.
M1	Matrix spike recovery exceeded QC limits. Batch accepted based on laboratory control sample (LCS) recovery.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60440221024	**RW-69-202310**	AM20	305317		
60440221025	**MW-58R-202310**	AM20	305317		
60440221026	**MW-198-202310**	AM20	305317		
60440221027	**IW-73-202310**	AM20	305317		
60440221028	**ITMW-9-202310**	AM20	305317		
60440221029	**MW-95-202310**	AM20	305317		
60440221030	**MW-38-202310**	AM20	305317		
60440221024	**RW-69-202310**	RSK175	305951		
60440221025	**MW-58R-202310**	RSK175	305951		
60440221026	**MW-198-202310**	RSK175	305951		
60440221027	**IW-73-202310**	RSK175	305951		
60440221028	**ITMW-9-202310**	RSK175	305951		
60440221029	**MW-95-202310**	RSK175	306252		
60440221030	**MW-38-202310**	RSK175	305951		
60440221031	**TMW-22R-202310**	RSK175	305951		
60440221032	**MW-185-202310**	RSK175	305951		
60440221033	**MW-92-202310**	RSK175	305951		
60440221034	**TMW-24-202310**	RSK175	305951		
60440221035	**ITMW-19-202310**	RSK175	305951		
60440221031	**TMW-22R-202310**	Pace ENV-SOP-BTRO-0042	305046		
60440221032	**MW-185-202310**	Pace ENV-SOP-BTRO-0042	305046		
60440221024	**RW-69-202310**	EPA 3010	871145	EPA 6010	871167
60440221025	**MW-58R-202310**	EPA 3010	871145	EPA 6010	871167
60440221026	**MW-198-202310**	EPA 3010	871145	EPA 6010	871167
60440221027	**IW-73-202310**	EPA 3010	871145	EPA 6010	871167
60440221028	**ITMW-9-202310**	EPA 3010	871145	EPA 6010	871167
60440221029	**MW-95-202310**	EPA 3010	871145	EPA 6010	871167
60440221030	**MW-38-202310**	EPA 3010	871145	EPA 6010	871167
60440221031	**TMW-22R-202310**	EPA 3010	871145	EPA 6010	871167
60440221032	**MW-185-202310**	EPA 3010	871145	EPA 6010	871167
60440221033	**MW-92-202310**	EPA 3010	871145	EPA 6010	871167
60440221034	**TMW-24-202310**	EPA 3010	871145	EPA 6010	871167
60440221035	**ITMW-19-202310**	EPA 3010	871145	EPA 6010	871167
60440221001	**MW-202-202310**	EPA 5030B/8260	870457		
60440221001	**MW-202-202310**	EPA 5030B/8260	871014		
60440221002	**MW-205-202310**	EPA 5030B/8260	870457		
60440221002	**MW-205-202310**	EPA 5030B/8260	871014		
60440221003	**IW-77-202310**	EPA 5030B/8260	870457		
60440221003	**IW-77-202310**	EPA 5030B/8260	871014		
60440221004	**ITMW-10-202310**	EPA 5030B/8260	870457		
60440221004	**ITMW-10-202310**	EPA 5030B/8260	871014		

REPORT OF LABORATORY ANALYSIS

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

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60440221005	**MW-46R-202310**	EPA 5030B/8260	870457		
60440221005	**MW-46R-202310**	EPA 5030B/8260	871014		
60440221006	**MW-199-202310**	EPA 5030B/8260	871014		
60440221007	**MW-189-202310**	EPA 5030B/8260	871014		
60440221007	**MW-189-202310**	EPA 5030B/8260	871523		
60440221008	**MW-175-202310**	EPA 5030B/8260	871014		
60440221009	**VP-8-202310**	EPA 5030B/8260	871014		
60440221010	**MW-57R-202310**	EPA 5030B/8260	871014		
60440221010	**MW-57R-202310**	EPA 5030B/8260	871523		
60440221011	**MW-178-202310**	EPA 5030B/8260	871014		
60440221012	**MW-179-202310**	EPA 5030B/8260	871014		
60440221013	**VP-14-202310**	EPA 5030B/8260	871014		
60440221014	**VP-12-202310**	EPA 5030B/8260	871014		
60440221015	**MW-56R-202310**	EPA 5030B/8260	871014		
60440221015	**MW-56R-202310**	EPA 5030B/8260	871516		
60440221016	**ITMW-18-202310**	EPA 5030B/8260	871014		
60440221016	**ITMW-18-202310**	EPA 5030B/8260	871523		
60440221017	**MW-93-202310**	EPA 5030B/8260	871014		
60440221017	**MW-93-202310**	EPA 5030B/8260	871516		
60440221018	**ITMW-5-202310**	EPA 5030B/8260	871014		
60440221018	**ITMW-5-202310**	EPA 5030B/8260	871516		
60440221019	**ITMW-6-202310**	EPA 5030B/8260	871014		
60440221019	**ITMW-6-202310**	EPA 5030B/8260	871516		
60440221020	**TB-11-202310**	EPA 5030B/8260	871014		
60440221021	**TB-07-202310**	EPA 5030B/8260	871015		
60440221022	**TB-08-202310**	EPA 5030B/8260	871015		
60440221023	**EB-04-202310**	EPA 5030B/8260	871015		
60440221024	**RW-69-202310**	EPA 5030B/8260	871015		
60440221025	**MW-58R-202310**	EPA 5030B/8260	871015		
60440221025	**MW-58R-202310**	EPA 5030B/8260	871523		
60440221026	**MW-198-202310**	EPA 5030B/8260	871015		
60440221026	**MW-198-202310**	EPA 5030B/8260	871516		
60440221027	**IW-73-202310**	EPA 5030B/8260	871015		
60440221027	**IW-73-202310**	EPA 5030B/8260	871440		
60440221028	**ITMW-9-202310**	EPA 5030B/8260	871015		
60440221028	**ITMW-9-202310**	EPA 5030B/8260	871516		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60440221029	**MW-95-202310**	EPA 5030B/8260	871015		
60440221029	**MW-95-202310**	EPA 5030B/8260	872006		
60440221030	**MW-38-202310**	EPA 5030B/8260	871015		
60440221030	**MW-38-202310**	EPA 5030B/8260	871516		
60440221031	**TMW-22R-202310**	EPA 5030B/8260	871015		
60440221032	**MW-185-202310**	EPA 5030B/8260	871015		
60440221033	**MW-92-202310**	EPA 5030B/8260	871015		
60440221033	**MW-92-202310**	EPA 5030B/8260	871438		
60440221034	**TMW-24-202310**	EPA 5030B/8260	871015		
60440221034	**TMW-24-202310**	EPA 5030B/8260	871523		
60440221035	**ITMW-19-202310**	EPA 5030B/8260	871015		
60440221035	**ITMW-19-202310**	EPA 5030B/8260	871523		
60440221024	**RW-69-202310**	SM 4500-S-2 D	870739		
60440221025	**MW-58R-202310**	SM 4500-S-2 D	870739		
60440221026	**MW-198-202310**	SM 4500-S-2 D	870739		
60440221027	**IW-73-202310**	SM 4500-S-2 D	870739		
60440221028	**ITMW-9-202310**	SM 4500-S-2 D	870739		
60440221029	**MW-95-202310**	SM 4500-S-2 D	870740		
60440221030	**MW-38-202310**	SM 4500-S-2 D	870740		
60440221024	**RW-69-202310**	EPA 300.0	872055		
60440221025	**MW-58R-202310**	EPA 300.0	872055		
60440221026	**MW-198-202310**	EPA 300.0	872055		
60440221027	**IW-73-202310**	EPA 300.0	872055		
60440221028	**ITMW-9-202310**	EPA 300.0	872055		
60440221029	**MW-95-202310**	EPA 300.0	872055		
60440221030	**MW-38-202310**	EPA 300.0	872055		
60440221031	**TMW-22R-202310**	EPA 300.0	872055		
60440221032	**MW-185-202310**	EPA 300.0	872055		
60440221033	**MW-92-202310**	EPA 300.0	872055		
60440221034	**TMW-24-202310**	EPA 300.0	872055		
60440221035	**ITMW-19-202310**	EPA 300.0	872055		
60440221024	**RW-69-202310**	EPA 353.2	870129		
60440221025	**MW-58R-202310**	EPA 353.2	870129		
60440221026	**MW-198-202310**	EPA 353.2	870129		
60440221027	**IW-73-202310**	EPA 353.2	870129		
60440221028	**ITMW-9-202310**	EPA 353.2	870129		
60440221029	**MW-95-202310**	EPA 353.2	870129		
60440221030	**MW-38-202310**	EPA 353.2	870129		
60440221031	**TMW-22R-202310**	EPA 353.2	870129		
60440221032	**MW-185-202310**	EPA 353.2	870129		
60440221033	**MW-92-202310**	EPA 353.2	870129		
60440221034	**TMW-24-202310**	EPA 353.2	870129		

REPORT OF LABORATORY ANALYSIS

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440221

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60440221035	**ITMW-19-202310**	EPA 353.2	870129		
60440221024	**RW-69-202310**	SM 5310C	873454		
60440221025	**MW-58R-202310**	SM 5310C	873454		
60440221026	**MW-198-202310**	SM 5310C	873295		
60440221027	**IW-73-202310**	SM 5310C	873295		
60440221028	**ITMW-9-202310**	SM 5310C	873454		
60440221029	**MW-95-202310**	SM 5310C	873454		
60440221030	**MW-38-202310**	SM 5310C	873454		
60440221031	**TMW-22R-202310**	SM 5310C	873454		
60440221032	**MW-185-202310**	SM 5310C	873454		
60440221031	**TMW-22R-202310**	SM 5310C	873477		
60440221032	**MW-185-202310**	SM 5310C	873477		

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WO# : 60440221

60440221

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_Sample C		
	Revision: 2	Effective Date: 01/12/2022	Issued By: Lenexa

Client Name: Ramboll

Courier: FedEx ☐ UPS ☐ VIA ☑ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☐ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☐ No ☑

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

Packing Material: Bubble Wrap ☐ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: T298 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 1.2/2.2 **Corr. Factor** -0.3 **Corrected** 0.9/1.9 1.7

Temperature should be above freezing to 6°C 2.0

Date and initials of person examining contents: PM 10/20/23

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☑Yes ☐No ☐N/A	NO2NO3
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☐No ☑N/A	
Filtered volume received for dissolved tests?	☐Yes ☐No ☑N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☐No ☐N/A	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) **LOT#:** 671871606203	☑Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks: Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☐No	
Trip Blank present:	☑Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☐No ☑N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☐No ☑N/A	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: _____

Project Manager Review: _____ Date: _____

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 5

Section A Required Client Information:

Company:	Ramboll
Address:	10851 Mastin Blvd., Ste. 100
	Overland Park, KS 66210
Email To:	jzellmer@ramboll.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STD TAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	VOC ONLY

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-202-202310	WT	G	10-19-23	0915	—			3									X		
2	MW-205-202310	WT	G	10-19-23	1125	—			3									X		
3	IW-77-202310	WT	G	10-19-23	1134	—			3									X		
4	ITMW-10-202310	WT	G	10-19-23	1047	—			3									X		
5	MW-46R-202310	WT	G	10-19-23	1119	—			3									X		
6	MW-199-202310	WT	G	10-19-23	1125	—			3									X		
7	MW-189-202310	WT	G	10-19-23	1145	—			3									X		
8	MW-175-202310	WT	G	10-19-23	1155	—			3									X		
9	VP-8-202310	WT	G	10-19-23	1207	—			3									X		
10	MW-57R-202310	WT	G	10-19-23	1235	—			3									X		
11	MW-178-202310	WT	G	10-19-23	1238	—			3									X		
12	MW-179-202310	WT	G	10-19-23	1246	—			3									X		

Requested Analysis Filtered (Y/N)

6044021 Pace Project No./ Lab I.D.

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Ramboll	10-19-23	1800		10/20	0300	0.9	Y	Y	Y
							1.9			
							1.7			

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 10-19-23

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

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Section A Required Client Information:

Company:	Ramboll
Address:	10851 Mastin Blvd., Ste. 100
	Overland Park, KS 66210
Email To:	jZellmer@ramboll.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STD TAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	VOC ONLY

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

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

Valid Matrix Codes

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	VP-14-202310	WT	G	10-19-23	1256	—	—		3									X			
2	VP-12-202310	WT	G	10-19-23	1320	—	—		3									X			
3	MW-56R-202310	WT	G	10-19-23	1335	—	—		3									X			
4	ITMW-18-202310	WT	G	10-19-23	1355	—	—		3									X			
5	MW-93-202310	WT	G	10-19-23	1430	—	—		3									X			
6	ITMW-5-202310	WT	G	10-19-23	1545	—	—		3									X			
7	ITMW-6-202310	WT	G	10-19-23	1325	—	—		3									X			
8	TB-06-202310	WT	G	10-19-23	0700	—	—		2									X			
9	TB-07-202310	WT	G	10-19-23	0705	—	—		2									X			
10	TB-08-202310	WT	G	10-19-23	0706	—	—		2									X			
11	EB-04-202310	WT	G	10-19-23	1755	—	—		3									X			
12	JZ																				

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS
*VP-14: limited sample volume	JZ Ramboll	10-19-23		[signature] ASL	10/20	0300	0.9
							1.9
							1.7

SAMPLER NAME AND SIGNATURE				
PRINT Name of SAMPLER:	Jackie Zellmer			
SIGNATURE of SAMPLER:	[signature]	DATE Signed (MM/DD/YY):	10-19-23	

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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

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Address:	10851 Mastin Blvd., Ste. 100
	Overland Park, KS 66210
Email To:	jzellmer@ramboll.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STD TAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	MNA

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 3

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

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

Valid Matrix Codes

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

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	6010 Iron	300.0 Sulfate	4500 Sulfide	353.2 Nitrate+Nitrite, unpres.	5310 TOC	Dissolved Hydrogen, Bubblestrip	RSK175 Methane/Ethane/Ethene	RSK175 Acetylene	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	RW-69-202310	WT	G	10-19-23	0948	—	—		11										X	X	X	X	X	X	X	X	X		6044 0211
2	MW-58R-202310	WT	G	10-19-23	1000	—	—		11										X	X	X	X	X	X	X	X	X		
3	MW-198-202310	WT	G	10-19-23	1110	—	—		11										X	X	X	X	X	X	X	X	X		
4	IW-73-202310	WT	G	10-19-23	1308	—	—		11										X	X	X	X	X	X	X	X	X		
5	ITMW-9-202310	WT	G	10-19-23	1452	—	—		11										X	X	X	X	X	X	X	X	X		
6	MW-95-202310	WT	G	10-19-23	1416	—	—		11										X	X	X	X	X	X	X	X	X		
7	MW-38-202310	WT	G	10-19-23	1013	—	—		11										X	X	X	X	X	X	X	X	X		
8																													
9																													
10																													
11																													
12																													

Requested Analysis Filtered (Y/N)

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME
RSK 175 Methane/Ethane/Ethene+ Acetylene & Dissolved Hyrdrogen to Pace Baton Rouge	Ramboll	10-19-23	1800		10/20	0300

SAMPLE CONDITIONS

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
0.9	Y	Y	Y
1.9			
1.7			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 10-19-23

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

CHAIN-OF-CUSTODY / Analytical Request Document

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

Pace Analytical™ www.pacelabs.com

Section A Required Client Information:

Company:	Ramboll
Address:	10851 Mastin Blvd., Ste. 100
	Overland Park, KS 66210
Email To:	jzellmer@ramboll.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STDTAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	ISCR

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

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

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

ITEM #	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	6010 Iron	300.0 Sulfate	300.0 Chloride	353.2 Nitrate+Nitrite, unpres.	5310 TOC	5310 DOC (Lab Filtered)	RSK175 Methane/Ethane/Ethene	AM23G Volatile Fatty Acids	RSK175 Acetylene			Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	WT	G	10-19-23	0905	—			12										X	X	X	X	X	X	X	X					6044021 1
2	WT	G	10-19-23	0929	—			12										X	X	X	X	X	X	X	X	X				
3																														
4																														
5																														
6																														
7																														
8																														
9																														
10																														
11																														
12																														

Pace Project No./ Lab I.D. 6044021 1

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
RSK 175 Methane/Ethane/Ethene & VFAs to Pace Baton Rouge	Ramboll	10-19-23	1800		10/20	0300	0.9	X	X	X
							1.9			
							1.7			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER: DATE Signed (MM/DD/YY): 10-19-23

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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

Pace Analytical
www.pacelabs.com

CHAIN-OF-CUSTODY / Analytical Request Document

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Section A Required Client Information:

Company:	Ramboll
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	JZellmer@ramboll.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STD TAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	BASELINE

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 4

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

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

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	353.2 Nitrate+Nitrite unpres.	300.0 Sulfate	6010 Iron	RSK175 Methane/Ethane/Ethene	RSK175 Acetylene	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D. 60440211
1	MW-92-202310	WT	G	10-19-23	0925	—	—		8									X	X	X	X	X	X			
2	TMW-24-202310	WT	G	10-19-23	0904	—	—		8									X	X	X	X	X	X			
3	ITMW-19-202310	WT	G	10-19-23	1257	—	—		8									X	X	X	X	X	X			
4																										
5																										
6																										
7																										
8																										
9																										
10																										
11																										
12																										

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
RSK 175 Methane/Ethane/Ethene+ Acetylene to Pace Baton Rouge	Ramboll	10-19-23	1800	PASE	10/20	07:00	0.9	Y	Y	Y
							1.9			
							1.7			

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER: [signature] DATE Signed (MM/DD/YY): 10-19-23

Temp in °C | Received on Ice (Y/N) | Custody Sealed Cooler (Y/N) | Samples Intact (Y/N)

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

1/5

Client: Ramboll

Profile # 7444-1

Site:

Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	WT		3																													
2																																
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1C	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2C	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3C	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60440211

2/5

Client: Ramboll

Profile # 7444-1

Site:

Notes

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	WT		2																													
2			3																													
3																																
4																																
5																																
6																																
7																																
8		2																														
9																																
10																																
11			3																													
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1C	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2C	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3C	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60440211

3/5

Client: Ramboll

Profile # 7444-1

Site:

Notes VG9U=SS-39Air / VG9H=SS-316CSV / DG9H=VOC

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	WT	3	3		1								1								1		1				1					
2																																
3																																
4																																
5																																
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1C	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2C	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3C	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60440211

DC#_Title: ENV-FRM-LENE-0001_Sample Container Count
Revision: 3 | Effective Date: | Issued by: Lenexa

4/5 AG2U = DOC

Client: Ramboll

Profile # 7444

Site:

Notes VG9H = SI-39Air / OTHR = SI-39WET / DG9H = 8260

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	WT	3	3									1	1								1		1							2		
2	↓	↓	↓									↓	↓								↓		↓							↓		
3																																
4																																
5																																
6																																
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9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1C	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2C	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3C	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60440211

5/5

Client: Rambell

Profile # 7444

Site:

Notes VG9H: SI-GCSU / DG9H=8260

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	WT	3	3																		-		-									
2	↓	↓	↓																		↓		↓									
3																																
4																																
5																																
6																																
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11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1C	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2C	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3C	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number: 60440211

WO# : 20294140

20294140

Internal Transfer Chain of Custody

☐ Rush Multiplier_____X

☐ Samples Pre-Logged into eCOC

State Of Origin: AR

Cert. Needed: ☒ Yes ☐ No

Workorder: 60440221 Workorder Name: WHIRLPOOL FORT SMITH, AR

Owner Received Date: 10/20/2023 Results Requested By: 11/3/2023

Report To	Subcontract To
Jamie Church Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 314-838-7223	Pace Analytical Baton Rouge 7979 Innovation Park Drive Baton Rouge, LA 70820 Phone (225) 769-4900

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers: HCL	Other	Unpreserved				AM23G Volatile Fatty Acids	Dissolved Hydrogen-Bubblestrip	RSK 175 M/E/E + Acetylene	RSK 175 Methane/Ethane/Ethene									LAB USE ONLY
1	RW-69-202310	PS	10/19/2023 09:48	60440221024	Water	3		1					X	X										1
2	MW-58R-202310	PS	10/19/2023 10:00	60440221025	Water	3		1					X	X										2
3	MW-198-202310	PS	10/19/2023 11:10	60440221026	Water	3		1					X	X										3
4	IW-73-202310	PS	10/19/2023 13:08	60440221027	Water	3		1					X	X										4
5	ITMW-9-202310	PS	10/19/2023 14:52	60440221028	Water	3		1					X	X										5
6	MW-95-202310	PS	10/19/2023 14:16	60440221029	Water	3		1					X	X										6
7	MW-38-202310	PS	10/19/2023 16:13	60440221030	Water	3		1					X	X										7
8	TMW-22R-202310	PS	10/19/2023 09:05	60440221031	Water	3	2					X			X									8
9	MW-185-202310	PS	10/19/2023 09:29	60440221032	Water	3	2					X		X										9
10	MW-92-202310	PS	10/19/2023 09:25	60440221033	Water	3								X										10
11	TMW-24-202310	PS	10/19/2023 09:04	60440221034	Water	3								X										11
12	ITMW-19-202310	PS	10/19/2023 12:57	60440221035	Water	3								X										12

13 14 15 16 17 18 19

Transfers	Released By	Date/Time	Received By	Date/Time
1		10.20.23 1700		
2	FedEx	10/21/23 10.21		10/21/23 10.21
3				

Comments

Cooler Temperature on Receipt ____ °C	Custody Seal Y or N	Received on Ice Y or N	Samples Intact Y or N

***In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.

This chain of custody is considered complete as is since this information is available in the owner laboratory.

Pace

Sample Condition Upon Recie

Workorde

WO#: 20294140

PM: DRM Due Date: 11/06/23

CLIENT: BR-PACE LENX

7979 Innovation Park Dr. Baton Rouge, LA 70806

Cooler Inspected by/date: OSR 10/21/23

Means of receipt: ☐ Pace ☐ Client ☐ UPS ☑ FedEx ☐ Other: _____				
☑ Yes	☐ No		Were custody seals present on the cooler?	
☑ Yes	☐ No	☐ NA	If custody seals were present, were they intact and unbroken?	
Method: ☐ Temperature Blank ☑ Against Bottles IR Gun ID: DM016 IR Gun Correction Factor: 0 °C				
Cooler #1	Cooler Temp °C: 3.3	(Actual/True)	Samples on ice ☑ Yes ☐ No	pH Strip Lot #
Cooler #2	Cooler Temp °C: _____	(Actual/True)		
Cooler #3	Cooler Temp °C: _____	(Actual/True)	Method of coolant: ☑ Wet ☐ Ice Packs ☐ Dry Ice ☐ None	
Cooler #4	Cooler Temp °C: _____	(Actual/True)		
Tracking #: 6432 1393 8805				

☐ Yes	☑ No	☐ NA	Is a temperature blank present?	
☑ Yes	☐ No	☐ NA	Was a chain of custody (COC) recieved?	
☐ Yes	☐ No	☐ NA	Was the line and profile number listed on the COC?	
☑ Yes	☐ No	☐ NA	Were all coolers received at or below 6.0°C? If no, notify Project Manager notified via email.	
☑ Yes	☐ No		Were proper custody procedures (relinquished/received) followed?	
☐ Yes	☐ No	☑ NA	Is the sampler name and signature on the COC?	
☑ Yes	☐ No		Were sample IDs listed on the COC and all sample containers?	
☑ Yes	☐ No		Was collection date & time listed on the COC and all sample containers?	
☑ Yes	☐ No		Did all container label information (ID, date, time) agree with the COC?	
☑ Yes	☐ No		Were tests to be performed listed on the COC?	
☑ Yes	☐ No		Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?	
☐ Yes	☐ No		Was adequate sample volume available?	
☑ Yes	☐ No		Were all samples received within ½ the holding time or 48 hours, whichever comes first?	
☑ Yes	☐ No		Were all samples containers accounted for? (No missing / excess)	
☑ Yes	☐ No	☐ NA	Were VOA, 8015C (GRO/VPH), and RSK-175 samples free of bubbles > "pea size" (1/4" or 6mm in diameter) in any of the VOA vials?	
☐ Yes	☑ No	☐ NA	Trip blank present?	
☐ Yes	☐ No	☑ NA	Filtered volume received for dissolved tests? *If no, list affected sample(s) in comments below.*	
☐ Yes	☐ No	☑ NA	Were all metals/nutrient samples received at a pH of < 2?	If No, was preservative added? ☐ Yes ☐ No If added, record lots. Dispenser/pipette lot #: _____
☐ Yes	☐ No	☑ NA	Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?	HNO_3 _____ H_2SO_4 _____ NaOH _____ Date: _____ Time: _____

Comments:

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

October 25, 2023

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440289

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 20, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

Some analyses were subcontracted outside of the Pace Network. The test report from the external subcontractor is attached to this report in its entirety.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

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

Sincerely,



Jamie Church
jamie.church@pacelabs.com
314-838-7223
Project Manager

Enclosures

cc: Caroline Chavers, Ramboll US Consulting, Inc.
Kristen Drucquer, Ramboll US Consulting, Inc.
Jackie Zellmer, Ramboll

REPORT OF LABORATORY ANALYSIS

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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440289

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60440289001	**RW-69-202310**	Water	10/19/23 09:48	10/20/23 08:00
60440289002	**MW-58R-202310**	Water	10/19/23 10:00	10/20/23 08:00
60440289003	**MW-198-202310**	Water	10/19/23 11:10	10/20/23 08:00
60440289004	**IW-73-202310**	Water	10/19/23 13:08	10/20/23 08:00
60440289005	**ITMW-9-202310**	Water	10/19/23 14:52	10/20/23 08:00
60440289006	**MW-95-202310**	Water	10/19/23 14:16	10/20/23 08:00
60440289007	**MW-25R-202310**	Water	10/19/23 09:58	10/20/23 08:00
60440289008	**MW-38-202310**	Water	10/19/23 16:13	10/20/23 08:00

REPORT OF LABORATORY ANALYSIS

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PROJECT NARRATIVE

Project:
Pace Project No.:

Method:
Description:
Client:
Date:

This data package has been reviewed for quality and completeness and is approved for release.

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REPORT TO:
Name: David Meyer
Company: Ramboll
Address: 10851 Mastin Blvd, Suite 100
Overland Park, KS 66210
email: dmeyer@ramboll.com
Phone: 913-998-6963
Fax:

INVOICE TO: (For Invoices paid by a third party it is imperative that all information be provided)
Name:
Company:
Address:
email:
Phone:
Fax:

microbialinsights
10515 Research Dr
Knoxville, TN 37932
865-573-8188
www.microbe.com

Project Manager:
Project Name:
Project No.:
Purchase Order No.
Subcontract No.
MI Quote No.

Please Check One:
☐ More samples to follow
☒ No Additional Samples

Report Type: ☒ Standard (default) ☐ Microbial Insights Level III raw data(15% surcharge) ☐ Microbial Insights Level IV (25% surcharge) ☐ Comprehensive Interpretive(15%) ☐ Historical Interpretive (35%)
EDD type: ☒ Microbial Insights Standard (default) ☐ All other available EDDs (5% surcharge) Specify EDD Type:

Please contact us with any questions about the analyses or filling out the COC at (865) 573-8188 (9:00 am to 5:00 pm EST, M-F). After hours email: customerservice@microbe.com

Sample Information						Analyses						CENSUS: Please select the target organism/gene																				
MI ID (Laboratory Use Only)	Sample Name	Date Sampled	Time Sampled	Matrix	Total Number of Containers	PLFA	NGS	QuantArray Chlor	QuantArray Petro	QuantArray NSZD	QuantArray BGC	DHC (Dehalococcoides)	DHC Functional genes (bvc, tce, vcr)	DHBt (Dehalobacter)	DHG (Dehalogenimonas)	DSM (Desulfuromonas)	DSB (Desulfitobacterium)	EBAC (Total)	SRB (Sulfate Reducing Bacteria-APS)	MGN (Methanogens)	MOB (Methanotrophs)	SMMO	DNF (Dentrifiers-nirS and nirK)	AMO (ammonia oxidizing bacteria)	PM1 (MTBE aerobic)	RMO (Toluene Monooxygenase)	RDEG (Toluene Monooxygenase)	PHE (Phenol Hydroxylase)	NAH (Napthalene-aerobic)	BSSA (Toluene/Xylene-Anaerobic)	add. qPCR:	RNA (Expression Option)*	Other: VC reductase
060VJ1	RW-69-202310	10-19-23	0948									X	X																			X
2	MW-58R-202310	10-19-23	1000									X	X																			X
3	MW-98-202310	10-19-23	1110									X	X																			X
4	IW-73-202310	10-19-23	1308									X	X																			X
5	ITMW-9-202310	10-19-23	1452									X	X																			X
6	MW-95-202310	10-19-23	1416									X	X																			X
7	MW-25R-202310	10-19-23	0958									X	X																			X
8	MW-38-202310	10-19-23	1613									X	X																			X

Relinquished by: Date 10-19-23
Received by: Date 10/20/23

It is vital that chain of custody is filled out correctly & that all relative information is provided.
Failure to provide sufficient and/or correct information regarding reporting, invoicing & analyses requested information may result in delays for which MI will not be liable.

* additional cost and sample preservation are associated with RNA samples.

**Saturday delivery: See sampling protocol for alternate shipping address.

10515 Research Drive
Knoxville, TN 37932
Phone: (865) 573-8188
Fax: (865) 573-8133

Client: Jamie Church
Pace Analytical Labs
9608 Loiret Blvd
Lenexa, KS 66219

Phone:

Fax:

Identifier: 060UJ **Date Rec:** 10/20/2023 **Report Date:** 10/25/2023

Client Project #: **Client Project Name:**

Purchase Order #: WO# 60440289

Test results provided for: CENSUS

Reviewed By:



NOTICE: This report is intended only for the addressee shown above and may contain confidential or privileged information. If the recipient of this material is not the intended recipient or if you have received this in error, please notify Microbial Insights, Inc. immediately. The data and other information in this report represent only the sample(s) analyzed and are rendered upon condition that it is not to be reproduced without approval from Microbial Insights, Inc. Thank you for your cooperation.

Results relate only to the items tested and the sample(s) as received by the laboratory.

MICROBIAL INSIGHTS, INC.

10515 Research Dr., Knoxville, TN 37932
Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: **Pace Analytical Labs**
Project:

MI Project Number: **060UJ**
Date Received: 10/20/2023

Sample Information

Client Sample ID:		**RW-69-202310**	**MW-58R-202310**	**MW-198-202310**	**IW-73-202310**	**ITMW-9-202310**
Sample Date:		10/19/2023	10/19/2023	10/19/2023	10/19/2023	10/19/2023
Units:		cells/mL	cells/mL	cells/mL	cells/mL	cells/mL
Analyst/Reviewer:		AR/SK	AR/SK	AR/SK	AR/SK	AR/SK
Dechlorinating Bacteria						
Dehalococcoides	*DHC*	**1.80E+00**	<5.00E-01	<5.00E-01	**2.79E+01**	<5.00E-01
tceA Reductase	TCE	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<5.00E-01	<5.00E-01	<5.00E-01	**1.20E+00**	<5.00E-01
Vinyl Chloride Reductase	VCR	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01	<5.00E-01

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

MICROBIAL INSIGHTS, INC.

10515 Research Dr., Knoxville, TN 37932
Tel. (865) 573-8188 Fax. (865) 573-8133

CENSUS

Client: **Pace Analytical Labs**
Project:

MI Project Number: **060UJ**
Date Received: 10/20/2023

Sample Information

Client Sample ID:		**MW-95-202310**	**MW-25R-202310**	**MW-38-202310**
Sample Date:		10/19/2023	10/19/2023	10/19/2023
Units:		cells/mL	cells/mL	cells/mL
Analyst/Reviewer:		AR/SK	AR/SK	AR/SK
Dechlorinating Bacteria				
Dehalococcoides	*DHC*	<5.00E-01	<1.10E+00	<5.00E-01
tceA Reductase	TCE	<5.00E-01	<1.10E+00	<5.00E-01
BAV1 Vinyl Chloride Reductase	BVC	<5.00E-01	<1.10E+00	<5.00E-01
Vinyl Chloride Reductase	VCR	<5.00E-01	<1.10E+00	<5.00E-01

Legend:
NA = Not Analyzed NS = Not Sampled J = Estimated gene copies below PQL but above LQL I = Inhibited
< = Result not detected

Quality Assurance/Quality Control Data

Samples Received **10/20/2023**

Component	Date Prepared	Date Analyzed	Arrival Temperature	Positive Control	Extraction Blank	Negative Control
BVC	10/20/2023	10/25/2023	0 °C	104%	non-detect	non-detect
DHC	10/20/2023	10/25/2023	0 °C	107%	non-detect	non-detect
TCE	10/20/2023	10/25/2023	0 °C	103%	non-detect	non-detect
VCR	10/20/2023	10/25/2023	0 °C	100%	non-detect	non-detect

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

December 19, 2023

David Meyer
Ramboll US Consulting, Inc.
82 Corporate Woods
Overland Park, KS 66210

RE: Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Dear David Meyer:

Enclosed are the analytical results for sample(s) received by the laboratory on October 20, 2023. The results relate only to the samples included in this report. Results reported herein conform to the applicable TNI/NELAC Standards and the laboratory's Quality Manual, where applicable, unless otherwise noted in the body of the report.

The test results provided in this final report were generated by each of the following laboratories within the Pace Network:

- Pace Analytical Services - Baton Rouge
- Pace Analytical Services - Kansas City

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

Sincerely,



Jamie Church
jamie.church@pacelabs.com
314-838-7223
Project Manager

Enclosures

cc: Caroline Chavers, Ramboll US Consulting, Inc.
Kristen Drucquer, Ramboll US Consulting, Inc.
Jackie Zellmer, Ramboll

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CERTIFICATIONS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Pace Analytical Services Kansas
9608 Loiret Boulevard, Lenexa, KS 66219
Missouri Inorganic Drinking Water Certification #: 10090
Arkansas Drinking Water
Arkansas Certification #: 88-00679
Illinois Certification #: 2000302023-5
Iowa Certification #: 118
Kansas/NELAP Certification #: E-10116
Louisiana Certification #: 03055
Nevada Certification #: KS000212023-1
Oklahoma Certification #: 2022-057
Florida: Cert E871149 SEKS WET
Texas Certification #: T104704407-23-17
Utah Certification #: KS000212022-12
Illinois Certification #: 004592
Kansas Field Laboratory Accreditation: # E-92587
Missouri SEKS Micro Certification: 10070

Pace Analytical Services Baton Rouge
7979 Innovation Park Drive Ste A, Baton Rouge, LA 70820-7402
Louisiana Dept of Enviromental Quality (NELAC/LELAP): 01979
Florida Dept of Health (NELAC/FELAP): E87854
DoD ELAP (A2LA) #: 6429.01
Alabama DEM #: 41900
Alaska DEC-DW #: LA00024
Alaska DEC CS-LAP #: 21-001
Arkansas DEQ #: 88-0655
California ELAP #: 3063
Georgia DPD #: C050
Hawaii DOH State Laboratories Division
Illinois EPA #: 200048
Kansas DoHE #: E-10354
Kentucky DEP UST Branch #: 123054
Louisiana DOH #: LA036
Minnesota DOH #: 2233799
Mississippi State Dept of Health
Montana Department of Environmental Quality
Nebraska DHHS #: NE-OS-35.21
Nevada DCNR DEP #: LA00024
New York DOH #: 12149
North Carolina DEQ - WW & GW #: 618
North Dakota DEQ #: R195
Ohio EPA #: 87782
Oklahoma Dept of Environmental Quality #: 9403
Oregon ELAP #: 4168
Pennsylvania Dept of Environmental Protection #: 68-05973
South Carolina DHEC #: 73006001
Texas CEQ #: T104704178-23-15
Utah DOH #: LA00024
Virginia DCLS #: 6460215
Washington Dept of Ecology #: C929
Wisconsin DNR #: 399139510

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Lenexa, KS 66219
(913)599-5665

SAMPLE SUMMARY

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Lab ID	Sample ID	Matrix	Date Collected	Date Received
60440541001	**MW-187-202310**	Water	10/20/23 08:29	10/20/23 17:15
60440541002	**MW-182-202310**	Water	10/20/23 09:45	10/20/23 17:15
60440541003	**DUP-07-202310**	Water	10/20/23 09:45	10/20/23 17:15
60440541004	**TMW-27-202310**	Water	10/20/23 09:40	10/20/23 17:15
60440541005	**MW-188-202310**	Water	10/20/23 09:38	10/20/23 17:15
60440541006	**EB-05-202310**	Water	10/20/23 10:19	10/20/23 17:15
60440541007	**TMW-30-202310**	Water	10/20/23 10:30	10/20/23 17:15
60440541008	**DUP-06-202310**	Water	10/20/23 10:30	10/20/23 17:15
60440541009	**TB-09-202310**	Water	10/20/23 06:30	10/20/23 17:15
60440541010	**TB-10-202310**	Water	10/20/23 06:35	10/20/23 17:15
60440541011	**TMW-26-202310**	Water	10/20/23 08:16	10/20/23 17:15
60440541012	**MW-186-202310**	Water	10/20/23 08:15	10/20/23 17:15
60440541013	**TMW-25-202310**	Water	10/20/23 08:38	10/20/23 17:15
60440541014	**TMW-32-202310**	Water	10/20/23 09:25	10/20/23 17:15
60440541015	**TMW-16-202310**	Water	10/20/23 09:51	10/20/23 17:15

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Lenexa, KS 66219
(913)599-5665

SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
60440541001	**MW-187-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440541002	**MW-182-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440541003	**DUP-07-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440541004	**TMW-27-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440541005	**MW-188-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440541006	**EB-05-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440541007	**TMW-30-202310**	EPA 5030B/8260	AML	38	PASI-K
60440541008	**DUP-06-202310**	EPA 5030B/8260	AML	38	PASI-K
60440541009	**TB-09-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440541010	**TB-10-202310**	EPA 5030B/8260	PGH	38	PASI-K
60440541011	**TMW-26-202310**	RSK175	BDP	4	PASI-BR
		Pace ENV-SOP-BTRO-0042	LHM	10	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K
60440541012	**MW-186-202310**	RSK175	BDP	4	PASI-BR
		Pace ENV-SOP-BTRO-0042	LHM	10	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K
60440541013	**TMW-25-202310**	RSK175	BDP	4	PASI-BR
		Pace ENV-SOP-BTRO-0042	LHM	10	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K
60440541014	**TMW-32-202310**	RSK175	BDP	4	PASI-BR
		Pace ENV-SOP-BTRO-0042	LHM	10	PASI-BR
		EPA 6010	JXD	1	PASI-K

REPORT OF LABORATORY ANALYSIS

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

SAMPLE ANALYTE COUNT

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Lab ID	Sample ID	Method	Analysts	Analytes Reported	Laboratory
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K
60440541015	**TMW-16-202310**	RSK175	BDP	4	PASI-BR
		Pace ENV-SOP-BTRO-0042	LHM	10	PASI-BR
		EPA 6010	JXD	1	PASI-K
		EPA 5030B/8260	PGH	38	PASI-K
		EPA 300.0	MLD	2	PASI-K
		EPA 353.2	BMT	3	PASI-K
		SM 5310C	BMT	1	PASI-K
		SM 5310C	BMT	1	PASI-K

PASI-BR = Pace Analytical Services - Baton Rouge
PASI-K = Pace Analytical Services - Kansas City

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Method: **RSK175**
Description: BR RSK175 Headspace
Client: Ramboll_AR
Date: December 19, 2023

General Information:
5 samples were analyzed for RSK175 by Pace Analytical Services Baton Rouge. 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.

H3: Sample was received or analysis requested beyond the recognized method holding time.
- MW-186-202310 (Lab ID: 60440541012)
- TMW-16-202310 (Lab ID: 60440541015)
- TMW-25-202310 (Lab ID: 60440541013)
- TMW-26-202310 (Lab ID: 60440541011)
- TMW-32-202310 (Lab ID: 60440541014)

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: 309600

CH: The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
- MW-186-202310 (Lab ID: 60440541012)
  - Methane
- TMW-16-202310 (Lab ID: 60440541015)
  - Methane
- TMW-25-202310 (Lab ID: 60440541013)
  - Methane
- TMW-26-202310 (Lab ID: 60440541011)
  - Methane
- TMW-32-202310 (Lab ID: 60440541014)
  - Methane

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.

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Method: **RSK175**
Description: BR RSK175 Headspace
Client: Ramboll_AR
Date: December 19, 2023

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.: 60440541

Method: **Pace ENV-SOP-BTRO-0042**
Description: BR AM23G Low Level VFA
Client: Ramboll_AR
Date: December 19, 2023

General Information:
5 samples were analyzed for Pace ENV-SOP-BTRO-0042 by Pace Analytical Services Baton Rouge. 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.

H3: Sample was received or analysis requested beyond the recognized method holding time.
- MW-186-202310 (Lab ID: 60440541012)
- TMW-16-202310 (Lab ID: 60440541015)
- TMW-25-202310 (Lab ID: 60440541013)
- TMW-26-202310 (Lab ID: 60440541011)
- TMW-32-202310 (Lab ID: 60440541014)

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

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

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

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

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

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

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

Additional Comments:

Analyte Comments:

QC Batch: 309281

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
- MW-186-202310 (Lab ID: 60440541012)
  - Lactic Acid

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Method: **Pace ENV-SOP-BTRO-0042**
Description: BR AM23G Low Level VFA
Client: Ramboll_AR
Date: December 19, 2023

Analyte Comments:

QC Batch: 309281

D3: Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.

- TMW-16-202310 (Lab ID: 60440541015)
  - Lactic Acid
- TMW-25-202310 (Lab ID: 60440541013)
  - Lactic Acid
- TMW-26-202310 (Lab ID: 60440541011)
  - Lactic Acid
- TMW-32-202310 (Lab ID: 60440541014)
  - Lactic Acid

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- BLANK (Lab ID: 1480925)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- LCS (Lab ID: 1480926)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- MS (Lab ID: 1481064)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- MSD (Lab ID: 1481065)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- MW-186-202310 (Lab ID: 60440541012)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- TMW-16-202310 (Lab ID: 60440541015)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- TMW-25-202310 (Lab ID: 60440541013)
  - Hexanoic Acid
  - i-Hexanoic Acid

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Method: **Pace ENV-SOP-BTRO-0042**
Description: BR AM23G Low Level VFA
Client: Ramboll_AR
Date: December 19, 2023

Analyte Comments:

QC Batch: 309281

N2: The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

- TMW-25-202310 (Lab ID: 60440541013)
  - i-Pentanoic Acid
  - Pentanoic Acid
- TMW-26-202310 (Lab ID: 60440541011)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid
- TMW-32-202310 (Lab ID: 60440541014)
  - Hexanoic Acid
  - i-Hexanoic Acid
  - i-Pentanoic Acid
  - Pentanoic Acid

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PROJECT NARRATIVE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Method: **EPA 6010**
Description: 6010 MET ICP
Client: Ramboll_AR
Date: December 19, 2023

General Information:
5 samples were analyzed for EPA 6010 by Pace Analytical Services Kansas City. 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.

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.: 60440541

Method: **EPA 5030B/8260**
Description: 8260 MSV
Client: Ramboll_AR
Date: December 19, 2023

General Information:
15 samples were analyzed for EPA 5030B/8260 by Pace Analytical Services Kansas City. 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: 871440

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.: 60440541

Method: **EPA 300.0**
Description: 300.0 IC Anions 28 Days
Client: Ramboll_AR
Date: December 19, 2023

General Information:
5 samples were analyzed for EPA 300.0 by Pace Analytical Services Kansas City. 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.

Method Blank:
All analytes were below the report limit in the method blank, 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.: 60440541

Method: **EPA 353.2**
Description: 353.2 Nitrogen, NO2/NO3 unpres
Client: Ramboll_AR
Date: December 19, 2023

General Information:
5 samples were analyzed for EPA 353.2 by Pace Analytical Services Kansas City. 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.

H1: Analysis conducted outside the EPA method holding time.
- MW-186-202310 (Lab ID: 60440541012)
- TMW-16-202310 (Lab ID: 60440541015)
- TMW-25-202310 (Lab ID: 60440541013)
- TMW-26-202310 (Lab ID: 60440541011)
- TMW-32-202310 (Lab ID: 60440541014)

Method Blank:
All analytes were below the report limit in the method blank, 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.: 60440541

Method: **SM 5310C**
Description: 5310C TOC
Client: Ramboll_AR
Date: December 19, 2023

General Information:
5 samples were analyzed for SM 5310C by Pace Analytical Services Kansas City. 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.

Method Blank:
All analytes were below the report limit in the method blank, 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.: 60440541

Method: **SM 5310C**
Description: 5310C Diss. Organic Carbon LF
Client: Ramboll_AR
Date: December 19, 2023

General Information:
5 samples were analyzed for SM 5310C by Pace Analytical Services Kansas City. 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.

Method Blank:
All analytes were below the report limit in the method blank, 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:

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.: 60440541

Sample: MW-187-202310 **Lab ID: 60440541001** Collected: 10/20/23 08:29 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/28/23 01:27	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/28/23 01:27	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/28/23 01:27	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/28/23 01:27	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/28/23 01:27	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/28/23 01:27	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/28/23 01:27	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/28/23 01:27	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/28/23 01:27	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/28/23 01:27	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/28/23 01:27	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/28/23 01:27	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/28/23 01:27	124-48-1	
1,1-Dichloroethane	**0.59J**	ug/L	1.0	0.12	1		10/28/23 01:27	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/28/23 01:27	107-06-2	
1,1-Dichloroethene	**0.46J**	ug/L	1.0	0.22	1		10/28/23 01:27	75-35-4	
cis-1,2-Dichloroethene	**3.5**	ug/L	1.0	0.13	1		10/28/23 01:27	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/28/23 01:27	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/28/23 01:27	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/28/23 01:27	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/28/23 01:27	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/28/23 01:27	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/28/23 01:27	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/28/23 01:27	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/28/23 01:27	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/28/23 01:27	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/28/23 01:27	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/28/23 01:27	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/28/23 01:27	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/28/23 01:27	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/28/23 01:27	79-00-5	
Trichloroethene	**96.0**	ug/L	1.0	0.21	1		10/28/23 01:27	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/28/23 01:27	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/28/23 01:27	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		10/28/23 01:27	460-00-4	
Toluene-d8 (S)	103	%	80-120		1		10/28/23 01:27	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	101	%	80-120		1		10/28/23 01:27	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/28/23 01:27		

REPORT OF LABORATORY ANALYSIS

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: MW-182-202310 **Lab ID: 60440541002** Collected: 10/20/23 09:45 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/28/23 01:40	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/28/23 01:40	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/28/23 01:40	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/28/23 01:40	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/28/23 01:40	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/28/23 01:40	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/28/23 01:40	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/28/23 01:40	56-23-5	
Chlorobenzene	**4.9**	ug/L	1.0	0.089	1		10/28/23 01:40	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/28/23 01:40	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/28/23 01:40	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/28/23 01:40	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/28/23 01:40	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/28/23 01:40	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/28/23 01:40	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/28/23 01:40	75-35-4	
cis-1,2-Dichloroethene	**0.79J**	ug/L	1.0	0.13	1		10/28/23 01:40	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/28/23 01:40	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/28/23 01:40	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/28/23 01:40	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/28/23 01:40	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/28/23 01:40	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/28/23 01:40	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/28/23 01:40	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/28/23 01:40	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/28/23 01:40	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/28/23 01:40	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/28/23 01:40	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/28/23 01:40	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/28/23 01:40	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/28/23 01:40	79-00-5	
Trichloroethene	**16.4**	ug/L	1.0	0.21	1		10/28/23 01:40	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/28/23 01:40	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/28/23 01:40	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/28/23 01:40	460-00-4	
Toluene-d8 (S)	100	%	80-120		1		10/28/23 01:40	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/28/23 01:40	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/28/23 01:40		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: DUP-07-202310 **Lab ID: 60440541003** Collected: 10/20/23 09:45 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/28/23 01:54	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/28/23 01:54	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/28/23 01:54	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/28/23 01:54	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/28/23 01:54	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/28/23 01:54	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/28/23 01:54	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/28/23 01:54	56-23-5	
Chlorobenzene	**5.0**	ug/L	1.0	0.089	1		10/28/23 01:54	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/28/23 01:54	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/28/23 01:54	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/28/23 01:54	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/28/23 01:54	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/28/23 01:54	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/28/23 01:54	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/28/23 01:54	75-35-4	
cis-1,2-Dichloroethene	**0.88J**	ug/L	1.0	0.13	1		10/28/23 01:54	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/28/23 01:54	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/28/23 01:54	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/28/23 01:54	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/28/23 01:54	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/28/23 01:54	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/28/23 01:54	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/28/23 01:54	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/28/23 01:54	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/28/23 01:54	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/28/23 01:54	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/28/23 01:54	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/28/23 01:54	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/28/23 01:54	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/28/23 01:54	79-00-5	
Trichloroethene	**16.7**	ug/L	1.0	0.21	1		10/28/23 01:54	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/28/23 01:54	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/28/23 01:54	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		10/28/23 01:54	460-00-4	
Toluene-d8 (S)	101	%	80-120		1		10/28/23 01:54	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/28/23 01:54	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/28/23 01:54		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: TMW-27-202310 **Lab ID: 60440541004** Collected: 10/20/23 09:40 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/31/23 21:02	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/23 21:02	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/23 21:02	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/31/23 21:02	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/23 21:02	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/23 21:02	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/23 21:02	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/23 21:02	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/31/23 21:02	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/23 21:02	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/31/23 21:02	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/23 21:02	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/23 21:02	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/31/23 21:02	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/23 21:02	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/31/23 21:02	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/31/23 21:02	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/31/23 21:02	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/23 21:02	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/23 21:02	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/23 21:02	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/23 21:02	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/23 21:02	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/31/23 21:02	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/23 21:02	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/23 21:02	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/23 21:02	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/31/23 21:02	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/31/23 21:02	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/23 21:02	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/23 21:02	79-00-5	
Trichloroethene	**1.3**	ug/L	1.0	0.21	1		10/31/23 21:02	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/31/23 21:02	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/23 21:02	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		10/31/23 21:02	460-00-4	
Toluene-d8 (S)	106	%	80-120		1		10/31/23 21:02	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	96	%	80-120		1		10/31/23 21:02	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/23 21:02		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: MW-188-202310 **Lab ID: 60440541005** Collected: 10/20/23 09:38 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/31/23 21:15	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/23 21:15	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/23 21:15	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/31/23 21:15	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/23 21:15	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/23 21:15	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/23 21:15	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/23 21:15	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/31/23 21:15	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/23 21:15	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		10/31/23 21:15	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/23 21:15	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/23 21:15	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/31/23 21:15	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/23 21:15	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/31/23 21:15	75-35-4	
cis-1,2-Dichloroethene	**0.64J**	ug/L	1.0	0.13	1		10/31/23 21:15	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/31/23 21:15	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/23 21:15	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/23 21:15	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/23 21:15	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/23 21:15	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/23 21:15	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/31/23 21:15	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/23 21:15	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/23 21:15	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/23 21:15	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/31/23 21:15	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/31/23 21:15	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/23 21:15	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/23 21:15	79-00-5	
Trichloroethene	**7.3**	ug/L	1.0	0.21	1		10/31/23 21:15	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/31/23 21:15	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/23 21:15	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	102	%	80-120		1		10/31/23 21:15	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/31/23 21:15	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		10/31/23 21:15	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/23 21:15		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: EB-05-202310 **Lab ID: 60440541006** Collected: 10/20/23 10:19 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		10/31/23 21:29	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		10/31/23 21:29	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		10/31/23 21:29	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		10/31/23 21:29	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		10/31/23 21:29	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		10/31/23 21:29	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		10/31/23 21:29	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		10/31/23 21:29	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		10/31/23 21:29	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		10/31/23 21:29	75-00-3	
Chloroform	**0.39J**	ug/L	1.0	0.22	1		10/31/23 21:29	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		10/31/23 21:29	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		10/31/23 21:29	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		10/31/23 21:29	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		10/31/23 21:29	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		10/31/23 21:29	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		10/31/23 21:29	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		10/31/23 21:29	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		10/31/23 21:29	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		10/31/23 21:29	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		10/31/23 21:29	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		10/31/23 21:29	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		10/31/23 21:29	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		10/31/23 21:29	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		10/31/23 21:29	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		10/31/23 21:29	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		10/31/23 21:29	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		10/31/23 21:29	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		10/31/23 21:29	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		10/31/23 21:29	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		10/31/23 21:29	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		10/31/23 21:29	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		10/31/23 21:29	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		10/31/23 21:29	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		10/31/23 21:29	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		10/31/23 21:29	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		10/31/23 21:29	2199-69-1	
Preservation pH	**1.0**		0.10		1		10/31/23 21:29		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: TMW-30-202310 **Lab ID: 60440541007** Collected: 10/20/23 10:30 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		11/02/23 23:05	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/02/23 23:05	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/02/23 23:05	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/02/23 23:05	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/02/23 23:05	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/02/23 23:05	78-93-3	
Carbon disulfide	**1.3J**	ug/L	5.0	0.98	1		11/02/23 23:05	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/02/23 23:05	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/02/23 23:05	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/02/23 23:05	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/02/23 23:05	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/02/23 23:05	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/02/23 23:05	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/02/23 23:05	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/02/23 23:05	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/02/23 23:05	75-35-4	
cis-1,2-Dichloroethene	**3.4**	ug/L	1.0	0.13	1		11/02/23 23:05	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/02/23 23:05	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/02/23 23:05	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/02/23 23:05	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/02/23 23:05	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/02/23 23:05	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/02/23 23:05	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/02/23 23:05	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/02/23 23:05	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/02/23 23:05	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/02/23 23:05	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/02/23 23:05	127-18-4	
Toluene	**3.7**	ug/L	1.0	0.25	1		11/02/23 23:05	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/02/23 23:05	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/02/23 23:05	79-00-5	
Trichloroethene	**15.9**	ug/L	1.0	0.21	1		11/02/23 23:05	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/02/23 23:05	75-01-4	
Xylene (Total)	**0.59J**	ug/L	3.0	0.28	1		11/02/23 23:05	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	101	%	80-120		1		11/02/23 23:05	460-00-4	
Toluene-d8 (S)	99	%	80-120		1		11/02/23 23:05	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	100	%	80-120		1		11/02/23 23:05	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/02/23 23:05		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: DUP-06-202310 **Lab ID: 60440541008** Collected: 10/20/23 10:30 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		11/02/23 23:21	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/02/23 23:21	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/02/23 23:21	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/02/23 23:21	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/02/23 23:21	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/02/23 23:21	78-93-3	
Carbon disulfide	**1.3J**	ug/L	5.0	0.98	1		11/02/23 23:21	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/02/23 23:21	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/02/23 23:21	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/02/23 23:21	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/02/23 23:21	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/02/23 23:21	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/02/23 23:21	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/02/23 23:21	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/02/23 23:21	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/02/23 23:21	75-35-4	
cis-1,2-Dichloroethene	**3.8**	ug/L	1.0	0.13	1		11/02/23 23:21	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/02/23 23:21	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/02/23 23:21	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/02/23 23:21	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/02/23 23:21	10061-02-6	
Ethylbenzene	**0.16J**	ug/L	1.0	0.12	1		11/02/23 23:21	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/02/23 23:21	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/02/23 23:21	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/02/23 23:21	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/02/23 23:21	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/02/23 23:21	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/02/23 23:21	127-18-4	
Toluene	**3.2**	ug/L	1.0	0.25	1		11/02/23 23:21	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/02/23 23:21	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/02/23 23:21	79-00-5	
Trichloroethene	**19.3**	ug/L	1.0	0.21	1		11/02/23 23:21	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/02/23 23:21	75-01-4	
Xylene (Total)	**0.60J**	ug/L	3.0	0.28	1		11/02/23 23:21	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	97	%	80-120		1		11/02/23 23:21	460-00-4	
Toluene-d8 (S)	98	%	80-120		1		11/02/23 23:21	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		11/02/23 23:21	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/02/23 23:21		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: TB-09-202310 **Lab ID: 60440541009** Collected: 10/20/23 06:30 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		11/01/23 00:25	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/01/23 00:25	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/23 00:25	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/23 00:25	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/23 00:25	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/23 00:25	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/23 00:25	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/23 00:25	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/23 00:25	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/23 00:25	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/23 00:25	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/23 00:25	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/23 00:25	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/23 00:25	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/23 00:25	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/23 00:25	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		11/01/23 00:25	156-59-2	
trans-1,2-Dichloroethene	**0.42J**	ug/L	1.0	0.10	1		11/01/23 00:25	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/23 00:25	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/23 00:25	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/23 00:25	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/23 00:25	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/23 00:25	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/23 00:25	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/23 00:25	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/23 00:25	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/23 00:25	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/23 00:25	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/23 00:25	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/23 00:25	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/23 00:25	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		11/01/23 00:25	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/01/23 00:25	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/23 00:25	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		11/01/23 00:25	460-00-4	
Toluene-d8 (S)	102	%	80-120		1		11/01/23 00:25	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		11/01/23 00:25	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/23 00:25		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: TB-10-202310 **Lab ID: 60440541010** Collected: 10/20/23 06:35 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		11/01/23 00:39	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/01/23 00:39	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/23 00:39	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/23 00:39	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/23 00:39	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/23 00:39	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/23 00:39	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/23 00:39	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/23 00:39	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/23 00:39	75-00-3	
Chloroform	**0.22J**	ug/L	1.0	0.22	1		11/01/23 00:39	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/23 00:39	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/23 00:39	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/23 00:39	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/23 00:39	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/23 00:39	75-35-4	
cis-1,2-Dichloroethene	ND	ug/L	1.0	0.13	1		11/01/23 00:39	156-59-2	
trans-1,2-Dichloroethene	**0.44J**	ug/L	1.0	0.10	1		11/01/23 00:39	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/23 00:39	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/23 00:39	10061-01-5	
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/23 00:39	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/23 00:39	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/23 00:39	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/23 00:39	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/23 00:39	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/23 00:39	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/23 00:39	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/23 00:39	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/23 00:39	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/23 00:39	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/23 00:39	79-00-5	
Trichloroethene	ND	ug/L	1.0	0.21	1		11/01/23 00:39	79-01-6	
Vinyl chloride	ND	ug/L	1.0	0.17	1		11/01/23 00:39	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/23 00:39	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		11/01/23 00:39	460-00-4	
Toluene-d8 (S)	103	%	80-120		1		11/01/23 00:39	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		11/01/23 00:39	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/23 00:39		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: TMW-26-202310 **Lab ID: 60440541011** Collected: 10/20/23 08:16 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Ethane	ND	ug/L	5.0	0.90	1		12/08/23 17:14	74-84-0	H3
Ethene	**1.1J**	ug/L	5.0	0.79	1		12/08/23 17:14	74-85-1	H3
Methane	**1460**	ug/L	10.0	3.8	1		12/08/23 17:14	74-82-8	CH,H3
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	93	%.	70-130		1		12/08/23 17:14		
BR AM23G Low Level VFA	Analytical Method: Pace ENV-SOP-BTRO-0042 Pace Analytical Services - Baton Rouge								
Pentanoic Acid	ND	mg/L	5.0	0.56	10		11/28/23 00:19	109-52-4	H3,N2
Acetic Acid	ND	mg/L	5.0	1.2	10		11/28/23 00:19	64-19-7	H3
Butyric Acid	ND	mg/L	5.0	0.58	10		11/28/23 00:19	107-92-6	H3
Formic acid	ND	mg/L	5.0	0.55	10		11/28/23 00:19	64-18-6	H3
Hexanoic Acid	ND	mg/L	5.0	0.58	10		11/28/23 00:19	142-62-1	H3,N2
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		11/28/23 00:19	646-07-1	H3,N2
Lactic Acid	**4.5J**	mg/L	5.0	0.53	10		11/28/23 00:19	50-21-5	D3,H3
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		11/28/23 00:19	503-74-2	H3,N2
Propionic Acid	ND	mg/L	5.0	0.53	10		11/28/23 00:19	79-09-4	H3
Pyruvic Acid	**0.91J**	mg/L	5.0	0.60	10		11/28/23 00:19	127-17-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**11100**	ug/L	50.0	9.1	1	10/30/23 11:25	10/31/23 13:46	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		11/01/23 00:52	67-64-1	
Benzene	**0.15J**	ug/L	1.0	0.14	1		11/01/23 00:52	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/23 00:52	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/23 00:52	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/23 00:52	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/23 00:52	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/23 00:52	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/23 00:52	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/23 00:52	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/23 00:52	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/23 00:52	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/23 00:52	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/23 00:52	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/23 00:52	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/23 00:52	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/23 00:52	75-35-4	
cis-1,2-Dichloroethene	**0.75J**	ug/L	1.0	0.13	1		11/01/23 00:52	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/01/23 00:52	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/23 00:52	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/23 00:52	10061-01-5	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: TMW-26-202310 **Lab ID: 60440541011** Collected: 10/20/23 08:16 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/23 00:52	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/23 00:52	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/23 00:52	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/23 00:52	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/23 00:52	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/23 00:52	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/23 00:52	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/23 00:52	127-18-4	
Toluene	**2.0**	ug/L	1.0	0.25	1		11/01/23 00:52	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/23 00:52	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/23 00:52	79-00-5	
Trichloroethene	**37.2**	ug/L	1.0	0.21	1		11/01/23 00:52	79-01-6	
Vinyl chloride	**0.62J**	ug/L	1.0	0.17	1		11/01/23 00:52	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/23 00:52	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		11/01/23 00:52	460-00-4	
Toluene-d8 (S)	103	%	80-120		1		11/01/23 00:52	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		11/01/23 00:52	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/23 00:52		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**189**	mg/L	10.0	5.3	10		11/06/23 10:47	16887-00-6	
Sulfate	**4.7**	mg/L	1.0	0.55	1		11/06/23 10:34	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.069	1		10/26/23 09:26		H1
Nitrogen, Nitrate	ND	mg/L	0.10	0.069	1		10/26/23 09:26	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/26/23 09:26	14797-65-0	H1
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	**11.1**	mg/L	5.0	2.7	5		11/16/23 17:20	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**6.2**	mg/L	1.0	0.54	1		11/17/23 19:13		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: MW-186-202310 **Lab ID: 60440541012** Collected: 10/20/23 08:15 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Ethane	ND	ug/L	5.0	0.90	1		12/08/23 17:30	74-84-0	H3
Ethene	ND	ug/L	5.0	0.79	1		12/08/23 17:30	74-85-1	H3
Methane	**1320**	ug/L	10.0	3.8	1		12/08/23 17:30	74-82-8	CH,H3
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	93	%.	70-130		1		12/08/23 17:30		
BR AM23G Low Level VFA	Analytical Method: Pace ENV-SOP-BTRO-0042 Pace Analytical Services - Baton Rouge								
Pentanoic Acid	ND	mg/L	5.0	0.56	10		11/28/23 00:44	109-52-4	H3,N2
Acetic Acid	ND	mg/L	5.0	1.2	10		11/28/23 00:44	64-19-7	H3
Butyric Acid	ND	mg/L	5.0	0.58	10		11/28/23 00:44	107-92-6	H3
Formic acid	ND	mg/L	5.0	0.55	10		11/28/23 00:44	64-18-6	H3
Hexanoic Acid	ND	mg/L	5.0	0.58	10		11/28/23 00:44	142-62-1	H3,N2
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		11/28/23 00:44	646-07-1	H3,N2
Lactic Acid	**4.5J**	mg/L	5.0	0.53	10		11/28/23 00:44	50-21-5	D3,H3
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		11/28/23 00:44	503-74-2	H3,N2
Propionic Acid	ND	mg/L	5.0	0.53	10		11/28/23 00:44	79-09-4	H3
Pyruvic Acid	ND	mg/L	5.0	0.60	10		11/28/23 00:44	127-17-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**13800**	ug/L	50.0	9.1	1	10/30/23 11:25	10/31/23 13:48	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		11/01/23 01:06	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/01/23 01:06	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/23 01:06	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/23 01:06	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/23 01:06	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/23 01:06	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/23 01:06	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/23 01:06	56-23-5	
Chlorobenzene	ND	ug/L	1.0	0.089	1		11/01/23 01:06	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/23 01:06	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/23 01:06	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/23 01:06	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/23 01:06	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/23 01:06	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/23 01:06	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/23 01:06	75-35-4	
cis-1,2-Dichloroethene	**0.61J**	ug/L	1.0	0.13	1		11/01/23 01:06	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/01/23 01:06	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/23 01:06	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/23 01:06	10061-01-5	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: MW-186-202310 **Lab ID: 60440541012** Collected: 10/20/23 08:15 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/23 01:06	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/23 01:06	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/23 01:06	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/23 01:06	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/23 01:06	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/23 01:06	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/23 01:06	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/23 01:06	127-18-4	
Toluene	**0.76J**	ug/L	1.0	0.25	1		11/01/23 01:06	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/23 01:06	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/23 01:06	79-00-5	
Trichloroethene	**1.1**	ug/L	1.0	0.21	1		11/01/23 01:06	79-01-6	
Vinyl chloride	**0.59J**	ug/L	1.0	0.17	1		11/01/23 01:06	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/23 01:06	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	98	%	80-120		1		11/01/23 01:06	460-00-4	
Toluene-d8 (S)	105	%	80-120		1		11/01/23 01:06	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	97	%	80-120		1		11/01/23 01:06	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/23 01:06		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**126**	mg/L	10.0	5.3	10		11/06/23 11:14	16887-00-6	
Sulfate	**0.86J**	mg/L	1.0	0.55	1		11/06/23 11:00	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.069	1		10/26/23 09:24		H1
Nitrogen, Nitrate	ND	mg/L	0.10	0.069	1		10/26/23 09:24	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/26/23 09:24	14797-65-0	H1
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	**12.0**	mg/L	5.0	2.7	5		11/16/23 17:49	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**8.8**	mg/L	1.0	0.54	1		11/17/23 19:56		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: TMW-25-202310 **Lab ID: 60440541013** Collected: 10/20/23 08:38 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Ethane	ND	ug/L	5.0	0.90	1		12/08/23 17:45	74-84-0	H3
Ethene	ND	ug/L	5.0	0.79	1		12/08/23 17:45	74-85-1	H3
Methane	**333**	ug/L	10.0	3.8	1		12/08/23 17:45	74-82-8	CH,H3
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	104	%.	70-130		1		12/08/23 17:45		
BR AM23G Low Level VFA	Analytical Method: Pace ENV-SOP-BTRO-0042 Pace Analytical Services - Baton Rouge								
Pentanoic Acid	ND	mg/L	5.0	0.56	10		11/28/23 01:08	109-52-4	H3,N2
Acetic Acid	ND	mg/L	5.0	1.2	10		11/28/23 01:08	64-19-7	H3
Butyric Acid	ND	mg/L	5.0	0.58	10		11/28/23 01:08	107-92-6	H3
Formic acid	ND	mg/L	5.0	0.55	10		11/28/23 01:08	64-18-6	H3
Hexanoic Acid	ND	mg/L	5.0	0.58	10		11/28/23 01:08	142-62-1	H3,N2
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		11/28/23 01:08	646-07-1	H3,N2
Lactic Acid	**5.0J**	mg/L	5.0	0.53	10		11/28/23 01:08	50-21-5	D3,H3
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		11/28/23 01:08	503-74-2	H3,N2
Propionic Acid	ND	mg/L	5.0	0.53	10		11/28/23 01:08	79-09-4	H3
Pyruvic Acid	ND	mg/L	5.0	0.60	10		11/28/23 01:08	127-17-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**40400**	ug/L	50.0	9.1	1	10/30/23 11:25	10/31/23 13:50	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		11/01/23 01:33	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/01/23 01:33	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/23 01:33	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/23 01:33	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/23 01:33	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/23 01:33	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/23 01:33	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/23 01:33	56-23-5	
Chlorobenzene	**1.8**	ug/L	1.0	0.089	1		11/01/23 01:33	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/23 01:33	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/23 01:33	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/23 01:33	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/23 01:33	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/23 01:33	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/23 01:33	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/23 01:33	75-35-4	
cis-1,2-Dichloroethene	**0.80J**	ug/L	1.0	0.13	1		11/01/23 01:33	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/01/23 01:33	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/23 01:33	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/23 01:33	10061-01-5	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: TMW-25-202310 **Lab ID: 60440541013** Collected: 10/20/23 08:38 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/23 01:33	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/23 01:33	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/23 01:33	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/23 01:33	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/23 01:33	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/23 01:33	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/23 01:33	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/23 01:33	127-18-4	
Toluene	**1.9**	ug/L	1.0	0.25	1		11/01/23 01:33	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/23 01:33	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/23 01:33	79-00-5	
Trichloroethene	**3.4**	ug/L	1.0	0.21	1		11/01/23 01:33	79-01-6	
Vinyl chloride	**0.35J**	ug/L	1.0	0.17	1		11/01/23 01:33	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/23 01:33	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	96	%	80-120		1		11/01/23 01:33	460-00-4	
Toluene-d8 (S)	104	%	80-120		1		11/01/23 01:33	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		11/01/23 01:33	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/23 01:33		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**94.6**	mg/L	10.0	5.3	10		11/06/23 12:07	16887-00-6	
Sulfate	**8.9**	mg/L	1.0	0.55	1		11/06/23 11:54	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	**0.21**	mg/L	0.10	0.069	1		10/26/23 09:27		H1
Nitrogen, Nitrate	**0.21**	mg/L	0.10	0.069	1		10/26/23 09:27	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/26/23 09:27	14797-65-0	H1
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	**3.8**	mg/L	1.0	0.54	1		11/16/23 18:03	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**5.3**	mg/L	1.0	0.54	1		11/17/23 20:10		

REPORT OF LABORATORY ANALYSIS

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(913)599-5665

ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: TMW-32-202310 **Lab ID: 60440541014** Collected: 10/20/23 09:25 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Ethane	ND	ug/L	5.0	0.90	1		12/08/23 18:01	74-84-0	H3
Ethene	ND	ug/L	5.0	0.79	1		12/08/23 18:01	74-85-1	H3
Methane	**167**	ug/L	10.0	3.8	1		12/08/23 18:01	74-82-8	CH,H3
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	87	%.	70-130		1		12/08/23 18:01		
BR AM23G Low Level VFA	Analytical Method: Pace ENV-SOP-BTRO-0042 Pace Analytical Services - Baton Rouge								
Pentanoic Acid	ND	mg/L	5.0	0.56	10		11/28/23 01:33	109-52-4	H3,N2
Acetic Acid	ND	mg/L	5.0	1.2	10		11/28/23 01:33	64-19-7	H3
Butyric Acid	ND	mg/L	5.0	0.58	10		11/28/23 01:33	107-92-6	H3
Formic acid	ND	mg/L	5.0	0.55	10		11/28/23 01:33	64-18-6	H3
Hexanoic Acid	ND	mg/L	5.0	0.58	10		11/28/23 01:33	142-62-1	H3,N2
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		11/28/23 01:33	646-07-1	H3,N2
Lactic Acid	**3.9J**	mg/L	5.0	0.53	10		11/28/23 01:33	50-21-5	D3,H3
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		11/28/23 01:33	503-74-2	H3,N2
Propionic Acid	ND	mg/L	5.0	0.53	10		11/28/23 01:33	79-09-4	H3
Pyruvic Acid	ND	mg/L	5.0	0.60	10		11/28/23 01:33	127-17-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**6710**	ug/L	50.0	9.1	1	10/30/23 11:25	10/31/23 13:52	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		11/01/23 01:19	67-64-1	
Benzene	ND	ug/L	1.0	0.14	1		11/01/23 01:19	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/23 01:19	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/23 01:19	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/23 01:19	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/23 01:19	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/23 01:19	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/23 01:19	56-23-5	
Chlorobenzene	**1.1**	ug/L	1.0	0.089	1		11/01/23 01:19	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/23 01:19	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/23 01:19	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/23 01:19	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/23 01:19	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/23 01:19	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/23 01:19	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/23 01:19	75-35-4	
cis-1,2-Dichloroethene	**5.3**	ug/L	1.0	0.13	1		11/01/23 01:19	156-59-2	
trans-1,2-Dichloroethene	ND	ug/L	1.0	0.10	1		11/01/23 01:19	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/23 01:19	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/23 01:19	10061-01-5	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: TMW-32-202310 **Lab ID: 60440541014** Collected: 10/20/23 09:25 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/23 01:19	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/23 01:19	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/23 01:19	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/23 01:19	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/23 01:19	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/23 01:19	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/23 01:19	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/23 01:19	127-18-4	
Toluene	ND	ug/L	1.0	0.25	1		11/01/23 01:19	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/23 01:19	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/23 01:19	79-00-5	
Trichloroethene	**10.2**	ug/L	1.0	0.21	1		11/01/23 01:19	79-01-6	
Vinyl chloride	**0.38J**	ug/L	1.0	0.17	1		11/01/23 01:19	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/23 01:19	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	100	%	80-120		1		11/01/23 01:19	460-00-4	
Toluene-d8 (S)	103	%	80-120		1		11/01/23 01:19	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	98	%	80-120		1		11/01/23 01:19	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/23 01:19		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**69.6**	mg/L	10.0	5.3	10		11/06/23 12:34	16887-00-6	
Sulfate	**40.7**	mg/L	10.0	5.5	10		11/06/23 12:34	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.069	1		10/26/23 09:28		H1
Nitrogen, Nitrate	ND	mg/L	0.10	0.069	1		10/26/23 09:28	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/26/23 09:28	14797-65-0	H1
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	**0.92J**	mg/L	1.0	0.54	1		11/16/23 18:18	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**1.1**	mg/L	1.0	0.54	1		11/17/23 20:25		

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: TMW-16-202310 **Lab ID: 60440541015** Collected: 10/20/23 09:51 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
BR RSK175 Headspace	Analytical Method: RSK175 Pace Analytical Services - Baton Rouge								
Ethane	**1.2J**	ug/L	5.0	0.90	1		12/08/23 18:17	74-84-0	H3
Ethene	**1.1J**	ug/L	5.0	0.79	1		12/08/23 18:17	74-85-1	H3
Methane	**1650**	ug/L	10.0	3.8	1		12/08/23 18:17	74-82-8	CH,H3
Surrogates									
Methyl-tert-butyl-ether-d3 (S)	100	%.	70-130		1		12/08/23 18:17		
BR AM23G Low Level VFA	Analytical Method: Pace ENV-SOP-BTRO-0042 Pace Analytical Services - Baton Rouge								
Pentanoic Acid	ND	mg/L	5.0	0.56	10		11/28/23 01:58	109-52-4	H3,N2
Acetic Acid	ND	mg/L	5.0	1.2	10		11/28/23 01:58	64-19-7	H3
Butyric Acid	ND	mg/L	5.0	0.58	10		11/28/23 01:58	107-92-6	H3
Formic acid	ND	mg/L	5.0	0.55	10		11/28/23 01:58	64-18-6	H3
Hexanoic Acid	**0.59J**	mg/L	5.0	0.58	10		11/28/23 01:58	142-62-1	H3,N2
i-Hexanoic Acid	ND	mg/L	5.0	0.56	10		11/28/23 01:58	646-07-1	H3,N2
Lactic Acid	**4.9J**	mg/L	5.0	0.53	10		11/28/23 01:58	50-21-5	D3,H3
i-Pentanoic Acid	ND	mg/L	5.0	0.61	10		11/28/23 01:58	503-74-2	H3,N2
Propionic Acid	ND	mg/L	5.0	0.53	10		11/28/23 01:58	79-09-4	H3
Pyruvic Acid	**0.84J**	mg/L	5.0	0.60	10		11/28/23 01:58	127-17-3	H3
6010 MET ICP	Analytical Method: EPA 6010 Preparation Method: EPA 3010 Pace Analytical Services - Kansas City								
Iron	**7190**	ug/L	50.0	9.1	1	10/30/23 11:25	10/31/23 13:54	7439-89-6	
8260 MSV	Analytical Method: EPA 5030B/8260 Pace Analytical Services - Kansas City								
Acetone	ND	ug/L	10.0	2.5	1		11/01/23 01:46	67-64-1	
Benzene	**0.25J**	ug/L	1.0	0.14	1		11/01/23 01:46	71-43-2	
Bromodichloromethane	ND	ug/L	1.0	0.16	1		11/01/23 01:46	75-27-4	
Bromoform	ND	ug/L	1.0	0.68	1		11/01/23 01:46	75-25-2	
Bromomethane	ND	ug/L	5.0	0.46	1		11/01/23 01:46	74-83-9	
2-Butanone (MEK)	ND	ug/L	10.0	0.98	1		11/01/23 01:46	78-93-3	
Carbon disulfide	ND	ug/L	5.0	0.98	1		11/01/23 01:46	75-15-0	
Carbon tetrachloride	ND	ug/L	1.0	0.17	1		11/01/23 01:46	56-23-5	
Chlorobenzene	**0.11J**	ug/L	1.0	0.089	1		11/01/23 01:46	108-90-7	
Chloroethane	ND	ug/L	1.0	0.37	1		11/01/23 01:46	75-00-3	
Chloroform	ND	ug/L	1.0	0.22	1		11/01/23 01:46	67-66-3	
Chloromethane	ND	ug/L	1.0	0.28	1		11/01/23 01:46	74-87-3	
Dibromochloromethane	ND	ug/L	1.0	0.30	1		11/01/23 01:46	124-48-1	
1,1-Dichloroethane	ND	ug/L	1.0	0.12	1		11/01/23 01:46	75-34-3	
1,2-Dichloroethane	ND	ug/L	1.0	0.21	1		11/01/23 01:46	107-06-2	
1,1-Dichloroethene	ND	ug/L	1.0	0.22	1		11/01/23 01:46	75-35-4	
cis-1,2-Dichloroethene	**0.67J**	ug/L	1.0	0.13	1		11/01/23 01:46	156-59-2	
trans-1,2-Dichloroethene	**0.10J**	ug/L	1.0	0.10	1		11/01/23 01:46	156-60-5	
1,2-Dichloropropane	ND	ug/L	1.0	0.14	1		11/01/23 01:46	78-87-5	
cis-1,3-Dichloropropene	ND	ug/L	1.0	0.078	1		11/01/23 01:46	10061-01-5	

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ANALYTICAL RESULTS

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Sample: TMW-16-202310 **Lab ID: 60440541015** Collected: 10/20/23 09:51 Received: 10/20/23 17:15 Matrix: Water

Parameters	Results	Units	Report Limit	MDL	DF	Prepared	Analyzed	CAS No.	Qual
8260 MSV	Analytical Method: EPA 5030B/8260								
	Pace Analytical Services - Kansas City								
trans-1,3-Dichloropropene	ND	ug/L	1.0	0.18	1		11/01/23 01:46	10061-02-6	
Ethylbenzene	ND	ug/L	1.0	0.12	1		11/01/23 01:46	100-41-4	
2-Hexanone	ND	ug/L	10.0	1.1	1		11/01/23 01:46	591-78-6	
Methylene Chloride	ND	ug/L	1.0	0.39	1		11/01/23 01:46	75-09-2	
4-Methyl-2-pentanone (MIBK)	ND	ug/L	10.0	0.74	1		11/01/23 01:46	108-10-1	
Styrene	ND	ug/L	1.0	0.12	1		11/01/23 01:46	100-42-5	
1,1,2,2-Tetrachloroethane	ND	ug/L	1.0	0.15	1		11/01/23 01:46	79-34-5	
Tetrachloroethene	ND	ug/L	1.0	0.33	1		11/01/23 01:46	127-18-4	
Toluene	**0.82J**	ug/L	1.0	0.25	1		11/01/23 01:46	108-88-3	
1,1,1-Trichloroethane	ND	ug/L	1.0	0.11	1		11/01/23 01:46	71-55-6	
1,1,2-Trichloroethane	ND	ug/L	1.0	0.14	1		11/01/23 01:46	79-00-5	
Trichloroethene	**31.8**	ug/L	1.0	0.21	1		11/01/23 01:46	79-01-6	
Vinyl chloride	**0.74J**	ug/L	1.0	0.17	1		11/01/23 01:46	75-01-4	
Xylene (Total)	ND	ug/L	3.0	0.28	1		11/01/23 01:46	1330-20-7	
Surrogates									
4-Bromofluorobenzene (S)	99	%	80-120		1		11/01/23 01:46	460-00-4	
Toluene-d8 (S)	106	%	80-120		1		11/01/23 01:46	2037-26-5	
1,2-Dichlorobenzene-d4 (S)	99	%	80-120		1		11/01/23 01:46	2199-69-1	
Preservation pH	**1.0**		0.10		1		11/01/23 01:46		
300.0 IC Anions 28 Days	Analytical Method: EPA 300.0								
	Pace Analytical Services - Kansas City								
Chloride	**211**	mg/L	20.0	10.5	20		11/07/23 10:32	16887-00-6	
Sulfate	**5.0**	mg/L	1.0	0.55	1		11/06/23 12:47	14808-79-8	
353.2 Nitrogen, NO2/NO3 unpres	Analytical Method: EPA 353.2								
	Pace Analytical Services - Kansas City								
Nitrogen, NO2 plus NO3	ND	mg/L	0.10	0.069	1		10/26/23 09:29		H1
Nitrogen, Nitrate	ND	mg/L	0.10	0.069	1		10/26/23 09:29	14797-55-8	
Nitrogen, Nitrite	ND	mg/L	0.10	0.069	1		10/26/23 09:29	14797-65-0	H1
5310C TOC	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Total Organic Carbon	**12.8**	mg/L	5.0	2.7	5		11/16/23 19:01	7440-44-0	
5310C Diss. Organic Carbon LF	Analytical Method: SM 5310C								
	Pace Analytical Services - Kansas City								
Dissolved Organic Carbon	**6.7**	mg/L	1.0	0.54	1		11/17/23 20:39		

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

QC Batch: 309600
QC Batch Method: RSK175
Analysis Method: RSK175
Analysis Description: BR RSK175W Headspace
Laboratory: Pace Analytical Services - Baton Rouge
Associated Lab Samples: 60440541011, 60440541012, 60440541013, 60440541014, 60440541015

METHOD BLANK: 1482369 Matrix: Water
Associated Lab Samples: 60440541011, 60440541012, 60440541013, 60440541014, 60440541015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Ethane	ug/L	ND	5.0	0.90	12/08/23 16:58	
Ethene	ug/L	ND	5.0	0.79	12/08/23 16:58	
Methane	ug/L	ND	10.0	3.8	12/08/23 16:58	
Methyl-tert-butyl-ether-d3 (S)	%.	92	70-130		12/08/23 16:58	

LABORATORY CONTROL SAMPLE: 1482370

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Ethane	ug/L	243	209	86	70-130	
Ethene	ug/L	296	246	83	70-130	
Methane	ug/L	945	868	92	70-130	
Methyl-tert-butyl-ether-d3 (S)	%.			92	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1482371 1482372

Parameter	Units	60442270017 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Ethane	ug/L	ND	243	243	217	209	89	86	70-130	4	20	H1
Ethene	ug/L	ND	296	296	258	252	87	85	70-130	2	20	H1
Methane	ug/L	ND	945	945	882	861	93	91	70-130	2	20	H1
Methyl-tert-butyl-ether-d3 (S)	%.						105	116	70-130			

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

QC Batch: 309281
QC Batch Method: Pace ENV-SOP-BTRO-0042
Analysis Method: Pace ENV-SOP-BTRO-0042
Analysis Description: BR AM23G Low Level VFA
Laboratory: Pace Analytical Services - Baton Rouge
Associated Lab Samples: 60440541011, 60440541012, 60440541013, 60440541014, 60440541015

METHOD BLANK: 1480925 Matrix: Water
Associated Lab Samples: 60440541011, 60440541012, 60440541013, 60440541014, 60440541015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Acetic Acid	mg/L	ND	0.50	0.12	11/27/23 23:30	
Butyric Acid	mg/L	ND	0.50	0.058	11/27/23 23:30	
Formic acid	mg/L	ND	0.50	0.055	11/27/23 23:30	
Hexanoic Acid	mg/L	ND	0.50	0.058	11/27/23 23:30	N2
i-Hexanoic Acid	mg/L	ND	0.50	0.056	11/27/23 23:30	N2
i-Pentanoic Acid	mg/L	ND	0.50	0.061	11/27/23 23:30	N2
Lactic Acid	mg/L	ND	0.50	0.053	11/27/23 23:30	
Pentanoic Acid	mg/L	ND	0.50	0.056	11/27/23 23:30	N2
Propionic Acid	mg/L	ND	0.50	0.053	11/27/23 23:30	
Pyruvic Acid	mg/L	ND	0.50	0.060	11/27/23 23:30	

LABORATORY CONTROL SAMPLE: 1480926

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Acetic Acid	mg/L	2	2.1	107	70-130	
Butyric Acid	mg/L	2	2.0	99	70-130	
Formic acid	mg/L	2	2.0	99	70-130	
Hexanoic Acid	mg/L	2	1.1	57	39-114	N2
i-Hexanoic Acid	mg/L	2	1.6	79	39-114	N2
i-Pentanoic Acid	mg/L	2	1.7	86	59-121	N2
Lactic Acid	mg/L	2	2.1	104	70-130	
Pentanoic Acid	mg/L	2	1.6	79	59-121	N2
Propionic Acid	mg/L	2	2.1	105	70-130	
Pyruvic Acid	mg/L	2	2.0	100	70-130	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1481064 1481065

Parameter	Units	20297306006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Acetic Acid	mg/L	2.7J	20	20	24.3	23.7	108	105	70-130	2	30	
Butyric Acid	mg/L	0.58U	20	20	20.2	19.2	101	96	70-130	5	30	
Formic acid	mg/L	0.55U	20	20	20.6	20.1	102	100	70-130	2	30	
Hexanoic Acid	mg/L	0.58U	20	20	10.3	10.4	51	51	39-114	0	30	N2
i-Hexanoic Acid	mg/L	0.56U	20	20	14.1	14.2	71	71	39-114	0	30	N2
i-Pentanoic Acid	mg/L	0.61U	20	20	17.1	18.1	85	91	59-121	6	30	N2
Lactic Acid	mg/L	1.1J	20	20	22.2	21.6	106	103	70-130	3	30	
Pentanoic Acid	mg/L	0.56U	20	20	14.9	14.8	75	74	59-121	1	30	N2

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 1481064 1481065

Parameter	Units	20297306006 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Propionic Acid	mg/L	0.53U	20	20	21.8	20.9	109	104	70-130	4	30	
Pyruvic Acid	mg/L	0.60U	20	20	19.9	19.2	99	96	70-130	3	30	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

QC Batch: 871197
QC Batch Method: EPA 3010
Analysis Method: EPA 6010
Analysis Description: 6010 MET
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440541011, 60440541012, 60440541013, 60440541014, 60440541015

METHOD BLANK: 3450674 Matrix: Water
Associated Lab Samples: 60440541011, 60440541012, 60440541013, 60440541014, 60440541015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Iron	ug/L	ND	50.0	9.1	10/31/23 12:58	

LABORATORY CONTROL SAMPLE: 3450675

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Iron	ug/L	10000	10100	101	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3450676 3450677

Parameter	Units	60440359001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Iron	ug/L	302	10000	10000	10500	10300	102	100	75-125	1	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

QC Batch: 871015
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440541001, 60440541002, 60440541003

METHOD BLANK: 3449613 Matrix: Water
Associated Lab Samples: 60440541001, 60440541002, 60440541003

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/28/23 00:33	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/28/23 00:33	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/28/23 00:33	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/28/23 00:33	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/28/23 00:33	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/28/23 00:33	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/28/23 00:33	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/28/23 00:33	
2-Hexanone	ug/L	ND	10.0	1.1	10/28/23 00:33	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/28/23 00:33	
Acetone	ug/L	ND	10.0	2.5	10/28/23 00:33	
Benzene	ug/L	ND	1.0	0.14	10/28/23 00:33	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/28/23 00:33	
Bromoform	ug/L	ND	1.0	0.68	10/28/23 00:33	
Bromomethane	ug/L	ND	5.0	0.46	10/28/23 00:33	
Carbon disulfide	ug/L	ND	5.0	0.98	10/28/23 00:33	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/28/23 00:33	
Chlorobenzene	ug/L	ND	1.0	0.089	10/28/23 00:33	
Chloroethane	ug/L	ND	1.0	0.37	10/28/23 00:33	
Chloroform	ug/L	ND	1.0	0.22	10/28/23 00:33	
Chloromethane	ug/L	ND	1.0	0.28	10/28/23 00:33	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/28/23 00:33	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/28/23 00:33	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/28/23 00:33	
Ethylbenzene	ug/L	ND	1.0	0.12	10/28/23 00:33	
Methylene Chloride	ug/L	ND	1.0	0.39	10/28/23 00:33	
Styrene	ug/L	ND	1.0	0.12	10/28/23 00:33	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/28/23 00:33	
Toluene	ug/L	ND	1.0	0.25	10/28/23 00:33	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/28/23 00:33	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/28/23 00:33	
Trichloroethene	ug/L	ND	1.0	0.21	10/28/23 00:33	
Vinyl chloride	ug/L	ND	1.0	0.17	10/28/23 00:33	
Xylene (Total)	ug/L	ND	3.0	0.28	10/28/23 00:33	
1,2-Dichlorobenzene-d4 (S)	%	96	80-120		10/28/23 00:33	
4-Bromofluorobenzene (S)	%	98	80-120		10/28/23 00:33	
Toluene-d8 (S)	%	103	80-120		10/28/23 00:33	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

LABORATORY CONTROL SAMPLE: 3449614

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.9	100	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	17.2	86	70-130	
1,1,2-Trichloroethane	ug/L	20	18.1	90	75-125	
1,1-Dichloroethane	ug/L	20	18.4	92	75-120	
1,1-Dichloroethene	ug/L	20	18.7	94	75-120	
1,2-Dichloroethane	ug/L	20	18.7	93	80-120	
1,2-Dichloropropane	ug/L	20	18.0	90	80-120	
2-Butanone (MEK)	ug/L	100	79.3	79	60-140	
2-Hexanone	ug/L	100	83.6	84	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	77.9	78	70-135	
Acetone	ug/L	100	95.7	96	25-185	
Benzene	ug/L	20	18.9	94	80-120	
Bromodichloromethane	ug/L	20	19.4	97	80-120	
Bromoform	ug/L	20	17.7	89	70-135	
Bromomethane	ug/L	20	14.6	73	50-145	
Carbon disulfide	ug/L	20	19.9	99	70-130	
Carbon tetrachloride	ug/L	20	19.7	99	80-130	
Chlorobenzene	ug/L	20	19.9	100	80-120	
Chloroethane	ug/L	20	18.5	93	60-135	
Chloroform	ug/L	20	19.6	98	75-125	
Chloromethane	ug/L	20	15.4	77	60-130	
cis-1,2-Dichloroethene	ug/L	20	19.0	95	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.2	91	75-125	
Dibromochloromethane	ug/L	20	19.4	97	80-120	
Ethylbenzene	ug/L	20	19.8	99	80-120	
Methylene Chloride	ug/L	20	20.8	104	70-130	
Styrene	ug/L	20	20.0	100	80-155	
Tetrachloroethene	ug/L	20	20.0	100	80-125	
Toluene	ug/L	20	19.2	96	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.8	94	75-125	
trans-1,3-Dichloropropene	ug/L	20	17.7	89	70-125	
Trichloroethene	ug/L	20	19.3	97	80-125	
Vinyl chloride	ug/L	20	17.6	88	65-130	
Xylene (Total)	ug/L	60	59.8	100	80-120	
1,2-Dichlorobenzene-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			96	80-120	
Toluene-d8 (S)	%			99	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3449615 3449616

Parameter	Units	60440541001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	20	20	19.7	20.1	98	100	75-125	2	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	20	20	16.4	17.0	82	85	80-120	4	15	
1,1,2-Trichloroethane	ug/L	ND	20	20	17.3	17.5	87	87	80-120	1	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

MATRIX SPIKE & MATRIX SPIKE DUPLICATE:		3449615			3449616							
Parameter	Units	60440541001 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	0.59J	20	20	19.5	18.4	95	89	75-120	6	15	
1,1-Dichloroethene	ug/L	0.46J	20	20	20.6	19.5	101	95	75-120	5	25	
1,2-Dichloroethane	ug/L	ND	20	20	19.0	18.1	95	91	80-120	5	25	
1,2-Dichloropropane	ug/L	ND	20	20	17.6	17.6	88	88	80-120	0	20	
2-Butanone (MEK)	ug/L	ND	100	100	58.8	55.4	59	55	50-155	6	25	
2-Hexanone	ug/L	ND	100	100	64.7	64.7	65	65	55-145	0	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	100	100	77.2	78.5	77	78	70-130	2	20	
Acetone	ug/L	ND	100	100	50.7	48.7	51	49	35-160	4	25	
Benzene	ug/L	ND	20	20	18.3	18.3	91	91	80-120	0	25	
Bromodichloromethane	ug/L	ND	20	20	19.3	18.8	96	94	80-120	2	15	
Bromoform	ug/L	ND	20	20	16.9	17.9	85	89	60-130	5	20	
Bromomethane	ug/L	ND	20	20	14.9	13.7	74	69	50-140	8	45	
Carbon disulfide	ug/L	ND	20	20	18.0	19.9	90	99	75-125	10	25	
Carbon tetrachloride	ug/L	ND	20	20	19.9	19.4	100	97	70-130	2	20	
Chlorobenzene	ug/L	ND	20	20	18.5	18.2	93	91	80-120	2	20	
Chloroethane	ug/L	ND	20	20	18.8	18.8	94	94	70-130	0	20	
Chloroform	ug/L	ND	20	20	19.6	19.0	97	94	75-120	3	20	
Chloromethane	ug/L	ND	20	20	14.6	15.7	73	78	45-145	7	30	
cis-1,2-Dichloroethene	ug/L	3.5	20	20	23.1	21.8	98	91	80-120	6	20	
cis-1,3-Dichloropropene	ug/L	ND	20	20	17.0	17.1	85	85	75-125	0	20	
Dibromochloromethane	ug/L	ND	20	20	18.4	17.7	92	89	75-125	4	20	
Ethylbenzene	ug/L	ND	20	20	19.3	18.4	97	92	80-120	5	25	
Methylene Chloride	ug/L	ND	20	20	17.7	19.7	88	99	70-140	11	25	
Styrene	ug/L	ND	20	20	18.5	19.2	92	96	80-120	4	30	
Tetrachloroethene	ug/L	ND	20	20	20.0	19.2	100	96	80-125	4	25	
Toluene	ug/L	ND	20	20	18.1	18.2	91	91	80-120	1	25	
trans-1,2-Dichloroethene	ug/L	ND	20	20	19.4	18.5	97	92	80-120	5	20	
trans-1,3-Dichloropropene	ug/L	ND	20	20	16.9	16.3	85	82	75-125	4	15	
Trichloroethene	ug/L	96.0	20	20	116	117	99	106	80-125	1	20	
Vinyl chloride	ug/L	ND	20	20	18.7	17.6	93	87	65-140	6	25	
Xylene (Total)	ug/L	ND	60	60	55.9	57.1	93	95	80-120	2	30	
1,2-Dichlorobenzene-d4 (S)	%						100	101	80-120			
4-Bromofluorobenzene (S)	%						96	100	80-120			
Toluene-d8 (S)	%						102	101	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.: 60440541

QC Batch: 871440
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440541004, 60440541005, 60440541006

METHOD BLANK: 3451733 Matrix: Water
Associated Lab Samples: 60440541004, 60440541005, 60440541006

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	10/31/23 18:46	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	10/31/23 18:46	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	10/31/23 18:46	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	10/31/23 18:46	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	10/31/23 18:46	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	10/31/23 18:46	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	10/31/23 18:46	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	10/31/23 18:46	
2-Hexanone	ug/L	ND	10.0	1.1	10/31/23 18:46	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	10/31/23 18:46	
Acetone	ug/L	ND	10.0	2.5	10/31/23 18:46	
Benzene	ug/L	ND	1.0	0.14	10/31/23 18:46	
Bromodichloromethane	ug/L	ND	1.0	0.16	10/31/23 18:46	
Bromoform	ug/L	ND	1.0	0.68	10/31/23 18:46	
Bromomethane	ug/L	ND	5.0	0.46	10/31/23 18:46	
Carbon disulfide	ug/L	ND	5.0	0.98	10/31/23 18:46	
Carbon tetrachloride	ug/L	ND	1.0	0.17	10/31/23 18:46	
Chlorobenzene	ug/L	ND	1.0	0.089	10/31/23 18:46	
Chloroethane	ug/L	ND	1.0	0.37	10/31/23 18:46	
Chloroform	ug/L	ND	1.0	0.22	10/31/23 18:46	
Chloromethane	ug/L	ND	1.0	0.28	10/31/23 18:46	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	10/31/23 18:46	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	10/31/23 18:46	
Dibromochloromethane	ug/L	ND	1.0	0.30	10/31/23 18:46	
Ethylbenzene	ug/L	ND	1.0	0.12	10/31/23 18:46	
Methylene Chloride	ug/L	ND	1.0	0.39	10/31/23 18:46	
Styrene	ug/L	ND	1.0	0.12	10/31/23 18:46	
Tetrachloroethene	ug/L	ND	1.0	0.33	10/31/23 18:46	
Toluene	ug/L	ND	1.0	0.25	10/31/23 18:46	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	10/31/23 18:46	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	10/31/23 18:46	
Trichloroethene	ug/L	ND	1.0	0.21	10/31/23 18:46	
Vinyl chloride	ug/L	ND	1.0	0.17	10/31/23 18:46	
Xylene (Total)	ug/L	ND	3.0	0.28	10/31/23 18:46	
1,2-Dichlorobenzene-d4 (S)	%	98	80-120		10/31/23 18:46	
4-Bromofluorobenzene (S)	%	102	80-120		10/31/23 18:46	
Toluene-d8 (S)	%	105	80-120		10/31/23 18:46	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

LABORATORY CONTROL SAMPLE: 3451734

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	18.0	90	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	16.1	80	70-130	
1,1,2-Trichloroethane	ug/L	20	17.2	86	75-125	
1,1-Dichloroethane	ug/L	20	18.4	92	75-120	
1,1-Dichloroethene	ug/L	20	17.7	88	75-120	
1,2-Dichloroethane	ug/L	20	16.4	82	80-120	
1,2-Dichloropropane	ug/L	20	18.0	90	80-120	
2-Butanone (MEK)	ug/L	100	65.4	65	60-140	
2-Hexanone	ug/L	100	75.5	75	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	72.8	73	70-135	
Acetone	ug/L	100	78.5	79	25-185	
Benzene	ug/L	20	19.2	96	80-120	
Bromodichloromethane	ug/L	20	18.4	92	80-120	
Bromoform	ug/L	20	16.6	83	70-135	
Bromomethane	ug/L	20	14.7	74	50-145	
Carbon disulfide	ug/L	20	19.3	97	70-130	
Carbon tetrachloride	ug/L	20	18.1	90	80-130	
Chlorobenzene	ug/L	20	19.5	97	80-120	
Chloroethane	ug/L	20	16.8	84	60-135	
Chloroform	ug/L	20	16.7	84	75-125	
Chloromethane	ug/L	20	20.0	100	60-130	
cis-1,2-Dichloroethene	ug/L	20	18.3	92	80-120	
cis-1,3-Dichloropropene	ug/L	20	16.6	83	75-125	
Dibromochloromethane	ug/L	20	18.0	90	80-120	
Ethylbenzene	ug/L	20	20.7	104	80-120	
Methylene Chloride	ug/L	20	20.4	102	70-130	
Styrene	ug/L	20	20.3	102	80-155	
Tetrachloroethene	ug/L	20	20.2	101	80-125	
Toluene	ug/L	20	20.5	102	80-120	
trans-1,2-Dichloroethene	ug/L	20	18.6	93	75-125	
trans-1,3-Dichloropropene	ug/L	20	16.9	84	70-125	
Trichloroethene	ug/L	20	17.5	88	80-125	
Vinyl chloride	ug/L	20	17.8	89	65-130	
Xylene (Total)	ug/L	60	62.1	104	80-120	
1,2-Dichlorobenzene-d4 (S)	%			97	80-120	
4-Bromofluorobenzene (S)	%			100	80-120	
Toluene-d8 (S)	%			106	80-120	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

QC Batch: 871441
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440541009, 60440541010, 60440541011, 60440541012, 60440541013, 60440541014, 60440541015

METHOD BLANK: 3451735 Matrix: Water
Associated Lab Samples: 60440541009, 60440541010, 60440541011, 60440541012, 60440541013, 60440541014, 60440541015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	11/01/23 00:12	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	11/01/23 00:12	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	11/01/23 00:12	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	11/01/23 00:12	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	11/01/23 00:12	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	11/01/23 00:12	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	11/01/23 00:12	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	11/01/23 00:12	
2-Hexanone	ug/L	ND	10.0	1.1	11/01/23 00:12	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	11/01/23 00:12	
Acetone	ug/L	ND	10.0	2.5	11/01/23 00:12	
Benzene	ug/L	ND	1.0	0.14	11/01/23 00:12	
Bromodichloromethane	ug/L	ND	1.0	0.16	11/01/23 00:12	
Bromoform	ug/L	ND	1.0	0.68	11/01/23 00:12	
Bromomethane	ug/L	ND	5.0	0.46	11/01/23 00:12	
Carbon disulfide	ug/L	ND	5.0	0.98	11/01/23 00:12	
Carbon tetrachloride	ug/L	ND	1.0	0.17	11/01/23 00:12	
Chlorobenzene	ug/L	ND	1.0	0.089	11/01/23 00:12	
Chloroethane	ug/L	ND	1.0	0.37	11/01/23 00:12	
Chloroform	ug/L	ND	1.0	0.22	11/01/23 00:12	
Chloromethane	ug/L	ND	1.0	0.28	11/01/23 00:12	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	11/01/23 00:12	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	11/01/23 00:12	
Dibromochloromethane	ug/L	ND	1.0	0.30	11/01/23 00:12	
Ethylbenzene	ug/L	ND	1.0	0.12	11/01/23 00:12	
Methylene Chloride	ug/L	ND	1.0	0.39	11/01/23 00:12	
Styrene	ug/L	ND	1.0	0.12	11/01/23 00:12	
Tetrachloroethene	ug/L	ND	1.0	0.33	11/01/23 00:12	
Toluene	ug/L	ND	1.0	0.25	11/01/23 00:12	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	11/01/23 00:12	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	11/01/23 00:12	
Trichloroethene	ug/L	ND	1.0	0.21	11/01/23 00:12	
Vinyl chloride	ug/L	ND	1.0	0.17	11/01/23 00:12	
Xylene (Total)	ug/L	ND	3.0	0.28	11/01/23 00:12	
1,2-Dichlorobenzene-d4 (S)	%	97	80-120		11/01/23 00:12	
4-Bromofluorobenzene (S)	%	100	80-120		11/01/23 00:12	
Toluene-d8 (S)	%	105	80-120		11/01/23 00:12	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

LABORATORY CONTROL SAMPLE: 3451736

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	19.5	98	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	18.3	91	70-130	
1,1,2-Trichloroethane	ug/L	20	18.6	93	75-125	
1,1-Dichloroethane	ug/L	20	19.8	99	75-120	
1,1-Dichloroethene	ug/L	20	18.0	90	75-120	
1,2-Dichloroethane	ug/L	20	18.6	93	80-120	
1,2-Dichloropropane	ug/L	20	19.8	99	80-120	
2-Butanone (MEK)	ug/L	100	78.6	79	60-140	
2-Hexanone	ug/L	100	89.3	89	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	90.1	90	70-135	
Acetone	ug/L	100	80.5	81	25-185	
Benzene	ug/L	20	20.0	100	80-120	
Bromodichloromethane	ug/L	20	19.9	99	80-120	
Bromoform	ug/L	20	18.2	91	70-135	
Bromomethane	ug/L	20	15.1	76	50-145	
Carbon disulfide	ug/L	20	19.7	99	70-130	
Carbon tetrachloride	ug/L	20	19.8	99	80-130	
Chlorobenzene	ug/L	20	20.2	101	80-120	
Chloroethane	ug/L	20	18.5	93	60-135	
Chloroform	ug/L	20	18.5	92	75-125	
Chloromethane	ug/L	20	19.5	97	60-130	
cis-1,2-Dichloroethene	ug/L	20	19.5	98	80-120	
cis-1,3-Dichloropropene	ug/L	20	18.1	91	75-125	
Dibromochloromethane	ug/L	20	19.6	98	80-120	
Ethylbenzene	ug/L	20	20.7	103	80-120	
Methylene Chloride	ug/L	20	22.3	112	70-130	
Styrene	ug/L	20	20.6	103	80-155	
Tetrachloroethene	ug/L	20	19.6	98	80-125	
Toluene	ug/L	20	21.0	105	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.7	98	75-125	
trans-1,3-Dichloropropene	ug/L	20	18.1	91	70-125	
Trichloroethene	ug/L	20	18.9	94	80-125	
Vinyl chloride	ug/L	20	18.6	93	65-130	
Xylene (Total)	ug/L	60	62.3	104	80-120	
1,2-Dichlorobenzene-d4 (S)	%			99	80-120	
4-Bromofluorobenzene (S)	%			98	80-120	
Toluene-d8 (S)	%			103	80-120	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3451802 3451803

Parameter	Units	60440877009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1,1-Trichloroethane	ug/L	ND	100	100	96.2	100	96	100	75-125	4	15	
1,1,2,2-Tetrachloroethane	ug/L	ND	100	100	82.2	85.5	82	86	80-120	4	15	
1,1,2-Trichloroethane	ug/L	ND	100	100	87.9	87.8	88	88	80-120	0	20	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3451802 3451803

Parameter	Units	60440877009 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
1,1-Dichloroethane	ug/L	ND	100	100	95.0	97.1	95	97	75-120	2	15	
1,1-Dichloroethene	ug/L	ND	100	100	91.5	93.2	92	93	75-120	2	25	
1,2-Dichloroethane	ug/L	ND	100	100	87.2	88.3	87	88	80-120	1	25	
1,2-Dichloropropane	ug/L	ND	100	100	95.0	94.3	95	94	80-120	1	20	
2-Butanone (MEK)	ug/L	ND	500	500	372	378	74	76	50-155	2	25	
2-Hexanone	ug/L	ND	500	500	417	401	83	80	55-145	4	20	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	500	500	404	408	81	82	70-130	1	20	
Acetone	ug/L	ND	500	500	386	393	77	79	35-160	2	25	
Benzene	ug/L	ND	100	100	101	101	101	101	80-120	0	25	
Bromodichloromethane	ug/L	ND	100	100	93.1	96.3	93	96	80-120	3	15	
Bromoform	ug/L	ND	100	100	88.5	88.8	88	89	60-130	0	20	
Bromomethane	ug/L	ND	100	100	66.3	80.9	66	81	50-140	20	45	
Carbon disulfide	ug/L	ND	100	100	99.2	97.8	99	98	75-125	1	25	
Carbon tetrachloride	ug/L	ND	100	100	97.6	98.4	98	98	70-130	1	20	
Chlorobenzene	ug/L	ND	100	100	97.5	98.8	97	99	80-120	1	20	
Chloroethane	ug/L	ND	100	100	90.0	90.5	90	90	70-130	1	20	
Chloroform	ug/L	ND	100	100	87.3	87.9	87	87	75-120	1	20	
Chloromethane	ug/L	ND	100	100	98.7	100	99	100	45-145	2	30	
cis-1,2-Dichloroethene	ug/L	77.1	100	100	171	173	94	96	80-120	1	20	
cis-1,3-Dichloropropene	ug/L	ND	100	100	83.1	86.3	83	86	75-125	4	20	
Dibromochloromethane	ug/L	ND	100	100	94.7	92.8	95	93	75-125	2	20	
Ethylbenzene	ug/L	ND	100	100	102	99.6	102	100	80-120	2	25	
Methylene Chloride	ug/L	ND	100	100	109	106	106	103	70-140	3	25	
Styrene	ug/L	ND	100	100	99.2	100	99	100	80-120	1	30	
Tetrachloroethene	ug/L	534	100	100	643	635	109	101	80-125	1	25	
Toluene	ug/L	ND	100	100	104	102	104	102	80-120	1	25	
trans-1,2-Dichloroethene	ug/L	7.9	100	100	105	105	97	97	80-120	0	20	
trans-1,3-Dichloropropene	ug/L	ND	100	100	84.1	84.0	84	84	75-125	0	15	
Trichloroethene	ug/L	76.3	100	100	166	169	90	93	80-125	1	20	
Vinyl chloride	ug/L	18.7	100	100	112	112	94	94	65-140	0	25	
Xylene (Total)	ug/L	ND	300	300	312	304	104	101	80-120	3	30	
1,2-Dichlorobenzene-d4 (S)	%						98	98	80-120			
4-Bromofluorobenzene (S)	%						101	99	80-120			
Toluene-d8 (S)	%						104	103	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.: 60440541

QC Batch: 871918
QC Batch Method: EPA 5030B/8260
Analysis Method: EPA 5030B/8260
Analysis Description: 8260 MSV Water 10 mL Purge
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440541007, 60440541008

METHOD BLANK: 3453368 Matrix: Water
Associated Lab Samples: 60440541007, 60440541008

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
1,1,1-Trichloroethane	ug/L	ND	1.0	0.11	11/02/23 21:46	
1,1,2,2-Tetrachloroethane	ug/L	ND	1.0	0.15	11/02/23 21:46	
1,1,2-Trichloroethane	ug/L	ND	1.0	0.14	11/02/23 21:46	
1,1-Dichloroethane	ug/L	ND	1.0	0.12	11/02/23 21:46	
1,1-Dichloroethene	ug/L	ND	1.0	0.22	11/02/23 21:46	
1,2-Dichloroethane	ug/L	ND	1.0	0.21	11/02/23 21:46	
1,2-Dichloropropane	ug/L	ND	1.0	0.14	11/02/23 21:46	
2-Butanone (MEK)	ug/L	ND	10.0	0.98	11/02/23 21:46	
2-Hexanone	ug/L	ND	10.0	1.1	11/02/23 21:46	
4-Methyl-2-pentanone (MIBK)	ug/L	ND	10.0	0.74	11/02/23 21:46	
Acetone	ug/L	ND	10.0	2.5	11/02/23 21:46	
Benzene	ug/L	ND	1.0	0.14	11/02/23 21:46	
Bromodichloromethane	ug/L	ND	1.0	0.16	11/02/23 21:46	
Bromoform	ug/L	ND	1.0	0.68	11/02/23 21:46	
Bromomethane	ug/L	ND	5.0	0.46	11/02/23 21:46	
Carbon disulfide	ug/L	ND	5.0	0.98	11/02/23 21:46	
Carbon tetrachloride	ug/L	ND	1.0	0.17	11/02/23 21:46	
Chlorobenzene	ug/L	ND	1.0	0.089	11/02/23 21:46	
Chloroethane	ug/L	ND	1.0	0.37	11/02/23 21:46	
Chloroform	ug/L	ND	1.0	0.22	11/02/23 21:46	
Chloromethane	ug/L	ND	1.0	0.28	11/02/23 21:46	
cis-1,2-Dichloroethene	ug/L	ND	1.0	0.13	11/02/23 21:46	
cis-1,3-Dichloropropene	ug/L	ND	1.0	0.078	11/02/23 21:46	
Dibromochloromethane	ug/L	ND	1.0	0.30	11/02/23 21:46	
Ethylbenzene	ug/L	ND	1.0	0.12	11/02/23 21:46	
Methylene Chloride	ug/L	ND	1.0	0.39	11/02/23 21:46	
Styrene	ug/L	ND	1.0	0.12	11/02/23 21:46	
Tetrachloroethene	ug/L	ND	1.0	0.33	11/02/23 21:46	
Toluene	ug/L	ND	1.0	0.25	11/02/23 21:46	
trans-1,2-Dichloroethene	ug/L	ND	1.0	0.10	11/02/23 21:46	
trans-1,3-Dichloropropene	ug/L	ND	1.0	0.18	11/02/23 21:46	
Trichloroethene	ug/L	ND	1.0	0.21	11/02/23 21:46	
Vinyl chloride	ug/L	ND	1.0	0.17	11/02/23 21:46	
Xylene (Total)	ug/L	ND	3.0	0.28	11/02/23 21:46	
1,2-Dichlorobenzene-d4 (S)	%	98	80-120		11/02/23 21:46	
4-Bromofluorobenzene (S)	%	101	80-120		11/02/23 21:46	
Toluene-d8 (S)	%	100	80-120		11/02/23 21:46	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

LABORATORY CONTROL SAMPLE: 3453369

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
1,1,1-Trichloroethane	ug/L	20	20.1	100	75-125	
1,1,2,2-Tetrachloroethane	ug/L	20	20.0	100	70-130	
1,1,2-Trichloroethane	ug/L	20	20.5	103	75-125	
1,1-Dichloroethane	ug/L	20	19.8	99	75-120	
1,1-Dichloroethene	ug/L	20	19.1	95	75-120	
1,2-Dichloroethane	ug/L	20	20.4	102	80-120	
1,2-Dichloropropane	ug/L	20	20.1	101	80-120	
2-Butanone (MEK)	ug/L	100	105	105	60-140	
2-Hexanone	ug/L	100	102	102	55-155	
4-Methyl-2-pentanone (MIBK)	ug/L	100	104	104	70-135	
Acetone	ug/L	100	94.7	95	25-185	
Benzene	ug/L	20	19.8	99	80-120	
Bromodichloromethane	ug/L	20	21.9	110	80-120	
Bromoform	ug/L	20	17.6	88	70-135	
Bromomethane	ug/L	20	18.7	93	50-145	
Carbon disulfide	ug/L	20	20.2	101	70-130	
Carbon tetrachloride	ug/L	20	19.5	98	80-130	
Chlorobenzene	ug/L	20	19.9	100	80-120	
Chloroethane	ug/L	20	18.6	93	60-135	
Chloroform	ug/L	20	20.4	102	75-125	
Chloromethane	ug/L	20	17.1	86	60-130	
cis-1,2-Dichloroethene	ug/L	20	20.5	103	80-120	
cis-1,3-Dichloropropene	ug/L	20	20.8	104	75-125	
Dibromochloromethane	ug/L	20	21.5	107	80-120	
Ethylbenzene	ug/L	20	19.6	98	80-120	
Methylene Chloride	ug/L	20	20.7	103	70-130	
Styrene	ug/L	20	20.5	103	80-155	
Tetrachloroethene	ug/L	20	20.0	100	80-125	
Toluene	ug/L	20	19.7	99	80-120	
trans-1,2-Dichloroethene	ug/L	20	19.4	97	75-125	
trans-1,3-Dichloropropene	ug/L	20	21.1	106	70-125	
Trichloroethene	ug/L	20	19.4	97	80-125	
Vinyl chloride	ug/L	20	17.8	89	65-130	
Xylene (Total)	ug/L	60	60.7	101	80-120	
1,2-Dichlorobenzene-d4 (S)	%			100	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.: 60440541

QC Batch: 872055
QC Batch Method: EPA 300.0
Analysis Method: EPA 300.0
Analysis Description: 300.0 IC Anions
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440541011, 60440541012, 60440541013, 60440541014, 60440541015

METHOD BLANK: 3453965 Matrix: Water
Associated Lab Samples: 60440541011, 60440541012, 60440541013, 60440541014, 60440541015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.53	11/05/23 16:53	
Sulfate	mg/L	ND	1.0	0.55	11/05/23 16:53	

METHOD BLANK: 3455617 Matrix: Water
Associated Lab Samples: 60440541011, 60440541012, 60440541013, 60440541014, 60440541015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.53	11/06/23 09:14	
Sulfate	mg/L	ND	1.0	0.55	11/06/23 09:14	

METHOD BLANK: 3456467 Matrix: Water
Associated Lab Samples: 60440541011, 60440541012, 60440541013, 60440541014, 60440541015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Chloride	mg/L	ND	1.0	0.53	11/07/23 08:52	
Sulfate	mg/L	ND	1.0	0.55	11/07/23 08:52	

LABORATORY CONTROL SAMPLE: 3453966

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.9	99	90-110	
Sulfate	mg/L	5	5.1	102	90-110	

LABORATORY CONTROL SAMPLE: 3455618

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	5.0	99	90-110	
Sulfate	mg/L	5	5.1	102	90-110	

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QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

LABORATORY CONTROL SAMPLE: 3456468

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	5	4.8	96	90-110	
Sulfate	mg/L	5	4.7	95	90-110	

MATRIX SPIKE & MATRIX SPIKE DUPLICATE: 3453967 3453968

Parameter	Units	60440221024 Result	MS Spike Conc.	MSD Spike Conc.	MS Result	MSD Result	MS % Rec	MSD % Rec	% Rec Limits	RPD	Max RPD	Qual
Chloride	mg/L	269	50	50	325	326	110	113	80-120	0	15	
Sulfate	mg/L	2.0	5	5	7.3	7.1	106	102	80-120	3	15	

MATRIX SPIKE SAMPLE: 3453969

Parameter	Units	60440221033 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Chloride	mg/L	441	250	681	96	80-120	
Sulfate	mg/L	204	250	470	107	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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9608 Loiret Blvd.
Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

QC Batch: 870682
QC Batch Method: EPA 353.2
Analysis Method: EPA 353.2
Analysis Description: 353.2 Nitrate + Nitrite, Unpres.
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440541011, 60440541012, 60440541013, 60440541014, 60440541015

METHOD BLANK: 3448464 Matrix: Water
Associated Lab Samples: 60440541011, 60440541012, 60440541013, 60440541014, 60440541015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Nitrogen, Nitrate	mg/L	ND	0.10	0.069	10/26/23 09:16	
Nitrogen, Nitrite	mg/L	ND	0.10	0.069	10/26/23 09:16	
Nitrogen, NO2 plus NO3	mg/L	ND	0.10	0.069	10/26/23 09:16	

LABORATORY CONTROL SAMPLE: 3448465

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	1	0.92	92	70-130	
Nitrogen, Nitrite	mg/L	1	1.0	101	90-110	
Nitrogen, NO2 plus NO3	mg/L	2	1.9	97	90-110	

MATRIX SPIKE SAMPLE: 3448466

Parameter	Units	60440549004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Nitrogen, Nitrate	mg/L	ND	1	0.95	95	70-130	
Nitrogen, Nitrite	mg/L	ND	1	1.1	110	90-110	H1
Nitrogen, NO2 plus NO3	mg/L	ND	2	2.1	103	90-110	H1

SAMPLE DUPLICATE: 3448467

Parameter	Units	60440549004 Result	Dup Result	RPD	Max RPD	Qualifiers
Nitrogen, Nitrate	mg/L	ND	ND		20	
Nitrogen, Nitrite	mg/L	ND	ND		20	H1
Nitrogen, NO2 plus NO3	mg/L	ND	ND		20	H1

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REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

QC Batch: 873457 | Analysis Method: SM 5310C
QC Batch Method: SM 5310C | Analysis Description: 5310C Total Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440541011, 60440541012, 60440541013, 60440541014, 60440541015

METHOD BLANK: 3459494 Matrix: Water
Associated Lab Samples: 60440541011, 60440541012, 60440541013, 60440541014, 60440541015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Total Organic Carbon	mg/L	ND	1.0	0.54	11/16/23 16:09	

LABORATORY CONTROL SAMPLE: 3459495

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

MATRIX SPIKE SAMPLE: 3459496

Parameter	Units	60440549004 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Total Organic Carbon	mg/L	17.9	25	47.3	118	80-120	

SAMPLE DUPLICATE: 3459497

Parameter	Units	60440541011 Result	Dup Result	RPD	Max RPD	Qualifiers
Total Organic Carbon	mg/L	11.1	11.1	0	25	

Results presented on this page are in the units indicated by the "Units" column except where an alternate unit is presented to the right of the result.

REPORT OF LABORATORY ANALYSIS

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Lenexa, KS 66219
(913)599-5665

QUALITY CONTROL DATA

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

QC Batch: 873477
QC Batch Method: SM 5310C
Analysis Method: SM 5310C
Analysis Description: 5310C Dissolved Organic Carbon
Laboratory: Pace Analytical Services - Kansas City
Associated Lab Samples: 60440541011, 60440541012, 60440541013, 60440541014, 60440541015

METHOD BLANK: 3459571 Matrix: Water
Associated Lab Samples: 60440541011, 60440541012, 60440541013, 60440541014, 60440541015

Parameter	Units	Blank Result	Reporting Limit	MDL	Analyzed	Qualifiers
Dissolved Organic Carbon	mg/L	ND	1.0	0.54	11/17/23 14:06	

LABORATORY CONTROL SAMPLE: 3459572

Parameter	Units	Spike Conc.	LCS Result	LCS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	5	5.1	103	80-120	

MATRIX SPIKE SAMPLE: 3459573

Parameter	Units	60439898011 Result	Spike Conc.	MS Result	MS % Rec	% Rec Limits	Qualifiers
Dissolved Organic Carbon	mg/L	0.92J	5	5.9	100	80-120	H1

SAMPLE DUPLICATE: 3459574

Parameter	Units	60440028030 Result	Dup Result	RPD	Max RPD	Qualifiers
Dissolved Organic Carbon	mg/L	3.1	3.1	2	25	H1

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.: 60440541

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.

TNTC - Too Numerous To Count

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 - The lowest concentration value that meets project requirements for quantitative data with known precision and bias for a specific analyte in a specific matrix.

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.

Reported results are not rounded until the final step prior to reporting. Therefore, calculated parameters that are typically reported as "Total" may vary slightly from the sum of the reported component parameters.

Pace Analytical is TNI accredited. Contact your Pace PM for the current list of accredited analytes.

TNI - The NELAC Institute.

BATCH QUALIFIERS

Batch: 871440

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

ANALYTE QUALIFIERS

CH	The continuing calibration for this compound is outside of Pace Analytical acceptance limits. The results may be biased high.
D3	Sample was diluted due to the presence of high levels of non-target analytes or other matrix interference.
H1	Analysis conducted outside the EPA method holding time.
H3	Sample was received or analysis requested beyond the recognized method holding time.
N2	The lab does not hold NELAC/TNI accreditation for this parameter but other accreditations/certifications may apply. A complete list of accreditations/certifications is available upon request.

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60440541011	**TMW-26-202310**	RSK175	309600		
60440541012	**MW-186-202310**	RSK175	309600		
60440541013	**TMW-25-202310**	RSK175	309600		
60440541014	**TMW-32-202310**	RSK175	309600		
60440541015	**TMW-16-202310**	RSK175	309600		
60440541011	**TMW-26-202310**	Pace ENV-SOP-BTRO-0042	309281		
60440541012	**MW-186-202310**	Pace ENV-SOP-BTRO-0042	309281		
60440541013	**TMW-25-202310**	Pace ENV-SOP-BTRO-0042	309281		
60440541014	**TMW-32-202310**	Pace ENV-SOP-BTRO-0042	309281		
60440541015	**TMW-16-202310**	Pace ENV-SOP-BTRO-0042	309281		
60440541011	**TMW-26-202310**	EPA 3010	871197	EPA 6010	871268
60440541012	**MW-186-202310**	EPA 3010	871197	EPA 6010	871268
60440541013	**TMW-25-202310**	EPA 3010	871197	EPA 6010	871268
60440541014	**TMW-32-202310**	EPA 3010	871197	EPA 6010	871268
60440541015	**TMW-16-202310**	EPA 3010	871197	EPA 6010	871268
60440541001	**MW-187-202310**	EPA 5030B/8260	871015		
60440541002	**MW-182-202310**	EPA 5030B/8260	871015		
60440541003	**DUP-07-202310**	EPA 5030B/8260	871015		
60440541004	**TMW-27-202310**	EPA 5030B/8260	871440		
60440541005	**MW-188-202310**	EPA 5030B/8260	871440		
60440541006	**EB-05-202310**	EPA 5030B/8260	871440		
60440541007	**TMW-30-202310**	EPA 5030B/8260	871918		
60440541008	**DUP-06-202310**	EPA 5030B/8260	871918		
60440541009	**TB-09-202310**	EPA 5030B/8260	871441		
60440541010	**TB-10-202310**	EPA 5030B/8260	871441		
60440541011	**TMW-26-202310**	EPA 5030B/8260	871441		
60440541012	**MW-186-202310**	EPA 5030B/8260	871441		
60440541013	**TMW-25-202310**	EPA 5030B/8260	871441		
60440541014	**TMW-32-202310**	EPA 5030B/8260	871441		
60440541015	**TMW-16-202310**	EPA 5030B/8260	871441		
60440541011	**TMW-26-202310**	EPA 300.0	872055		
60440541012	**MW-186-202310**	EPA 300.0	872055		
60440541013	**TMW-25-202310**	EPA 300.0	872055		
60440541014	**TMW-32-202310**	EPA 300.0	872055		
60440541015	**TMW-16-202310**	EPA 300.0	872055		
60440541011	**TMW-26-202310**	EPA 353.2	870682		
60440541012	**MW-186-202310**	EPA 353.2	870682		
60440541013	**TMW-25-202310**	EPA 353.2	870682		
60440541014	**TMW-32-202310**	EPA 353.2	870682		
60440541015	**TMW-16-202310**	EPA 353.2	870682		
60440541011	**TMW-26-202310**	SM 5310C	873457		

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QUALITY CONTROL DATA CROSS REFERENCE TABLE

Project: WHIRLPOOL FORT SMITH, AR
Pace Project No.: 60440541

Lab ID	Sample ID	QC Batch Method	QC Batch	Analytical Method	Analytical Batch
60440541012	**MW-186-202310**	SM 5310C	873457		
60440541013	**TMW-25-202310**	SM 5310C	873457		
60440541014	**TMW-32-202310**	SM 5310C	873457		
60440541015	**TMW-16-202310**	SM 5310C	873457		
60440541011	**TMW-26-202310**	SM 5310C	873477		
60440541012	**MW-186-202310**	SM 5310C	873477		
60440541013	**TMW-25-202310**	SM 5310C	873477		
60440541014	**TMW-32-202310**	SM 5310C	873477		
60440541015	**TMW-16-202310**	SM 5310C	873477		

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WO# : 60440541

60440541

Pace ANALYTICAL SERVICES	DC#_Title: ENV-FRM-LENE-0009_Sample Co		
	Revision: 2	Effective Date: 01/12/2022	Issued By: Lenexa

Client Name: Ramboll

Courier: FedEx ☐ UPS ☐ VIA ☐ Clay ☐ PEX ☐ ECI ☐ Pace ☐ Xroads ☐ Client ☑ Other ☐

Tracking #: _____ Pace Shipping Label Used? Yes ☑ No ☐

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

Packing Material: Bubble Wrap ☑ Bubble Bags ☑ Foam ☐ None ☐ Other ☐

Thermometer Used: T298 **Type of Ice:** (Wet) Blue None

Cooler Temperature (°C): **As-read** 3.8 **Corr. Factor** -0.3 **Corrected** 3.5

Date and initials of person examining contents: 10/25/23 TH

Temperature should be above freezing to 6°C

Chain of Custody present:	☑Yes ☐No ☐N/A	
Chain of Custody relinquished:	☑Yes ☐No ☐N/A	
Samples arrived within holding time:	☑Yes ☐No ☐N/A	
Short Hold Time analyses (<72hr):	☐Yes ☑No ☐N/A	
Rush Turn Around Time requested:	☐Yes ☑No ☐N/A	
Sufficient volume:	☑Yes ☐No ☐N/A	
Correct containers used:	☑Yes ☐No ☐N/A	
Pace containers used:	☑Yes ☐No ☐N/A	
Containers intact:	☑Yes ☐No ☐N/A	
Unpreserved 5035A / TX1005/1006 soils frozen in 48hrs?	☐Yes ☑No ☐N/A	
Filtered volume received for dissolved tests?	☐Yes ☑No ☐N/A	
Sample labels match COC: Date / time / ID / analyses	☑Yes ☑No ☐N/A TH	
Samples contain multiple phases? Matrix: WT	☐Yes ☑No ☐N/A	
Containers requiring pH preservation in compliance? (HNO_3, H_2SO_4, HCl<2; NaOH>9 Sulfide, NaOH>10 Cyanide) (Exceptions: VOA, Micro, O&G, KS TPH, OK-DRO) **LOT#:**	☑Yes ☐No ☐N/A	List sample IDs, volumes, lot #'s of preservative and the date/time added.
Cyanide water sample checks:		
Lead acetate strip turns dark? (Record only)	☐Yes ☐No	
Potassium iodide test strip turns blue/purple? (Preserve)	☐Yes ☑No	
Trip Blank present:	☑Yes ☐No ☐N/A	
Headspace in VOA vials (>6mm):	☐Yes ☑No ☐N/A	
Samples from USDA Regulated Area: State:	☐Yes ☑No ☐N/A	
Additional labels attached to 5035A / TX1005 vials in the field?	☐Yes ☑No ☐N/A	

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

Person Contacted: _____ Date/Time: _____

Comments/ Resolution: Received one empty DG9H for Sample ID MW-186-202310.

Project Manager Review: _____ Date: _____

Pace Analytical
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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 1 of 2

Section A Required Client Information:

Company:	Ramboll
Address:	7500 College Blvd., Ste. 925
	Overland Park, KS 66210
Email To:	jzellmer@ramboll.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STD TAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	VOC ONLY

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

Valid Matrix Codes

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

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

Requested Analysis Filtered (Y/N)

ITEM #	SAMPLE ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N: 8260 VOCs	Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	MW-187-202310	WT	G	10-20-23	0829				3									X		
2	MW-187-202310 MS	WT	G	10-20-23	0829				3									X		
3	MW-187-202310 MSD	WT	G	10-20-23	0829				3									X		
4	MW-182-202310	WT	G	10-20-23	0945				3									X		
5	DUP-07-202310	WT	G	10-20-23	0945				3									X		
6	TMW-27-202310	WT	G	10-20-23	0940				3									X		
7	MW-188-202310	WT	G	10-20-23	0938				3									X		
8	EB-05-202310	WT	G	10-20-23	1019				3									X		
9	TMW-30-202310	WT	G	10-20-23	1030				3									X		
10	DUP-06-202310	WT	G	10-20-23	1030				3									X		
11	TB-09-202310	WT	G	10-20-23	0632				2									X		
12	TB-10-202310	WT	G	10-20-23	0635				2									X		

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS			
	Ramboll			JA Pace	10/20/23	1715	3-S	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 10-20-23

Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)

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

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CHAIN-OF-CUSTODY / Analytical Request Document

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

Page: 2 of 2

Section A Required Client Information:

Company:	Ramboll
Address:	10851 Mastin Blvd., Ste. 100
	Overland Park, KS 66210
Email To:	JZellmer@ramboll.com
Phone: 913-553-5926	Fax:
Requested Due Date/TAT:	STD TAT

Section B Required Project Information:

Report To:	David Meyer
Copy To:	Jackie Zellmer
Purchase Order No.:	
Project Name:	WHIRLPOOL FORT SMITH, AR
Project Number:	ISCR

Section C Invoice Information:

Attention:	Accounts Payable
Company Name:	Ramboll
Address:	
Pace Quote Reference:	
Pace Project Manager:	Jamie Church
Pace Profile #:	7444, line 1

REGULATORY AGENCY

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

Site Location STATE: AR

Section D Required Client Information

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

Valid Matrix Codes

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

Requested Analysis Filtered (Y/N)

ITEM #	Sample ID	MATRIX CODE (see valid codes to left)	SAMPLE TYPE (G=GRAB C=COMP)	COLLECTED COMPOSITE START DATE	COLLECTED COMPOSITE START TIME	COLLECTED COMPOSITE END/GRAB DATE	COLLECTED COMPOSITE END/GRAB TIME	SAMPLE TEMP AT COLLECTION	# OF CONTAINERS	Preservatives: Unpreserved	H_2SO_4	HNO_3	HCl	NaOH	$Na_2S_2O_3$	Methanol	Other	Analysis Test Y/N	8260 VOCs	6010 Iron	300.0 Sulfate	300.0 Chloride	353.2 Nitrate+Nitrite, unpres.	6310 TOC	6310 DOC (Lab Filtered)	RSK175 Methane/Ethane/Ethene	AM23G Volatile Fatty Acids				Residual Chlorine (Y/N)	Pace Project No./ Lab I.D.
1	TMW-26-202310	WT	G	10-20-23	0816	—	—		12										X	X	X	X	X	X	X	X	X		
2	MW-186-202310	WT	G	10-20-23	0815	—	—		12										X	X	X	X	X	X	X	X	X		
3	TMW-25-202310	WT	G	10-20-23	0838	—	—		12										X	X	X	X	X	X	X	X	X		
4	TMW-32-202310	WT	G	10-20-23	0925	—	—		12										X	X	X	X	X	X	X	X	X		
5	TMW-16-202310	WT	G	10-20-23	0951	—	—		12										X	X	X	X	X	X	X	X	X		
6																													
7																													
8																													
9																													
10																													
11																													
12																													

ADDITIONAL COMMENTS	RELINQUISHED BY / AFFILIATION	DATE	TIME	ACCEPTED BY / AFFILIATION	DATE	TIME	SAMPLE CONDITIONS: Temp in °C	Received on Ice (Y/N)	Custody Sealed Cooler (Y/N)	Samples Intact (Y/N)
RSK 175 Methane/Ethane/Ethene & VFAs to Pace Baton Rouge	Ramboll			SA Pace	10/20/23	1715	3.5	Y	Y	Y

SAMPLER NAME AND SIGNATURE

PRINT Name of SAMPLER: Jackie Zellmer

SIGNATURE of SAMPLER:

DATE Signed (MM/DD/YY): 10-20-23

*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.

Client: Ramboll

Profile # 7444, Linel

Site: AR

Notes 1-2

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	WT		3																													
2				Smk																												
3																																
4	WT		3																													
5																																
6																																
7																																
8																																
9																																
10			2																													
11																																
12																																

Container Codes

Glass				Plastic		Misc.	
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar	BP1C	1L NAOH plastic	I	Wipe/Swab
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar	BP1N	1L HNO3 plastic	SP5T	120mL Coliform Na Thiosulfate
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar	BP1S	1L H2SO4 plastic	ZPLC	Ziploc Bag
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide	BP1U	1L unpreserved plastic	AF	Air Filter
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass	BP1Z	1L NaOH, Zn Acetate	C	Air Cassettes
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass	BP2C	500mL NAOH plastic	R	Terracore Kit
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass	BP2N	500mL HNO3 plastic	U	Summa Can
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass	BP2S	500mL H2SO4 plastic		
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass	BP2U	500mL unpreserved plastic		
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass	BP2Z	500mL NaOH, Zn Acetate	Matrix	
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass	BP3C	250mL NaOH plastic		
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass	BP3F	250mL HNO3 plastic - field filtered	WT	Water
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass	BP3N	250mL HNO3 plastic	SL	Solid
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass	BP3U	250mL unpreserved plastic	NAL	Non-aqueous Liquid
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass	BP3S	250mL H2SO4 plastic	OL	OIL
		AG5U	100mL unpres amber glass	BP3Z	250mL NaOH, Zn Acetate	WP	Wipe
				BP4U	125mL unpreserved plastic	DW	Drinking Water
				BP4N	125mL HNO3 plastic		
				BP4S	125mL H2SO4 plastic		
				WPDU	16oz unpresserved plstic		

Work Order Number:

Client: Ramboll

Profile # 7444, line 1

Site: AR

Notes 2-2

COC Line Item	Matrix	VG9H	DG9H	DG9Q	VG9U	DG9U	DG9M	DG9B	BG1U	AG1H	AG1U	AG2U	AG3S	AG4U	AG5U	JGFU	WGKU	WGDU	BP1U	BP2U	BP3U	BP1N	BP3N	BP3F	BP3S	BP3C	BP3Z	WPDU	ZPLC	Other		
1	WT	3	3									1	1								1		1							3		
2	↓	↓	2									↓	↓								↓		↓							↓		
3			3																													
4			↓																													
5	↓	↓										↓	↓								↓		↓							↓		
6																																
7																																
8																																
9																																
10																																
11																																
12																																

Container Codes

Glass			
DG9B	40mL bisulfate clear vial	WGKU	8oz clear soil jar
DG9H	40mL HCl amber voa vial	WGFU	4oz clear soil jar
DG9M	40mL MeOH clear vial	WG2U	2oz clear soil jar
DG9Q	40mL TSP amber vial	JGFU	4oz unpreserved amber wide
DG9S	40mL H2SO4 amber vial	AG0U	100mL unores amber glass
DG9T	40mL Na Thio amber vial	AG1H	1L HCl amber glass
DG9U	40mL amber unpreserved	AG1S	1L H2SO4 amber glass
VG9H	40mL HCl clear vial	AG1T	1L Na Thiosulfate clear/amber glass
VG9T	40mL Na Thio. clear vial	AG1U	1liter unpres amber glass
VG9U	40mL unpreserved clear vial	AG2N	500mL HNO3 amber glass
BG1S	1liter H2SO4 clear glass	AG2S	500mL H2SO4 amber glass
BG1U	1liter unpres glass	AG3S	250mL H2SO4 amber glass
BG3H	250mL HCL Clear glass	AG2U	500mL unpres amber glass
BG3U	250mL Unpres Clear glass	AG3U	250mL unpres amber glass
WGDU	16oz clear soil jar	AG4U	125mL unpres amber glass
		AG5U	100mL unpres amber glass

Plastic	
BP1C	1L NAOH plastic
BP1N	1L HNO3 plastic
BP1S	1L H2SO4 plastic
BP1U	1L unpreserved plastic
BP1Z	1L NaOH, Zn Acetate
BP2C	500mL NAOH plastic
BP2N	500mL HNO3 plastic
BP2S	500mL H2SO4 plastic
BP2U	500mL unpreserved plastic
BP2Z	500mL NaOH, Zn Acetate
BP3C	250mL NaOH plastic
BP3F	250mL HNO3 plastic - field filtered
BP3N	250mL HNO3 plastic
BP3U	250mL unpreserved plastic
BP3S	250mL H2SO4 plastic
BP3Z	250mL NaOH, Zn Acetate
BP4U	125mL unpreserved plastic
BP4N	125mL HNO3 plastic
BP4S	125mL H2SO4 plastic
WPDU	16oz unpresserved plstic

Misc.	
I	Wipe/Swab
SP5T	120mL Coliform Na Thiosulfate
ZPLC	Ziploc Bag
AF	Air Filter
C	Air Cassettes
R	Terracore Kit
U	Summa Can

Matrix	
WT	Water
SL	Solid
NAL	Non-aqueous Liquid
OL	OIL
WP	Wipe
DW	Drinking Water

Work Order Number:

Internal Transfer Chain of Custody

WO# : 20297753

20297753

State of Sample Origin: AR

☐ Rush Multiplier____X

☐ Samples Pre-Logged into eCOC

Cert. Needed: ☒ Yes ☐

Workorder: 60440541 **Workorder Name:** WHIRLPOOL FORT SMITH, AR

Owner Received Date: 10/20/2023 **Results Requested By:** 11/6/2023

Report To	Subcontract To
Jamie Church Pace Analytical Kansas 9608 Loiret Blvd. Lenexa, KS 66219 Phone 314-838-7223	Pace Analytical Baton Rouge 7979 Innovation Park Drive Baton Rouge, LA 70820 Phone (225) 769-4900

Item	Sample ID	Sample Type	Collect Date/Time	Lab ID	Matrix	Preserved Containers HCL	Preserved Containers Other	AM23G Volatile Fatty Acids	RSK 175 Methane/Ethane/Ethene	LAB USE ONLY
1	TMW-26-202310	PS	10/20/2023 08:16	60440541011	Water	3	2	X	X	1
2	MW-186-202310	PS	10/20/2023 08:15	60440541012	Water	3	2	X	X	2
3	TMW-25-202310	PS	10/20/2023 08:38	60440541013	Water	3	2	X	X	3
4	TMW-32-202310	PS	10/20/2023 09:25	60440541014	Water	3	2	X	X	4
5	TMW-16-202310	PS	10/20/2023 09:51	60440541015	Water	3	2	X	X	5

Transfers	Released By	Date/Time	Received By	Date/Time
1		11/17/23 17:00		
2	FedEx	11/17/23 11:16		11/17/23
3				

Comments: 11/16

Cooler Temperature on Receipt ____ °C | **Custody Seal** Y or N | **Received on Ice** Y or N | **Samples Intact** Y or N

****In order to maintain client confidentiality, location/name of the sampling site, sampler's name and signature may not be provided on this COC document.*
This chain of custody is considered complete as is since this information is available in the owner laboratory.

WO# : 20297753

PM: DRM **Due Date: 12/05/23**

CLIENT: BR-PACE LENX

Pace

Sample Condition Upon Recie

Workorder #: _____

7979 Innovation Park Dr. Baton Rouge, LA 70806

Cooler Inspected by/date: GSR / 11/15/23

Means of receipt: ☐ Pace ☐ Client ☐ UPS ☐ FedEx ☐ Other: _____				
☑ Yes	☐ No		Were custody seals present on the cooler?	
☑ Yes	☐ No	☐ NA	If custody seals were present, were they intact and unbroken?	
Method: ☐ Temperature Blank ☑ Against Bottles IR Gun ID: DM04 IR Gun Correction Factor: 0 °C				
Cooler #1	Cooler Temp °C: 0.7	(Actual/True)	Samples on ice ☑ Yes ☐ No	pH Strip Lot #
Cooler #2	Cooler Temp °C: _____	(Actual/True)		
Cooler #3	Cooler Temp °C: _____	(Actual/True)	Method of coolant: ☑ Wet ☐ Ice Packs ☐ Dry Ice ☐ None	
Cooler #4	Cooler Temp °C: _____	(Actual/True)		
Tracking #: 6432 1395 0596				

☐ Yes	☑ No	☐ NA	Is a temperature blank present?	
☑ Yes	☐ No	☐ NA	Was a chain of custody (COC) recieved?	
☐ Yes	☑ No	☐ NA	Was the line and profile number listed on the COC?	
☑ Yes	☐ No	☐ NA	Were all coolers received at or below 6.0°C? If no, notify Project Manager notified via email.	
☑ Yes	☐ No		Were proper custody procedures (relinquished/received) followed?	
☐ Yes	☐ No	☑ NA	Is the sampler name and signature on the COC?	
☑ Yes	☐ No		Were sample IDs listed on the COC and all sample containers?	
☑ Yes	☐ No		Was collection date & time listed on the COC and all sample containers?	
☑ Yes	☐ No		Did all container label information (ID, date, time) agree with the COC?	
☑ Yes	☐ No		Were tests to be performed listed on the COC?	
☑ Yes	☐ No		Did all samples arrive in the proper containers for each test and/or in good condition (unbroken, lids on, etc.)?	
☑ Yes	☐ No		Was adequate sample volume available?	
☑ Yes	☐ No		Were all samples received within ½ the holding time or 48 hours, whichever comes first?	
☑ Yes	☐ No		Were all samples containers accounted for? (No missing / excess)	
☑ Yes	☐ No	☐ NA	Were VOA, 8015C (GRO/VPH), and RSK-175 samples free of bubbles > "pea size" (1/4" or 6mm in diameter) in any of the VOA vials?	
☐ Yes	☐ No	☑ NA	Trip blank present?	
☐ Yes	☐ No	☑ NA	Filtered volume received for dissolved tests? *If no, list affected sample(s) in comments below.*	
☐ Yes	☐ No	☑ NA	Were all metals/nutrient samples received at a pH of < 2?	If No, was preservative added? ☐ Yes ☐ No If added, record lots. Dispenser/pipette lot #: _____
☐ Yes	☐ No	☑ NA	Were all cyanide samples received at a pH > 12 and sulfide samples received at a pH > 9?	HNO_3_____ H_2SO_4 _____ NaOH_____ Date: _____ Time:_____

Comments:

Appendix C

Data Validation Report

LEVEL II DATA VALIDATION REVIEW

Annual Groundwater Monitoring Event 2023

Whirlpool Corporation

Fort Smith, Arkansas

Laboratory Sample Delivery Groups (SDGs): 60439898, 60440028, 60440158, 60440221, 60440541, L1667739, and L1668193

Laboratory: Pace Analytical Services, LLC located in Lenexa, Kansas; and Pace Analytical National located in Mount Juliet, Tennessee

Reviewer: Kristin Drucquer

Date: January 10, 2024

This data validation report has been prepared by Ramboll Americas Engineering Solutions, Inc. (Ramboll) to assess the validity and usability of laboratory analytical data generated from samples collected during the annual groundwater sampling event at the Whirlpool Corporation, Fort Smith, Arkansas site (Site) from October 16 – 20, 2023.

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* (OLEM9240.0-51, EPA-540-R-20-005, November 2020) and *USEPA Contract Laboratory Program National Functional Guidelines for Superfund Inorganic Methods Data Review* (OLEM 9240.1-66, EPA-542-R-20-006, November 2020).

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.

One hundred and two (102) groundwater samples, 24 air samples, 11 groundwater field duplicates, one air field duplicate, five equipment rinsate blanks, and 11 trip blanks were analyzed for one or more of the following analyses:

- Volatile organic compounds (VOCs) by United States Environmental Protection Agency (USEPA) 8260;
- VOCs by USEPA TO-15/TO-15 SIM;
- Chloride and sulfate by USEPA 300.0;
- Nitrate, nitrite, and nitrogen as nitrite and nitrate by USEPA 353.2;
- Iron by USEPA 6010;
- Sulfide by Standard Method (SM) 4500-S2-D;
- Total organic carbon (TOC) and dissolved organic carbon (DOC) by SM5310C;
- Dissolved gases (methane, ethane, ethene) by Method RSK-175;
- Hydrogen by Method AM20GAX; and
- Volatile fatty acids (VFAs) by Method AM23G.

Pace Analytical Services, LLC (Pace) located in Lenexa, Kansas, analyzed all the aqueous samples, with the exception of the analyses for dissolved gases and volatile fatty acids. Pace Analytical Gulf Coast located in Baton Rouge, Louisiana performed the analysis for dissolved gases and volatile fatty acids. The air analyses were performed by Pace Analytical National located in Mount Juliet, Tennessee.

The table below summarizes the field sample identifications, sample type, laboratory sample identification and matrix types for the data included in this data set:

Field ID	Sample Type	Lab ID	Matrix
SDG: 60439898			
MW-68-202310	SA	60439898001	Aqueous
MW-39R-202310	SA	60439898002	Aqueous
MW-29-202310	SA	60439898003	Aqueous
MW-62R-202310	SA	60439898004	Aqueous
TMW-29-202310	SA	60439898005	Aqueous
MW-191-202310	SA	60439898006	Aqueous
MW-96-202310	SA	60439898007	Aqueous
DUP-10-202310	FD	60439898008	Aqueous
TB-01-202310	TB	60439898009	Aqueous
EB-01-202310	EB	60439898010	Aqueous
TMW-36-202310	SA	60439898011	Aqueous
TMW-36B-202310	SA	60439898012	Aqueous
SDG 60440028			
TMW-20-202310	SA	60440028001	Aqueous
MW-184-202310	SA	60440028002	Aqueous
DUP-01-202310	FD	60440028003	Aqueous
MW-26-202310	SA	60440028004	Aqueous
MW-22-202310	SA	60440028005	Aqueous
MW-176-202310	SA	60440028006	Aqueous
MW-196-202310	SA	60440028007	Aqueous
TMW-35-202310	SA	60440028008	Aqueous
DUP-11-202310	FD	60440028009	Aqueous
ITMW-20-202310	SA	60440028010	Aqueous
DUP-02-202310	FD	60440028011	Aqueous
MW-195-202310	SA	60440028012	Aqueous
DUP-05-202310	FD	60440028013	Aqueous
MW-28-202310	SA	60440028014	Aqueous
MW-206-202310	SA	60440028015	Aqueous
MW-97-202310	SA	60440028016	Aqueous
MW-201-202310	SA	60440028017	Aqueous
TMW-14-202310	SA	60440028018	Aqueous
MW-183R-202310	SA	60440028019	Aqueous
MW-192-202310	SA	60440028020	Aqueous
MW-40R-202310	SA	60440028021	Aqueous
MW-200-202310	SA	60440028022	Aqueous
MW-190-202310	SA	60440028023	Aqueous
ITMW-2R-202310	SA	60440028024	Aqueous
TB-02-202310	TB	60440028025	Aqueous
EB-02-202310	EB	60440028026	Aqueous
TB-03-202310	TB	60440028027	Aqueous
MW-203-202310	SA	60440028028	Aqueous

Field ID	Sample Type	Lab ID	Matrix
MW-60R-202310	SA	60440028029	Aqueous
MW-91-202310	SA	60440028030	Aqueous
TMW-21-202310	SA	60440028031	Aqueous
TMW-19-202310	SA	60440028032	Aqueous
MW-89-202310	SA	60440028033	Aqueous
MW-50R-202310	SA	60440028034	Aqueous
SDG: 60440158			
MW-84-202310	SA	60440158001	Aqueous
MW-98-202310	SA	60440158002	Aqueous
ITMW-21-202310	SA	60440158003	Aqueous
DUP-03-202310	FD	60440158004	Aqueous
ITMW-7-202310	SA	60440158005	Aqueous
MW-24-202310	SA	60440158006	Aqueous
DUP-08-202310	FD	60440158007	Aqueous
IW-78-202310	SA	60440158008	Aqueous
DUP-04-202310	FD	60440158009	Aqueous
ITMW-1R-202310	SA	60440158010	Aqueous
MW-55R-202310	SA	60440158011	Aqueous
TMW-12-202310	SA	60440158012	Aqueous
DUP-09-202310	FD	60440158013	Aqueous
MW-63R-202310	SA	60440158014	Aqueous
RW-1-202310	SA	60440158015	Aqueous
MW-82-202310	SA	60440158016	Aqueous
EB-03-202310	EB	60440158017	Aqueous
TB-04-202310	TB	60440158018	Aqueous
TB-05-202310	TB	60440158019	Aqueous
TB-06-202310	TB	60440158020	Aqueous
MW-204-202310	SA	60440158021	Aqueous
TMW-10-202310	SA	60440158022	Aqueous
TMW-11-202310	SA	60440158023	Aqueous
MW-87-202310	SA	60440158024	Aqueous
MW-25R-202310	SA	60440158025	Aqueous
MW-99-202310	SA	60440158026	Aqueous
MW-61R-202310	SA	60440158027	Aqueous
TMW-34-202310	SA	60440158028	Aqueous
MW-194-202310	SA	60440158029	Aqueous
MW-197-202310	SA	60440158030	Aqueous
MW-27-202310	SA	60440158031	Aqueous
TMW-23-202310	SA	60440158032	Aqueous
MW-83-202310	SA	60440158033	Aqueous
SDG: 60440221			
MW-202-202310	SA	60440221001	Aqueous
MW-205-202310	SA	60440221002	Aqueous
IW-77-202310	SA	60440221003	Aqueous
ITMW-10-202310	SA	60440221004	Aqueous
MW-46R-202310	SA	60440221005	Aqueous
MW-199-202310	SA	60440221006	Aqueous
MW-189-202310	SA	60440221007	Aqueous
MW-175-202310	SA	60440221008	Aqueous
VP-8-202310	SA	60440221009	Aqueous
MW-57R-202310	SA	60440221010	Aqueous

Field ID	Sample Type	Lab ID	Matrix
MW-178-202310	SA	60440221011	Aqueous
MW-179-202310	SA	60440221012	Aqueous
VP-14-202310	SA	60440221013	Aqueous
VP-12-202310	SA	60440221014	Aqueous
MW-56R-202310	SA	60440221015	Aqueous
ITMW-18-202310	SA	60440221016	Aqueous
MW-93-202310	SA	60440221017	Aqueous
ITMW-5-202310	SA	60440221018	Aqueous
ITMW-6-202310	SA	60440221019	Aqueous
TB-11-202310	TB	60440221020	Aqueous
TB-07-202310	TB	60440221021	Aqueous
TB-08-202310	TB	60440221022	Aqueous
EB-04-202310	EB	60440221023	Aqueous
RW-69-202310	SA	60440221024	Aqueous
MW-58R-202310	SA	60440221025	Aqueous
MW-198-202310	SA	60440221026	Aqueous
IW-73-202310	SA	60440221027	Aqueous
ITMW-9-202310	SA	60440221028	Aqueous
MW-95-202310	SA	60440221029	Aqueous
MW-38-202310	SA	60440221030	Aqueous
TMW-22R-202310	SA	60440221031	Aqueous
MW-185-202310	SA	60440221032	Aqueous
MW-92-202310	SA	60440221033	Aqueous
TMW-24-202310	SA	60440221034	Aqueous
ITMW-19-202310	SA	60440221035	Aqueous
SDG: 60440541			
MW-187-202310	SA	60440541001	Aqueous
MW-182-202310	SA	60440541002	Aqueous
DUP-07-202310	FD	60440541003	Aqueous
TMW-27-202310	SA	60440541004	Aqueous
MW-188-202310	SA	60440541005	Aqueous
EB-05-202310	EB	60440541006	Aqueous
TMW-30-202310	SA	60440541007	Aqueous
DUP-06-202310	FD	60440541008	Aqueous
TB-09-202310	TB	60440541009	Aqueous
TB-10-202310	TB	60440541010	Aqueous
TMW-26-202310	SA	60440541011	Aqueous
MW-186-202310	SA	60440541012	Aqueous
TMW-25-202310	SA	60440541013	Aqueous
TMW-32-202310	SA	60440541014	Aqueous
TMW-16-202310	SA	60440541015	Aqueous
SDG: L1667739			
Z6-2-IA-202310	SA	L1667739-01	Air
DUP-IA-202310	FD	L1667739-02	Air
Z5-2-IA-202310	SA	L1667739-03	Air
Z5-OF-IA-202310	SA	L1667739-04	Air
Z6-1-IA-202310	SA	L1667739-05	Air
Z5-1-IA-202310	SA	L1667739-06	Air
Z3-1-IA-202310	SA	L1667739-07	Air
Z4-1-IA-202310	SA	L1667739-08	Air
AA-1-IA-202310	SA	L1667739-09	Air

Field ID	Sample Type	Lab ID	Matrix
Z1-1-IA-202310	SA	L1667739-10	Air
Z3-2-IA-202310	SA	L1667739-11	Air
Z2-1-IA-202310	SA	L1667739-12	Air
Z4-2-IA-202310	SA	L1667739-13	Air
SDG: L1668193			
Z6-2-202310	SA	L1668193-01	Air
Z5-2-202310	SA	L1668193-02	Air
AA-2-202310	SA	L1668193-03	Air
Z6-1-202310	SA	L1668193-04	Air
Z5-1-202310	SA	L1668193-05	Air
Z3-1-202310	SA	L1668193-06	Air
Z4-1-202310	SA	L1668193-07	Air
Z5-OF-202310	SA	L1668193-08	Air
Z1-1-202310	SA	L1668193-09	Air
Z3-2-202310	SA	L1668193-10	Air
Z4-2-202310	SA	L1668193-11	Air
Z2-1-202310	SA	L1668193-12	Air

Sample Type: SA = Sample TB = Trip Blank FD = Field Duplicate EB = Equipment Blank

The laboratory reports were evaluated for the following QC elements:

- Data Package Completeness;
- Sample Preservation and Holding Times;
- Blanks;
- Surrogate Compound Recoveries;
- Laboratory Control Sample (LCS);
- Matrix Spike/Matrix Spike Duplicates (MS/MSD);
- Laboratory and Field Precision; and
- Overall Assessment of Data.

General Overall Assessment:

_____ Data are usable without qualification.

__X__ Data are usable with qualification (noted below).

__X__ Some or all data are unusable for any purpose (detailed below).

1.0 Data Package Completeness

Were all items delivered as specified on the chain-of-custody (COC) and is the data package complete?

The analyses were performed as requested on the COC record.

2.0 Technical Holding Times and Sample Preservation

Were samples received within the required temperature and preservation requirements?

Yes. All samples were received within the required temperature criteria. All samples were received within the required preservation requirements.

Were samples extracted/analyzed within method specific holding time requirements?

No. Twenty-five samples were analyzed outside the holding for one or more analyses for VOCs by USEPA 8260; nitrate, nitrite, and nitrogen as nitrite and nitrate by USEPA 353.2; methane, ethane, and ethene by RSK-175; TOC and DOC by SM5310C; and VFAs by AM23G. Detected results in the affected samples were qualified "J" as estimated. Non-detect results were quailed "UJ" as estimated when the analysis was performed within 2x the method holding time. Non-detect results for analyses that were performed greater than 2x the holding time were qualified "R" as rejected. Twenty (20) results for nitrogen (4 results), nitrate (4 results), nitrite (5 results), ethane (4 results), and ethene (3 results) were rejected for analyses that were performed outside 2x the method holding time.

The results qualified for holding time exceedances are summarized in the table below.

SDG	Field ID	Analyte	Qualification
60440541	TMW-26-202310	Butyric acid	UJ
60440541	TMW-26-202310	1-Butanecarboxylic Acid	UJ
60440541	TMW-26-202310	Pyruvic Acid	J
60440541	TMW-26-202310	n-Hexanoic acid	UJ
60440541	TMW-26-202310	Lactic Acid	J
60440541	TMW-26-202310	3-methyl-Butanoic acid	UJ
60440541	TMW-26-202310	Formic acid	UJ
60440541	TMW-26-202310	Acetic acid	UJ
60440541	TMW-26-202310	4-methyl-pentanoic acid	UJ
60440541	TMW-26-202310	Propionic Acid	UJ
60440541	MW-186-202310	Butyric acid	UJ
60440541	MW-186-202310	1-Butanecarboxylic Acid	UJ
60440541	MW-186-202310	Pyruvic Acid	UJ
60440541	MW-186-202310	n-Hexanoic acid	UJ
60440541	MW-186-202310	Lactic Acid	J
60440541	MW-186-202310	3-methyl-Butanoic acid	UJ
60440541	MW-186-202310	Formic acid	UJ
60440541	MW-186-202310	Acetic acid	UJ
60440541	MW-186-202310	4-methyl-pentanoic acid	UJ
60440541	MW-186-202310	Propionic Acid	UJ
60440541	TMW-25-202310	Butyric acid	UJ
60440541	TMW-25-202310	1-Butanecarboxylic Acid	UJ
60440541	TMW-25-202310	Pyruvic Acid	UJ
60440541	TMW-25-202310	n-Hexanoic acid	UJ
60440541	TMW-25-202310	Lactic Acid	J
60440541	TMW-25-202310	3-methyl-Butanoic acid	UJ
60440541	TMW-25-202310	Formic acid	UJ
60440541	TMW-25-202310	Acetic acid	UJ
60440541	TMW-25-202310	4-methyl-pentanoic acid	UJ
60440541	TMW-25-202310	Propionic Acid	UJ
60440541	TMW-32-202310	Butyric acid	UJ
60440541	TMW-32-202310	1-Butanecarboxylic Acid	UJ
60440541	TMW-32-202310	Pyruvic Acid	UJ
60440541	TMW-32-202310	n-Hexanoic acid	UJ
60440541	TMW-32-202310	Lactic Acid	J
60440541	TMW-32-202310	3-methyl-Butanoic acid	UJ
60440541	TMW-32-202310	Formic acid	UJ
60440541	TMW-32-202310	Acetic acid	UJ
60440541	TMW-32-202310	4-methyl-pentanoic acid	UJ
60440541	TMW-32-202310	Propionic Acid	UJ
60440541	TMW-16-202310	Butyric acid	UJ
60440541	TMW-16-202310	1-Butanecarboxylic Acid	UJ
60440541	TMW-16-202310	Pyruvic Acid	J
60440541	TMW-16-202310	n-Hexanoic acid	J

SDG	Field ID	Analyte	Qualification
60440541	TMW-16-202310	Lactic Acid	J
60440541	TMW-16-202310	3-methyl-Butanoic acid	UJ
60440541	TMW-16-202310	Formic acid	UJ
60440541	TMW-16-202310	Acetic acid	UJ
60440541	TMW-16-202310	4-methyl-pentanoic acid	UJ
60440541	TMW-16-202310	Propionic Acid	UJ
60440541	TMW-26-202310	Nitrogen	R
60440541	TMW-26-202310	Nitrogen, Nitrate (As N)	R
60440541	TMW-26-202310	Nitrogen, Nitrite	R
60440541	MW-186-202310	Nitrogen	R
60440541	MW-186-202310	Nitrogen, Nitrate (As N)	R
60440541	MW-186-202310	Nitrogen, Nitrite	R
60440541	TMW-25-202310	Nitrogen	J
60440541	TMW-25-202310	Nitrogen, Nitrate (As N)	J
60440541	TMW-25-202310	Nitrogen, Nitrite	R
60440541	TMW-32-202310	Nitrogen	R
60440541	TMW-32-202310	Nitrogen, Nitrate (As N)	R
60440541	TMW-32-202310	Nitrogen, Nitrite	R
60440541	TMW-16-202310	Nitrogen	R
60440541	TMW-16-202310	Nitrogen, Nitrate (As N)	R
60440541	TMW-16-202310	Nitrogen, Nitrite	R
60440541	TMW-26-202310	Methane	J
60440541	TMW-26-202310	Ethane	R
60440541	TMW-26-202310	Ethene	J
60440541	MW-186-202310	Methane	J
60440541	MW-186-202310	Ethane	R
60440541	MW-186-202310	Ethene	R
60440541	TMW-25-202310	Methane	J
60440541	TMW-25-202310	Ethane	R
60440541	TMW-25-202310	Ethene	R
60440541	TMW-32-202310	Methane	J
60440541	TMW-32-202310	Ethane	R
60440541	TMW-32-202310	Ethene	R
60440541	TMW-16-202310	Methane	J
60440541	TMW-16-202310	Ethane	J
60440541	TMW-16-202310	Ethene	J
60439898	TMW-36-202310	Organic Carbon (dissolved)	J
60439898	TMW-36B-202310	Organic Carbon (dissolved)	UJ
60440028	MW-91-202310	Organic Carbon (dissolved)	J
60440028	TMW-21-202310	Organic Carbon (dissolved)	J
60440028	TMW-19-202310	Organic Carbon (dissolved)	UJ
60440028	MW-89-202310	Organic Carbon (dissolved)	UJ
60440028	MW-50R-202310	Organic Carbon (dissolved)	UJ
60440158	TMW-10-202310	Organic Carbon (dissolved)	J
60440158	TMW-11-202310	Organic Carbon (dissolved)	J
60440158	MW-99-202310	Organic Carbon (dissolved)	J
60440158	MW-61R-202310	Organic Carbon (dissolved)	J
60440158	TMW-34-202310	Organic Carbon (dissolved)	UJ
60440158	MW-194-202310	Organic Carbon (dissolved)	UJ
60440221	RW-69-202310	Organic Carbon (total)	UJ
60440221	MW-58R-202310	Organic Carbon (total)	UJ
60440221	ITMW-9-202310	Organic Carbon (total)	J
60440221	MW-95-202310	Organic Carbon (total)	UJ
60440221	MW-38-202310	Organic Carbon (total)	UJ
60440221	TMW-22R-202310	Organic Carbon (dissolved)	J
60440221	TMW-22R-202310	Organic Carbon (total)	J
60440221	MW-185-202310	Organic Carbon (dissolved)	UJ

SDG	Field ID	Analyte	Qualification
60440221	MW-185-202310	Organic Carbon (total)	UJ
60440221	MW-95-202310	Ethyl Benzene	UJ
60440221	MW-95-202310	Styrene	UJ
60440221	MW-95-202310	cis-1,3-Dichloropropene	UJ
60440221	MW-95-202310	trans-1,3-Dichloropropene	UJ
60440221	MW-95-202310	1,2-Dichloroethane	J
60440221	MW-95-202310	4-Methyl-2-pentanone	UJ
60440221	MW-95-202310	Toluene	J
60440221	MW-95-202310	Chlorobenzene	UJ
60440221	MW-95-202310	Dibromochloromethane	UJ
60440221	MW-95-202310	Tetrachloroethene	J
60440221	MW-95-202310	trans-1,2-Dichloroethene	J
60440221	MW-95-202310	1,3-Dichloropropene (total)	UJ
60440221	MW-95-202310	Carbon Tetrachloride	J
60440221	MW-95-202310	2-Hexanone	UJ
60440221	MW-95-202310	Acetone	UJ
60440221	MW-95-202310	Chloroform	J
60440221	MW-95-202310	Benzene	J
60440221	MW-95-202310	1,1,1-Trichloroethane	J
60440221	MW-95-202310	Bromomethane	UJ
60440221	MW-95-202310	Chloromethane	UJ
60440221	MW-95-202310	Chloroethane	UJ
60440221	MW-95-202310	Vinyl Chloride	J
60440221	MW-95-202310	Methylene Chloride	J
60440221	MW-95-202310	Carbon Disulfide	UJ
60440221	MW-95-202310	Bromoform	UJ
60440221	MW-95-202310	Bromodichloromethane	J
60440221	MW-95-202310	1,1-Dichloroethane	J
60440221	MW-95-202310	1,1-Dichloroethene	J
60440221	MW-95-202310	1,2-Dichloropropane	UJ
60440221	MW-95-202310	2-Butanone	UJ
60440221	MW-95-202310	1,1,2-Trichloroethane	J
60440221	MW-95-202310	1,1,2,2-Tetrachloroethane	J

ID = Identification
J = Estimated
R = Rejected
SDG = Sample delivery group
UJ = Estimated non-detect

3.0 Blank Contamination

Were any analytes detected in the associated laboratory or field blanks?

Yes. The following table summarizes analytes detected in laboratory method and field blanks collected as part of this data set:

SDG	Blank ID	Blank Type	Analyte	Concentration	Units
60439898	TB-01-202310	Trip	trans-1,2-Dichloroethene	0.48 J	µg/L
60439898	EB-01-202310	Equipment	Chloroform	0.39 J	µg/L
60439898	1461779	Method	Ethane	0.97 J	µg/L
60439898	1461779	Method	Ethene	0.86 J	µg/L
60439898	1461779	Method	Methane	4.7 J	µg/L
60440028	TB-02-202310	Trip	Chloroform	0.24 J	µg/L
60440028	TB-02-202310	Trip	trans-1,2-	0.48 J	µg/L

SDG	Blank ID	Blank Type	Analyte	Concentration	Units
			Dichloroethene		
60440028	EB-02-202310	Equipment	Chloroform	0.51 J	µg/L
60440028	TB-03-202310	Trip	Chloroform	0.27 J	µg/L
60440028	TB-03-202310	Trip	trans-1,2-Dichloroethene	0.49 J	µg/L
60440028	3445296	Method	Methylene Chloride	0.53 J	µg/L
60440158	TB-04-202310	Trip	trans-1,2-Dichloroethene	0.49 J	µg/L
60440158	TB-05-202310	Trip	trans-1,2-Dichloroethene	0.46 J	µg/L
60440158	TB-06-202310	Trip	trans-1,2-Dichloroethene	0.50 J	µg/L
60440158	3447114	Method	Bromomethane	0.50 J	µg/L
60440158	3449590	Method	Trichloroethene	1.3	µg/L
60440158	3454848	Method	Chloride	0.58J	µg/L
60440221	TB-06-202310	Trip	trans-1,2-Dichloroethene	0.44 J	µg/L
60440221	TB-07-202310	Trip	trans-1,2-Dichloroethene	0.39 J	µg/L
60440221	TB-08-202310	Trip	trans-1,2-Dichloroethene	0.42 J	µg/L
60440221	EB-04-202310	Trip	trans-1,2-Dichloroethene	0.24 J	µg/L
60440541	EB-05-202310	Equipment	Chloroform	0.39 J	µg/L
60440541	TB-09-202310	Trip	trans-1,2-Dichloroethene	0.42 J	µg/L
60440541	TB-10-202310	Trip	Chloroform	0.22 J	µg/L
60440541	TB-10-202310	Trip	trans-1,2-Dichloroethene	0.44 J	µg/L
L1667739	R3989160-3	Method	Benzene	0.00955 J	ppbv
L1667739	R3989160-3	Method	1,4-Dichlorobenzene	0.00221 J	ppbv
L1667739	R3989160-3	Method	Tetrachloroethene	0.0123 J	ppbv
L1667739	R3991366-3	Method	Benzene	0.0107 J	ppbv
L1667739	R3991366-3	Method	Chloromethane	0.00717 J	ppbv
L1668193	R3993017-3	Method	Ethanol	1.00 J	ppbv

ID = Identification
J = Result was detected between the method detection limit and reporting limit and is considered estimated.
µg/L = Micrograms per liter
ppbv = Parts per billion by volume
SDG = Sample delivery group

The results qualified for blank contamination are summarized in the table below.

SDG	Field ID	Analyte	Qualification
60440028	MW-176-202310	trans-1,2-Dichloroethene	U
60440028	MW-176-202310	Chloroform	U
60440028	MW-190-202310	Chloroform	U
60440028	MW-203-202310	trans-1,2-Dichloroethene	U
60440028	MW-203-202310	Chloroform	U
60440028	MW-91-202310	trans-1,2-Dichloroethene	U
60440028	TMW-21-202310	trans-1,2-Dichloroethene	U
60440158	DUP-09-202310	trans-1,2-Dichloroethene	U
60440158	ITMW-1R-202310	trans-1,2-Dichloroethene	U
60440158	MW-197-202310	trans-1,2-Dichloroethene	U
60440158	MW-27-202310	trans-1,2-Dichloroethene	U
60440158	MW-87-202310	trans-1,2-Dichloroethene	U

SDG	Field ID	Analyte	Qualification
60440158	TMW-10-202310	trans-1,2-Dichloroethene	U
60440158	TMW-12-202310	trans-1,2-Dichloroethene	U
60440158	TMW-34-202310	trans-1,2-Dichloroethene	U
60439898	TMW-36-202310	Ethane	U
60439898	TMW-36-202310	Ethene	U
60439898	TMW-36-202310	trans-1,2-Dichloroethene	U
60439898	TMW-36B-202310	Ethene	U
60440221	ITMW-19-202310	trans-1,2-Dichloroethene	J+
60440221	ITMW-5-202310	trans-1,2-Dichloroethene	U
60440221	ITMW-6-202310	trans-1,2-Dichloroethene	U
60440221	IW-77-202310	trans-1,2-Dichloroethene	U
60440221	MW-175-202310	trans-1,2-Dichloroethene	U
60440221	MW-179-202310	trans-1,2-Dichloroethene	U
60440221	MW-185-202310	trans-1,2-Dichloroethene	U
60440221	MW-202-202310	trans-1,2-Dichloroethene	U
60440221	MW-205-202310	trans-1,2-Dichloroethene	U
60440221	MW-38-202310	trans-1,2-Dichloroethene	U
60440221	MW-46R-202310	trans-1,2-Dichloroethene	U
60440221	MW-56R-202310	trans-1,2-Dichloroethene	U
60440221	MW-57R-202310	trans-1,2-Dichloroethene	U
60440221	MW-58R-202310	trans-1,2-Dichloroethene	U
60440221	RW-69-202310	trans-1,2-Dichloroethene	U
60440541	TMW-16-202310	trans-1,2-Dichloroethene	U

ID = Identification
J+ = Estimated with a high bias
SDG = Sample delivery group
U = Non-detect

4.0 Surrogate Recoveries

Were surrogate recoveries within evaluation criteria?

Yes. Three surrogates (4-bromofluorobenzene, 1,2-dichlorobenzene-d4, and toluene-d8) were added to each aqueous sample analyzed for VOCs by 8260 to evaluate the laboratory performance on individual samples. Percent recoveries for all surrogates were within the laboratory acceptance limits in all samples analyzed for VOCs by 8260.

5.0 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.

6.0 Laboratory Control Sample

Were LCS recoveries within evaluation criteria?

No. The LCS provides information on the accuracy of the analytical method and on the laboratory performance. The LCS recoveries that were outside the laboratory acceptance criteria are summarized in the table below. Non-detect results associated with high recoveries were not qualified.

SDG	LCS ID	Analyte	LCS Recovery (%)	LCS Recovery Criteria (%)
60439898/ 60440028	1458490	n-Hexanoic acid	50	70-130
60439898/ 60440028	1458490	4-methyl-pentanoic acid	69	70-130
60440158/ 60440221	1460182	n-Hexanoic acid	50	70-130
60440158/ 60440221	1460182	1-Butanecarboxylic Acid	69	70-130
60440221	3451732	1,1,2-Trichloroethane	72	75-125
60440221	3451976	1,1,2-Trichloroethane	72	75-125
60440541	1480926	n-Hexanoic acid	57	70-130

ID = Identification
LCS = Laboratory control sample
% = Percent
SDG = Sample delivery group

The results qualified for LCS recoveries are summarized in the table below.

SDG	Field ID	Analyte	Qualification
60440028	MW-91-202310	n-Hexanoic acid	UJ
60440028	MW-91-202310	4-methyl-pentanoic acid	UJ
60440028	TMW-19-202310	n-Hexanoic acid	UJ
60440028	TMW-19-202310	4-methyl-pentanoic acid	UJ
60440028	TMW-21-202310	n-Hexanoic acid	UJ
60440028	TMW-21-202310	4-methyl-pentanoic acid	UJ
60440158	MW-194-202310	1-Butanecarboxylic Acid	UJ
60440158	MW-194-202310	n-Hexanoic acid	UJ
60440158	MW-61R-202310	1-Butanecarboxylic Acid	UJ
60440158	MW-61R-202310	n-Hexanoic acid	UJ
60440158	MW-99-202310	1-Butanecarboxylic Acid	UJ
60440158	MW-99-202310	n-Hexanoic acid	UJ
60440158	TMW-10-202310	1-Butanecarboxylic Acid	UJ
60440158	TMW-10-202310	n-Hexanoic acid	UJ
60440158	TMW-11-202310	1-Butanecarboxylic Acid	UJ
60440158	TMW-11-202310	n-Hexanoic acid	UJ
60440158	TMW-34-202310	1-Butanecarboxylic Acid	UJ
60440158	TMW-34-202310	n-Hexanoic acid	UJ
60439898	TMW-36-202310	n-Hexanoic acid	UJ
60439898	TMW-36-202310	4-methyl-pentanoic acid	UJ
60439898	TMW-36B-202310	n-Hexanoic acid	UJ
60439898	TMW-36B-202310	4-methyl-pentanoic acid	UJ
60440221	ITMW-5-202310	1,1,2-Trichloroethane	UJ
60440221	ITMW-6-202310	1,1,2-Trichloroethane	UJ
60440221	MW-185-202310	1-Butanecarboxylic Acid	UJ
60440221	MW-185-202310	n-Hexanoic acid	UJ
60440221	MW-198-202310	1,1,2-Trichloroethane	J-
60440221	MW-38-202310	1,1,2-Trichloroethane	UJ
60440221	MW-56R-202310	1,1,2-Trichloroethane	UJ
60440221	MW-92-202310	1,1,2-Trichloroethane	UJ
60440221	MW-93-202310	1,1,2-Trichloroethane	UJ
60440221	TMW-22R-202310	1-Butanecarboxylic Acid	UJ
60440221	TMW-22R-202310	n-Hexanoic acid	UJ
60440541	TMW-16-202310	n-Hexanoic acid	J

SDG	Field ID	Analyte	Qualification
60440541	MW-186-202310	n-Hexanoic acid	UJ
60440541	TMW-25-202310	n-Hexanoic acid	UJ
60440541	TMW-26-202310	n-Hexanoic acid	UJ
60440541	TMW-32-202310	n-Hexanoic acid	UJ

ID = Identification
J = Estimated
J- = Estimated with a low bias
SDG = Sample delivery group
UJ = Estimated non-detect

7.0 Matrix Spike and Matrix Spike Duplicate Recoveries

Were MS/MSD samples reported as part of these SDGs?

Yes. 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	Analyte	MS/MSD Recovery (%) or RPD	MS/MSD Recovery Criteria (%) or RPD Limit
60439898	MW-29-202310	Styrene	**39/30**	80-120
60440028	MW-91-202310	n-Hexanoic acid	**48/48**	70-130
60440028	MW-91-202310	4-methyl-pentanoic acid	**66/66**	70-130
60440028	MW-91-202310	1-Butanecarboxylic Acid	**68/68**	70-130
60440028	MW-60R-202310	Styrene	**48/48**	70-130
60440028	MW-89-202310	Nitrogen	**-1**	90-110
60440028	MW-89-202310	Nitrogen, Nitrate (As N)	**-2**	70-130
60440028	MW-89-202310	Nitrogen, Nitrite	**0**	90-110

ID = Identification
MS = Matrix Spike
MSD = Matrix Spike Duplicate
% = Percent
RPD = Relative percent difference
SDG = Sample delivery group

Only the project samples that were used to prepare MS/MSDs were evaluated. The result for nitrite was qualified "R" as reject for sample MW-89-202310 because the MS recovery was significantly low (below 10%). The rejected result and additional results qualified for MS/MSD recoveries are shown in the table below.

SDG	Field ID	Analyte	Qualification
60440028	MW-60R-202310	Styrene	UJ
60440028	MW-89-202310	Nitrogen	J-
60440028	MW-89-202310	Nitrogen, Nitrate (As N)	J-
60440028	MW-89-202310	Nitrogen, Nitrite	R
60440028	MW-91-202310	1-Butanecarboxylic Acid	UJ
60440028	MW-91-202310	n-Hexanoic acid	UJ

SDG	Field ID	Analyte	Qualification
60440028	MW-91-202310	4-methyl-pentanoic acid	UJ
60440158	MW-61R-202310	Sulfate	J+
60439898	MW-29-202310	Styrene	UJ

ID = Identification
J = Estimated
J+ = Estimated with a hight bias
J- = Estimated with a low bias
R = Rejected
SDG = Sample delivery group
UJ = Estimated non-detect

8.0 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 Identification
60440028	MW-184-202310	DUP-01-202310
60440028	ITMW-20-202310	DUP-02-202310
60440158	ITMW-21-202310	DUP-03-202310
60440158	IW-78-202310	DUP-04-202310
60440028	MW-195-202310	DUP-05-202310
60440541	TMW-30-202310	DUP-06-202310
60440541	MW-182-202310	DUP-07-202310
60440158	MW-24-202310	DUP-08-202310
60440158	TMW-12-202310	DUP-09-202310
60439898	MW-96-202310	DUP-10-202310
60440028	TMW-35-202310	DUP-11-202310
L1667739	AA-1-IA-202310	DUP-IA-202310

ID = Identification
SDG = Sample delivery group

Were field duplicates within evaluation criteria?

No. RPDs were calculated for results that were above the reporting limit in both the parent sample and field duplicate. All calculated RPDs were within 30% with several exceptions for field duplicate pair AA-1-IA-202310/ DUP-IA-202310. Calculated RPDs for trans-1,2-DCE (124%) and benzene (78%) exceeded 30%. Results for ethylbenzene and trichloroethene were also qualified because the analytes were detected in the field duplicate DUP-IA-202310 but were not detected in parent sample AA-1-IA-202310.

The results qualified for field duplicate precision are summarized in the table below.

SDG	Field ID	Analyte	Qualification
L1667739	AA-1-IA-202310	Ethyl Benzene	UJ
L1667739	AA-1-IA-202310	trans-1,2-Dichloroethene	J
L1667739	AA-1-IA-202310	Benzene	J
L1667739	AA-1-IA-202310	Trichloroethene	UJ
L1667739	DUP-IA-202310	Ethyl Benzene	J
L1667739	DUP-IA-202310	trans-1,2-Dichloroethene	J
L1667739	DUP-IA-202310	Benzene	J
L1667739	DUP-IA-202310	Trichloroethene	J

9.0 Detects and Calibration Range

For samples that were diluted and non-detect, were undiluted results also reported?

No. Several samples in this data set were diluted due to the presence of non-target analytes or other matrix interferences. Non-detect results were reported for some analyses with elevated reporting limits.

For samples that were not diluted and detected, were the results within calibration range?

Yes. Results reported between the MDL and RL were qualified "J" as estimated.

10.0 Additional Qualifications

Were additional qualifications applied?

Yes. Calibrations were not reviewed as part of the validation; however, the laboratory noted that the recovery for one of the continuing calibration standards exceeded the acceptance criteria for methane. Methane results for samples MW-186-202310, TMW-16-202310, TMW-25-202310, TMW-26-202310, and TMW-32-202310 were qualified "J" as estimated for the accuracy nonconformance.

11.0 Overall Data Assessment

The data that are not rejected are usable as qualified for the intended purposes based on an evaluation of the QC parameters discussed in this report. The table below summarizes the final qualifications for the analytical data.

Data Qualifier Summary:

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
60439898003	MW-29-202310	Styrene	UJ	MS and MSD recoveries low
60439898006	MW-191-202310	cis-1,2-Dichloroethene	J	Result <RL
60439898009	TB-01-202310	trans-1,2-Dichloroethene	J	Result <RL
60439898010	EB-01-202310	Chloroform	J	Result <RL
60439898011	TMW-36-202310	n-Hexanoic acid	UJ	LCS recovery low
60439898011	TMW-36-202310	Lactic Acid	J	Result <RL
60439898011	TMW-36-202310	4-methyl-pentanoic acid	UJ	LCS recovery low
60439898011	TMW-36-202310	Ethane	U	Method blank contamination; qualify U as non-detect at RL
60439898011	TMW-36-202310	Ethene	U	Method blank contamination; qualify U as non-detect at RL
60439898011	TMW-36-202310	Organic Carbon (dissolved)	J	Result <RL; Hold time exceeded
60439898011	TMW-36-202310	trans-1,2-Dichloroethene	U	Trip blank contamination; qualify U as non-detect at RL

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
60439898011	TMW-36-202310	Vinyl Chloride	J	Result <RL
60439898011	TMW-36-202310	1,1-Dichloroethane	J	Result <RL
60439898011	TMW-36-202310	1,1-Dichloroethene	J	Result <RL
60439898012	TMW-36B-202310	n-Hexanoic acid	UJ	LCS recovery low
60439898012	TMW-36B-202310	4-methyl-pentanoic acid	UJ	LCS recovery low
60439898012	TMW-36B-202310	Ethene	U	Method blank contamination; qualify U as non-detect at RL
60439898012	TMW-36B-202310	Organic Carbon (dissolved)	UJ	Hold time exceeded
60439898012	TMW-36B-202310	cis-1,2-Dichloroethene	J	Result <RL
60440028001	TMW-20-202310	Trichloroethene	J	Result <RL
60440028002	MW-184-202310	cis-1,2-Dichloroethene	J	Result <RL
60440028003	DUP-01-202310	cis-1,2-Dichloroethene	J	Result <RL
60440028006	MW-176-202310	trans-1,2-Dichloroethene	U	Trip blank contamination; qualify U as non-detect at RL
60440028006	MW-176-202310	Chloroform	U	Equipment and trip blank contamination; qualify U as non-detect at RL
60440028012	MW-195-202310	cis-1,2-Dichloroethene	J	Result <RL
60440028013	DUP-05-202310	cis-1,2-Dichloroethene	J	Result <RL
60440028015	MW-206-202310	cis-1,2-Dichloroethene	J	Result <RL
60440028019	MW-183R-202310	Acetone	J	Result <RL
60440028019	MW-183R-202310	Trichloroethene	J	Result <RL
60440028023	MW-190-202310	Chloroform	U	Equipment and trip blank contamination; qualify U as non-detect at RL
60440028023	MW-190-202310	Vinyl Chloride	J	Result <RL
60440028023	MW-190-202310	1,1-Dichloroethane	J	Result <RL
60440028025	TB-02-202310	trans-1,2-Dichloroethene	J	Result <RL
60440028025	TB-02-202310	Chloroform	J	Result <RL
60440028026	EB-02-202310	Chloroform	J	Result <RL
60440028027	TB-03-202310	trans-1,2-Dichloroethene	J	Result <RL
60440028027	TB-03-202310	Chloroform	J	Result <RL
60440028028	MW-203-202310	trans-1,2-Dichloroethene	U	Trip blank contamination; qualify U as non-detect at RL
60440028028	MW-203-202310	Chloroform	U	Equipment and trip blank contamination; qualify U as non-detect at RL
60440028028	MW-203-202310	Vinyl Chloride	J	Result <RL
60440028028	MW-203-202310	1,1-Dichloroethane	J	Result <RL
60440028028	MW-203-202310	1,1-Dichloroethene	J	Result <RL

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
60440028029	MW-60R-202310	Styrene	UJ	MS and MSD recoveries low
60440028030	MW-91-202310	1-Butanecarboxylic Acid	UJ	MS and MSD recoveries low
60440028030	MW-91-202310	n-Hexanoic acid	UJ	LCS recovery low; MS and MSD recoveries low
60440028030	MW-91-202310	4-methyl-pentanoic acid	UJ	LCS recovery low; MS and MSD recoveries low
60440028030	MW-91-202310	Ethane	J	Result <RL
60440028030	MW-91-202310	Ethene	J	Result <RL
60440028030	MW-91-202310	Organic Carbon (dissolved)	J	Hold time exceeded
60440028030	MW-91-202310	Toluene	J	Result <RL
60440028030	MW-91-202310	Tetrachloroethene	J	Result <RL
60440028030	MW-91-202310	trans-1,2-Dichloroethene	U	Trip blank contamination; qualify U as non-detect at RL
60440028030	MW-91-202310	Benzene	J	Result <RL
60440028030	MW-91-202310	Vinyl Chloride	J	Result <RL
60440028030	MW-91-202310	1,1-Dichloroethane	J	Result <RL
60440028031	TMW-21-202310	n-Hexanoic acid	UJ	LCS recovery low
60440028031	TMW-21-202310	Lactic Acid	J	Result <RL
60440028031	TMW-21-202310	4-methyl-pentanoic acid	UJ	LCS recovery low
60440028031	TMW-21-202310	Ethane	J	Result <RL
60440028031	TMW-21-202310	Ethene	J	Result <RL
60440028031	TMW-21-202310	Organic Carbon (dissolved)	J	Hold time exceeded
60440028031	TMW-21-202310	Toluene	J	Result <RL
60440028031	TMW-21-202310	trans-1,2-Dichloroethene	U	Trip blank contamination; qualify U as non-detect at RL
60440028031	TMW-21-202310	Benzene	J	Result <RL
60440028032	TMW-19-202310	n-Hexanoic acid	UJ	LCS recovery low
60440028032	TMW-19-202310	Lactic Acid	J	Result <RL
60440028032	TMW-19-202310	4-methyl-pentanoic acid	UJ	LCS recovery low
60440028032	TMW-19-202310	Methane	J	Result <RL
60440028032	TMW-19-202310	Ethene	J	Result <RL
60440028032	TMW-19-202310	Organic Carbon (total)	J	Result <RL
60440028032	TMW-19-202310	Organic Carbon (dissolved)	UJ	Hold time exceeded
60440028032	TMW-19-202310	Iron	J	Result <RL
60440028032	TMW-19-202310	1,1-Dichloroethane	J	Result <RL
60440028033	MW-89-202310	Nitrogen	J-	MS recovery low
60440028033	MW-89-202310	Nitrogen, Nitrate (As N)	J-	MS recovery low
60440028033	MW-89-202310	Nitrogen, Nitrite	R	MS recovery low
60440028033	MW-89-202310	Ethene	J	Result <RL
60440028033	MW-89-202310	Organic Carbon (total)	J	Result <RL
60440028033	MW-89-202310	Organic Carbon (dissolved)	UJ	Hold time exceeded

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
60440028033	MW-89-202310	cis-1,2-Dichloroethene	J	Result <RL
60440028034	MW-50R-202310	HYDROGEN (H2)	J	Result <RL
60440028034	MW-50R-202310	Ethene	J	Result <RL
60440028034	MW-50R-202310	Organic Carbon (dissolved)	UJ	Hold time exceeded
60440028034	MW-50R-202310	cis-1,2-Dichloroethene	J	Result <RL
60440158002	MW-98-202310	cis-1,2-Dichloroethene	J	Result <RL
60440158003	ITMW-21-202310	cis-1,2-Dichloroethene	J	Result <RL
60440158004	DUP-03-202310	cis-1,2-Dichloroethene	J	Result <RL
60440158005	ITMW-7-202310	Benzene	J	Result <RL
60440158006	MW-24-202310	cis-1,2-Dichloroethene	J	Result <RL
60440158007	DUP-08-202310	cis-1,2-Dichloroethene	J	Result <RL
60440158008	IW-78-202310	Dibromochloromethane	J	Result <RL
60440158008	IW-78-202310	cis-1,2-Dichloroethene	J	Result <RL
60440158008	IW-78-202310	Chloromethane	J	Result <RL
60440158009	DUP-04-202310	Dibromochloromethane	J	Result <RL
60440158009	DUP-04-202310	cis-1,2-Dichloroethene	J	Result <RL
60440158009	DUP-04-202310	Chloromethane	J	Result <RL
60440158009	DUP-04-202310	Bromodichloromethane	J	Result <RL
60440158010	ITMW-1R-202310	Tetrachloroethene	J	Result <RL
60440158010	ITMW-1R-202310	trans-1,2-Dichloroethene	U	Trip blank contamination; qualify U as non-detect at RL
60440158010	ITMW-1R-202310	1,1-Dichloroethene	J	Result <RL
60440158011	MW-55R-202310	1,1-Dichloroethene	J	Result <RL
60440158012	TMW-12-202310	trans-1,2-Dichloroethene	U	Trip blank contamination; qualify U as non-detect at RL
60440158012	TMW-12-202310	Vinyl Chloride	J	Result <RL
60440158013	DUP-09-202310	trans-1,2-Dichloroethene	U	Trip blank contamination; qualify U as non-detect at RL
60440158013	DUP-09-202310	Vinyl Chloride	J	Result <RL
60440158014	MW-63R-202310	cis-1,2-Dichloroethene	J	Result <RL
60440158015	RW-1-202310	Vinyl Chloride	J	Result <RL
60440158015	RW-1-202310	1,1-Dichloroethene	J	Result <RL
60440158015	RW-1-202310	Ethyl Benzene	J	Result <RL
60440158015	RW-1-202310	trans-1,3-Dichloropropene	J	Result <RL
60440158015	RW-1-202310	1,2-Dichloroethane	J	Result <RL
60440158015	RW-1-202310	4-Methyl-2-pentanone	J	Result <RL
60440158015	RW-1-202310	Xylenes (total)	J	Result <RL
60440158015	RW-1-202310	1,3-Dichloropropene (total)	J	Result <RL
60440158015	RW-1-202310	Acetone	J	Result <RL
60440158015	RW-1-202310	Benzene	J	Result <RL
60440158015	RW-1-202310	Chloroethane	J	Result <RL
60440158015	RW-1-202310	Methylene Chloride	J	Result <RL
60440158015	RW-1-202310	Bromoform	J	Result <RL
60440158015	RW-1-202310	1,2-Dichloropropane	J	Result <RL
60440158015	RW-1-202310	2-Butanone	J	Result <RL
60440158016	MW-82-202310	cis-1,2-Dichloroethene	J	Result <RL
60440158016	MW-82-202310	Chloromethane	J	Result <RL

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
60440158018	TB-04-202310	trans-1,2-Dichloroethene	J	Result <RL
60440158019	TB-05-202310	trans-1,2-Dichloroethene	J	Result <RL
60440158020	TB-06-202310	trans-1,2-Dichloroethene	J	Result <RL
60440158022	TMW-10-202310	HYDROGEN (H2)	J	Result <RL
60440158022	TMW-10-202310	1-Butanecarboxylic Acid	UJ	LCS recovery low
60440158022	TMW-10-202310	n-Hexanoic acid	UJ	LCS recovery low
60440158022	TMW-10-202310	Lactic Acid	J	Result <RL
60440158022	TMW-10-202310	Ethane	J	Result <RL
60440158022	TMW-10-202310	Sulfide (total)	J	Result <RL
60440158022	TMW-10-202310	Organic Carbon (dissolved)	J	Hold time exceeded
60440158022	TMW-10-202310	Toluene	J	Result <RL
60440158022	TMW-10-202310	trans-1,2-Dichloroethene	U	Trip blank contamination; qualify U as non-detect at RL
60440158023	TMW-11-202310	1-Butanecarboxylic Acid	UJ	LCS recovery low
60440158023	TMW-11-202310	n-Hexanoic acid	UJ	LCS recovery low
60440158023	TMW-11-202310	Ethane	J	Result <RL
60440158023	TMW-11-202310	Organic Carbon (dissolved)	J	Hold time exceeded
60440158024	MW-87-202310	HYDROGEN (H2)	J	Result <RL
60440158024	MW-87-202310	Methane	J	Result <RL
60440158024	MW-87-202310	Ethene	J	Result <RL
60440158024	MW-87-202310	trans-1,2-Dichloroethene	U	Trip blank contamination; qualify U as non-detect at RL
60440158024	MW-87-202310	1,1-Dichloroethane	J	Result <RL
60440158025	MW-25R-202310	Ethene	J	Result <RL
60440158025	MW-25R-202310	Acetylene	J	Result <RL
60440158025	MW-25R-202310	Organic Carbon (total)	J	Result <RL
60440158025	MW-25R-202310	Ethyl Benzene	J	Result <RL
60440158025	MW-25R-202310	4-Methyl-2-pentanone	J	Result <RL
60440158025	MW-25R-202310	Benzene	J	Result <RL
60440158025	MW-25R-202310	Chloromethane	J	Result <RL
60440158025	MW-25R-202310	1,2-Dichloropropane	J	Result <RL
60440158025	MW-25R-202310	1,1,2-Trichloroethane	J	Result <RL
60440158025	MW-25R-202310	1,1,2,2-Tetrachloroethane	J	Result <RL
60440158026	MW-99-202310	1-Butanecarboxylic Acid	UJ	LCS recovery low
60440158026	MW-99-202310	n-Hexanoic acid	UJ	LCS recovery low
60440158026	MW-99-202310	Ethane	J	Result <RL
60440158026	MW-99-202310	Organic Carbon (dissolved)	J	Hold time exceeded
60440158026	MW-99-202310	4-Methyl-2-pentanone	J	Result <RL
60440158026	MW-99-202310	Toluene	J	Result <RL
60440158026	MW-99-202310	Benzene	J	Result <RL
60440158026	MW-99-202310	Trichloroethene	J	Result <RL
60440158027	MW-61R-202310	1-Butanecarboxylic	UJ	LCS recovery low

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
		Acid		
60440158027	MW-61R-202310	n-Hexanoic acid	UJ	LCS recovery low
60440158027	MW-61R-202310	Lactic Acid	J	Result <RL
60440158027	MW-61R-202310	Sulfate	J+	MS recovery high
60440158027	MW-61R-202310	Organic Carbon (dissolved)	J	Hold time exceeded
60440158028	TMW-34-202310	1-Butanecarboxylic Acid	UJ	LCS recovery low
60440158028	TMW-34-202310	n-Hexanoic acid	UJ	LCS recovery low
60440158028	TMW-34-202310	Organic Carbon (dissolved)	UJ	Hold time exceeded
60440158028	TMW-34-202310	trans-1,2-Dichloroethene	U	Trip blank contamination; qualify U as non-detect at RL
60440158028	TMW-34-202310	1,1-Dichloroethane	J	Result <RL
60440158029	MW-194-202310	1-Butanecarboxylic Acid	UJ	LCS recovery low
60440158029	MW-194-202310	n-Hexanoic acid	UJ	LCS recovery low
60440158029	MW-194-202310	Lactic Acid	J	Result <RL
60440158029	MW-194-202310	Ethane	J	Result <RL
60440158029	MW-194-202310	Ethene	J	Result <RL
60440158029	MW-194-202310	Organic Carbon (dissolved)	UJ	Hold time exceeded
60440158030	MW-197-202310	Ethane	J	Result <RL
60440158030	MW-197-202310	Ethene	J	Result <RL
60440158030	MW-197-202310	trans-1,2-Dichloroethene	U	Trip blank contamination; qualify U as non-detect at RL
60440158031	MW-27-202310	Methane	J	Result <RL
60440158031	MW-27-202310	Ethane	J	Result <RL
60440158031	MW-27-202310	Ethene	J	Result <RL
60440158031	MW-27-202310	trans-1,2-Dichloroethene	U	Trip blank contamination; qualify U as non-detect at RL
60440158031	MW-27-202310	1,1-Dichloroethene	J	Result <RL
60440158032	TMW-23-202310	1,1-Dichloroethene	J	Result <RL
60440158033	MW-83-202310	Acetylene	J	Result <RL
60440158033	MW-83-202310	Iron	J	Result <RL
60440158033	MW-83-202310	cis-1,2-Dichloroethene	J	Result <RL
60440221001	MW-202-202310	Tetrachloroethene	J	Result <RL
60440221001	MW-202-202310	trans-1,2-Dichloroethene	U	Trip and equipment blank contamination; qualify U as non-detect at RL
60440221001	MW-202-202310	1,1-Dichloroethane	J	Result <RL
60440221002	MW-205-202310	trans-1,2-Dichloroethene	U	Trip and equipment blank contamination; qualify U as non-detect at RL
60440221002	MW-205-202310	Chloroform	J	Result <RL
60440221002	MW-205-202310	Benzene	J	Result <RL

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
60440221002	MW-205-202310	Vinyl Chloride	J	Result <RL
60440221002	MW-205-202310	1,1,2-Trichloroethane	J	Result <RL
60440221003	IW-77-202310	trans-1,2-Dichloroethene	U	Trip and equipment blank contamination; qualify U as non-detect at RL
60440221004	ITMW-10-202310	Toluene	J	Result <RL
60440221004	ITMW-10-202310	1,1-Dichloroethane	J	Result <RL
60440221004	ITMW-10-202310	1,1-Dichloroethene	J	Result <RL
60440221005	MW-46R-202310	trans-1,2-Dichloroethene	U	Trip and equipment blank contamination; qualify U as non-detect at RL
60440221005	MW-46R-202310	Vinyl Chloride	J	Result <RL
60440221006	MW-199-202310	Chlorobenzene	J	Result <RL
60440221006	MW-199-202310	1,1-Dichloroethene	J	Result <RL
60440221007	MW-189-202310	Chlorobenzene	J	Result <RL
60440221007	MW-189-202310	Vinyl Chloride	J	Result <RL
60440221007	MW-189-202310	Methylene Chloride	J	Result <RL
60440221007	MW-189-202310	1,1-Dichloroethane	J	Result <RL
60440221007	MW-189-202310	1,1-Dichloroethene	J	Result <RL
60440221008	MW-175-202310	trans-1,2-Dichloroethene	U	Trip and equipment blank contamination; qualify U as non-detect at RL
60440221008	MW-175-202310	1,1-Dichloroethene	J	Result <RL
60440221009	VP-8-202310	Toluene	J	Result <RL
60440221009	VP-8-202310	cis-1,2-Dichloroethene	J	Result <RL
60440221009	VP-8-202310	Benzene	J	Result <RL
60440221009	VP-8-202310	2-Butanone	J	Result <RL
60440221010	MW-57R-202310	trans-1,2-Dichloroethene	U	Trip and equipment blank contamination; qualify U as non-detect at RL
60440221011	MW-178-202310	cis-1,2-Dichloroethene	J	Result <RL
60440221011	MW-178-202310	Trichloroethene	J	Result <RL
60440221012	MW-179-202310	trans-1,2-Dichloroethene	U	Trip and equipment blank contamination; qualify U as non-detect at RL
60440221012	MW-179-202310	1,1-Dichloroethene	J	Result <RL
60440221013	VP-14-202310	1,1-Dichloroethene	J	Result <RL
60440221015	MW-56R-202310	trans-1,2-Dichloroethene	U	Trip and equipment blank contamination; qualify U as non-detect at RL
60440221015	MW-56R-202310	Carbon Disulfide	J	Result <RL
60440221015	MW-56R-202310	1,1,2-Trichloroethane	UJ	LCS recovery low
60440221016	ITMW-18-202310	Methylene Chloride	J	Result <RL
60440221016	ITMW-18-202310	Bromodichloromethane	J	Result <RL

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
60440221016	ITMW-18-202310	1,1-Dichloroethane	J	Result <RL
60440221016	ITMW-18-202310	1,1,2,2-Tetrachloroethane	J	Result <RL
60440221017	MW-93-202310	Carbon Tetrachloride	J	Result <RL
60440221017	MW-93-202310	Bromoform	J	Result <RL
60440221017	MW-93-202310	1,1,2-Trichloroethane	UJ	LCS recovery low
60440221018	ITMW-5-202310	Chlorobenzene	J	Result <RL
60440221018	ITMW-5-202310	trans-1,2-Dichloroethene	U	Trip and equipment blank contamination; qualify U as non-detect at RL
60440221018	ITMW-5-202310	Chloroform	J	Result <RL
60440221018	ITMW-5-202310	Vinyl Chloride	J	Result <RL
60440221018	ITMW-5-202310	1,1-Dichloroethane	J	Result <RL
60440221018	ITMW-5-202310	1,1,2-Trichloroethane	UJ	LCS recovery low
60440221019	ITMW-6-202310	Tetrachloroethene	J	Result <RL
60440221019	ITMW-6-202310	trans-1,2-Dichloroethene	U	Trip and equipment blank contamination; qualify U as non-detect at RL
60440221019	ITMW-6-202310	Chloroform	J	Result <RL
60440221019	ITMW-6-202310	Vinyl Chloride	J	Result <RL
60440221019	ITMW-6-202310	1,1,2-Trichloroethane	UJ	LCS recovery low
60440221020	TB-11-202310	trans-1,2-Dichloroethene	J	Result <RL
60440221021	TB-07-202310	trans-1,2-Dichloroethene	J	Result <RL
60440221022	TB-08-202310	trans-1,2-Dichloroethene	J	Result <RL
60440221023	EB-04-202310	Chloroform	J	Result <RL
60440221024	RW-69-202310	Organic Carbon (total)	UJ	Hold time exceeded
60440221024	RW-69-202310	trans-1,2-Dichloroethene	U	Trip and equipment blank contamination; qualify U as non-detect at RL
60440221024	RW-69-202310	Vinyl Chloride	J	Result <RL
60440221025	MW-58R-202310	HYDROGEN (H2)	J	Result <RL
60440221025	MW-58R-202310	Ethane	J	Result <RL
60440221025	MW-58R-202310	Ethene	J	Result <RL
60440221025	MW-58R-202310	Organic Carbon (total)	UJ	Hold time exceeded
60440221025	MW-58R-202310	trans-1,2-Dichloroethene	U	Trip and equipment blank contamination; qualify U as non-detect at RL
60440221025	MW-58R-202310	Vinyl Chloride	J	Result <RL
60440221026	MW-198-202310	Acetylene	J	Result <RL
60440221026	MW-198-202310	Organic Carbon (total)	J	Result <RL
60440221026	MW-198-202310	Vinyl Chloride	J	Result <RL
60440221026	MW-198-202310	Toluene	J	Result <RL
60440221026	MW-198-202310	Dibromochloromethane	J	Result <RL

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
60440221026	MW-198-202310	Benzene	J	Result <RL
60440221026	MW-198-202310	1,1,2-Trichloroethane	J-	LCS recovery low
60440221027	IW-73-202310	HYDROGEN (H2)	J	Result <RL
60440221027	IW-73-202310	Methane	J	Result <RL
60440221027	IW-73-202310	Ethane	J	Result <RL
60440221027	IW-73-202310	Ethene	J	Result <RL
60440221027	IW-73-202310	Organic Carbon (total)	J	Result <RL
60440221027	IW-73-202310	Vinyl Chloride	J	Result <RL
60440221027	IW-73-202310	1,1-Dichloroethene	J	Result <RL
60440221028	ITMW-9-202310	Ethane	J	Result <RL
60440221028	ITMW-9-202310	Ethene	J	Result <RL
60440221028	ITMW-9-202310	Organic Carbon (total)	J	Result <RL; Hold time exceeded
60440221028	ITMW-9-202310	Methylene Chloride	J	Result <RL
60440221028	ITMW-9-202310	1,1,2-Trichloroethane	J	Result <RL; LCS recovery low
60440221028	ITMW-9-202310	1,1,2,2-Tetrachloroethane	J	Result <RL
60440221029	MW-95-202310	HYDROGEN (H2)	J	Result <RL
60440221029	MW-95-202310	Methane	J	Result <RL
60440221029	MW-95-202310	Ethane	J	Result <RL
60440221029	MW-95-202310	Acetylene	J	Result <RL
60440221029	MW-95-202310	Organic Carbon (total)	UJ	Hold time exceeded
60440221029	MW-95-202310	Iron	J	Result <RL
60440221029	MW-95-202310	Ethyl Benzene	UJ	Hold time exceeded
60440221029	MW-95-202310	Styrene	UJ	Hold time exceeded
60440221029	MW-95-202310	cis-1,3-Dichloropropene	UJ	Hold time exceeded
60440221029	MW-95-202310	trans-1,3-Dichloropropene	UJ	Hold time exceeded
60440221029	MW-95-202310	1,2-Dichloroethane	J	Result <RL; Hold time exceeded
60440221029	MW-95-202310	4-Methyl-2-pentanone	UJ	Hold time exceeded
60440221029	MW-95-202310	Toluene	J	Hold time exceeded
60440221029	MW-95-202310	Chlorobenzene	UJ	Hold time exceeded
60440221029	MW-95-202310	Dibromochloromethane	UJ	Hold time exceeded
60440221029	MW-95-202310	Tetrachloroethene	J	Hold time exceeded
60440221029	MW-95-202310	trans-1,2-Dichloroethene	J	Hold time exceeded
60440221029	MW-95-202310	1,3-Dichloropropene (total)	UJ	Hold time exceeded
60440221029	MW-95-202310	Carbon Tetrachloride	J	Result <RL; Hold time exceeded
60440221029	MW-95-202310	2-Hexanone	UJ	Hold time exceeded
60440221029	MW-95-202310	Acetone	UJ	Hold time exceeded
60440221029	MW-95-202310	Chloroform	J	Hold time

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
				exceeded
60440221029	MW-95-202310	Benzene	J	Result <RL; Hold time exceeded
60440221029	MW-95-202310	1,1,1-Trichloroethane	J	Hold time exceeded
60440221029	MW-95-202310	Bromomethane	UJ	Hold time exceeded
60440221029	MW-95-202310	Chloromethane	UJ	Hold time exceeded
60440221029	MW-95-202310	Chloroethane	UJ	Hold time exceeded
60440221029	MW-95-202310	Vinyl Chloride	J	Hold time exceeded
60440221029	MW-95-202310	Methylene Chloride	J	Hold time exceeded
60440221029	MW-95-202310	Carbon Disulfide	UJ	Hold time exceeded
60440221029	MW-95-202310	Bromoform	UJ	Hold time exceeded
60440221029	MW-95-202310	Bromodichloromethane	J	Result <RL; Hold time exceeded
60440221029	MW-95-202310	1,1-Dichloroethane	J	Result <RL; Hold time exceeded
60440221029	MW-95-202310	1,1-Dichloroethene	J	Hold time exceeded
60440221029	MW-95-202310	1,2-Dichloropropane	UJ	Hold time exceeded
60440221029	MW-95-202310	2-Butanone	UJ	Hold time exceeded
60440221029	MW-95-202310	1,1,2-Trichloroethane	J	Hold time exceeded
60440221029	MW-95-202310	1,1,2,2-Tetrachloroethane	J	Hold time exceeded
60440221030	MW-38-202310	Ethane	J	Result <RL
60440221030	MW-38-202310	Ethene	J	Result <RL
60440221030	MW-38-202310	Organic Carbon (total)	UJ	Hold time exceeded
60440221030	MW-38-202310	Dibromochloromethane	J	Result <RL
60440221030	MW-38-202310	trans-1,2-Dichloroethene	U	Trip and equipment blank contamination; qualify U as non-detect at RL
60440221030	MW-38-202310	1,1,2-Trichloroethane	UJ	LCS recovery low
60440221031	TMW-22R-202310	1-Butanecarboxylic Acid	UJ	LCS recovery low
60440221031	TMW-22R-202310	n-Hexanoic acid	UJ	LCS recovery low
60440221031	TMW-22R-202310	Lactic Acid	J	Result <RL
60440221031	TMW-22R-202310	Ethane	J	Result <RL
60440221031	TMW-22R-202310	Organic Carbon (dissolved)	J	Result <RL; Hold time exceeded
60440221031	TMW-22R-202310	Organic Carbon (total)	J	Result <RL; Hold time exceeded
60440221031	TMW-22R-202310	Benzene	J	Result <RL
60440221031	TMW-22R-202310	1,1-Dichloroethene	J	Result <RL
60440221032	MW-185-202310	1-Butanecarboxylic	UJ	LCS recovery low

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
		Acid		
60440221032	MW-185-202310	n-Hexanoic acid	UJ	LCS recovery low
60440221032	MW-185-202310	Lactic Acid	J	Result <RL
60440221032	MW-185-202310	Methane	J	Result <RL
60440221032	MW-185-202310	Ethane	J	Result <RL
60440221032	MW-185-202310	Ethene	J	Result <RL
60440221032	MW-185-202310	Organic Carbon (dissolved)	UJ	Hold time exceeded
60440221032	MW-185-202310	Organic Carbon (total)	UJ	Hold time exceeded
60440221032	MW-185-202310	trans-1,2-Dichloroethene	U	Trip and equipment blank contamination; qualify U as non-detect at RL
60440221032	MW-185-202310	1,1-Dichloroethane	J	Result <RL
60440221033	MW-92-202310	Methane	J	Result <RL
60440221033	MW-92-202310	Ethane	J	Result <RL
60440221033	MW-92-202310	Ethene	J	Result <RL
60440221033	MW-92-202310	Chloroform	J	Result <RL
60440221033	MW-92-202310	Bromoform	J	Result <RL
60440221033	MW-92-202310	1,1-Dichloroethene	J	Result <RL
60440221033	MW-92-202310	1,1,2-Trichloroethane	UJ	LCS recovery low
60440221034	TMW-24-202310	Ethane	J	Result <RL
60440221034	TMW-24-202310	Ethene	J	Result <RL
60440221034	TMW-24-202310	trans-1,2-Dichloroethene	J	Result <RL
60440221035	ITMW-19-202310	Methane	J	Result <RL
60440221035	ITMW-19-202310	Ethane	J	Result <RL
60440221035	ITMW-19-202310	Ethene	J	Result <RL
60440221035	ITMW-19-202310	Iron	J	Result <RL
60440221035	ITMW-19-202310	Dibromochloromethane	J	Result <RL
60440221035	ITMW-19-202310	Tetrachloroethene	J	Result <RL
60440221035	ITMW-19-202310	trans-1,2-Dichloroethene	J+	Trip and equipment blank contamination
60440221035	ITMW-19-202310	Chloromethane	J	Result <RL
60440221035	ITMW-19-202310	Bromodichloromethane	J	Result <RL
60440221035	ITMW-19-202310	1,1,2-Trichloroethane	J	Result <RL
60440221035	ITMW-19-202310	1,1,2,2-Tetrachloroethane	J	Result <RL
60440541001	MW-187-202310	1,1-Dichloroethane	J	Result <RL
60440541001	MW-187-202310	1,1-Dichloroethene	J	Result <RL
60440541002	MW-182-202310	cis-1,2-Dichloroethene	J	Result <RL
60440541003	DUP-07-202310	cis-1,2-Dichloroethene	J	Result <RL
60440541005	MW-188-202310	cis-1,2-Dichloroethene	J	Result <RL
60440541006	EB-05-202310	Chloroform	J	Result <RL
60440541007	TMW-30-202310	Xylenes (total)	J	Result <RL
60440541007	TMW-30-202310	Carbon Disulfide	J	Result <RL
60440541008	DUP-06-202310	Ethyl Benzene	J	Result <RL
60440541008	DUP-06-202310	Xylenes (total)	J	Result <RL
60440541008	DUP-06-202310	Carbon Disulfide	J	Result <RL
60440541009	TB-09-202310	trans-1,2-Dichloroethene	J	Result <RL
60440541010	TB-10-202310	trans-1,2-Dichloroethene	J	Result <RL

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
60440541010	TB-10-202310	Chloroform	J	Result <RL
60440541011	TMW-26-202310	Butyric acid	UJ	Hold time exceeded
60440541011	TMW-26-202310	1-Butanecarboxylic Acid	UJ	Hold time exceeded
60440541011	TMW-26-202310	Pyruvic Acid	J	Result <RL; Hold time exceeded
60440541011	TMW-26-202310	n-Hexanoic acid	UJ	Hold time exceeded; LCS recovery low
60440541011	TMW-26-202310	Lactic Acid	J	Result <RL; Hold time exceeded
60440541011	TMW-26-202310	3-methyl-Butanoic acid	UJ	Hold time exceeded
60440541011	TMW-26-202310	Formic acid	UJ	Hold time exceeded
60440541011	TMW-26-202310	Acetic acid	UJ	Hold time exceeded
60440541011	TMW-26-202310	4-methyl-pentanoic acid	UJ	Hold time exceeded
60440541011	TMW-26-202310	Propionic Acid	UJ	Hold time exceeded
60440541011	TMW-26-202310	Nitrogen	R	Hold time exceeded
60440541011	TMW-26-202310	Nitrogen, Nitrate (As N)	R	Hold time exceeded
60440541011	TMW-26-202310	Nitrogen, Nitrite	R	Hold time exceeded
60440541011	TMW-26-202310	Methane	J	Hold time exceeded; CCV recovery high
60440541011	TMW-26-202310	Ethane	R	Hold time exceeded
60440541011	TMW-26-202310	Ethene	J	Result <RL; Hold time exceeded
60440541011	TMW-26-202310	cis-1,2-Dichloroethene	J	Result <RL
60440541011	TMW-26-202310	Benzene	J	Result <RL
60440541011	TMW-26-202310	Vinyl Chloride	J	Result <RL
60440541012	MW-186-202310	Butyric acid	UJ	Hold time exceeded
60440541012	MW-186-202310	1-Butanecarboxylic Acid	UJ	Hold time exceeded
60440541012	MW-186-202310	Pyruvic Acid	UJ	Hold time exceeded
60440541012	MW-186-202310	n-Hexanoic acid	UJ	Hold time exceeded; LCS recovery low
60440541012	MW-186-202310	Lactic Acid	J	Result <RL; Hold time exceeded
60440541012	MW-186-202310	3-methyl-Butanoic acid	UJ	Hold time exceeded
60440541012	MW-186-202310	Formic acid	UJ	Hold time exceeded
60440541012	MW-186-202310	Acetic acid	UJ	Hold time exceeded
60440541012	MW-186-202310	4-methyl-pentanoic	UJ	Hold time

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
		acid		exceeded
60440541012	MW-186-202310	Propionic Acid	UJ	Hold time exceeded
60440541012	MW-186-202310	Nitrogen	R	Hold time exceeded
60440541012	MW-186-202310	Nitrogen, Nitrate (As N)	R	Hold time exceeded
60440541012	MW-186-202310	Nitrogen, Nitrite	R	Hold time exceeded
60440541012	MW-186-202310	Sulfate	J	Result <RL
60440541012	MW-186-202310	Methane	J	Hold time exceeded; CCV recovery high
60440541012	MW-186-202310	Ethane	R	Hold time exceeded
60440541012	MW-186-202310	Ethene	R	Hold time exceeded
60440541012	MW-186-202310	Toluene	J	Result <RL
60440541012	MW-186-202310	cis-1,2-Dichloroethene	J	Result <RL
60440541012	MW-186-202310	Vinyl Chloride	J	Result <RL
60440541013	TMW-25-202310	Butyric acid	UJ	Hold time exceeded
60440541013	TMW-25-202310	1-Butanecarboxylic Acid	UJ	Hold time exceeded
60440541013	TMW-25-202310	Pyruvic Acid	UJ	Hold time exceeded
60440541013	TMW-25-202310	n-Hexanoic acid	UJ	Hold time exceeded; LCS recovery low
60440541013	TMW-25-202310	Lactic Acid	J	Result <RL; Hold time exceeded
60440541013	TMW-25-202310	3-methyl-Butanoic acid	UJ	Hold time exceeded
60440541013	TMW-25-202310	Formic acid	UJ	Hold time exceeded
60440541013	TMW-25-202310	Acetic acid	UJ	Hold time exceeded
60440541013	TMW-25-202310	4-methyl-pentanoic acid	UJ	Hold time exceeded
60440541013	TMW-25-202310	Propionic Acid	UJ	Hold time exceeded
60440541013	TMW-25-202310	Nitrogen	J	Hold time exceeded
60440541013	TMW-25-202310	Nitrogen, Nitrate (As N)	J	Hold time exceeded
60440541013	TMW-25-202310	Nitrogen, Nitrite	R	Hold time exceeded
60440541013	TMW-25-202310	Methane	J	Hold time exceeded; CCV recovery high
60440541013	TMW-25-202310	Ethane	R	Hold time exceeded
60440541013	TMW-25-202310	Ethene	R	Hold time exceeded
60440541013	TMW-25-202310	cis-1,2-Dichloroethene	J	Result <RL
60440541013	TMW-25-202310	Vinyl Chloride	J	Result <RL

Lab Sample ID	Field ID	Analyte	Qualifier	Reason for Qualification
60440541014	TMW-32-202310	Butyric acid	UJ	Hold time exceeded
60440541014	TMW-32-202310	1-Butanecarboxylic Acid	UJ	Hold time exceeded
60440541014	TMW-32-202310	Pyruvic Acid	UJ	Hold time exceeded
60440541014	TMW-32-202310	n-Hexanoic acid	UJ	Hold time exceeded; LCS recovery low
60440541014	TMW-32-202310	Lactic Acid	J	Result <RL; Hold time exceeded
60440541014	TMW-32-202310	3-methyl-Butanoic acid	UJ	Hold time exceeded
60440541015	TMW-16-202310	Formic acid	UJ	Hold time exceeded
60440541015	TMW-16-202310	Acetic acid	UJ	Hold time exceeded
60440541015	TMW-16-202310	4-methyl-pentanoic acid	UJ	Hold time exceeded
60440541015	TMW-16-202310	Propionic Acid	UJ	Hold time exceeded
60440541015	TMW-16-202310	Nitrogen	R	Hold time exceeded
60440541015	TMW-16-202310	Nitrogen, Nitrate (As N)	R	Hold time exceeded
60440541015	TMW-16-202310	Nitrogen, Nitrite	R	Hold time exceeded
60440541015	TMW-16-202310	Methane	J	Hold time exceeded; CCV recovery high
60440541015	TMW-16-202310	Ethane	J	Result <RL; Hold time exceeded
60440541015	TMW-16-202310	Ethene	J	Result <RL; Hold time exceeded
60440541015	TMW-16-202310	Toluene	J	Result <RL
60440541015	TMW-16-202310	Chlorobenzene	J	Result <RL
60440541015	TMW-16-202310	cis-1,2-Dichloroethene	J	Result <RL
60440541015	TMW-16-202310	trans-1,2-Dichloroethene	U	Trip blank contamination; qualify U as non-detect at RL
60440541015	TMW-16-202310	Benzene	J	Result <RL
60440541015	TMW-16-202310	Vinyl Chloride	J	Result <RL
L1667739-09	AA-1-IA-202310	Ethyl Benzene	UJ	Field duplicate
L1667739-09	AA-1-IA-202310	trans-1,2-Dichloroethene	J	Field duplicate
L1667739-09	AA-1-IA-202310	Benzene	J	Field duplicate
L1667739-09	AA-1-IA-202310	Trichloroethene	UJ	Field duplicate
L1667739-02	DUP-IA-202310	Ethyl Benzene	J	Field duplicate
L1667739-02	DUP-IA-202310	trans-1,2-Dichloroethene	J	Field duplicate
L1667739-02	DUP-IA-202310	Benzene	J	Field duplicate
L1667739-02	DUP-IA-202310	Trichloroethene	J	Field duplicate

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.
J+ = Estimated with a high bias. The associated numerical value is an estimated quantity. The analyte was detected but the reported value may not be accurate or precise.
J- = Estimated with a low bias. 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 another spike recovery.
R = Rejected. The sample results are unusable due to the quality of the data generated.

Appendix D

Historical Data Summary

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
DP-01	DP-01-20131219	12/19/2013	N	8.0	< 5.0 U	< 2.0 U
DP-02	DP-02-20131220	12/20/2013	N	270	8.2	0.33 J
DP-02	DP-02-20131220-FD	12/20/2013	FD	270	8.7	0.34 J
DP-03	DP-03-20131218	12/18/2013	N	120	5.1	0.14 J
DP-04	DP-04-20131218	12/18/2013	N	57	2.3 J	0.15 J
DP-05	DP-05-20131217	12/17/2013	N	2.2 J	< 5.0 U	< 2.0 U
DP-07	DP-07-20131217	12/17/2013	N	12000	97	21
DP-12	DP-12-20140111	1/11/2014	N	390	140	1.6 J
DP-12	DP-12-20140111-FD	1/11/2014	FD	490	140	1.3 J
DP-14	DP-14-20140109	1/9/2014	N	17000	150	16 J
DP-16	DP-16-20140110	1/10/2014	N	390	48	3.6
DP-18	DP-18-20140110	1/10/2014	N	2800	170	< 20 U
DP-22	DP-22-20140111	1/11/2014	N	170	3.0 J	< 2.0 U
DP-38	DP-38-082014	8/5/2014	N	1.5 J	2.9 J	< 2.0 U
DP-39	DP-39 - 082014	8/6/2014	N	18.1	0.78 J	< 2.0 U
DP-40	DP-40 - 082014	8/11/2014	N	3.2 J	0.55 J	< 2.0 U
DP-41	DP-41 - 082014	8/11/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
DP-42	DP-42 - 082014	8/11/2014	N	6.4	< 5.0 U	< 2.0 U
DP-43	DP-43 - 082014	8/11/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
DP-44	DP-44 - 082014	8/11/2014	N	< 25.0 U	< 25.0 U	< 10.0 U
DP-45	DP-45 - 082014	8/11/2014	N	6.8	1.3 J	< 2.0 U
DP-46	DP-46-082014	8/13/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
DP-47	DP-47-082014	8/13/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
DP-48	DP-48-082014	8/15/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
DP-49	DP-49-GW-20140817	8/17/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
DP-50	DP-50-082014	8/15/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
DP-51	DP-51-GW-082014	8/20/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
DP-52	DP-52-GW-082014	8/19/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
DP-53	DP-53-GW-082014	8/20/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
DP-57	DP-57-GW-20140825	8/25/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
DP-58	DP-58-GW-082014	8/26/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
DP-59	DP-59-GW-082014	8/26/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
DP-60	DP-60-GW-082014	8/26/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
DP-61	DP-61-GW-082014	8/26/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
DP-62	DP-62-GW-082014	8/27/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
HM-HP-01	HM-HP-01-WG-39.5	7/13/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
HM-HP-02	HM-HP-02-WG-31	7/13/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
HM-HP-03	HM-HP-03-WG-37	7/13/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
HM-HP-04	HM-HP-04-WG-38	7/15/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
HP-02	HP-02-20180404	4/4/2018	N	63.4	5.9	0.16 J
HP-03	HP-03-20180404	4/4/2018	N	244	7.9	0.29 J
HP-04	HP-04-20180404	4/4/2018	N	6.6	2.2	< 1.0 U
HP-05	HP-05-20180404	4/4/2018	N	10.9	5.8	< 1.0 U
HP-06	HP-06-20180404	4/4/2018	N	7.4	2.7	< 1.0 U
HP-07	HP-07-20180405	4/5/2018	N	4.6	3.2	0.14 J
HP-08	HP-08-20180405	4/5/2018	N	0.30 J	0.34 J	< 1.0 U
HP-16D	HP-16D-WG-20210803	8/3/2021	N	179	13.2	0.29 J
HP-17D	HP-17D-WG-20210803	8/3/2021	N	398	134	0.89 J
HP-17S	HP-17S-WG-20210803	8/3/2021	N	321	120	0.70 J
HP-18D	HP-18D-WG-20210803	8/3/2021	N	0.33 J	< 1.0 U	< 1.0 U
HP-19	HP-19-WG-20210804	8/4/2021	N	0.35 J	0.24 J	< 1.0 U
HP-20	HP-20-WG-20210805	8/5/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
HP-21	HP-21-WG-202109	9/20/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
HP-22	HP-22-WG-202109	9/21/2021	N	27.4	4.6	< 1.0 U
HP-23	HP-23-WG-202109	9/22/2021	N	97.9	9.9	< 1.0 U
HP-23	HP-23-WG-20210923	9/23/2021	N	45.6	5.0	< 1.0 U
HP-24	HP-24-WG-202109	9/22/2021	N	0.90 J	0.21 J	< 1.0 U
HP-24	HP-24-WG-20210923	9/23/2021	N	1.8	0.36 J,B	< 1.0 U
HP-25	HP-25-WG-202109	9/22/2021	N	127	11.6	< 1.0 U
HP-26	HP-26-WG-202109	9/22/2021	N	321	25.4	< 1.0 U
HP-27	HP-27-WG-202109	9/22/2021	N	154	3.8	0.34 J
ITMW-1	ITMW-1-19891101-FS	11/1/1989	N	< ND		< ND
ITMW-1	ITMW-1-19900101-FS	1/1/1990	N	< ND		< ND
ITMW-1	ITMW-1-19931101-FS	11/1/1993	N	10		< ND
ITMW-1	ITMW-1-19961201-FS	12/1/1996	N	21		< ND
ITMW-1	ITMW-1-19990201-FS	2/1/1999	N	37	< ND	< ND
ITMW-1	ITMW-1-20000301-FS	3/1/2000	N	125	8	< ND
ITMW-1	MW-1-20000919-FS	9/19/2000	N	30.7	7.45	< 10 U
ITMW-1	MW-1-20010327-FS	3/27/2001	N	30	6	< 10 U
ITMW-1	MW-1-20010911-FS	9/11/2001	N	27	9	< 10 U
ITMW-1	ITMW-1-20020910-FS	9/10/2002	N	35	9	< 10 U
ITMW-1	ITMW-1-20030227-FS	2/27/2003	N	29.6	7.14	< 10 U
ITMW-1	ITMW-1-20030923-FS	9/23/2003	N	25	12	< 10 U
ITMW-1	ITMW-1-20040413-FS	4/13/2004	N	42.2	11.1	< 10 U
ITMW-1	ITMW-1-20040921-FS	9/21/2004	N	26	16.7	< 10 U
ITMW-1	ITMW-1-20040921-FD	9/21/2004	FD	26.1	15.8	< 10 U
ITMW-1	ITMW-1-20050928-FS	9/28/2005	N	34.7	11.3	< 10 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-1	ITMW-1-20061014-FS	10/14/2006	N	20	11	< 10 UJ
ITMW-1	ITMW-1-20070920-FS	9/20/2007	N	18	13	< 10 U
ITMW-1	ITMW-1-20081209-FS	12/9/2008	N	14	7.3	< 5 U
ITMW-1	ITMW-1-20111027-FS	10/27/2011	N	17	8.2	< 5 U
ITMW-1	ITMW-1-20120418-FS	4/18/2012	N	32	13	< 5 U
ITMW-1	ITMW-1-20121019	10/19/2012	N	10	8.3	< 2.0 U
ITMW-1	IT MW-1-20130424	4/24/2013	N	26	9.1	< 2.0 U
ITMW-1	ITMW-1-101513	10/15/2013	N	7.2	5.8	< 2.0 U
ITMW-1	ITMW-1-201403	3/8/2014	N	23.4	8.9	< 2.0 U
ITMW-1	ITMW-1-201405	5/13/2014	N	21.3	8.7	< 2.0 U
ITMW-1	ITMW-1-201407	7/30/2014	N	8.9	5.4	< 2.0 U
ITMW-1	DUP-5-201407	7/30/2014	FD	9.2	5.7	< 2.0 U
ITMW-1	ITMW-1-201410	10/15/2014	N	6.1	4.5 J	< 2.0 U
ITMW-1	ITMW-1-201501	1/14/2015	N	22.7	9.7	< 1.0 U
ITMW-1	ITMW-1-201504	4/15/2015	N	19.2	9.7	< 1.0 U
ITMW-1	ITMW-1-201507	7/22/2015	N	10.5	5.3	< 1.0 U
ITMW-1	ITMW-1-201510	10/7/2015	N	7.8	4.4	< 1.0 U
ITMW-1	ITMW-1-201601	1/13/2016	N	19.9	8.9	< 1.0 U
ITMW-1	ITMW-1-201605	5/5/2016	N	17.2	8.0	< 1.0 U
ITMW-1	DUP-05-201605	5/5/2016	FD	17.6	8.1	< 1.0 U
ITMW-1	ITMW-1-201611	11/10/2016	N	7.6	3.1	< 1.0 U
ITMW-1	DUP-04-201611	11/10/2016	FD	7.0	3.4	< 1.0 U
ITMW-1	ITMW-1-201710	10/25/2017	N	8.9	3.8	< 1.0 U
ITMW-1	ITMW-1-201811	11/15/2018	N	12.7	5.4	< 1.0 U
ITMW-2	ITMW-2-19891001-FS	10/1/1989	N	< ND		< ND
ITMW-2	ITMW-2-19891101-FS	11/1/1989	N	< ND		< ND
ITMW-2	ITMW-2-19900101-FS	1/1/1990	N	< ND		< ND
ITMW-2	ITMW-2 DUP-19900101-FD	1/1/1990	FD	< ND		< ND
ITMW-2	ITMW-2-19910301-FS	3/1/1991	N	< ND		< ND
ITMW-2	ITMW-2-19931101-FS	11/1/1993	N	4		< ND
ITMW-2	ITMW-2-19961201-FS	12/1/1996	N	3.4		< ND
ITMW-2	ITMW-2-20000301-FS	3/1/2000	N	< ND	< ND	< ND
ITMW-2	MW-2-20000919-FS	9/19/2000	N	< 5 U	< 5 U	< 10 U
ITMW-2	MW-2-20010327-FS	3/27/2001	N	< 5 U	< 5 U	< 10 U
ITMW-2	MW-2-20010913-FS	9/13/2001	N	< 5 U	< 5 U	< 10 U
ITMW-2	ITMW-2-20020911-FS	9/11/2002	N	< 5 U	< 5 U	< 10 U
ITMW-2	ITMW-2-20030227-FS	2/27/2003	N	< 5 U	< 5 U	< 10 U
ITMW-2	ITMW-2-20030923-FS	9/23/2003	N	< 5 U	< 5 U	< 10 U
ITMW-2	ITMW-2-20040413-FS	4/13/2004	N	< 5 U	< 5 U	< 10 U
ITMW-2	ITMW-2 DUP-1-20040413-FD	4/13/2004	FD	< 5 U	< 5 U	< 10 U
ITMW-2	ITMW-2-20040921-FS	9/21/2004	N	< 5 U	< 5 U	< 10 U
ITMW-2	ITMW-2 DUP1-20040921-FD	9/21/2004	FD	< 5 U	< 5 U	< 10 U
ITMW-2	ITMW-2-20050929-FS	9/29/2005	N	< 5 U	< 5 U	< 10 U
ITMW-2	ITMW-2-20061014-FS	10/14/2006	N	4 J	< 5 U	< 10 U
ITMW-2	ITMW-2-20070920-FS	9/20/2007	N	< 5 U	< 5 U	< 10 U
ITMW-2	ITMW-2-20081209-FS	12/9/2008	N	< 5 U	< 5 U	< 5 U
ITMW-2	ITMW-2-20101103-FS	11/3/2010	N	< 5 U	< 5 U	< 5 U
ITMW-2	ITMW-2-20111026-FS	10/26/2011	N	< 5 U	< 5 U	< 5 U
ITMW-2	ITMW-2-20120417-FS	4/17/2012	N	< 5 U	< 5 U	< 5 U
ITMW-2	ITMW-2-20121017	10/17/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-2	ITMW-2-20130424	4/24/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-2	ITMW-2-101413	10/14/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-2	ITMW-2-201403	3/6/2014	N	0.23 J	0.40 J	< 2.0 U
ITMW-2	DUP-1-201403	3/6/2014	FD	0.28 J	0.51 J	< 2.0 U
ITMW-2	ITMW-2-201405	5/13/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-2	ITMW-2-201407	7/30/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-2	ITMW-2-201410	10/15/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-2	ITMW-2-201501	1/13/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-2	ITMW-2-201504	4/15/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-2	ITMW-2-201507	7/22/2015	N	0.24 J	0.26 J	< 1.0 U
ITMW-2	ITMW-2-201510	10/6/2015	N	0.22 J	0.21 J	< 1.0 U
ITMW-2	ITMW-2-201601	1/12/2016	N	0.21 J	0.42 J	< 1.0 U
ITMW-2	ITMW-2-201605	5/5/2016	N	0.25 J	0.29 J	< 1.0 U
ITMW-2	ITMW-2-201611	11/9/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-2	ITMW-2-201710	10/25/2017	N	< 1.0 U	0.29 J	< 1.0 U
ITMW-2	ITMW-2-201811	11/13/2018	N	0.71 J	0.57 J	< 1.0 U
ITMW-3	ITMW-3-19891001-FS	10/1/1989	N	< ND		< ND
ITMW-3	ITMW-3-19900101-FS	1/1/1990	N	< ND		< ND
ITMW-3	ITMW-3-19931101-FS	11/1/1993	N	3		< ND
ITMW-3	ITMW-3-19961201-FS	12/1/1996	N	1.7		< ND
ITMW-3	ITMW-3-19990201-FS	2/1/1999	N	< ND	< ND	< ND
ITMW-3	ITMW-3-20000301-FS	3/1/2000	N	< ND	< ND	< ND
ITMW-3	ITMW-3 DUP-20000301-FD	3/1/2000	FD	< ND	< ND	< ND
ITMW-3	MW-3-20000919-FS	9/19/2000	N	< 5 U	< 5 U	< 10 U
ITMW-3	MW-3-20010327-FS	3/27/2001	N	< 5 U	< 5 U	< 10 U
ITMW-3	MW-3-20010911-FS	9/11/2001	N	< 5 U	< 5 U	< 10 U
ITMW-3	ITMW-3-20020910-FS	9/10/2002	N	15	< 5 U	< 10 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-3	ITMW-3-20030227-FS	2/27/2003	N	< 5 U	< 5 U	< 10 U
ITMW-3	ITMW-3-20030923-FS	9/23/2003	N	< 5 U	< 5 U	< 10 U
ITMW-3	ITMW-3-20040413-FS	4/13/2004	N	< 5 U	< 5 U	< 10 U
ITMW-3	ITMW-3-20040921-FS	9/21/2004	N	< 5 U	< 5 U	< 10 U
ITMW-3	ITMW-3-20050928-FS	9/28/2005	N	< 5 U	< 5 U	< 10 U
ITMW-3	ITMW-3-20061014-FS	10/14/2006	N	< 5 U	< 5 U	< 10 UJ
ITMW-3	ITMW-3-20070920-FS	9/20/2007	N	< 5 U	< 5 U	< 10 U
ITMW-3	ITMW-3-20081209-FS	12/9/2008	N	< 5 U	< 5 U	< 5 U
ITMW-3	ITMW-3-20101104-FS	11/4/2010	N	190	3.9 J	< 5 U
ITMW-3	ITMW-3-20111027-FS	10/27/2011	N	4.1 J	< 5 U	< 5 U
ITMW-3	ITMW-3-20120417-FS	4/17/2012	N	< 5 U	< 5 U	< 5 U
ITMW-3	ITMW-3-20121017	10/17/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-3	ITMW-3-20130423	4/23/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-3	ITMW-3-101513	10/15/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-4	ITMW-4-19891001-FS	10/1/1989	N	< ND		< ND
ITMW-4	ITMW-4-19891101-FS	11/1/1989	N	< ND		< ND
ITMW-4	ITMW-4-19900101-FS	1/1/1990	N	< ND		< ND
ITMW-4	ITMW-4-19931101-FS	11/1/1993	N	< ND		< ND
ITMW-4	ITMW-4-19961201-FS	12/1/1996	N	75		< ND
ITMW-4	ITMW-4-19990201-FS	2/1/1999	N	93	54	< ND
ITMW-4	ITMW-4-20000301-FS	3/1/2000	N	22	16	< ND
ITMW-4	MW-4-20000920-FS	9/20/2000	N	13.9	10.6	< 10 U
ITMW-4	MW-4-20010328-FS	3/28/2001	N	9	< 5 U	< 10 U
ITMW-4	MW-4-20010913-FS	9/13/2001	N	6	8	< 10 U
ITMW-4	ITMW-4-20020910-FS	9/10/2002	N	9	< 5 U	< 10 U
ITMW-4	ITMW-4-20030228-FS	2/28/2003	N	< 5 U	< 5 U	< 10 U
ITMW-4	ITMW-4-20030923-FS	9/23/2003	N	< 5 U	< 5 U	< 10 U
ITMW-4	ITMW-4-20040414-FS	4/14/2004	N	< 5 U	< 5 U	< 10 U
ITMW-4	ITMW-4-20040922-FS	9/22/2004	N	< 5 U	< 5 U	< 10 U
ITMW-4	ITMW-4-20050927-FS	9/27/2005	N	< 5 U	< 5 U	< 10 U
ITMW-4	ITMW-4-20061011-FS	10/11/2006	N	6	8	< 10 U
ITMW-4	ITMW-4-20070920-FS	9/20/2007	N	5 J	5 J	< 10 U
ITMW-4	ITMW-4-20081209-FS	12/9/2008	N	< 5 U	3.2 J	< 5 U
ITMW-4	ITMW-4-20111025-FS	10/25/2011	N	4.8 J	5.1	< 5 U
ITMW-4	ITMW-4-20121017	10/17/2012	N	3.3 J	4.5 J	7.9
ITMW-4	ITMW-4-101413	10/14/2013	N	3.7 J	6.1	< 2.0 U
ITMW-4	ITMW-4-201403	3/6/2014	N	1.4 J	2.0 J	0.19 J
ITMW-4	ITMW-4-201405	5/13/2014	N	2.0 J	2.1 J	0.18 J
ITMW-4	ITMW-4-201407	7/30/2014	N	2.8 J	4.6 J	< 2.0 U
ITMW-4	ITMW-4-201410	10/16/2014	N	3.4 J	4.9 J	< 2.0 U
ITMW-4	ITMW-4-201501	1/13/2015	N	1.7	2.3	< 1.0 U
ITMW-4	ITMW-4-201504	4/14/2015	N	1.6	2.6	0.84 J
ITMW-4	ITMW-4-201507	7/22/2015	N	2.0	2.6	0.17 J
ITMW-4	ITMW-4-201510	10/7/2015	N	2.3	2.8	0.23 J
ITMW-4	ITMW-4-201601	1/12/2016	N	1.5	2.5	< 1.0 U
ITMW-4	ITMW-4-201605	5/5/2016	N	1.3	< 1.0 U	0.15 J
ITMW-4	ITMW-4-202005	5/13/2020	N	12.4	< 1.0 U	< 1.0 U
ITMW-5	ITMW-5-19891001-FS	10/1/1989	N	< ND		< ND
ITMW-5	ITMW-5-19900101-FS	1/1/1990	N	< ND		< ND
ITMW-5	ITMW-5-19961201-FS	12/1/1996	N	21		< ND
ITMW-5	ITMW-5-19990201-FS	2/1/1999	N	86	39	< ND
ITMW-5	ITMW-5-20000301-FS	3/1/2000	N	73	59	< ND
ITMW-5	MW-5-20000920-FS	9/20/2000	N	85	64.4	< 10 U
ITMW-5	MW-5-20010328-FS	3/28/2001	N	100	46	< 10 U
ITMW-5	MW-5-20010913-FS	9/13/2001	N	72	64	< 10 U
ITMW-5	ITMW-5-20020910-FS	9/10/2002	N	108	72	< 10 U
ITMW-5	ITMW-5-20030228-FS	2/28/2003	N	90.4	68.7	< 10 U
ITMW-5	ITMW-5-20030924-FS	9/24/2003	N	97.3	73.7	< 10 U
ITMW-5	ITMW-5-20040414-FS	4/14/2004	N	83.9	55.4	< 10 U
ITMW-5	ITMW-5-20040922-FS	9/22/2004	N	105	75.8	< 10 U
ITMW-5	ITMW-5-20050406-FS	4/6/2005	N	93.2	72.6	< 10 U
ITMW-5	DUP-040605-20050406-FD	4/6/2005	FD	87	71	< 10 U
ITMW-5	ITMW-5-20050928-FS	9/28/2005	N	79	53.5	< 10 U
ITMW-5	DUP-1-20050928-FD	9/28/2005	FD	82.1	54.4	< 10 U
ITMW-5	ITMW-5-20060314-FS	3/14/2006	N	92	66.1	< 10 U
ITMW-5	DUP-1-20060314-FD	3/14/2006	FD	98.4	66.1	< 10 U
ITMW-5	ITMW-5-20061010-FS	10/10/2006	N	110	51	4 J
ITMW-5	ITMW-5-20070418-FS	4/18/2007	N	115	39.3	< 10 U
ITMW-5	ITMW-5-20070920-FS	9/20/2007	N	120	49	4 J
ITMW-5	ITMW-5-20080429-FS	4/29/2008	N	120 0	43 0	< 10 U
ITMW-5	ITMW-5-20081209-FS	12/9/2008	N	200 E	42	< 5 U
ITMW-5	ITMW-5-20090427-FS	4/27/2009	N	160	34	< 5 U
ITMW-5	ITMW-5-20100511-FS	5/11/2010	N	190 EF	40	< 5 U
ITMW-5	ITMW-5-20101106-FS	11/6/2010	N	350	50	< 5 U
ITMW-5	ITMW-5-20110322-FS	3/22/2011	N	370	39	< 5 U
ITMW-5	ITMW-5-20111025-FS	10/25/2011	N	150	35	< 5 U
ITMW-5	ITMW-5-20120417-FS	4/17/2012	N	290	26	< 5 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-5	ITMW-5-20121018	10/18/2012	N	260	33	0.64 J
ITMW-5	ITMW-5-20130425	4/25/2013	N	220	20	0.50 J
ITMW-5	ITMW-5-101613	10/16/2013	N	260	27	0.55 J
ITMW-5	ITMW-5-201611	11/10/2016	N	507	38.9	2.8 J
ITMW-5	DUP-06-201611	11/10/2016	FD	441	33.5	1.5 J
ITMW-5	ITMW-5-201704	4/28/2017	N	608	30.7	0.93 J
ITMW-5	DUP-06-201704	4/28/2017	FD	664	27.8	0.82 J
ITMW-5	ITMW-5-201710	10/25/2017	N	1470	38.2	1.6
ITMW-5	ITMW-5-201804	4/19/2018	N	1590	34.2	1.4
ITMW-5	ITMW-5-201811	11/15/2018	N	2250	36.9	2.0
ITMW-5	ITMW-5-201904	4/24/2019	N	3660	37.0	1.6
ITMW-5	ITMW-5-201910	10/24/2019	N	3700	42.1	2.0
ITMW-5	ITMW-5-202005	5/13/2020	N	3050	30.3	1.3
ITMW-5	ITMW-5-202010	10/8/2020	N	2560	29.5	1.4
ITMW-5	ITMW-5-202104	4/14/2021	N	2170	22.1	0.81 J
ITMW-5	ITMW-5-202110	10/21/2021	N	2420	27.9	1.1
ITMW-5	ITMW-5-202204	4/14/2022	N	1330	25.8	< 1.0 U
ITMW-5	ITMW-5-202210	10/20/2022	N	2710	27.6	1.1
ITMW-5	ITMW-5-202304	4/19/2023	N	1710	41.7	0.57 J
ITMW-5	ITMW-5-202310	10/19/2023	N	2690	22.6	0.90 J
ITMW-6	ITMW-6-19891001-FS	10/1/1989	N	< ND		< ND
ITMW-6	ITMW-6-19900101-FS	1/1/1990	N	< ND		< ND
ITMW-6	ITMW-6-19961201-FS	12/1/1996	N	6.8		< ND
ITMW-6	ITMW-6-19970501-FS	5/1/1997	N	7	< ND	< ND
ITMW-6	ITMW-6-19990201-FS	2/1/1999	N	25	< ND	< ND
ITMW-6	ITMW-6 DUP-19990201-FS	2/1/1999	FD	6	< ND	< ND
ITMW-6	ITMW-6-20000301-FS	3/1/2000	N	< ND	< ND	< ND
ITMW-6	MW-6-20000920-FS	9/20/2000	N	< 5 U	< 5 U	< 10 U
ITMW-6	MW-6-20010328-FS	3/28/2001	N	< 5 U	< 5 U	< 10 U
ITMW-6	MW-6-20010913-FS	9/13/2001	N	< 5 U	< 5 U	< 10 U
ITMW-6	ITMW-6-20020910-FS	9/10/2002	N	< 5 U	< 5 U	< 10 U
ITMW-6	ITMW-6 DUP-1-20020910-FD	9/10/2002	FD	< 5 U	< 5 U	< 10 U
ITMW-6	ITMW-6-20030227-FS	2/27/2003	N	< 5 U	< 5 U	< 10 U
ITMW-6	ITMW-6-20030924-FS	9/24/2003	N	< 5 U	< 5 U	< 10 U
ITMW-6	ITMW-6-20040414-FS	4/14/2004	N	< 5 U	< 5 U	< 10 U
ITMW-6	ITMW-6-20040922-FS	9/22/2004	N	< 5 U	< 5 U	< 10 U
ITMW-6	ITMW-6-20050928-FS	9/28/2005	N	< 5 U	< 5 U	< 10 U
ITMW-6	ITMW-6-20061011-FS	10/11/2006	N	< 5 U	4 J	< 10 U
ITMW-6	ITMW-6-20070920-FS	9/20/2007	N	< 5 U	< 5 U	< 10 U
ITMW-6	ITMW-6-20081210-FS	12/10/2008	N	< 5 U	< 5 U	< 5 U
ITMW-6	ITMW-6-20091028-FS	10/28/2009	N	< 5 U	2.1 J	< 5 U
ITMW-6	ITMW-6-20100510-FS	5/10/2010	N	< 5 U	1.9 J	< 5 U
ITMW-6	DUP-102511-20111025-FD	10/25/2011	FD	< 5 U	2.7 J	< 5 U
ITMW-6	ITMW-6-20111025-FS	10/25/2011	N	< 5 U	2.4 J	< 5 U
ITMW-6	ITMW-6-20120417-FS	4/17/2012	N	< 5 U	2.9 J	< 5 U
ITMW-6	ITMW-6-20121017	10/17/2012	N	< 5.0 U	3.1 J	< 2.0 U
ITMW-6	ITMW-6-20130422	4/22/2013	N	< 5.0 U	2.1 J	0.33 J
ITMW-6	ITWM-6-101413	10/14/2013	N	3.4 J	5.5	0.18 J
ITMW-6	ITMW-6-201403	3/6/2014	N	2.7 J	4.9 J	0.18 J
ITMW-6	ITMW-6-201405	5/13/2014	N	3.6 J	5.3	0.17 J
ITMW-6	ITMW-6-201407	7/30/2014	N	4.4 J	6.7	< 2.0 U
ITMW-6	ITMW-6-201410	10/15/2014	N	3.1 J	5.2	< 2.0 U
ITMW-6	ITMW-6-201501	1/13/2015	N	3.7	5.7	< 1.0 U
ITMW-6	ITMW-6-201504	4/14/2015	N	3.7	5.3 J	< 1.0 U
ITMW-6	ITMW-6-201507	7/22/2015	N	4.7	6.3	0.31 J
ITMW-6	ITMW-6-201510	10/7/2015	N	3.1	5.5	0.21 J
ITMW-6	ITMW-6-201601	1/12/2016	N	4.2	6.2	0.32 J
ITMW-6	ITMW-6-201605	5/5/2016	N	4.4	5.3	0.22 J
ITMW-6	ITMW-6-202005	5/13/2020	N	2070	19.5	0.99 J
ITMW-6	ITMW-6-202010	10/8/2020	N	2110	20.6	1.4
ITMW-6	ITMW-6-202110	10/21/2021	N	1980	18.2	1.1
ITMW-6	ITMW-6-202310	10/19/2023	N	1630	11.3	0.81 J
ITMW-7	ITMW-7-19891101-FS	11/1/1989	N	< ND		< ND
ITMW-7	ITMW-7-19900101-FS	1/1/1990	N	< ND		< ND
ITMW-7	ITMW-7-19961201-FS	12/1/1996	N	290		3
ITMW-7	ITMW-7-19970501-FS	5/1/1997	N	380	180	< ND
ITMW-7	ITMW-7-19990201-FS	2/1/1999	N	< ND	< ND	< ND
ITMW-7	ITMW-7-19990601-FS	6/1/1999	N	320	144	< ND
ITMW-7	ITMW-7 DUP-19990601-FD	6/1/1999	FD	300	140	< ND
ITMW-7	ITMW-7-20000301-FS	3/1/2000	N	262	100	< ND
ITMW-7	ITMW-7 DUP-20000301-FS	3/1/2000	FD	207	92	< ND
ITMW-7	MW-7-20000919-FS	9/19/2000	N	207	100	< 10 U
ITMW-7	ITMW-7 DUP-3-20000921-FD	9/21/2000	FD	109	< 5 U	< 10 U
ITMW-7	MW-7-20010328-FS	3/28/2001	N	161	66	< 10 U
ITMW-7	MW-7-20010913-FS	9/13/2001	N	139	68	< 10 U
ITMW-7	ITMW-7-20020910-FS	9/10/2002	N	137	56	< 10 U
ITMW-7	ITMW-7 DUP-2-20020910-FD	9/10/2002	FD	128	54	< 10 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-7	ITMW-7-20030227-FS	2/27/2003	N	172	92.5	< 10 U
ITMW-7	ITMW-7-20030924-FS	9/24/2003	N	125	57.3	< 10 U
ITMW-7	ITMW-7-20040414-FS	4/14/2004	N	201	80.7	< 10 U
ITMW-7	ITMW-7-20040922-FS	9/22/2004	N	132	48.4	< 10 U
ITMW-7	ITMW-7-20050407-FS	4/7/2005	N	122	39	< 10 U
ITMW-7	ITMW-7-20050928-FS	9/28/2005	N	100	30.5	< 10 U
ITMW-7	ITMW-7-20060314-FS	3/14/2006	N	153	59.5	< 10 U
ITMW-7	ITMW-7-20061010-FS	10/10/2006	N	140	44	1 J
ITMW-7	ITMW-7-20070417-FS	4/17/2007	N	83	29.4	< 10 U
ITMW-7	ITMW-7-20070921-FS	9/21/2007	N	72	22	< 10 U
ITMW-7	ITMW-7-20080430-FS	4/30/2008	N	70 0	18 0	< 10 U
ITMW-7	MW-7-20081211-FS	12/11/2008	N	66	19	< 5 U
ITMW-7	ITMW-7-20090427-FS	4/27/2009	N	87	26	< 5 U
ITMW-7	ITMW-7-20091028-FS	10/28/2009	N	60	20	< 5 U
ITMW-7	ITMW-7-20100510-FS	5/10/2010	N	73	18	< 5 U
ITMW-7	ITMW-7-20110323-FS	3/23/2011	N	225 EF	93.2	56.5
ITMW-7	ITMW-7-20111025-FS	10/25/2011	N	99	26	< 5 U
ITMW-7	ITMW-7-20120418-FS	4/18/2012	N	100	20	< 5 U
ITMW-7	ITMW-7-20121018	10/18/2012	N	63	17	< 2.0 U
ITMW-7	ITMW-7-20130425	4/25/2013	N	69	16	0.27 J
ITMW-7	ITMW-7-101713	10/17/2013	N	47	12	< 2.0 U
ITMW-7	ITMW-7-201403	3/8/2014	N	37.4	10	0.24 J
ITMW-7	ITMW-7-201405	5/14/2014	N	37.0	11.1	0.22 J
ITMW-7	ITMW-7-201407	7/30/2014	N	36.7	11.2	< 2.0 U
ITMW-7	ITMW-7-201410	10/15/2014	N	33.7	10.3	< 2.0 U
ITMW-7	ITMW-7-201501	1/14/2015	N	34.7	10.5	< 1.0 U
ITMW-7	ITMW-7-201504	4/14/2015	N	29.3	9.2	< 1.0 U
ITMW-7	ITMW-7-201507	7/22/2015	N	26.4	8.3	0.19 J
ITMW-7	ITMW-7-201510	10/8/2015	N	27.6	8.8	0.19 J
ITMW-7	ITMW-7-201601	1/13/2016	N	44.2	13.0	0.23 J
ITMW-7	ITMW-7-201605	5/5/2016	N	33.8	8.7	< 1.0 U
ITMW-7	DUP-06-201605	5/5/2016	FD	33.9	9.0	0.18 J
ITMW-7	ITMW-7-201611	11/10/2016	N	33.2	10	0.26 J
ITMW-7	ITMW-07-201704	4/27/2017	N	29.2	9.3	0.14 J
ITMW-7	ITMW-7-201710	10/25/2017	N	23.4	7.5	0.20 J
ITMW-7	ITMW-7-201804	4/19/2018	N	24.2	8.3	0.13 J
ITMW-7	ITMW-7-201811	11/15/2018	N	22.8	7.3	< 1.0 U
ITMW-7	ITMW-7-201904	4/24/2019	N	19.4	6.5	< 1.0 U
ITMW-7	ITMW-7-201910	10/22/2019	N	20.5	6.7	0.13 J
ITMW-7	ITMW-7-202005	5/13/2020	N	14.1	6.3	< 1.0 U
ITMW-7	ITMW-7-202010	10/8/2020	N	16.4	6.4	< 1.0 U
ITMW-7	ITMW-7-202104	4/14/2021	N	17.9	7.3	< 1.0 U
ITMW-7	ITMW-7-202110	10/20/2021	N	17.7	7.3	< 1.0 U
ITMW-7	ITMW-7-202204	4/14/2022	N	16.8	7.1	< 1.0 U
ITMW-7	DUP-08-202204	4/14/2022	FD	20.4	8.4	< 1.0 U
ITMW-7	ITMW-7-202210	10/19/2022	N	18.7	6.6	< 1.0 U
ITMW-7	ITMW-7-202304	4/19/2023	N	21.7	8.4	< 1.0 U
ITMW-7	DUP-08-202304	4/19/2023	FD	20.3	8.1	< 1.0 U
ITMW-7	ITMW-7-202310	10/18/2023	N	16.1	6.2	< 1.0 U
ITMW-9	ITMW-9-19900101-FS	1/1/1990	N	< ND		< ND
ITMW-9	ITMW-9-19961201-FS	12/1/1996	N	230		< ND
ITMW-9	ITMW-9-19970501-FS	5/1/1997	N	7	< ND	< ND
ITMW-9	ITMW-9-19990201-FS	2/1/1999	N	40	24	< ND
ITMW-9	ITMW-9-20000301-FS	3/1/2000	N	69	45	< ND
ITMW-9	MW-9-20000920-FS	9/20/2000	N	57.3	14.3	< 10 U
ITMW-9	ITMW-9 DUP-2-20000920-FD	9/20/2000	FD	54.8	14	< 10 U
ITMW-9	MW-9-20010328-FS	3/28/2001	N	40	12	< 10 U
ITMW-9	MW-9-20010913-FS	9/13/2001	N	40	12	< 10 U
ITMW-9	ITMW-9-20020910-FS	9/10/2002	N	61	21	< 10 U
ITMW-9	ITMW-9-20030228-FS	2/28/2003	N	54.2	37.2	< 10 U
ITMW-9	ITMW-9-20030923-FS	9/23/2003	N	91	49.5	< 10 U
ITMW-9	ITMW-9 DUP-1-20030923-FD	9/23/2003	FD	97.6	53.9	< 10 U
ITMW-9	ITMW-9-20040414-FS	4/14/2004	N	71.8	38.8	< 10 U
ITMW-9	ITMW-9-20040922-FS	9/22/2004	N	80.7	21.1	< 10 U
ITMW-9	ITMW-9-20050406-FS	4/6/2005	N	79	30.4	< 10 U
ITMW-9	ITMW-9-20050927-FS	9/27/2005	N	98.8	54.6	< 10 U
ITMW-9	ITMW-9-20060314-FS	3/14/2006	N	101	78.7	< 10 U
ITMW-9	ITMW-9-20061011-FS	10/11/2006	N	110	77	6 J
ITMW-9	ITMW-9-20070417-FS	4/17/2007	N	79	39.6	< 10 U
ITMW-9	ITMW-9-20070920-FS	9/20/2007	N	76	26	< 10 U
ITMW-9	ITMW-9-20080428-FS	4/28/2008	N	82 0	37 0	< 10 U
ITMW-9	ITMW-9-20081209-FS	12/9/2008	N	90	62	< 5 U
ITMW-9	ITMW-9-20090427-FS	4/27/2009	N	110	51	< 5 U
ITMW-9	ITMW-9-20091027-FS	10/27/2009	N	120	67	5.7
ITMW-9	DUP-1-20091027-FD	10/27/2009	FD	120	71	6.1
ITMW-9	ITMW-9-20100511-FS	5/11/2010	N	130	38	< 5 U
ITMW-9	ITMW-9-20110322-FS	3/22/2011	N	120	48	2.4 J

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-9	ITMW-9-20111025-FS	10/25/2011	N	90	57	< 5 U
ITMW-9	ITMW-9-20120417-FS	4/17/2012	N	150	50	2.5 J
ITMW-9	ITMW-9-20121018	10/18/2012	N	120	53	5.2
ITMW-9	ITMW-9-20130424	4/24/2013	N	140	44	1.6 J
ITMW-9	ITMW-9-101713	10/17/2013	N	83	42	16
ITMW-9	ITMW-9-201403	3/8/2014	N	112	40.4	0.41 J
ITMW-9	ITMW-9-201405	5/14/2014	N	113	42.2	0.64 J
ITMW-9	ITMW-9-201407	7/30/2014	N	141	44.4	0.53 J
ITMW-9	DUP-6-201407	7/30/2014	FD	143	43.9	0.54 J
ITMW-9	ITMW-9-201410	10/15/2014	N	76.9	39.1	1.8 J
ITMW-9	DUP-02-201410	10/15/2014	FD	75.3	38.8	1.7 J
ITMW-9	ITMW-9-201501	1/13/2015	N	89.6	39.1	1.4
ITMW-9	DUP-02-201501	1/13/2015	FD	89.4	39.1	1.4
ITMW-9	ITMW-9-201504	4/15/2015	N	100	35.4	< 1.0 U
ITMW-9	ITMW-9-201507	7/21/2015	N	142	35.5	0.40 J
ITMW-9	ITMW-9-201510	10/7/2015	N	55.6	26.6	1.0
ITMW-9	DUP-09-201510	10/7/2015	FD	55.2	26.8	1.1
ITMW-9	ITMW-9-201601	1/13/2016	N	92.4	35.3	1.1
ITMW-9	DUP-04-201601	1/13/2016	FD	91.3	34.1	1.1
ITMW-9	ITMW-9-201605	5/5/2016	N	97.3	31.6	0.48 J
ITMW-9	ITMW-9-201611	11/8/2016	N	2550	73.0 J	0.17 J
ITMW-9	ITMW-9-201612	12/14/2016	N	193	40.1	1
ITMW-9	ITMW-9-201710	10/25/2017	N	797	60.8	1.7
ITMW-9	ITMW-9-201811	11/15/2018	N	1390	77.1	2.0
ITMW-9	ITMW-9-201910	10/23/2019	N	2720	96.3	2.0
ITMW-9	DUP-07-201910	10/23/2019	FD	2810	95.0	2.0
ITMW-9	ITMW-9-202005	5/13/2020	N	1900	72.5	1.4
ITMW-9	ITMW-9-202010	10/7/2020	N	1770	67.6	1.2
ITMW-9	ITMW-9-202104	4/13/2021	N	3060	87.6	1.7
ITMW-9	ITMW-9-202110	10/21/2021	N	3620	101	2.1
ITMW-9	ITMW-9-202204	4/14/2022	N	2090	81.9	2.2
ITMW-9	ITMW-9-202210_3912	10/21/2022	N	802	39.3	0.91 J
ITMW-9	ITMW-9-202304	4/19/2023	N	3000	19.2	0.78 J
ITMW-9	ITMW-9-202310	10/19/2023	N	4190	92.0	2.0
ITMW-10	ITMW-10-19900101-FS	1/1/1990	N	< ND		< ND
ITMW-10	ITMW-10-19961201-FS	12/1/1996	N	4		< ND
ITMW-10	ITMW-10-19990201-FS	2/1/1999	N	25	13	< ND
ITMW-10	ITMW-10-20000301-FS	3/1/2000	N	23	17	< ND
ITMW-10	MW-10-20000920-FS	9/20/2000	N	18.1	15.9	< 10 U
ITMW-10	MW-10-20010328-FS	3/28/2001	N	40	21	< 10 U
ITMW-10	MW-10-20010913-FS	9/13/2001	N	29	28	< 10 U
ITMW-10	MW-10 DUP-20010913-FD	9/13/2001	FD	30	27	< 10 U
ITMW-10	ITMW-10-20020910-FS	9/10/2002	N	55	38	< 10 U
ITMW-10	ITMW-10-20030228-FS	2/28/2003	N	57.6	50.9	< 10 U
ITMW-10	MW-10-20030716-FS	7/16/2003	N	55.3	49.2	< 10 U
ITMW-10	ITMW-10-20030923-FS	9/23/2003	N	65.9	56.5	< 10 U
ITMW-10	ITMW-10-20040414-FS	4/14/2004	N	80	57.4	< 10 U
ITMW-10	MW-10-20040922-FS	9/22/2004	N	59.6	50	< 10 U
ITMW-10	ITMW-10-20050406-FS	4/6/2005	N	72.1	57.7	< 10 U
ITMW-10	ITMW-10-20050928-FS	9/28/2005	N	57.6	41.6	< 10 U
ITMW-10	ITMW-10-20060314-FS	3/14/2006	N	82	67.2	< 10 U
ITMW-10	ITMW-10-20061010-FS	10/10/2006	N	88	54	5 J
ITMW-10	ITMW-10-20070417-FS	4/17/2007	N	76	52.4	< 10 U
ITMW-10	ITMW-10-20070920-FS	9/20/2007	N	67	48	5 J
ITMW-10	ITMW-10-20080428-FS	4/28/2008	N	61 0	46 0	< 10 U
ITMW-10	ITMW-10-20081209-FS	12/9/2008	N	78	50	< 5 U
ITMW-10	ITMW-10-20090427-FS	4/27/2009	N	87	52	4.4 J
ITMW-10	ITMW-10-20091027-FS	10/27/2009	N	110	50	4.2 J
ITMW-10	ITMW-10-20100511-FS	5/11/2010	N	85	46	2.4 J
ITMW-10	ITMW-10-20110322-FS	3/22/2011	N	92	42	2.7 J
ITMW-10	ITMW-10-20111025-FS	10/25/2011	N	94	39	2.5 J
ITMW-10	ITMW-10-20121018	10/18/2012	N	100	37	2.5
ITMW-10	ITMW-10-101513	10/15/2013	N	100	32	3.1
ITMW-10	ITMW-10-201403	3/6/2014	N	166	32.3	1.2 J
ITMW-10	ITMW-10-201405	5/14/2014	N	184	32.4	1.4 J
ITMW-10	ITMW-10-201407	7/30/2014	N	273	38.3	1.8 J
ITMW-10	ITMW-10-201410	10/15/2014	N	243	32.3	1.7 J
ITMW-10	ITMW-10-201501	1/14/2015	N	403	38.9	1.4
ITMW-10	ITMW-10-201504	4/15/2015	N	258	34.8	0.98 J
ITMW-10	DUP-08-201504	4/16/2015	FD	303	36.1	1.2
ITMW-10	ITMW-10-201507	7/22/2015	N	504	36.2	1.3
ITMW-10	DUP-01-201507	7/22/2015	FD	501	36.7	1.5
ITMW-10	ITMW-10-201510	10/7/2015	N	437	37.5	1.5
ITMW-10	DUP-04-201510	10/7/2015	FD	445	37.9	1.6
ITMW-10	ITMW-10-201601	1/13/2016	N	761	44.4	1.6
ITMW-10	DUP-01-201601	1/13/2016	FD	735	45.5	1.7
ITMW-10	ITMW-10-201605	5/5/2016	N	743	36.6	1.1

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-10	DUP-01-201605	5/5/2016	FD	673	34.0	1.1
ITMW-10	ITMW-10-201611	11/10/2016	N	113	12.5	0.52 J
ITMW-10	ITMW-10-201704	4/28/2017	N	132	18.3	0.71 J
ITMW-10	ITMW-10-201710	10/25/2017	N	72.9	13.3	0.82 J
ITMW-10	ITMW-10-201804	4/19/2018	N	65.4	12.2	0.65 J
ITMW-10	ITMW-10-201811	11/14/2018	N	45.0	10.9	0.77 J
ITMW-10	ITMW-10-201904	4/25/2019	N	60.5	8.1	0.39 J
ITMW-10	DUP-07-201904	4/25/2019	FD	59.4	7.9	0.32 J
ITMW-10	ITMW-10-201910	10/24/2019	N	127	6.3	0.40 J
ITMW-10	ITMW-10-202005	5/13/2020	N	246	6.4	0.33 J
ITMW-10	ITMW-10-202010	10/8/2020	N	286	6.5	0.36 J
ITMW-10	ITMW-10-202110	10/21/2021	N	302	4.4	0.24 J
ITMW-10	ITMW-10-202210_3912	10/21/2022	N	326	5.7	0.29 J
ITMW-10	ITMW-10-202310	10/19/2023	N	344	5.5	< 1.0 U
ITMW-11	ITMW-11-19900101-FS	1/1/1990	N	19000		180
ITMW-11	ITMW-11-19901101-FS	11/1/1990	N	4700		93
ITMW-11	ITMW-11-19910201-FS	2/1/1991	N	3400		< ND
ITMW-11	ITMW-11-19931101-FS	11/1/1993	N	2300		43
ITMW-11	ITMW-11-19961201-FS	12/1/1996	N	510		< ND
ITMW-11	ITMW-11-19990201-FS	2/1/1999	N	650	10	< ND
ITMW-11	ITMW-11-20000301-FS	3/1/2000	N	3370	206	< ND
ITMW-11	MW-11-20000919-FS	9/19/2000	N	8030	327	11.7
ITMW-11	MW-11-20010327-FS	3/27/2001	N	7000	200	< 10 U
ITMW-11	MW-11-20010913-FS	9/13/2001	N	6000	183	< 10 U
ITMW-11	MW-11-20011120-FS	11/20/2001	N	< 5 U	< 5 U	< 10 U
ITMW-11	ITMW-11L-20020909-FS	9/9/2002	N	7100	206	10
ITMW-11	ITMW-11T-20020909-FS	9/9/2002	N	800	72	< 10 U
ITMW-11	ITMW-11-20030226-FS	2/26/2003	N	4110	346	58.8
ITMW-11	ITMW-11 DUP-1-20030226-FD	2/26/2003	FD	3630	306	60.7
ITMW-11	ITMW-11-20030924-FS	9/24/2003	N	3990	269	11.8
ITMW-11	ITMW-11-20040413-FS	4/13/2004	N	3160	240	37.8
ITMW-11	ITMW-11-20040921-FS	9/21/2004	N	3450	204	< 10 U
ITMW-11	ITMW-11-20050407-FS	4/7/2005	N	4210	282	66.7
ITMW-11	ITMW-11-20050929-FS	9/29/2005	N	3910	199	18
ITMW-11	ITMW-11-20060316-FS	3/16/2006	N	14600	1290	482
ITMW-11	DUP-2-20060316-FD	3/16/2006	FD	12800	1210	381
ITMW-11	ITMW-11-20061013-FS	10/13/2006	N	8000	340	47
ITMW-11	ITMW-11-20070419-FS	4/19/2007	N	3970	199	< 200 U
ITMW-11	ITMW-11-20070921-FS	9/21/2007	N	7600	180	21
ITMW-11	ITMW-11-20080430-FS	4/30/2008	N	4500 0	210 0	58 0
ITMW-11	ITMW-11-20081210-FS	12/10/2008	N	5800	190	27
ITMW-11	ITMW-11-20090427-FS	4/27/2009	N	2500	200	24
ITMW-11	DUP-1-20100511-FD	5/11/2010	FD	6200	290	28
ITMW-11	ITMW-11-20100511-FS	5/11/2010	N	6200	290	45
ITMW-11	ITMW-11-20110323-FS	3/23/2011	N	9700	520	130
ITMW-11	ITMW-11-20111026-FS	10/26/2011	N	8800	310	16
ITMW-11	ITMW-11-20121019	10/19/2012	N	1400	34	2.4
ITMW-11	ITMW-11-101713	10/17/2013	N	180	8.7	2.9
ITMW-11	ITMW-11-201403	3/8/2014	N	2980	187 M1	22.5
ITMW-11	ITMW-11-201405	5/15/2014	N	1590	99.5	5.5
ITMW-11	DUP-4-201405	5/15/2014	FD	1470	107	4.9
ITMW-11	ITMW-11-201407	7/31/2014	N	7380	156	6.9
ITMW-11	ITMW-11-201410	10/15/2014	N	2050	70.4	3.5
ITMW-11	ITMW-11-20141204	12/4/2014	N	1530	55.0	6.4
ITMW-11	ITMW-11-201501	1/15/2015	N	68.3	9.8	1.9
ITMW-11	ITMW-11-201504	4/15/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-11	ITMW-11-201507	7/22/2015	N	33.2	5.9	< 1.0 U
ITMW-11	ITMW-11-201510	10/7/2015	N	721	57.9	0.96 J
ITMW-11	ITMW-11-201601	1/13/2016	N	605	100	13.1
ITMW-11	DUP-03-201601	1/13/2016	FD	2100	199	65.3
ITMW-11	ITMW-11-201605	5/5/2016	N	4630	173	11.2
ITMW-11	ITMW-11-201904	4/25/2019	N	3670	89.9	0.19 J
ITMW-11	DUP-05-201904	4/25/2019	FD	4060	93.2	2.0
ITMW-11	ITMW-11-201910	10/24/2019	N	9.9	0.39 J	< 1.0 U
ITMW-11	ITMW-11-202005	5/13/2020	N	3460	134	< 1.0 U
ITMW-11	ITMW-11-202010	10/8/2020	N	894	18.7	< 1.0 U
ITMW-12	ITMW-12-19901101-FS	11/1/1990	N	2400		140
ITMW-12	ITMW-12-19910201-FS	2/1/1991	N	2100		< ND
ITMW-12	ITMW-12-19931101-FS	11/1/1993	N	2500		35
ITMW-12	ITMW-12-19961201-FS	12/1/1996	N	1200		< ND
ITMW-12	ITMW-12-19990201-FS	2/1/1999	N	3100	480	34
ITMW-12	ITMW-12-20000301-FS	3/1/2000	N	3110	320	19
ITMW-12	MW-12-20000919-FS	9/19/2000	N	3350	180	12
ITMW-12	MW-12-20010327-FS	3/27/2001	N	3900	200	20
ITMW-12	MW-12-20010913-FS	9/13/2001	N	3100	159	< 10 U
ITMW-12	MW-12-20011120-FS	11/20/2001	N	2400	300	20
ITMW-12	ITMW-12-20020911-FS	9/11/2002	N	4200	300	< 10 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-12	ITMW-12-20030226-FS	2/26/2003	N	3460	287	< 10 U
ITMW-12	ITMW-12 DUP-2-20030226-FD	2/26/2003	FD	3940	308	< 10 U
ITMW-12	ITMW-12-20030924-FS	9/24/2003	N	2920	242	< 10 U
ITMW-12	ITMW-12-20040413-FS	4/13/2004	N	2410	245	< 10 U
ITMW-12	ITMW-12-20040921-FS	9/21/2004	N	1780	238	< 10 U
ITMW-12	ITMW-12-20050929-FS	9/29/2005	N	2120	273	< 10 U
ITMW-12	ITMW-12-20061013-FS	10/13/2006	N	3500	310	9 J
ITMW-12	ITMW-12-20070921-FS	9/21/2007	N	2100	220	< 10 U
ITMW-12	ITMW-12-20081209-FS	12/9/2008	N	1500	180	< 5 U
ITMW-12	ITMW-12-20111026-FS	10/26/2011	N	1600	230	1.8 J
ITMW-12	ITMW-12-20121019	10/19/2012	N	2500	200	3.6
ITMW-12	ITMW-12-101713	10/17/2013	N	2300	190	3.2
ITMW-12	DUP-ITMW-12-101713	10/17/2013	FD	2300	160	4.1
ITMW-12	ITMW-12-20140308	3/8/2014	N	1910	148	3.4
ITMW-12	DUP-6-20140308	3/8/2014	FD	2400	207	3.4
ITMW-12	ITMW-12-201405	5/14/2014	N	2740	164	14.0
ITMW-12	ITMW-12-201407	7/31/2014	N	2710	173	13.6
ITMW-12	ITMW-12-201410	10/15/2014	N	2570	188	3.5
ITMW-12	DUP-04-201410	10/15/2014	FD	2950	192	3.7
ITMW-12	ITMW-12-20141204	12/4/2014	N	468	51.1	0.88 J
ITMW-12	ITMW-12-201501	1/15/2015	N	57.1	4.2	< 1.0 U
ITMW-12	DUP-04-201501	1/15/2015	FD	59.3	4.8	< 1.0 U
ITMW-12	ITMW-12-201504	4/15/2015	N	2260	149	< 1.0 U
ITMW-12	ITMW-12-201507	7/23/2015	N	652	46.2	0.58 J
ITMW-12	ITMW-12-201510	10/7/2015	N	314	34.6	0.42 J
ITMW-12	ITMW-12-201601	1/13/2016	N	465	70.5	< 1.0 U
ITMW-12	ITMW-12-201605	5/5/2016	N	675	78.9	< 1.0 U
ITMW-12R	ITMW-12R-201910	10/24/2019	N	11800	275	7.1
ITMW-12R	ITMW-12R-202010	10/8/2020	N	11400	284	7.0
ITMW-13	ITMW-13-19901101-FS	11/1/1990	N	34		18
ITMW-13	ITMW-13-19910201-FS	2/1/1991	N	32		35
ITMW-13	ITMW-13-19931101-FS	11/1/1993	N			29
ITMW-13	ITMW-13-19961201-FS	12/1/1996	N	36		36
ITMW-13	ITMW-13-19990201-FS	2/1/1999	N	36	140	48
ITMW-13	ITMW-13-20000301-FS	3/1/2000	N	37	121	53
ITMW-13	MW-13-20000919-FS	9/19/2000	N	22.4	112	50.5
ITMW-13	MW-13-20010328-FS	3/28/2001	N	44	92	40
ITMW-13	MW-13-20010913-FS	9/13/2001	N	35	111	80
ITMW-13	ITMW-13L-20020909-FS	9/9/2002	N	99	110	10
ITMW-13	ITMW-13T-20020909-FS	9/9/2002	N	81	86	20
ITMW-13	ITMW-13-20030226-FS	2/26/2003	N	70.2	85.5	< 10 U
ITMW-13	ITMW-13-20030924-FS	9/24/2003	N	159	130	< 10 U
ITMW-13	ITMW-13-20040413-FS	4/13/2004	N	48.4	87.2	< 10 U
ITMW-13	ITMW-13-20040921-FS	9/21/2004	N	25.5	71.6	< 10 U
ITMW-13	ITMW-13-20050407-FS	4/7/2005	N	71.8	103	< 10 U
ITMW-13	ITMW-13-20050930-FS	9/30/2005	N	72.7	114	17.9
ITMW-13	ITMW-13-20060316-FS	3/16/2006	N	141	187	< 10 U
ITMW-13	ITMW-13-20061014-FS	10/14/2006	N	100	150	17
ITMW-13	ITMW-13-20070418-FS	4/18/2007	N	83.1	78	4.3 J
ITMW-13	ITMW-13-20070920-FS	9/20/2007	N	28	40	< 10 U
ITMW-13	ITMW-13-20080429-FS	4/29/2008	N	69 0	72 0	< 10 U
ITMW-13	ITMW-13-20081210-FS	12/10/2008	N	26	23	< 5 U
ITMW-13	ITMW-13-20090427-FS	4/27/2009	N	79	78	< 5 U
ITMW-13	ITMW-13-20091027-FS	10/27/2009	N	18	22	< 5 U
ITMW-13	ITMW-13-20100512-FS	5/12/2010	N	97	72	< 5 U
ITMW-13	ITMW-13-20110323-FS	3/23/2011	N	130	83	< 5 U
ITMW-13	DUP-102711-20111027-FD	10/27/2011	FD	64	40	< 5 U
ITMW-13	ITMW-13-20111027-FS	10/27/2011	N	65	41	< 5 U
ITMW-13	ITMW-13-20120419-FS	4/19/2012	N	97	63	< 5 U
ITMW-13	ITMW-13-20121018	10/18/2012	N	400	260	1.0 J
ITMW-13	ITMW-13-20130425	4/25/2013	N	86	52	0.14 J
ITMW-13	ITMW-13-101613	10/16/2013	N	150	74	< 2.0 U
ITMW-13	ITMW-13-201403	3/8/2014	N	69.3	45.3	< 2.0 U
ITMW-13	ITMW-13-201405	5/14/2014	N	54.0	34.7	0.17 J
ITMW-13	ITMW-13-201407	7/30/2014	N	36.5	27.5	< 2.0 U
ITMW-13	ITMW-13-2014	10/15/2014	N	40.8	25.9	< 2.0 U
ITMW-13	ITMW-13-201501	1/14/2015	N	45.8	28.5	< 1.0 U
ITMW-13	ITMW-13-201504	4/15/2015	N	43.1	26.5	< 1.0 U
ITMW-13	DUP-03-201504	4/15/2015	FD	47.7	26.7	< 1.0 U
ITMW-13	ITMW-13-201507	7/22/2015	N	37.3	20.1	0.18 J
ITMW-13	DUP-02-201507	7/22/2015	FD	36.1	20.8	0.17 J
ITMW-13	ITMW-13-201510	10/7/2015	N	29.9	17.8	0.20 J
ITMW-13	DUP-01-201510	10/7/2015	FD	25.5	17.6	0.18 J
ITMW-13	ITMW-13-201601	1/13/2016	N	47.6	26.7	0.17 J
ITMW-13	DUP-02-201601	1/13/2016	FD	51.6	26.1	< 1.0 U
ITMW-13	ITMW-13-201605	5/5/2016	N	41.9	20.8	0.17 J
ITMW-14	ITMW-14-19901101-FS	11/1/1990	N	< ND		13

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-14	ITMW-14-19910201-FS	2/1/1991	N	< ND		< ND
ITMW-14	ITMW-14-19931101-FS	11/1/1993	N	6		< ND
ITMW-14	ITMW-14-19961201-FS	12/1/1996	N	< ND		< ND
ITMW-14	ITMW-14-19990201-FS	2/1/1999	N	< ND	29	20
ITMW-14	ITMW-14-20000301-FS	3/1/2000	N	< ND	24	12
ITMW-14	MW-14-20000919-FS	9/19/2000	N	< 5 U	13.6	< 10 U
ITMW-14	MW-14-20010327-FS	3/27/2001	N	< 5 U	24	10
ITMW-14	MW-14-20010913-FS	9/13/2001	N	< 5 U	5	< 10 U
ITMW-14	ITMW-14-20020911-FS	9/11/2002	N	41	6	< 10 U
ITMW-14	ITMW-14-20030226-FS	2/26/2003	N	< 5 U	< 5 U	< 10 U
ITMW-14	ITMW-14-20030924-FS	9/24/2003	N	< 5 U	< 5 U	< 10 U
ITMW-14	ITMW-14-20040413-FS	4/13/2004	N	< 5 U	< 5 U	< 10 U
ITMW-14	ITMW-14-20040921-FS	9/21/2004	N	< 5 U	< 5 U	< 10 U
ITMW-14	ITMW-14-20050930-FS	9/30/2005	N	< 5 U	< 5 U	< 10 U
ITMW-14	ITMW-14-20061014-FS	10/14/2006	N	4 J	8	< 10 UJ
ITMW-14	ITMW-14-20070921-FS	9/21/2007	N	5 J	9	< 10 U
ITMW-14	ITMW-14-20081210-FS	12/10/2008	N	5.7	9.3	< 5 U
ITMW-14	ITMW-14-20101104-FS	11/4/2010	N	110	14	< 5 U
ITMW-14	ITMW-14-20111027-FS	10/27/2011	N	6.3	11	< 5 U
ITMW-14	ITMW-14-20120419-FS	4/19/2012	N	7.6	16	< 5 U
ITMW-14	ITMW-14-20121019	10/19/2012	N	5.4	11	< 2.0 U
ITMW-14	ITMW-14-20130425	4/25/2013	N	6.8	14	< 2.0 U
ITMW-14	ITMW-14-101613	10/16/2013	N	2.9 J	4.9 J	< 2.0 U
ITMW-14	ITMW-14-201403	3/8/2014	N	6.1	11.9	< 2.0 U
ITMW-14	ITMW-14-201405	5/14/2014	N	5.3	11.3	< 2.0 U
ITMW-14	ITMW-14-201407	7/30/2014	N	4.0 J	9.2	< 2.0 U
ITMW-14	ITMW-14-201410	10/15/2014	N	4.1 J	9.4	< 2.0 U
ITMW-14	ITMW-14-201501	1/14/2015	N	4.9	11.5	< 1.0 U
ITMW-14	ITMW-14-201504	4/15/2015	N	5.0	10.7	< 1.0 U
ITMW-14	ITMW-14-201507	7/22/2015	N	4.3	9.6	< 1.0 U
ITMW-14	ITMW-14-201510	10/7/2015	N	4.6	9.8	< 1.0 U
ITMW-14	ITMW-14-201601	1/12/2016	N	4.3	10	< 1.0 U
ITMW-14	ITMW-14-201605	5/5/2016	N	3.9	8.6	< 1.0 U
ITMW-15	ITMW-15-19901101-FS	11/1/1990	N	2500		55
ITMW-15	ITMW-15-19910201-FS	2/1/1991	N	1700		< ND
ITMW-15	ITMW-15-19910415-FS	4/15/1991	N	2000		< ND
ITMW-15	ITMW-15-19910419-FS	4/19/1991	N	2100		< ND
ITMW-15	ITMW-15-19910420-FS	4/20/1991	N	2400		< ND
ITMW-15	ITMW-15-19931101-FS	11/1/1993	N	4300		10
ITMW-15	ITMW-15-19961201-FS	12/1/1996	N	240		< ND
ITMW-15	ITMW-15-19990201-FS	2/1/1999	N	400	120	< ND
ITMW-15	ITMW-15-20000301-FS	3/1/2000	N	339	97	< ND
ITMW-15	MW-15-20000919-FS	9/19/2000	N	362	92.7	< 10 U
ITMW-15	ITMW-15 DUP-1-20000919-FD	9/19/2000	FD	376	91	< 10 U
ITMW-15	MW-15-20010328-FS	3/28/2001	N	290	57	< 10 U
ITMW-15	MW-15-20010913-FS	9/13/2001	N	380	87	< 10 U
ITMW-15	MW-15 DUP-20010913-FD	9/13/2001	FD	370	80	< 10 U
ITMW-15	MW-15-20011120-FS	11/20/2001	N	157	30	< 10 U
ITMW-15	ITMW-15-20020911-FS	9/11/2002	N	320	75	< 10 U
ITMW-15	ITMW-15-20030226-FS	2/26/2003	N	301	98.7	< 10 U
ITMW-15	ITMW-15-20030925-FS	9/25/2003	N	490	91.9	< 10 U
ITMW-15	ITMW-15-20040414-FS	4/14/2004	N	334	126	< 10 U
ITMW-15	ITMW-15-20040921-FS	9/21/2004	N	774	118	< 10 U
ITMW-15	ITMW-15-20050407-FS	4/7/2005	N	685	133	< 10 U
ITMW-15	ITMW-15-20050929-FS	9/29/2005	N	862	189	< 10 U
ITMW-15	ITMW-15-20060316-FS	3/16/2006	N	908	183	12
ITMW-15	ITMW-15-20061013-FS	10/13/2006	N	680	140	7 J
ITMW-15	ITMW-15-20070419-FS	4/19/2007	N	591	110	8.5 J
ITMW-15	ITMW-15-20070921-FS	9/21/2007	N	1000	190	27
ITMW-15	ITMW-15-20080429-FS	4/29/2008	N	100 0	18 0	< 10 U
ITMW-15	ITMW-15-20081210-FS	12/10/2008	N	1100	150	< 5 U
ITMW-15	ITMW-15-20090427-FS	4/27/2009	N	2800	130	17
ITMW-15	ITMW-15-20100511-FS	5/11/2010	N	2800	160	11
ITMW-15	ITMW-15-20111026-FS	10/26/2011	N	1100	74	< 5 U
ITMW-15	ITMW-15-20121019	10/19/2012	N	240	14	1.1 J
ITMW-15	ITMW-15-101613	10/16/2013	N	2800	170	14
ITMW-15	ITMW-15-201403	3/8/2014	N	1630	152	11.6
ITMW-15	DUP2-201405	5/14/2014	FD	899	61.7	4.4
ITMW-15	ITMW-15-201405	5/14/2014	N	729	60.7	4.1
ITMW-15	ITMW-15-201407	7/30/2014	N	1820	82.5	3.1
ITMW-15	DUP-4-201407	7/30/2014	FD	1850	82.8	3.0
ITMW-15	ITMW-15-201410	10/16/2014	N	1490	63.0	2.0
ITMW-15	DUP-05-201410	10/16/2014	FD	1660	66.4	1.8 J
ITMW-15	ITMW-15-20141205	12/5/2014	N	63.0	< 5.0 U	< 2.0 U
ITMW-15	ITMW-15-201501	1/15/2015	N	56.5	2.9	< 1.0 U
ITMW-15	DUP-05-201501	1/15/2015	FD	61.7	3.8	< 1.0 U
ITMW-15	ITMW-15-201504	4/15/2015	N	101	7.5	< 1.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-15	ITMW-15-201507	7/22/2015	N	110	22.4	1.3
ITMW-15	ITMW-15-201510	10/8/2015	N	38.9	2.4	< 1.0 U
ITMW-15	ITMW-15-201601	1/13/2016	N	797	67.0	4.9
ITMW-15	ITMW-15-201605	5/5/2016	N	659	48.8	5.8
ITMW-16	ITMW-16-19910201-FS	2/1/1991	N	31		< ND
ITMW-16	ITMW-16-19931101-FS	11/1/1993	N	41		7
ITMW-16	ITMW-16-19961201-FS	12/1/1996	N	< ND		< ND
ITMW-16	ITMW-16-19990201-FS	2/1/1999	N	< ND	< ND	< ND
ITMW-16	ITMW-16-20000301-FS	3/1/2000	N	7	< ND	< ND
ITMW-16	MW-16-20000921-FS	9/21/2000	N	< 5 U	< 5 U	< 10 U
ITMW-16	MW-16-20010326-FS	3/26/2001	N	< 5 U	< 5 U	< 10 U
ITMW-16	MW-16-20010913-FS	9/13/2001	N	< 5 U	< 5 U	< 10 U
ITMW-16	ITMW-16-20020911-FS	9/11/2002	N	< 5 U	< 5 U	< 10 U
ITMW-16	ITMW-16-20030227-FS	2/27/2003	N	< 5 U	< 5 U	< 10 U
ITMW-16	ITMW-16-20030925-FS	9/25/2003	N	< 5 U	< 5 U	< 10 U
ITMW-16	ITMW-16-20040415-FS	4/15/2004	N	< 5 U	< 5 U	< 10 U
ITMW-16	ITMW-16-20040923-FS	9/23/2004	N	< 5 U	< 5 U	< 10 U
ITMW-16	ITMW-16-20050929-FS	9/29/2005	N	< 5 U	< 5 U	< 10 U
ITMW-16	DUP-2-20050929-FD	9/29/2005	FD	< 5 U	< 5 U	< 10 U
ITMW-16	ITMW-16-20061014-FS	10/14/2006	N	< 5 U	< 5 U	< 10 U
ITMW-16	ITMW-16-20070920-FS	9/20/2007	N	< 5 U	< 5 U	< 10 U
ITMW-16	ITMW-16-20081210-FS	12/10/2008	N	< 5 U	< 5 U	< 5 U
ITMW-16	ITMW-16-20101106-FS	11/6/2010	N	17	< 5 U	< 5 U
ITMW-16	ITMW-16-20111027-FS	10/27/2011	N	< 5 U	< 5 U	< 5 U
ITMW-16	ITMW-16-20120418-FS	4/18/2012	N	< 5 U	< 5 U	< 5 U
ITMW-16	ITMW-16-20121018	10/18/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-16	ITMW-16-20130424	4/24/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-16	ITMW-16-101613	10/16/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-16	ITMW-16-201403	3/7/2014	N	0.30 J	< 5.0 U	< 2.0 U
ITMW-16	ITMW-16-201405	5/13/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-16	ITMW-16-201407	7/30/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-16	ITMW-16-201410	10/15/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-16	ITMW-16-201501	1/14/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-16	ITMW-16-201504	4/14/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-16	ITMW-16-201507	7/22/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-16	ITMW-16-201510	10/7/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-16	ITMW-16-201601	1/13/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-16	ITMW-16-201605	5/5/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-16	ITMW-16-201611	11/9/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-16	ITMW-16-201710	10/25/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-16	ITMW-16-201811	11/13/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-16	ITMW-16-201910	10/24/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-16	DUP-10-201910	10/24/2019	FD	< 1.0 U	0.31 J	< 1.0 U
ITMW-16	ITMW-16-202010	10/8/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-16	ITMW-16-202110	10/19/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-17	ITMW-17-19910201-FS	2/1/1991	N	21000		< ND
ITMW-17	ITMW-17-19910415-FS	4/15/1991	N	21000		< ND
ITMW-17	ITMW-17-19910424-FS	4/24/1991	N	21000		< ND
ITMW-17	ITMW-17-19931101-FS	11/1/1993	N	18000		15
ITMW-17	ITMW-17-19961201-FS	12/1/1996	N	9300		< ND
ITMW-17	ITMW-17-19990201-FS	2/1/1999	N	11000	240	< ND
ITMW-17	ITMW-17-20000301-FS	3/1/2000	N	6780	171	< ND
ITMW-17	MW-17-20000919-FS	9/19/2000	N	5500	180	< 10 U
ITMW-17	MW-17-20010105-FS	1/5/2001	N	8310	179	< 10 U
ITMW-17	MW-17-20010328-FS	3/28/2001	N	6700	134	< 10 U
ITMW-17	MW-17-20010913-FS	9/13/2001	N	6300	158	< 10 U
ITMW-17	ITMW-17-20020911-FS	9/11/2002	N	6500	153	< 10 U
ITMW-17	ITMW-17-20030226-FS	2/26/2003	N	4380	134	< 10 U
ITMW-17	ITMW-17-20030925-FS	9/25/2003	N	6090	136	< 10 U
ITMW-17	ITMW-17-20040414-FS	4/14/2004	N	5050	184	< 10 U
ITMW-17	ITWM-17 DUP-2-20040414-FD	4/14/2004	FD	4920	182	< 10 U
ITMW-17	ITMW-17-20040921-FS	9/21/2004	N	5760	156	< 10 U
ITMW-17	ITMW-17-20050407-FS	4/7/2005	N	5750	156	< 10 U
ITMW-17	ITMW-17-20050929-FS	9/29/2005	N	5460	111	< 10 U
ITMW-17	ITMW-17-20060315-FS	3/15/2006	N	15900	211 E	26.3
ITMW-17	ITMW-17-20061012-FS	10/12/2006	N	19000	220	21
ITMW-17	ITMW-17-20070418-FS	4/18/2007	N	13000	298	< 10 U
ITMW-17	ITMW-17-20070921-FS	9/21/2007	N	11000	210	3 J
ITMW-17	ITMW-17-20080429-FS	4/29/2008	N	6200 0	140 0	< 10 U
ITMW-17	ITMW-17-20081210-FS	12/10/2008	N	5600	130	< 5 U
ITMW-17	ITMW-17-20090427-FS	4/27/2009	N	5200	130	< 5 U
ITMW-17	ITMW-17-20100511-FS	5/11/2010	N	4500	85	< 5 U
ITMW-17	ITMW-17-20101104-FS	11/4/2010	N	5400	110	< 5 U
ITMW-17	ITMW-17-20110322-FS	3/22/2011	N	5300	100	< 5 U
ITMW-17	ITMW-17-20111026-FS	10/26/2011	N	4500	98	< 5 U
ITMW-17	ITMW-17-20120419-FS	4/19/2012	N	4700	110	< 5 U
ITMW-17	ITMW-17-20121018	10/19/2012	N	3500	100	0.48 J

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-17	ITMW-17-20130425	4/25/2013	N	5600	130	0.90 J
ITMW-17	ITMW-17-101713	10/17/2013	N	4800	79	< 2.0 U
ITMW-17	ITMW-17-201403	3/8/2014	N	3770	86.1	0.57 J
ITMW-17	DUP-3-201403	3/8/2014	FD	4040	87.3	0.74 J
ITMW-17	ITMW-17-201405	5/15/2014	N	3630	82.9	1.3 J
ITMW-17	DUP-3-201405	5/15/2014	FD	3370	88.5	1.1 J
ITMW-17	ITMW-17-201407	7/30/2014	N	2260	64.7	< 2.0 U
ITMW-17	ITMW-17-201410	10/16/2014	N	3510	70.5	3.2
ITMW-17	ITMW-17-20141205	12/5/2014	N	4630	210 J	7.7
ITMW-17	ITMW-17-201501	1/15/2015	N	3840	110	1.5
ITMW-17	ITMW-17-201504	4/15/2015	N	3920	142	< 1.0 U
ITMW-17	ITMW-17-201507	7/22/2015	N	5350	116	0.51 J
ITMW-17	ITMW-17-201510	10/8/2015	N	3970	77.2	2.5
ITMW-17	ITMW-17-201601	1/13/2016	N	2600	44.7	2.2
ITMW-17	ITMW-17-201605	5/5/2016	N	2720	77.7	< 50.0 U
ITMW-18	ITMW-18-19910201-FS	2/1/1991	N	3700		< ND
ITMW-18	ITMW-18-19931101-FS	11/1/1993	N	4500		6
ITMW-18	ITMW-18-19961201-FS	12/1/1996	N	1600		< ND
ITMW-18	ITMW-18-19990201-FS	2/1/1999	N	6300	480	< ND
ITMW-18	ITMW-18-20000301-FS	3/1/2000	N	3560	401	< ND
ITMW-18	MW-18-20000919-FS	9/19/2000	N	4080	409	< 10 U
ITMW-18	MW-18-20010327-FS	3/27/2001	N	4000	400	< 10 U
ITMW-18	DUPLICATE 2-20010327-FD	3/27/2001	FD	4200	370	< 100 U
ITMW-18	MW-18-20010911-FS	9/11/2001	N	4100	300	< 10 U
ITMW-18	ITMW-18-20020911-FS	9/11/2002	N	6700	300	< 10 U
ITMW-18	ITMW-18-20030226-FS	2/26/2003	N	5110	290	< 10 U
ITMW-18	ITMW-18-20030924-FS	9/24/2003	N	7700	415	< 10 U
ITMW-18	ITMW-18-20040413-FS	4/13/2004	N	7740	410	< 10 U
ITMW-18	ITMW-18-20040921-FS	9/21/2004	N	7050	380	< 10 U
ITMW-18	ITMW-18-20050408-FS	4/8/2005	N	7080	389	< 10 U
ITMW-18	ITMW-18-20050929-FS	9/29/2005	N	4660	241	< 10 U
ITMW-18	ITMW-18-20060315-FS	3/15/2006	N	5750	373	< 50 U
ITMW-18	ITMW-18-20061013-FS	10/13/2006	N	6600	300	< 10 U
ITMW-18	ITMW-18-20070418-FS	4/18/2007	N	15000	387	< 10 U
ITMW-18	ITMW-18-20070921-FS	9/21/2007	N	8300	310	< 100 U
ITMW-18	ITMW-18-20080430-FS	4/30/2008	N	9000 0	350 0	< 10 U
ITMW-18	ITMW-18-20081209-FS	12/9/2008	N	7200	320	< 5 U
ITMW-18	ITMW-18-20090427-FS	4/27/2009	N	7100	320	< 5 U
ITMW-18	ITMW-18-20091027-FS	10/27/2009	N	7800	360	< 5 U
ITMW-18	ITMW-18-20100511-FS	5/11/2010	N	11000	360	< 5 U
ITMW-18	ITMW-18-20111026-FS	10/26/2011	N	8500	290	< 5 U
ITMW-18	ITMW-18-20120419-FS	4/19/2012	N	9800	360	2.9 J
ITMW-18	ITMW-18-20121019	10/19/2012	N	7600	260	1.2 J
ITMW-18	ITMW-18-20130425	4/25/2013	N	7200	270	0.90 J
ITMW-18	ITMW-18-101713	10/17/2013	N	7000	280	0.64 J
ITMW-18	ITMW-18-201403	3/8/2014	N	9380	285	< 100 U
ITMW-18	DUP-5-201403	3/8/2014	FD	8550	242 J	1.7 J
ITMW-18	ITMW-18-201405	5/15/2014	N	2940	101	< 2.0 U
ITMW-18	DUP-5-201405	5/15/2014	FD	2500	108	< 2.0 U
ITMW-18	ITMW-18-201407	7/31/2014	N	5360	139	1.6 J
ITMW-18	ITMW-18-201410	10/15/2014	N	3540	68.5	< 2.0 U
ITMW-18	ITMW-18-20141204	12/4/2014	N	3690	74.3	< 2.0 U
ITMW-18	ITMW-18-201501	1/15/2015	N	488	26.5	< 1.0 U
ITMW-18	ITMW-18-201504	4/16/2015	N	43.5	1.6	< 1.0 U
ITMW-18	DUP-04-201504	4/16/2015	FD	42.8	1.7	< 1.0 U
ITMW-18	ITMW-18-201507	7/23/2015	N	22.9	0.69 J	< 1.0 U
ITMW-18	DUP-07-201507	7/23/2015	FD	24.7	0.81 J	< 1.0 U
ITMW-18	ITMW-18-201510	10/8/2015	N	12.9	0.40 J	< 1.0 U
ITMW-18	DUP-06-201510	10/8/2015	FD	12.4	0.41 J	< 1.0 U
ITMW-18	ITMW-18-201601	1/13/2016	N	48.8	4.6	< 1.0 U
ITMW-18	ITMW-18-201605	5/5/2016	N	13.9	0.49 J	< 1.0 U
ITMW-18	ITMW-18-201611	11/9/2016	N	10.1	< 1.0 U	< 1.0 U
ITMW-18	ITMW-18-201710	10/26/2017	N	15.0	0.47 J	< 1.0 U
ITMW-18	FD-07-201710	10/26/2017	FD	16.0	0.50 J	< 1.0 U
ITMW-18	ITMW-18-201811	11/14/2018	N	641	55.3	< 1.0 U
ITMW-18	ITMW-18-201910	10/24/2019	N	769	68.4	< 1.0 U
ITMW-18	ITMW-18-202010	10/8/2020	N	1210	94.5	0.43 J
ITMW-18	ITMW-18-202110	10/21/2021	N	2090	192	< 1.0 U
ITMW-18	ITMW-18-202210	10/20/2022	N	2930	183	< 1.0 U
ITMW-18	ITMW-18-202310	10/19/2023	N	2380	215	< 1.0 U
ITMW-19	ITMW-19-19910201-FS	2/1/1991	N	9900		< ND
ITMW-19	ITMW-19-19931101-FS	11/1/1993	N	27000		7
ITMW-19	ITMW-19-19961201-FS	12/1/1996	N	25000		< ND
ITMW-19	ITMW-19-19990201-FS	2/1/1999	N	33000	150	< ND
ITMW-19	ITMW-19-20000301-FS	3/1/2000	N	33100	128	< ND
ITMW-19	MW-19-20000919-FS	9/19/2000	N	35700	197	< 10 U
ITMW-19	MW-19-20010105-FS	1/5/2001	N	34000	166	< 10 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-19	MW-19-20010328-FS	3/28/2001	N	38000	119	< 10 U
ITMW-19	MW-19-20010913-FS	9/13/2001	N	19000	132	< 10 U
ITMW-19	ITMW-19-20020911-FS	9/11/2002	N	27000	167	< 10 U
ITMW-19	ITMW-19-20030226-FS	2/26/2003	N	16200	126	< 10 U
ITMW-19	ITMW-19-20030924-FS	9/24/2003	N	27300	186	< 10 U
ITMW-19	ITMW-19-20040413-FS	4/13/2004	N	19400	186	< 10 U
ITMW-19	ITMW-19-20040921-FS	9/21/2004	N	20000	148	< 10 U
ITMW-19	ITMW-19-20050407-FS	4/7/2005	N	18300	146	< 10 U
ITMW-19	DUP-040705-20050407-FD	4/7/2005	FD	16200	145	< 10 U
ITMW-19	ITMW-19-20050929-FS	9/29/2005	N	25700	144	< 10 U
ITMW-19	ITMW-19-20060315-FS	3/15/2006	N	21300	177	< 100 U
ITMW-19	ITMW-19-20061012-FS	10/12/2006	N	16000	150	2 J
ITMW-19	ITMW-19-20070418-FS	4/18/2007	N	20000	131	< 10 U
ITMW-19	ITMW-19-20070921-FS	9/21/2007	N	19000	110	< 200 U
ITMW-19	ITMW-19-20080429-FS	4/29/2008	N	17000 0	98 0	< 100 U
ITMW-19	ITMW-19-20081210-FS	12/10/2008	N	11000	93	< 5 U
ITMW-19	ITMW-19-20090427-FS	4/27/2009	N	13000	100	< 5 U
ITMW-19	ITMW-19-20100511-FS	5/11/2010	N	19000	130	< 5 U
ITMW-19	DUP-03-20101104-FD	11/4/2010	FD	19000	150	< 5 U
ITMW-19	ITMW-19-20101104-FS	11/4/2010	N	18000	140	< 5 U
ITMW-19	ITMW-19-20110322-FS	3/22/2011	N	16000	110	1 J
ITMW-19	ITMW-19-20111026-FS	10/26/2011	N	17000	120	< 5 U
ITMW-19	DUP-02-20120419-FD	4/19/2012	FD	15000	110	< 5 U
ITMW-19	ITMW-19-20120419-FS	4/19/2012	N	18000	110	< 5 U
ITMW-19	ITMW-19-20121019	10/19/2012	N	15000	110	0.89 J
ITMW-19	ITMW-19-20130425	4/25/2013	N	13000	110	0.57 J
ITMW-19	ITMW-19-10182013	10/18/2013	N	16000	91 J	< 2.0 U
ITMW-19	DUP-ITMW-19-10182013	10/18/2013	FD	14000	100 J	< 2.0 U
ITMW-19	ITMW-19-201403	3/8/2014	N	8850	66.7	0.57 J
ITMW-19	DUP-4-201403	3/8/2014	FD	8270	60.8 J	< 100 U
ITMW-19	ITMW-19-201405	5/15/2014	N	9780 J	65.8	0.85 J
ITMW-19	DUP-6-201405	5/15/2014	FD	15300 J	67.2	0.87 J
ITMW-19	ITMW-19-201407	7/31/2014	N	13300	85.5	0.96 J
ITMW-19	ITMW-19-201410	10/16/2014	N	12800	76.7	1.9 J
ITMW-19	ITMW-19-20141205	12/5/2014	N	33.5	< 5.0 U	< 2.0 U
ITMW-19	ITMW-19-201501	1/15/2015	N	17.4	< 1.0 U	< 1.0 U
ITMW-19	ITMW-19-201504	4/15/2015	N	594	2.2	< 1.0 U
ITMW-19	ITMW-19-201507	7/23/2015	N	15.2	< 1.0 U	< 1.0 U
ITMW-19	ITMW-19-201510	10/8/2015	N	87.1	0.41 J	< 1.0 U
ITMW-19	ITMW-19-201601	1/13/2016	N	336	1.2	< 1.0 U
ITMW-19	ITMW-19-201605	5/5/2016	N	105	0.28 J	< 1.0 U
ITMW-19	ITMW-19-201611	11/9/2016	N	137	< 1.0 U	< 1.0 U
ITMW-19	ITMW-19-201710	10/26/2017	N	165	0.52 J	< 1.0 U
ITMW-19	ITMW-19-201811	11/15/2018	N	204	1.3	< 1.0 U
ITMW-19	ITMW-19-201910	10/24/2019	N	240 J	1.8	< 1.0 U
ITMW-19	ITMW-19-202010	10/8/2020	N	435	4.8	< 1.0 U
ITMW-19	ITMW-19-202110	10/21/2021	N	1350	13.6	< 1.0 U
ITMW-19	ITMW-19-202210	10/20/2022	N	1570	12.2	< 1.0 U
ITMW-19	ITMW-19-202310	10/19/2023	N	1150	11.4	< 1.0 U
ITMW-1R	ITMW-1R-201910	10/23/2019	N	11.4	8.9	0.14 J
ITMW-1R	ITMW-1R-202010	10/8/2020	N	28.4	45.9	< 1.0 U
ITMW-1R	ITMW-1R-202110	10/20/2021	N	31.1	51.1	< 1.0 U
ITMW-1R	ITMW-1R-202210	10/19/2022	N	18.6	38.8	< 1.0 U
ITMW-1R	ITMW-1R-202310	10/18/2023	N	22.3	31.0	< 1.0 U
ITMW-20	ITMW-20-19910301-FS	3/1/1991	N	< ND		< ND
ITMW-20	ITMW-20-19931101-FS	11/1/1993	N	< ND		< ND
ITMW-20	ITMW-20-19961201-FS	12/1/1996	N	290		< ND
ITMW-20	ITMW-20-19970501-FS	5/1/1997	N	< ND	< ND	< ND
ITMW-20	ITMW-20-19990201-FS	2/1/1999	N	< ND	< ND	< ND
ITMW-20	ITMW-20-20000301-FS	3/1/2000	N	< ND	< ND	< ND
ITMW-20	MW-20-20000921-FS	9/21/2000	N	< 5 U	< 5 U	< 10 U
ITMW-20	MW-20-20010327-FS	3/27/2001	N	< 5 U	< 5 U	< 10 U
ITMW-20	MW-20-20010911-FS	9/11/2001	N	21	< 5 U	< 10 U
ITMW-20	ITMW-20-20020910-FS	9/10/2002	N	< 5 U	< 5 U	< 10 U
ITMW-20	ITMW-20-20030227-FS	2/27/2003	N	< 5 U	< 5 U	< 10 U
ITMW-20	ITMW-20-20030924-FS	9/24/2003	N	< 5 U	< 5 U	< 10 U
ITMW-20	ITMW-20-20040414-FS	4/14/2004	N	< 5 U	< 5 U	< 10 U
ITMW-20	ITMW-20-20040922-FS	9/22/2004	N	< 5 U	< 5 U	< 10 U
ITMW-20	ITMW-20-20050929-FS	9/29/2005	N	< 5 U	< 5 U	< 10 U
ITMW-20	ITMW-20-20061012-FS	10/12/2006	N	< 5 U	< 5 U	< 10 U
ITMW-20	ITMW-20-20070919-FS	9/19/2007	N	< 5 U	< 5 U	< 10 U
ITMW-20	ITMW-20-20081210-FS	12/10/2008	N	< 5 U	< 5 U	< 5 U
ITMW-20	MW-20-20091029-FS	10/29/2009	N	< 5 U	< 5 U	< 5 U
ITMW-20	ITMW-20-20100512-FS	5/12/2010	N	< 5 U	< 5 U	< 5 U
ITMW-20	ITMW-20-20101105-FS	11/5/2010	N	15	< 5 U	< 5 U
ITMW-20	DUP-102611-20111026-FD	10/26/2011	FD	< 5 U	< 5 U	< 5 U
ITMW-20	ITMW-20-20111026-FS	10/26/2011	N	< 5 U	< 5 U	< 5 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-20	ITMW-20-20120418-FS	4/18/2012	N	< 5 U	< 5 U	< 5 U
ITMW-20	ITMW-20-20121018	10/18/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-20	ITMW-20-20130423	4/23/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-20	ITMW-20-101413	10/14/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-20	ITMW-20-201403	3/5/2014	N	< 5.0 U	< 5.0 U	0.15 J
ITMW-20	ITMW-20-201405	5/12/2014	N	0.21 J	< 5.0 U	< 2.0 U
ITMW-20	ITMW-20-201407	7/30/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-20	ITMW-20-201410	10/15/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
ITMW-20	ITMW-20-201501	1/12/2015	N	< 1.0 U	< 1.0 U	< 1.0
ITMW-20	ITMW-20-201504	4/13/2015	N	< 1.0 U	< 1.0 U	< 1.0
ITMW-20	ITMW-20-201507	7/22/2015	N	0.20 J	< 1.0 U	< 1.0 U
ITMW-20	ITMW-20-201510	10/7/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	ITMW-20-201601	1/12/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	ITMW-20-201605	5/2/2016	N	< 1.0	< 1.0 U	< 1.0 U
ITMW-20	ITMW-20-201611	11/9/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	ITMW-20-201704	4/26/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	ITMW-20-201710	10/25/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	ITMW-20-201804	4/18/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	ITMW-20-201811	11/14/2018	N	< 1.0	< 1.0 U	< 1.0 U
ITMW-20	ITMW-20-201904	4/24/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	ITMW-20-201910	10/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	DUP-05-201910	10/23/2019	FD	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	ITMW-20-202005	5/13/2020	N	0.68 J	< 1.0 U	< 1.0 U
ITMW-20	ITMW-20-202010	10/6/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	ITMW-20-202104	4/12/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	DUP-02-202104	4/12/2021	FD	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	ITMW-20-202110	10/19/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	DUP-03-202110	10/19/2021	FD	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	ITMW-20-202204	4/12/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	DUP-05-202204	4/12/2022	FD	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	ITMW-20-202210	10/17/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	DUP-03-202210	10/17/2022	FD	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	ITMW-20-202304	4/17/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	DUP-05-202304	4/17/2023	FD	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	ITMW-20-202310	10/17/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-20	DUP-02-202310	10/17/2023	FD	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-21	ITMW-21-19910301-FS	3/1/1991	N	21		< ND
ITMW-21	ITMW-21-19931101-FS	11/1/1993	N	37		< ND
ITMW-21	ITMW-21-19961201-FS	12/1/1996	N	150		< ND
ITMW-21	ITMW-21-19990201-FS	2/1/1999	N	190	< ND	< ND
ITMW-21	ITMW-21-20000301-FS	3/1/2000	N	196	< ND	< ND
ITMW-21	MW-21-20000919-FS	9/19/2000	N	192	< 5 U	< 10 U
ITMW-21	MW-21-20010328-FS	3/28/2001	N	123	< 5 U	< 10 U
ITMW-21	MW-21-20010913-FS	9/13/2001	N	116	< 5 U	< 10 U
ITMW-21	ITMW-21-20020910-FS	9/10/2002	N	13	< 5 U	< 10 U
ITMW-21	ITMW-21-20030226-FS	2/26/2003	N	39.5	< 5 U	< 10 U
ITMW-21	ITMW-21-20030923-FS	9/23/2003	N	9.09	< 5 U	< 10 U
ITMW-21	ITMW-21-20040414-FS	4/14/2004	N	52.9	< 5 U	< 10 U
ITMW-21	ITMW-21-20040922-FS	9/22/2004	N	7.8	< 5 U	< 10 U
ITMW-21	ITMW-21-20050928-FS	9/28/2005	N	6.45	< 5 U	< 10 U
ITMW-21	ITMW-21-20061012-FS	10/12/2006	N	9	< 5 U	< 10 U
ITMW-21	ITMW-21-20070921-FS	9/21/2007	N	10	< 5 U	< 10 U
ITMW-21	ITMW-21-20081209-FS	12/9/2008	N	15	< 5 U	< 5 U
ITMW-21	ITMW-21-20091027-FS	10/27/2009	N	14	< 5 U	< 5 U
ITMW-21	ITMW-21-20101104-FS	11/4/2010	N	1100	4.4 J	< 5 U
ITMW-21	ITMW-21-20110322-FS	3/22/2011	N	24	< 5 U	< 5 U
ITMW-21	ITMW-21-20111025-FS	10/25/2011	N	11	< 5 U	< 5 U
ITMW-21	ITMW-21-20120417-FS	4/17/2012	N	30	< 5 U	< 5 U
ITMW-21	ITMW-21-20121019	10/19/2012	N	7.7	< 5.0 U	< 2.0 U
ITMW-21	ITMW-21-20130424	4/24/2013	N	18	< 5.0 U	< 2.0 U
ITMW-21	ITMW-21-101513	10/15/2013	N	20	< 5.0 U	< 2.0 U
ITMW-21	ITMW-21-201403	3/6/2014	N	14.8	< 5.0 U	< 2.0 U
ITMW-21	ITMW-21-201405	5/14/2014	N	17.6	< 5.0 U	< 2.0 U
ITMW-21	ITMW-21-201407	7/30/2014	N	9.4	< 5.0 U	< 2.0 U
ITMW-21	DUP-3-201407	7/30/2014	FD	9.3	< 5.0 U	< 2.0 U
ITMW-21	ITMW-21-201410	10/15/2014	N	6.0	< 5.0 U	< 2.0 U
ITMW-21	ITMW-21-201501	1/14/2015	N	10.8	< 1.0 U	< 1.0 U
ITMW-21	ITMW-21-201504	4/14/2015	N	12.7	< 1.0 U	< 1.0 U
ITMW-21	ITMW-21-201507	7/22/2015	N	7.6	0.20 J	< 1.0 U
ITMW-21	ITMW-21-201510	10/8/2015	N	7.2	0.29 J	< 1.0 U
ITMW-21	ITMW-21-201601	1/13/2016	N	9.8	0.27 J	< 1.0 U
ITMW-21	ITMW-21-201605	5/5/2016	N	11.1	0.30 J	< 1.0 U
ITMW-21	ITMW-21-201611	11/9/2016	N	8.1	< 1.0 U	< 1.0 U
ITMW-21	ITMW-21-201704	4/28/2017	N	11.9	0.31 J	< 1.0 U
ITMW-21	ITMW-21-201710	10/25/2017	N	7.9	0.25 J	< 1.0 U
ITMW-21	ITMW-21-201804	4/19/2018	N	13.2	0.38 J	< 1.0 U
ITMW-21	ITMW-21-201811	11/15/2018	N	8.0	< 1.0 U	< 1.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
ITMW-21	ITMW-21-201904	4/24/2019	N	12.3	0.36 J	< 1.0 U
ITMW-21	ITMW-21-201910	10/24/2019	N	6.0	0.30 J	< 1.0 U
ITMW-21	ITMW-21-202005	5/13/2020	N	7.8	0.42 J	< 1.0 U
ITMW-21	ITMW-21-202010	10/8/2020	N	5.4	0.32 J	< 1.0 U
ITMW-21	ITMW-21-202104	4/13/2021	N	8.0	0.25 J	< 1.0 U
ITMW-21	DUP-07-202104	4/13/2021	FD	7.7	0.28 J	< 1.0 U
ITMW-21	ITMW-21-202110	10/20/2021	N	4.9	0.26 J	< 1.0 U
ITMW-21	DUP-04-202110	10/20/2021	FD	5.8	0.22 J	< 1.0 U
ITMW-21	ITMW-21-202204	4/13/2022	N	4.7	0.26 J	< 1.0 U
ITMW-21	DUP-07-202204	4/13/2022	FD	4.9	0.26 J	< 1.0 U
ITMW-21	ITMW-21-202210	10/19/2022	N	6.4	0.29 J	< 1.0 U
ITMW-21	DUP-05-202210	10/19/2022	FD	5.4	0.29 J	< 1.0 U
ITMW-21	ITMW-21-202304	4/18/2023	N	4.5	< 1.0 U	< 1.0 U
ITMW-21	ITMW-21-202310	10/18/2023	N	7.3	0.17 J	< 1.0 U
ITMW-21	DUP-03-202310	10/18/2023	FD	7.6	0.19 J	< 1.0 U
ITMW-2R	ITMW-2R-201910	10/24/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-2R	ITMW-2R-202010	10/8/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-2R	DUP-09-202010	10/8/2020	FD	0.32 J	< 1.0 U	< 1.0 U
ITMW-2R	ITMW-2R-202110	10/19/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
ITMW-2R	ITMW-2R-202210	10/18/2022	N	0.34 J	< 1.0 U	< 1.0 U
ITMW-2R	ITMW-2R-202310	10/17/2023	N	1.6	< 1.0 U	< 1.0 U
IW-72	IW-72-20090116-FS	1/16/2009	N	27	< 5 U	< 5 U
IW-72	IW-72-20090423-FS	4/23/2009	N	40	< 5 U	< 5 U
IW-72	IW-72-20090508-FS	5/8/2009	N	40	< 5 U	< 5 U
IW-72	IW-72-20110303-FS	3/3/2011	N	3.1 J	< 5.0 U	< 5.0 U
IW-72	IW-72-20110519-FS	5/19/2011	N	< 5.0 U	< 5.0 U	
IW-72	IW-72-20111024-FS	10/24/2011	N	< 5 U	< 5 U	< 5 U
IW-72	IW-72-20120417-FS	4/17/2012	N	3.8 J	< 5 U	< 5 U
IW-72	IW-72-20121019	10/19/2012	N	< 25 U	< 25 U	< 10 U
IW-72	IW-72-20130424	4/24/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
IW-72	IW-72-101513	10/15/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
IW-72	IW-72-201403	3/6/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
IW-72	IW-72-201405	5/12/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
IW-72	IW-72-201407	7/29/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
IW-72	IW-72-201410	10/13/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
IW-72	IW-72-201501	1/12/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
IW-72	IW-72-201504	4/15/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
IW-72	IW-72-201507	7/20/2015	N	0.48 J	< 1.0 U	< 1.0 U
IW-72	IW-72-201510	10/6/2015	N	0.74 J	< 1.0 U	< 1.0 U
IW-72	IW-72-201601	1/12/2016	N	1.4	< 1.0 U	< 1.0 U
IW-72	IW-72-201605	5/3/2016	N	1.8	< 1.0 U	< 1.0 U
IW-73	IW-73-20090423-FS	4/23/2009	N	400	16	< 5 U
IW-73	IW-73-20110519-FS	5/19/2011	N	160	3.6 J	
IW-73	IW-73-20111025-FS	10/25/2011	N	250	4.9 J	< 5 U
IW-73	IW-73-20120417-FS	4/17/2012	N	180	5.8	< 5 U
IW-73	IW-73-20121020	10/20/2012	N	170	7.0	< 2.0 U
IW-73	IW-73-20130424	4/24/2013	N	200	6.5	< 2.0 U
IW-73	IW-73 DUP-20130424	4/24/2013	FD	180	6.4	< 2.0 U
IW-73	IW-73-101513	10/15/2013	N	140	47	6.3
IW-73	IW-73-201403	3/7/2014	N	183	20.9	4.6
IW-73	IW-73-201405	5/14/2014	N	31.9	0.81 J	< 2.0 U
IW-73	IW-73-201407	7/29/2014	N	138	24.3	26.1
IW-73	IW-73-201410	10/14/2014	N	8.5	0.84 J	1.1 J
IW-73	IW-73-201501	1/14/2015	N	70.8	6.3	4.1
IW-73	IW-73-201504	4/15/2015	N	96.8	6.8	1.6
IW-73	IW-73-201507	7/21/2015	N	143	9.0	1.5
IW-73	IW-73-201510	10/6/2015	N	154	7.8	0.59 J
IW-73	IW-73-201601	1/12/2016	N	103	4.3	0.24 J
IW-73	IW-73-201605	5/4/2016	N	125	4.9	0.35 J
IW-73	IW-73-201611	11/9/2016	N	113	2.5	0.16 J
IW-73	DUP-01-201611	11/9/2016	FD	116	2.8	0.21 J
IW-73	IW-73-201704	4/28/2017	N	108	3.8	< 1.0 U
IW-73	IW-73-201710	10/24/2017	N	126	3.3	< 1.0 U
IW-73	IW-73-201804	4/18/2018	N	176	4.0	< 1.0 U
IW-73	IW-73-201811	11/14/2018	N	208	7.3	< 1.0 U
IW-73	IW-73-201904	4/24/2019	N	216	8.0	0.35 J
IW-73	IW-73-201910	11/20/2019	N	215	7.0	0.16 J
IW-73	IW-73-202005	5/13/2020	N	173	6.4	0.21 J
IW-73	DUP-03-202005	5/13/2020	FD	193	6.0	< 1.0 U
IW-73	IW-73-202010	10/7/2020	N	211	7.6	0.27 J
IW-73	IW-73-202104	4/13/2021	N	227	7.8	0.33 J
IW-73	IW-73-202110	10/21/2021	N	198	6.8	1.7 J
IW-73	IW-73-202210	10/21/2022	N	189	6.4	< 1.0 U
IW-73	IW-73-202304	4/19/2023	N	185	5.5	0.26 J
IW-73	IW-73-202310	10/19/2023	N	195	6.2	0.23 J
IW-74	IW-74-20090423-FS	4/23/2009	N	260	8.1	< 5 U
IW-74	IW-74-20110519-FS	5/19/2011	N	74	< 5.0 U	

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
IW-74	IW-74-20111025-FS	10/25/2011	N	150	3.1 J	< 5 U
IW-74	IW-74-20120417-FS	4/17/2012	N	130	2.4 J	< 5 U
IW-74	IW-74-20121020	10/20/2012	N	160	3.4 J	< 2.0 U
IW-74	IW-74-20130424	4/24/2013	N	160	4.8 J	< 2.0 U
IW-74	IW-74-101513	10/15/2013	N	190	5.7	< 2.0 U
IW-74	IW-74-201403	3/7/2014	N	135	4.3 J	1.5 J
IW-74	DUP-2-201403	3/7/2014	FD	151	4.5 J	2.2
IW-74	IW-74-201405	5/14/2014	N	169	4.3 J	0.80 J
IW-74	IW-74-201407	7/29/2014	N	177	5.8	0.91 J
IW-74	IW-74-201410	10/14/2014	N	144	3.3 J	< 2.0 U
IW-74	DUP-01-201410	10/14/2014	FD	143	3.3 J	< 2.0 U
IW-74	IW-74-201501	1/14/2015	N	141	3.8	< 1.0 U
IW-74	DUP-01-201501	1/14/2015	FD	139	3.5	< 1.0 U
IW-74	IW-74-201504	4/15/2015	N	147	5.0	< 1.0 U
IW-74	DUP-05-201504	4/15/2015	FD	153	4.8	< 1.0 U
IW-74	IW-74-201507	7/21/2015	N	168	4.6	1.4
IW-74	DUP-08-201507	7/21/2015	FD	168	4.2	1.3
IW-74	IW-74-201510	10/7/2015	N	121	3.8	0.36 J
IW-74	DUP-10-201510	10/7/2015	FD	122	3.8	0.33 J
IW-74	IW-74-201601	1/12/2016	N	135	3.2	0.17 J
IW-74	DUP-05-201601	1/12/2016	FD	135	3.3	0.18 J
IW-74	IW-74-201605	5/4/2016	N	122	3.5	0.44 J
IW-74	DUP-07-201605	5/4/2016	FD	108	3.2	0.42 J
IW-75	IW-75-20090116-FS	1/16/2009	N	140	2.4 J	< 5 U
IW-75	IW-75-20111025-FS	10/25/2011	N	< 5 U	< 5 U	< 5 U
IW-75	IW-75-20120417-FS	4/17/2012	N	2.9 J	< 5 U	< 5 U
IW-75	IW-75-20121018	10/18/2012	N	< 25 U	< 25 U	< 10 U
IW-75	IW-75-101513	10/15/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
IW-76	IW-76-20090423-FS	4/23/2009	N	730	28	< 5 U
IW-76	IW-76-20090507-FS	5/7/2009	N	460	28	< 5 U
IW-76	IW-76-20110304-FS	3/4/2011	N	380	11	< 5.0 U
IW-76	IW-76-20110523-FS	5/23/2011	N	460	12	
IW-76	IW-76-20111025-FS	10/25/2011	N	130	2.2 J	< 5 U
IW-76	IW-76-20120417-FS	4/17/2012	N	400	8.9	< 5 U
IW-76	IW-76-20121020	10/20/2012	N	610	16	< 2.0 U
IW-76	IW-76-20130424	4/24/2013	N	420	13	0.39 J
IW-76	IW-76-101513	10/15/2013	N	450	8.7	< 2.0 U
IW-76	IW-76-201403	3/8/2014	N	127	1.5 J	< 2.0 U
IW-76	IW-76-201405	5/14/2014	N	10.3	< 5.0 U	< 2.0 U
IW-76	IW-76-201407	7/29/2014	N	319	2.7 J	< 2.0
IW-76	IW-76-201410	10/15/2014	N	214	6.7	< 2.0 U
IW-76	IW-76-201501	1/14/2015	N	288	8.8	< 1.0 U
IW-76	IW-76-201504	4/15/2015	N	354	11.2	< 1.0 U
IW-76	IW-76-201507	7/21/2015	N	323	7.3	< 1.0 U
IW-76	IW-76-201510	10/6/2015	N	106	1.6	< 1.0 U
IW-76	IW-76-201601	1/12/2016	N	80.2 J	1.9	< 1.0 U
IW-76	IW-76-201605	5/4/2016	N	139 J	2.6	< 1.0 U
IW-77	IW-77-20090423-FS	4/23/2009	N	570	20	< 5 U
IW-77	IW-77-20090507-FS	5/7/2009	N	300	17	< 5 U
IW-77	IW-77-20090527-FS	5/27/2009	N	250	13	< 5 U
IW-77	MW-77-20091028-FS	10/28/2009	N	380	13	< 5 U
IW-77	IW-77-20091221-FS	12/21/2009	N	250	12	< 5.0 U
IW-77	IW-77-20100513-FS	5/13/2010	N	260	11	< 5 U
IW-77	IW-77-20101105-FS	11/5/2010	N	1400	41	< 5 U
IW-77	IW-77-20110304-FS	3/4/2011	N	430	14	< 5.0 U
IW-77	IW-77-20110523-FS	5/23/2011	N	440	15	
IW-77	IW-77-20111025-FS	10/25/2011	N	1400	32	< 5 U
IW-77	DUP-01-20120417-FD	4/17/2012	FD	520	20	< 5 U
IW-77	IW-77-20120417-FS	4/17/2012	N	510	23	< 5 U
IW-77	IW-77-20121019	10/19/2012	N	1000	32	0.65 J
IW-77	IW-77-20130424	4/24/2013	N	530	21	< 2.0 U
IW-77	IW-77-101613	10/16/2013	N	1000	39	1.6 J
IW-77	IW-77-101613-FD	10/16/2013	FD	990	39	0.49 J
IW-77	IW-77-201403	3/8/2014	N	546	24.4	0.22 J
IW-77	IW-77-201405	5/14/2014	N	1460	36.0	0.66 J
IW-77	20140709-GW-IW-77	7/9/2014	N	1200	21.1	< 2.0 U
IW-77	IW-77-201407	7/29/2014	N	1540	35.2	< 2.0 U
IW-77	IW-77-201410	10/15/2014	N	741	15.8	< 2.0 U
IW-77	IW-77-20141023	10/23/2014	N	554	11.9	< 2.0 U
IW-77	IW-77-201501	1/14/2015	N	201	4.8	< 1.0 U
IW-77	IW-77-201504	4/14/2015	N	153	2.9	< 1.0 U
IW-77	IW-77-201507	7/21/2015	N	130	2.4	< 1.0 U
IW-77	IW-77-201510	10/8/2015	N	24.3	0.54 J	< 1.0 U
IW-77	IW-77-201511	11/5/2015	N	95.1	1.1	< 1.0 U
IW-77	IW-77-201512	12/2/2015	N	87.8	1.3	< 1.0 U
IW-77	IW-77-201601	1/11/2016	N	95.3	1.3	< 1.0 U
IW-77	IW-77-201605	5/4/2016	N	101	1.7	< 1.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
IW-77	IW-77-201611	11/8/2016	N	137	2.1	< 1.0 U
IW-77	IW-77-201704	4/28/2017	N	113	1.8	< 1.0 U
IW-77	IW-77-201710	10/24/2017	N	161	2.9	< 1.0 U
IW-77	IW-77-201804	4/18/2018	N	181	3.6	< 1.0 U
IW-77	IW-77-201811	11/15/2018	N	218	5.1	< 1.0 U
IW-77	IW-77-201904	4/25/2019	N	188	4.1	< 1.0 U
IW-77	DUP-04-201904	4/25/2019	FD	198	4.3	< 1.0 U
IW-77	IW-77-201910	10/23/2019	N	180	6.8	< 1.0 U
IW-77	IW-77-202005	5/12/2020	N	196	4.3	< 1.0 U
IW-77	IW-77-202010	10/8/2020	N	171	5.7	< 1.0 U
IW-77	IW-77-202104	4/13/2021	N	184	5.4	< 1.0 U
IW-77	IW-77-202110	10/22/2021	N	176	7.6	< 5.0 U
IW-77	IW-77-202204	4/13/2022	N	178	5.2	< 1.0 U
IW-77	DUP-09-202204	4/13/2022	FD	188	5.5	< 1.0 U
IW-77	IW-77-202210	10/20/2022	N	157	5.7	< 1.0 U
IW-77	IW-77-202304	4/19/2023	N	184	4.8	< 1.0 U
IW-77	IW-77-202310	10/19/2023	N	181	5.3	< 1.0 U
IW-78	IW-78-20111025-FS	10/25/2011	N	350	12	< 5 U
IW-78	IW-78-20120418-FS	4/18/2012	N	120	2.3 J	< 5 U
IW-78	IW-78-20121020	10/20/2012	N	310	8.7	< 2.0 U
IW-78	IW-78-20130424	4/24/2013	N	7.0	< 5.0 U	< 2.0 U
IW-78	IW-78-101713	10/17/2013	N	190	4.6 J	< 2.0 U
IW-78	IW-78-201405	5/28/2014	N	255	6.2	< 2.0 U
IW-78	IW-78-201409	9/11/2014	N	39.6	1.2 J	< 2.0 U
IW-78	IW-78-201601	1/11/2016	N	1.5	< 1.0 U	< 1.0 U
IW-78	IW-78-201605	5/3/2016	N	1.3	< 1.0 U	< 1.0 U
IW-78	IW-78-201611	11/8/2016	N	2.6	< 1.0 U	< 1.0 U
IW-78	IW-78-201710	10/25/2017	N	7.0	0.16 J	< 1.0 U
IW-78	IW-78-201811	11/15/2018	N	0.74 J	< 1.0 U	< 1.0 U
IW-78	IW-78-201910	10/23/2019	N	2.4	< 1.0 U	< 1.0 U
IW-78	IW-78-202010	10/7/2020	N	25.0	0.66 J	< 1.0 U
IW-78	DUP-09-202110	10/20/2021	N	15.1	0.45 J	< 1.0 U
IW-78	IW-78-202210	10/20/2022	N	17.9	0.24 J	< 1.0 U
IW-78	DUP-09-202210	10/20/2022	FD	19.3	0.49 J	< 1.0 U
IW-78	IW-78-202310	10/18/2023	N	24.8	0.58 J	< 1.0 U
IW-78	DUP-04-202310	10/18/2023	FD	23.9	0.52 J	< 1.0 U
IW-79	IW-79-20111025-FS	10/25/2011	N	570	13	< 5 U
IW-79	IW-79-20120417-FS	4/17/2012	N	430	2.1 J	< 5 U
IW-79	IW-79-20121020	10/20/2012	N	670	20	0.45 J
IW-79	DUPLICATE 2-20121020	10/20/2012	FD	480	16	< 2.0 U
IW-79	IW-79-20130424	4/24/2013	N	420	9.0	< 2.0 U
IW-79	IW-79-101713	10/17/2013	N	440	12	< 2.0 U
IW-79	IW-79-201405	5/28/2014	N	426	6.9	< 2.0 U
IW-79	IW-79-201409	9/11/2014	N	105	1.8 J	< 2.0 U
IW-79	IW-79-201601	1/11/2016	N	70.0	1.4	< 1.0 U
IW-79	IW-79-201605	5/4/2016	N	55.0	1.0	< 1.0 U
IW-80	IW-80-20090423-FS	4/23/2009	N	170	4 J	< 5 U
IW-80	IW-80-20090507-FS	5/7/2009	N	69	< 5 U	< 5 U
IW-80	IW-80-20110519-FS	5/19/2011	N	27	< 5.0 U	
IW-80	IW-80-20111025-FS	10/25/2011	N	9.7	< 5 U	< 5 U
IW-80	IW-80-20120417-FS	4/17/2012	N	55	2.2 J	< 5 U
IW-80	IW-80-20121019	10/19/2012	N	48	< 5.0 U	< 2.0 U
IW-80	IW-80-20130424	4/24/2013	N	40	< 5.0 U	< 2.0 U
IW-80	IW-80-101713	10/17/2013	N	58	2.4 J	< 2.0 U
IW-80	IW-80-101713-DUP	10/17/2013	FD	62	2.4 J	< 2.0 U
IW-80	IW-80-201403	3/8/2014	N	79.1 J	2.7 J	< 2.0 U
IW-80	IW-80-201405	5/13/2014	N	24.2	< 5.0 U	< 2.0 U
IW-80	IW-80-201407	7/30/2014	N	25.6	0.85 J	< 2.0 U
IW-80	IW-80-201410	10/14/2014	N	11.8	< 5.0 U	< 2.0 U
IW-80	IW-80-201501	1/13/2015	N	7.1	< 1.0 U	< 1.0 U
IW-80	IW-80-201504	4/14/2015	N	9.2	< 1.0 U	< 1.0 U
IW-80	IW-80-201507	7/21/2015	N	12.5	0.39 J	< 1.0 U
IW-80	IW-80-201510	10/6/2015	N	10.6	0.37 J	< 1.0 U
IW-80	IW-80-201511	11/5/2015	N	11.0	< 1.0 U	< 1.0 U
IW-80	IW-80-201512	12/2/2015	N	9.0	0.35 J	< 1.0 U
IW-80	IW-80-201601	1/7/2016	N	4.2	< 1.0 U	< 1.0 U
IW-80	IW-80-201605	5/3/2016	N	4.3	< 1.0 U	< 1.0 U
IW-101	IW-101-20140323	3/23/2014	N	314	7.5	0.21 J
IW-101	IW-101-20140430	4/30/2014	N	794	18.9	< 2.0 U
IW-101	IW-101-20140523	5/23/2014	N	509	11.2	< 2.0 U
IW-101	20140708-GW-IW-101	7/8/2014	N	150	4.5 J	< 2.0 U
IW-101	IW-101-201409	9/12/2014	N	139	3.4 J	< 2.0 U
IW-101	IW-101-201601	1/7/2016	N	42.9	1.1	< 1.0 U
IW-101	IW-101-201605	5/5/2016	N	20.3	0.54 J	< 1.0 U
IW-102	IW-102-20140323	3/23/2014	N	685	14.6	0.45 J
IW-102	IW-102-20140430	4/30/2014	N	239	5.4	< 2.0 U
IW-103	IW-103-20140323	3/23/2014	N	692	13.1	0.76 J

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
IW-103	IW-103-20140430	4/30/2014	N	729	22.8	0.83 J
IW-104	IW-104-20140323	3/23/2014	N	637	13.5	0.69 J
IW-104	IW-104-20140430	4/30/2014	N	527	12.6	< 2.0 U
IW-105	IW-105-20140323	3/23/2014	N	901	14.4	0.54 J
IW-105	IW-105-20140430	4/30/2014	N	185	4.9 J	< 2.0 U
IW-106	IW-106-20140323	3/23/2014	N	198	4.2 J	< 2 U
IW-106	IW-106-20140430	4/30/2014	N	163	6.8	< 2.0 U
IW-106	IW-106-20140523	5/23/2014	N	132	2.6 J	< 2.0 U
IW-107	IW-107-20140323	3/23/2014	N	198	4.3 J	0.14 J
IW-107	IW-107-20140430	4/30/2014	N	110	3.3 J	< 2.0 U
IW-108	IW-108-20140323	3/23/2014	N	1280	27.8	0.83 J
IW-108	IW-108-20140429	4/29/2014	N	72.1	4.1 J	< 2.0 U
IW-108	IW-108-20140523	5/23/2014	N	59.0	1.5 J	< 2.0 U
IW-109	IW-109-20140323	3/23/2014	N	362	7.4	0.23 J
IW-109	IW-109-20140429	4/29/2014	N	91.2	2.5 J	< 2.0 U
IW-109	IW-109-20140523	5/23/2014	N	110	1.9 J	< 2.0 U
IW-110	IW-110-20140323	3/23/2014	N	464	9.8	0.5 J
IW-110	IW-110	4/16/2014	N	397	9.4	0.17 J
IW-110	IW-110-20140430	4/30/2014	N	268	8.2	0.33 J
IW-111	IW-111-20140323	3/23/2014	N	704	14	0.63 J
IW-111	IW-111-20140429	4/29/2014	N	260	6.4	< 2.0 U
IW-112	IW-112-20140323	3/23/2014	N	219	4.9 J	0.23 J
IW-112	IW-112	4/16/2014	N	200	4.8 J	< 2.0 U
IW-112	IW-112-20140430	4/30/2014	N	104	3.8 J	< 2.0 U
IW-113	IW-113-20140324	3/24/2014	N	510	11.1	0.43 J
IW-113	IW-113	4/14/2014	N	435	8.7	< 2.0 U
IW-114	IW-114-20140324	3/24/2014	N	397	9.7	0.25 J
IW-114	IW-114	4/14/2014	N	336	8.1	< 2.0 U
IW-115	IW-115-20140324	3/24/2014	N	622	14	0.25 J
IW-115	IW-115-20140407	4/7/2014	N	455	9.1 J	< 20.0 U
IW-115	IW-115	4/14/2014	N	449	9.3	< 2.0 U
IW-115	IW-115-201405	5/28/2014	N	504	11.2	0.27 J
IW-115	20140709-GW-IW-115	7/9/2014	N	352	7.4	< 2.0 U
IW-115	IW-115-201409	9/11/2014	N	355	8.0	< 2.0 U
IW-115	IW-115-201601	1/11/2016	N	169	3.6	< 1.0 U
IW-115	IW-115-201605	5/4/2016	N	51.9	1.1	< 1.0 U
IW-116	IW-116-20140324	3/24/2014	N	486	10.9	0.33 J
IW-116	IW-116	4/15/2014	N	546	10.8	0.34 J
IW-117	IW-117-20140324	3/24/2014	N	384	9.1	0.23 J
IW-117	IW-117	4/15/2014	N	384	9.9	< 2.0 U
IW-118	IW-118-20140324	3/24/2014	N	496	11.6	0.34 J
IW-118	IW-118	4/15/2014	N	395	9.7	< 2.0 U
IW-118	IW-118-201405	5/28/2014	N	437	9.3	< 2.0 U
IW-119	IW-119-20140324	3/24/2014	N	524	11.5	0.33 J
IW-119	IW-119-20140407	4/7/2014	N	478	9.1 J	< 20.0 U
IW-119	IW-119	4/15/2014	N	509	11.3	< 2.0 U
IW-120	IW-120-20140324	3/24/2014	N	289	7.9	0.14 J
IW-120	IW-120	4/15/2014	N	390	10.2	< 2.0 U
IW-121	IW-121-20140324	3/24/2014	N	402	8.9 J	< 10 U
IW-121	IW-121	4/15/2014	N	445	11.7	< 2.0 U
IW-122	IW-122-20140324	3/24/2014	N	473	11.5	0.29 J
IW-122	IW-122	4/15/2014	N	384	10.0	< 2.0 U
IW-123	IW-123-20140324	3/24/2014	N	532	12.2	0.40 J
IW-123	IW-123-20140407	4/7/2014	N	539	8.8 J	< 20.0 U
IW-123	IW-123	4/15/2014	N	488	10.0	< 2.0 U
IW-124	IW-124-20140324	3/24/2014	N	455	6.8 J	< 10 U
IW-124	IW-124	4/15/2014	N	448	8.7	0.26 J
IW-125	IW-125-20140325	3/25/2014	N	2140	207	3.1
IW-125	IW-125-201405	5/29/2014	N	17.1	2.9 J	< 2.0 U
IW-125	IW-125-201409	9/11/2014	N	7.3	1.0 J	< 2.0 U
IW-126	IW-126-20140325	3/25/2014	N	2020	197	10.4
IW-126	IW-126-201405	5/29/2014	N	787	59.1	< 2.0 U
IW-127	IW-127-20140324	3/24/2014	N	3700	219 J	7.6
IW-127	IW-127-201405	5/29/2014	N	639	34.7	< 2.0 U
IW-127	IW-127-201409	9/11/2014	N	1020	38.5	2.6
IW-127	IW-127-20141204	12/4/2014	N	182	7.2	< 2.0 U
IW-128	IW-128-20140325	3/25/2014	N	2980	178	11.7
IW-128	IW-128-20140429	4/29/2014	N	1250	68.4	4.9
IW-128	IW-128-201405	5/29/2014	N	1190	62.7	< 2.0 U
IW-129	IW-129-20140325	3/25/2014	N	2540	192	< 2.0 U
IW-129	IW-129-201405	5/29/2014	N	25.8	1.8 J	< 2.0 U
IW-130	IW-130-20140323	3/23/2014	N	358	7.6 J	< 10 U
IW-130	IW-130-20140523	5/23/2014	N	75.5	0.78 J	< 2.0 U
IW-131	IW-131-20140324	3/24/2014	N	526	11.5	0.35 J
IW-131	IW-131-20140430	4/30/2014	N	318	8.5	0.31 J
IW-131	IW-131-201405	5/28/2014	N	443	8.8	0.30 J
IW-132	IW-132-20141023	10/23/2014	N	714	3.5 J	< 2.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
IW-132	IW-132-201910	10/24/2019	N	292	0.57 J	< 1.0 U
IW-132	IW-132-202005	5/13/2020	N	180	0.63 J	< 1.0 U
IW-132	IW-132-202010	10/8/2020	N	210	0.63 J	< 1.0 U
IW-134	IW-134-201910	10/24/2019	N	1090	9.9	< 1.0 U
IW-134	IW-134-202005	5/13/2020	N	985	8.3	< 1.0 U
IW-134	DUP-02-202005	5/13/2020	FD	922	8.8	0.21 J
IW-134	IW-134-202010	10/8/2020	N	1110	10.6	0.38 J
IW-135	IW-135-20141023	10/23/2014	N	3840	43.3	2.0
IW-141	IW-141-20141023	10/23/2014	N	368000	< 10000 U	82.6
IW-141	IW-141-20141205	12/5/2014	N	46300	232 E	31.0
IW-143	IW-143-20141023	10/23/2014	N	13100	44.8	2.5
IW-147	IW-147-20141023	10/23/2014	N	199000	1640 J	< 4000 U
IW-147	IW-147-20141205	12/5/2014	N	91600	1420 J	176
IW-147	IW-147-201910	10/24/2019	N	95800	5420	376 J
IW-147	IW-147-202005	5/13/2020	N	37500	4460	170
IW-147	IW-147-202010	10/7/2020	N	76800	8340	329 J
IW-152	IW-152-20141022	10/22/2014	N	17600	224 J	8.2
IW-152	IW-152-20141204	12/4/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
IW-153	IW-153-20141023	10/23/2014	N	293	85.3	12.3
IW-153	IW-153-20141204	12/4/2014	N	1.6 J	< 5.0 U	< 2.0 U
IW-155	IW-155-20141023	10/23/2014	N	14600	36.4	5.8
IW-157	IW-157-20141023	10/23/2014	N	74200	712 J	195
IW-157	IW-157-20141205	12/5/2014	N	31700	391 E	66.8
IW-169	IW-169-20141022	10/22/2014	N	163	1.7 J	< 2.0 U
MCP-HP-01	MCP-HP-01-WG-29.5	7/13/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MCP-HP-02	MCP-HP-02-WG-31	7/13/2020	N	1.2	0.60 J	< 1.0 U
MCP-HP-03	MCP-HP-03-WG-28	7/13/2020	N	52.8	4.4	0.11 J
MCP-HP-04	MCP-HP-04-WG-27	7/13/2020	N	3.5 J	< 5.0 U	< 5.0 U
MCP-HP-05	MCP-HP-05	7/14/2020	N	6.4	0.91 J	< 1.0 U
MCP-HP-07	MCP-HP-07-WG-23	7/16/2020	N	14.9	1.1	< 1.0 U
MCP-HP-08	MCP-HP-08-WG-20200923	9/23/2020	N	< 5.0 U	< 5.0 U	< 5.0 U
MCP-HP-09	MCP-HP-09-WG-20200923	9/23/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MCP-HP-10	MCP-HP-10-WG-20200923	9/23/2020	N	30.2	2.8 J	< 5.0 U
MCP-HP-11	MCP-HP-11-WG-20200924	9/24/2020	N	18.1	2.9 J	< 5.0 U
MCP-HP-12	MCP-HP-12-WG-20200925	9/25/2020	N	3.9	0.45 J	< 1.0 U
MCP-HP-13	MCP-HP-13-WG-20200925	9/25/2020	N	55.7	6.5	0.31 J
MW-22	MW-22-19961201-FS	12/1/1996	N	< ND		< ND
MW-22	MW-22-19970501-FS	5/1/1997	N	< ND	5	< ND
MW-22	MW-22-19990201-FS	2/1/1999	N	< ND	5	< ND
MW-22	MW-22-20000301-FS	3/1/2000	N	< ND	< ND	< ND
MW-22	MW-22-20000919-FS	9/19/2000	N	< 5 U	< 5 U	< 10 U
MW-22	MW-22-20010327-FS	3/27/2001	N	< 5 U	< 5 U	< 10 U
MW-22	MW-22-20010913-FS	9/13/2001	N	< 5 U	< 5 U	< 10 U
MW-22	MW-22-20020910-FS	9/10/2002	N	9	< 5 U	< 10 U
MW-22	ITMW-22-20030227-FS	2/27/2003	N	< 5 U	< 5 U	< 10 U
MW-22	MW-22-20030923-FS	9/23/2003	N	< 5 U	< 5 U	< 10 U
MW-22	MW-22 DUP-2-20030923-FD	9/23/2003	FD	< 5 U	< 5 U	< 10 U
MW-22	MW-22-20040413-FS	4/13/2004	N	< 5 U	< 5 U	< 10 U
MW-22	MW-22-20040921-FS	9/21/2004	N	< 5 U	< 5 U	< 10 U
MW-22	MW-22-20050930-FS	9/30/2005	N	< 5 U	< 5 U	< 10 U
MW-22	MW-22-20061014-FS	10/14/2006	N	< 5 U	< 5 U	< 10 UJ
MW-22	MW-22-20070920-FS	9/20/2007	N	< 5 U	< 5 U	< 10 U
MW-22	MW-22-20081209-FS	12/9/2008	N	< 5 U	< 5 U	< 5 U
MW-22	MW-22-20091027-FS	10/27/2009	N	< 5 U	< 5 U	< 5 U
MW-22	MW-22-20101103-FS	11/3/2010	N	< 5 U	< 5 U	< 5 U
MW-22	MW-22-20111027-FS	10/27/2011	N	2.1 J	< 5 U	< 5 U
MW-22	MW-22-20120418-FS	4/18/2012	N	< 5 U	< 5 U	< 5 U
MW-22	MW-22-20121017	10/17/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-22	MW-22-20130423	4/23/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-22	MW-22-101413	10/14/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-22	MW-22-201403	3/5/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-22	MW-22-201405	5/12/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-22	MW-22-201407	7/30/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-22	MW-22-201410	10/15/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-22	MW-22-201501	1/13/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-22	MW-22-201504	4/13/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-22	MW-22-201507	7/22/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-22	MW-22-201510	10/7/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-22	MW-22-201601	1/12/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-22	MW-22-201605	5/4/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-22	MW-22-201611	11/8/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-22	MW-22-201710	10/25/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-22	MW-22-201811	11/14/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-22	MW-22-201910	10/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-22	MW-22-202010	10/8/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-22	DUP-07-202010	10/8/2020	FD	0.59 J	< 1.0 U	< 1.0 U
MW-22	MW-22-202110	10/20/2021	N	< 1.0 U	< 1.0 U	< 1.0 U

APPENDIX D
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Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-22	MW-22-202210	10/18/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-22	MW-22-202310	10/17/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-23	MW-23-19961201-FS	12/1/1996	N	210		< ND
MW-23	MW-23-19970501-FS	5/1/1997	N	2400		< ND
MW-23	MW-23-19990201-FS	2/1/1999	N	350	10	< ND
MW-23	MW-23 DUP-19990201-FD	2/1/1999	FD	440	10	< ND
MW-23	MW-23 DUP-20000301-FD	3/1/2000	FD	147	< ND	< ND
MW-23	MW-23-20000921-FS	9/21/2000	N	67	< 5 U	< 10 U
MW-23	MW-23-20010105-FS	1/5/2001	N	137	< 5 U	< 10 U
MW-23	MW-23-20010326-FS	3/26/2001	N	87	< 5 U	< 10 U
MW-23	MW-23-20010911-FS	9/11/2001	N	23	< 5 U	< 10 U
MW-23	MW-23-20020911-FS	9/11/2002	N	111	< 5 U	< 10 U
MW-23	MW-23 DUP-3-20020911-FD	9/11/2002	FD	105	< 5 U	< 10 U
MW-23	ITMW-23-20030227-FS	2/27/2003	N	54	< 5 U	< 10 U
MW-23	MW-23-20030925-FS	9/25/2003	N	83.9	< 5 U	< 10 U
MW-23	MW-23-20040415-FS	4/15/2004	N	70.3	< 5 U	< 10 U
MW-23	MW-23-20040922-FS	9/22/2004	N	73.4	< 5 U	< 10 U
MW-23	MW-23-20050405-FS	4/5/2005	N	55.5	< 5 U	< 10 U
MW-23	MW-23-20050929-FS	9/29/2005	N	65.8	< 5 U	< 10 U
MW-23	MW-23-20060317-FS	3/17/2006	N	47.1	< 5 U	< 10 U
MW-23	MW-23-20061014-FS	10/14/2006	N	59	< 5 U	< 10 UJ
MW-23	MW-23-20070419-FS	4/19/2007	N	39.9	9.79	< 10 U
MW-23	MW-23-20070919-FS	9/19/2007	N	47	< 5 U	< 10 U
MW-23	MW-23-20080429-FS	4/29/2008	N	29 0	< 5 U	< 10 U
MW-23	MW-23-20081210-FS	12/10/2008	N	69	< 5 U	< 5 U
MW-23	MW-23-20090427-FS	4/27/2009	N	32	< 5 U	< 5 U
MW-23	MW-23-20091029-FS	10/29/2009	N	45	< 5 U	< 5 U
MW-23	DUP-2-20100512-FD	5/12/2010	FD	55	< 5 U	< 5 U
MW-23	MW-23-20100512-FS	5/12/2010	N	52	< 5 U	< 5 U
MW-23	MW-23-20101105-FS	11/5/2010	N	76	< 5 U	< 5 U
MW-23	MW-23-20110323-FS	3/23/2011	N	46	< 5 U	< 5 U
MW-23	MW-23-20111027-FS	10/27/2011	N	41	< 5 U	< 5 U
MW-23	MW-23-20120418-FS	4/18/2012	N	36	< 5 U	< 5 U
MW-23	MW-23-20121019	10/19/2012	N	43	< 5.0 U	< 2.0 U
MW-23	MW-23-20130425	4/25/2013	N	20	< 5.0 U	< 2.0 U
MW-23	MW-23-101613	10/16/2013	N	54	< 5.0 U	< 2.0 U
MW-23	MW-23-20140522	5/22/2014	N	22.8	< 5.0 U	< 2.0 U
MW-23	20140708-GW-MW-23	7/8/2014	N	27.8	0.68 J	< 2.0 U
MW-23	MW-23-201409	9/12/2014	N	62.1	1.8 J	< 2.0 U
MW-23	MW-23-20141023	10/23/2014	N	189	3.5 J	< 2.0 U
MW-23	MW-23-201501	1/15/2015	N	115	2.2	< 1.0 U
MW-23	MW-23-201504	4/14/2015	N	57.5	1.1	< 1.0 U
MW-23	MW-23-201507	7/23/2015	N	37.8	0.95 J	< 1.0 U
MW-23	MW-23-201510	10/8/2015	N	0.65 J	< 1.0 U	< 1.0 U
MW-23	MW-23-201511	11/5/2015	N	0.40 J	< 1.0 U	< 1.0 U
MW-23	MW-23-201512	12/1/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-23	MW-23-201601	1/7/2016	N	0.48 J	< 1.0 U	< 1.0 U
MW-23	MW-23-201605	5/5/2016	N	0.90 J	< 1.0 U	< 1.0 U
MW-24	MW-24-19990201-FS	2/1/1999	N	1400	49	< ND
MW-24	MW-24-20000301-FS	3/1/2000	N	403	25	< ND
MW-24	MW-24 DUP-20000301-FD	3/1/2000	FD	595	24	< ND
MW-24	MW-24-20000921-FS	9/21/2000	N	128	11	< 10 U
MW-24	MW-24-20010105-FS	1/5/2001	N	247	12	< 10 U
MW-24	MW-24-20010326-FS	3/26/2001	N	330	11	< 10 U
MW-24	MW-24-20010911-FS	9/11/2001	N	124	6	< 10 U
MW-24	MW-24-20020911-FS	9/11/2002	N	199	6	< 10 U
MW-24	ITMW-24-20030227-FS	2/27/2003	N	253	7.01	< 10 U
MW-24	MW-24-20030925-FS	9/25/2003	N	155	< 5 U	< 10 U
MW-24	MW-24-20040415-FS	4/15/2004	N	181	5.12	< 10 U
MW-24	MW-24-20040923-FS	9/23/2004	N	116	< 5 U	< 10 U
MW-24	MW-24-20050406-FS	4/6/2005	N	152	6.04	< 10 U
MW-24	MW-24-20050929-FS	9/29/2005	N	161	< 5 U	< 10 U
MW-24	MW-24-20060316-FS	3/16/2006	N	347	7.57	< 10 U
MW-24	MW-24-20061014-FS	10/14/2006	N	620	11	2 J
MW-24	MW-24-20070419-FS	4/19/2007	N	196	11.6	< 10 U
MW-24	MW-24-20070920-FS	9/20/2007	N	140	< 5 U	< 10 U
MW-24	DUP-2-20070920-FD	9/20/2007	FD	150	< 5 U	< 10 U
MW-24	MW-24-20080429-FS	4/29/2008	N	150 0	3 J	< 10 U
MW-24	MW-24-20081210-FS	12/10/2008	N	150	3.4 J	< 5 U
MW-24	DUP-6-20081210-FS	12/10/2008	FD	130	3.4 J	< 5 U
MW-24	MW-24-20090427-FS	4/27/2009	N	120	< 5 U	< 5 U
MW-24	MW-24-20091029-FS	10/29/2009	N	110	2.6 J	< 5 U
MW-24	MW-24-20100512-FS	5/12/2010	N	150	4.3 J	< 5 U
MW-24	MW-24-20110323-FS	3/23/2011	N	170	3.6 J	< 5 U
MW-24	MW-24-20111027-FS	10/27/2011	N	170	1.9 J	< 5 U
MW-24	DUP-01-20111027-FD	10/27/2011	FD	170	1.4 J	< 5 U
MW-24	MW-24-20120418-FS	4/18/2012	N	150	2.9 J	< 5 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-24	MW-15-20121019	10/19/2012	N	190	3.7 J	< 2.0 U
MW-24	MW-24-20130425	4/25/2013	N	110	3.5 J	0.23 J
MW-24	MW-24-20140522	5/22/2014	N	79.7	1.2 J	< 2.0 U
MW-24	20140708-GW-MW-24	7/8/2014	N	102	1.4 J	< 2.0 U
MW-24	MW-24-201409	9/12/2014	N	55.7	0.66 J	< 2.0 U
MW-24	MW-24-20141023	10/23/2014	N	33.1	< 5.0 U	< 2.0 U
MW-24	MW-24-201501	1/15/2015	N	26.9	< 1.0 U	< 1.0 U
MW-24	MW-24-201504	4/16/2015	N	18.8	< 1.0 U	< 1.0 U
MW-24	MW-24-201507	7/23/2015	N	178	3.1	< 1.0 U
MW-24	MW-24-201510	10/8/2015	N	44.1	0.83 J	< 1.0 U
MW-24	MW-24-201511	11/5/2015	N	75.8	0.20 J	< 1.0 U
MW-24	MW-24-201512	12/2/2015	N	84.1	0.59 J	< 1.0 U
MW-24	MW-24-201601	1/7/2016	N	49.3	0.48 J	< 1.0 U
MW-24	MW-24-201605	5/4/2016	N	23.8 J	0.27 J	< 1.0 U
MW-24	MW-24-201611	11/8/2016	N	4.2	< 1.0 U	< 1.0 U
MW-24	MW-24-201710	10/25/2017	N	20.9	< 1.0 U	< 1.0 U
MW-24	DUP-02-201811	11/15/2018	FD	12.5	< 1.0 U	< 1.0 U
MW-24	MW-24-201811	11/15/2018	N	12.6	< 1.0 U	< 1.0 U
MW-24	MW-24-2019110	10/23/2019	N	19.0	0.24 J	< 1.0 U
MW-24	MW-24-202010	10/8/2020	N	144	2.2	< 1.0 U
MW-24	DUP-08-202010	10/8/2020	FD	148	2.3	< 1.0 U
MW-24	MW-24-202110	10/21/2021	N	10.4	0.24 J	< 1.0 U
MW-24	DUP-07-202110	10/21/2021	FD	10.0	< 1.0 U	< 1.0 U
MW-24	MW-24-202210	10/20/2022	N	10.5	< 1.0 U	< 1.0 U
MW-24	DUP-04-202210	10/20/2022	FD	10.9	0.31 J	< 1.0 U
MW-24	MW-24-202310	10/18/2023	N	16.0	0.29 J	< 1.0 U
MW-24	DUP-08-202310	10/18/2023	FD	16.1	0.32 J	< 1.0 U
MW-25	MW-25-19990201-FS	2/1/1999	N	29000	170	100
MW-25	MW-25 DUP-19990201-FD	2/1/1999	FD	27000	180	110
MW-25	MW-25-19991201-FS	12/1/1999	N	94500	< ND	< ND
MW-25	MW-25-20000301-FS	3/1/2000	N	35900	245	63
MW-25	MW-25-20000921-FS	9/21/2000	N	59000	300	50
MW-25	MW-25-20010328-FS	3/28/2001	N	34000	117	60
MW-25	MW-25-20010913-FS	9/13/2001	N	60000	300	< 200 U
MW-25	MW-25L-20020909-FS	9/9/2002	N	157000	440	180
MW-25	MW-25T-20020909-FS	9/9/2002	N	56000	370	200
MW-25	ITMW-25-20030226-FS	2/26/2003	N	45900	557	75.7
MW-25	MW-25-20030717-FS	7/17/2003	N	62200	621	243
MW-25	MW-25-20030924-FS	9/24/2003	N	103000	775	< 500 U
MW-25	MW-25-20040414-FS	4/14/2004	N	25600	255	31.8
MW-25	MW-25-20040921-FS	9/21/2004	N	85200	819	422
MW-25	MW-25-20050407-FS	4/7/2005	N	21100	353	61.1
MW-25	MW-25-20050928-FS	9/28/2005	N	136000	837	< 500 U
MW-25	MW-25-20060315-FS	3/15/2006	N	36300	774	< 200 U
MW-25	MW-25-20061012-FS	10/12/2006	N	64000	1300	610
MW-25	DUP-2-20061012-FD	10/12/2006	FD	65000	1400	600
MW-25	MW-25-20070418-FS	4/18/2007	N	19000	321	20
MW-25	DUP-1-20070418-FD	4/18/2007	FD	18000	319	20
MW-25	MW-25-20070921-FS	9/21/2007	N	54000	1200	800
MW-25	DUP-3-20070921-FD	9/21/2007	FD	55000	1200	780
MW-25	MW-25-20080429-FS	4/29/2008	N	23000 0	470 0	10 J
MW-25	DUP-1-20080429-FD	4/29/2008	FD	25000 0	510 0	10 J
MW-25	MW-25-20081210-FS	12/10/2008	N	100000	1200	430
MW-25	MW-25-20090427-FS	4/27/2009	N	36000	2100	140
MW-25	DUP-2-20090427-FD	4/27/2009	FD	39000	2000	190
MW-25	MW-25-20091027-FS	10/27/2009	N	140000	1500	570
MW-25	MW-25-20100511-FS	5/11/2010	N	81000	1400	11
MW-25	MW-25-20101104-FS	11/4/2010	N	270000	1500	400
MW-25	MW-25-20110322-FS	3/22/2011	N	57000	2400	34
MW-25	MW-25-20111026-FS	10/26/2011	N	120000	2100	< 250 U
MW-25	MW-25-20120417-FS	4/17/2012	N	18000	690	18
MW-25	MW-25-20121019	10/19/2012	N	56000	4200	1500
MW-25	DUPLICATE 1-20121019	10/19/2012	FD	49000	3600	1500
MW-25	MW-25-20130425	4/25/2013	N	9100	330	7.9
MW-25	DUP MW-25-20130425	4/25/2013	FD	9500	380	11
MW-25	MW-25-101813	10/18/2013	N	43000	2900	1300
MW-25	MW-25-20140308	3/8/2014	N	14500	625	33.6 J
MW-25	MW-25-201405	5/15/2014	N	18500	600 J	30.3
MW-25	20140709-GW-MW-25	7/9/2014	N	49900	1750	< 2.0 U
MW-25	MW-25-201407	7/31/2014	N	71700	2310 J	< 2000 U
MW-25	MW-25-201410	10/16/2014	N	42500	2870 J	540 J
MW-25	MW-25-20141024	10/24/2014	N	59800	2650 J	0.66 J
MW-25	MW-25-20141205	12/5/2014	N	2620 J	31.5	2.1
MW-25	MW-25-201501	1/15/2015	N	2510	126	1.6
MW-25	MW-25-201504	4/16/2015	N	4650	204	6.4
MW-25	MW-25-201507	7/23/2015	N	39800	580 J	66.4
MW-25	MW-25-201510	10/8/2015	N	68700	957 J	< 1.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-25	MW-25-201601	1/13/2016	N	43400	608 J	55.0
MW-25	MW-25-201605	5/5/2016	N	53000	83.6	< 1.0 U
MW-25	MW-25-201611	11/9/2016	N	36900	509 J	< 1000 U
MW-25	MW-25-201710	10/26/2017	N	97400	22900	< 1.0 U
MW-25	FD-08-201710	10/26/2017	FD	95900	20900	< 1.0 U
MW-25	MW-25-201811	11/16/2018	N	94300	18200	762 J
MW-25R	MW-25R-201910	10/25/2019	N	5410	1880	113
MW-25R	MW-25R-202010	10/8/2020	N	3130	1050	21.4
MW-25R	MW-25R-202110	10/22/2021	N	7440	2840	54.2
MW-25R	MW-25R-202210_4073	10/20/2022	N	7530	< 1.0 U	26.4
MW-25R	MW-25R-202310	10/18/2023	N	6300	3120	88.4
MW-26	MW-26-19990201-FS	2/1/1999	N	360	150	< ND
MW-26	MW-26-19990601-FS	6/1/1999	N	< ND	< ND	< ND
MW-26	MW-26-20000301-FS	3/1/2000	N	< ND	< ND	< ND
MW-26	MW-26-20000921-FS	9/21/2000	N	< 5 U	< 5 U	< 10 U
MW-26	MW-26-20010326-FS	3/26/2001	N	< 5 U	< 5 U	< 10 U
MW-26	MW-26-20010911-FS	9/11/2001	N	< 5 U	< 5 U	< 10 U
MW-26	MW-26 DUP-20010911-FD	9/11/2001	FD	< 5 U	< 5 U	< 10 U
MW-26	MW-26-20020910-FS	9/10/2002	N	< 5 U	< 5 U	< 10 U
MW-26	ITMW-26-20030227-FS	2/27/2003	N	< 5 U	< 5 U	< 10 U
MW-26	MW-26-20030924-FS	9/24/2003	N	< 5 U	< 5 U	< 10 U
MW-26	MW-26-20040414-FS	4/14/2004	N	< 5 U	< 5 U	< 10 U
MW-26	ITMW-26-20040922-FS	9/22/2004	N	< 5 U	< 5 U	< 10 U
MW-26	MW-26-20050929-FS	9/29/2005	N	< 5 U	< 5 U	< 10 U
MW-26	MW-26-20061012-FS	10/12/2006	N	< 5 U	< 5 U	< 10 U
MW-26	MW-26-20070919-FS	9/19/2007	N	< 5 U	< 5 U	< 10 U
MW-26	MW-26-20081210-FS	12/10/2008	N	< 5 U	< 5 U	< 5 U
MW-26	MW-26-20091029-FS	10/29/2009	N	< 5 U	< 5 U	< 5 U
MW-26	MW-26-20100512-FS	5/12/2010	N	< 5 U	< 5 U	< 5 U
MW-26	MW-26-20101105-FS	11/5/2010	N	22	< 5 U	< 5 U
MW-26	MW-26-20111026-FS	10/26/2011	N	< 5 U	< 5 U	< 5 U
MW-26	MW-26-20120418-FS	4/18/2012	N	< 5 U	< 5 U	< 5 U
MW-26	MW-26-20121018	10/18/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-26	MW-26-20130423	4/23/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-26	MW-26-101513	10/15/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-26	MW-26-201403	3/5/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-26	MW-26-201405	5/12/2014	N	0.25 J	< 5.0 U	< 2.0 U
MW-26	MW-26-201407	7/30/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-26	MW-26-201410	10/14/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-26	MW-26-201501	1/14/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-26	MW-26-201504	4/13/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-26	MW-26-201507	7/22/2015	N	0.18 J	< 1.0 U	< 1.0 U
MW-26	MW-26-201510	10/7/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-26	MW-26-201601	1/13/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-26	MW-26-201605	5/2/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-26	MW-26-201611	11/9/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-26	MW-26-201704	4/28/2017	N	0.28 J	< 1.0 U	< 1.0 U
MW-26	MW-26-201710	10/25/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-26	MW-26-201804	4/18/2018	N	1.0	< 1.0 U	< 1.0 U
MW-26	MW-26-201811	11/14/2018	N	< 1.0	< 1.0 U	< 1.0 U
MW-26	DUP-09-201811	11/14/2018	FD	0.46 J	< 1.0 U	< 1.0 U
MW-26	MW-26-201904	4/24/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-26	MW-26-201910	10/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-26	MW-26-202005	5/13/2020	N	0.65 J	< 1.0 U	< 1.0 U
MW-26	MW-26-202010	10/7/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-26	MW-26-202104	4/13/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-26	MW-26-202110	10/19/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-26	MW-26-202204	4/12/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-26	MW-26-202210	10/17/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-26	MW-26-202304	4/17/2023	N	1.6	0.13 J	< 1.0 U
MW-26	MW-26-202310	10/17/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-27	MW-27-19991201-FS	12/1/1999	N	< ND	< ND	< ND
MW-27	MW-27 26'-19991207-FS	12/7/1999	N	< 5 U	< 5 U	< 10 U
MW-27	MW-27-19991209-FS	12/9/1999	N	< 5 U	< 5 U	< 10 U
MW-27	MW-27-20000301-FS	3/1/2000	N	< ND	< ND	< ND
MW-27	MW-27-20000921-FS	9/21/2000	N	< 5 U	< 5 U	< 10 U
MW-27	MW-27-20010105-FS	1/5/2001	N	< 5 U	< 5 U	< 10 U
MW-27	DUPLICATE-20010105-FD	1/5/2001	FD	5.55	< 5 U	< 10 U
MW-27	MW-27-20010326-FS	3/26/2001	N	< 5 U	< 5 U	< 10 U
MW-27	MW-27-20010911-FS	9/11/2001	N	< 5 U	< 5 U	< 10 U
MW-27	MW-27-20020911-FS	9/11/2002	N	< 5 U	< 5 U	< 10 U
MW-27	MW-27 DUP-4-20020911-FD	9/11/2002	FD	< 5 U	< 5 U	< 10 U
MW-27	ITMW-27-20030227-FS	2/27/2003	N	< 5 U	< 5 U	< 10 U
MW-27	MW-27-20030925-FS	9/25/2003	N	< 5 U	< 5 U	< 10 U
MW-27	MW-27-20040415-FS	4/15/2004	N	< 5 U	< 5 U	< 10 U
MW-27	MW-27-20040922-FS	9/22/2004	N	< 5 U	< 5 U	< 10 U
MW-27	MW-27-20050929-FS	9/29/2005	N	< 5 U	< 5 U	< 10 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-27	MW-27-20061014-FS	10/14/2006	N	2 J	< 5 U	< 10 U
MW-27	MW-27-20070919-FS	9/19/2007	N	< 5 U	< 5 U	< 10 U
MW-27	MW-27-20081210-FS	12/10/2008	N	< 5 U	< 5 U	< 5 U
MW-27	MW-27-20100512-FS	5/12/2010	N	3.1 J	< 5 U	< 5 U
MW-27	MW-27-20101105-FS	11/5/2010	N	42	< 5 U	< 5 U
MW-27	MW-27-20111027-FS	10/27/2011	N	< 5 U	< 5 U	< 5 U
MW-27	MW-27-20120418-FS	4/18/2012	N	2.6 J	< 5 U	< 5 U
MW-27	MW-27-20121018	10/18/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-27	MW-27-20130424	4/24/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-27	MW-27-101513	10/15/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-27	MW-27-201403	3/7/2014	N	0.31 J	< 5.0 U	< 2.0 U
MW-27	MW-27-201405	5/13/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-27	MW-27-201407	7/30/2014	N	0.63 J	< 5.0 U	< 2.0 U
MW-27	MW-27-201410	10/14/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-27	MW-27-201501	1/14/2015	N	0.84 J	0.59 J	< 1.0 U
MW-27	MW-27-201504	4/13/2015	N	0.59 J	< 1.0 U	< 1.0 U
MW-27	MW-27-201507	7/22/2015	N	0.18 J	< 1.0 U	< 1.0 U
MW-27	MW-27-201510	10/7/2015	N	0.55 J	0.33 J	< 1.0 U
MW-27	MW-27-201601	1/12/2016	N	0.61 J	0.42 J	< 1.0 U
MW-27	MW-27-201605	5/4/2016	N	0.35 J	0.18 J	< 1.0 U
MW-27	MW-27-201611	11/9/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-27	MW-27-201710	10/25/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-27	MW-27-201811	11/13/2018	N	0.92 J	0.27 J	< 1.0 U
MW-27	MW-27-201910	10/24/2019	N	1.9	0.40 J	< 1.0 U
MW-27	MW-27-202010	10/7/2020	N	10.2	0.42 J	< 1.0 U
MW-27	MW-27-202110	10/18/2021	N	56.3	1.6	< 1.0 U
MW-27	MW-27-202210	10/18/2022	N	105	1.8	< 1.0 U
MW-27	MW-27-202310	10/18/2023	N	123	3.1	< 1.0 U
MW-28	MW-28-19991201-FS	12/1/1999	N	< ND	< ND	< ND
MW-28	MW-28-19991209-FS	12/9/1999	N	< 5 U	< 5 U	< 10 U
MW-28	DUPLICATE-19991209-FD	12/9/1999	FD	< 5 U	< 5 U	< 10 U
MW-28	MW-28-20000301-FS	3/1/2000	N	< ND	< ND	< ND
MW-28	MW-28-20000921-FS	9/21/2000	N	< 5 U	< 5 U	< 10 U
MW-28	MW-28-20010327-FS	3/27/2001	N	< 5 U	< 5 U	< 10 U
MW-28	DUPLICATE 1-20010327-FD	3/27/2001	FD	< 5 U	< 5 U	< 10 U
MW-28	MW-28-20010911-FS	9/11/2001	N	< 5 U	< 5 U	< 10 U
MW-28	MW-28-20020911-FS	9/11/2002	N	< 5 U	< 5 U	< 10 U
MW-28	ITMW-28-20030227-FS	2/27/2003	N	< 5 U	< 5 U	< 10 U
MW-28	MW-28-20030925-FS	9/25/2003	N	< 5 U	< 5 U	< 10 U
MW-28	MW-28-20040415-FS	4/15/2004	N	< 5 U	< 5 U	< 10 U
MW-28	MW-28-20040922-FS	9/22/2004	N	< 5 U	< 5 U	< 10 U
MW-28	MW-28-20050930-FS	9/30/2005	N	< 5 U	< 5 U	< 10 U
MW-28	MW-28-20061014-FS	10/14/2006	N	< 5 U	< 5 U	< 10 UJ
MW-28	MW-28-20070919-FS	9/19/2007	N	< 5 U	< 5 U	< 10 U
MW-28	MW-28-20081210-FS	12/10/2008	N	< 5 U	< 5 U	< 5 U
MW-28	MW-28-20091029-FS	10/29/2009	N	< 5 U	< 5 U	< 5 U
MW-28	MW-28-20100512-FS	5/12/2010	N	2.6 J	< 5 U	< 5 U
MW-28	MW-28-20101105-FS	11/5/2010	N	54	< 5 U	< 5 U
MW-28	MW-28-20110323-FS	3/23/2011	N	1.6 J	< 5 U	< 5 U
MW-28	MW-28-20111027-FS	10/27/2011	N	< 5 U	< 5 U	< 5 U
MW-28	MW-28-20120419-FS	4/19/2012	N	< 5 U	< 5 U	< 5 U
MW-28	MW-28-20121017	10/17/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-28	MW-28-20130424	4/24/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-28	MW-28-101513	10/15/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-28	MW-28-201403	3/6/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-28	MW-28-201405	5/13/2014	N	0.30 J	< 5.0 U	< 2.0 U
MW-28	MW-28-201407	7/30/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-28	MW-28-201410	10/14/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-28	MW-28-201501	1/14/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-28	MW-28-201504	4/13/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-28	MW-28-201507	7/22/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-28	MW-28-201510	10/7/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-28	MW-28-201601	1/12/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-28	MW-28-201605	5/4/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-28	MW-28-201611	11/9/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-28	MW-28-201710	10/25/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-28	MW-28-201811	11/13/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-28	MW-28-201910	10/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-28	MW-28-202010	10/8/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-28	MW-28-202110	10/18/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-28	MW-28-202210	10/18/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-28	MW-28-202310	10/17/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-19991201-FS	12/1/1999	N	< ND	< ND	< ND
MW-29	MW-29-19991209-FS	12/9/1999	N	< 5 U	< 5 U	< 10 U
MW-29	MW-29-20000301-FS	3/1/2000	N	< ND	< ND	< ND
MW-29	MW-29-20000920-FS	9/20/2000	N	< 5 U	< 5 U	< 10 U
MW-29	MW-29-20010327-FS	3/27/2001	N	< 5 U	< 5 U	< 10 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-29	MW-29-20010911-FS	9/11/2001	N	< 5 U	< 5 U	< 10 U
MW-29	MW-29-20020910-FS	9/10/2002	N	< 5 U	< 5 U	< 10 U
MW-29	ITMW-29-20030227-FS	2/27/2003	N	< 5 U	< 5 U	< 10 U
MW-29	MW-29-20030924-FS	9/24/2003	N	< 5 U	< 5 U	< 10 U
MW-29	MW-29-20040414-FS	4/14/2004	N	< 5 U	< 5 U	< 10 U
MW-29	MW-29-20040922-FS	9/22/2004	N	< 5 U	< 5 U	< 10 U
MW-29	MW-29-20050928-FS	9/28/2005	N	< 5 U	< 5 U	< 10 U
MW-29	MW-29-20061012-FS	10/12/2006	N	< 5 U	< 5 U	< 10 U
MW-29	MW-29-20070919-FS	9/19/2007	N	< 5 U	< 5 U	< 10 U
MW-29	MW-29-20081210-FS	12/10/2008	N	< 5 U	< 5 U	< 5 U
MW-29	DUP-2-20081210-FD	12/10/2008	FD	< 5 U	< 5 U	< 5 U
MW-29	MW-29-20091029-FS	10/29/2009	N	< 5 U	< 5 U	< 5 U
MW-29	MW-29-20111025-FS	10/25/2011	N	< 5 U	< 5 U	< 5 U
MW-29	MW-29-20120418-FS	4/18/2012	N	< 5 U	< 5 U	< 5 U
MW-29	MW-29-20121018	10/18/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-29	MW-29-20130423	4/23/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-29	MW-29-101413	10/14/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-29	MW-29-201403	3/5/2014	N	0.52 J	< 5.0 U	< 2.0 U
MW-29	MW-29-201405	5/13/2014	N	0.18 J	< 5.0 U	< 2.0 U
MW-29	MW-29-201407	7/30/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-29	MW-29-201410	10/15/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-29	MW-29-201501	1/13/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-201504	4/14/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-201507	7/22/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-201510	10/7/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-201601	1/13/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-201605	5/3/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-201611	11/9/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-201704	4/27/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-201710	10/25/2017	N	< 1.0 U	0.16 J	< 1.0 U
MW-29	MW-29-201804	4/19/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-201811	11/15/2018	N	< 1.0	< 1.0 U	< 1.0 U
MW-29	MW-29-201904	4/24/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-201910	10/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-202005	5/13/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-202010	10/6/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-202104	4/13/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-202110	10/19/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-202204	4/12/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-202210	10/17/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-202304	4/18/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-29	MW-29-202310	10/16/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-30	MW-30-19991201-FS	12/1/1999	N	115	34	< ND
MW-30	MW-30-19991209-FS	12/9/1999	N	115	34	< 10 U
MW-30	MW-30-20000301-FS	3/1/2000	N	86	25	< ND
MW-30	MW-30-20000920-FS	9/20/2000	N	102	25	< 10 U
MW-30	MW-30-20010327-FS	3/27/2001	N	43	11	< 10 U
MW-30	MW-30-20010911-FS	9/11/2001	N	63	18	< 10 U
MW-30	MW-30-20020910-FS	9/10/2002	N	48	14	< 10 U
MW-30	MW-30-20030227-FS	2/27/2003	N	60	20.3	< 10 U
MW-30	MW-30-20030924-FS	9/24/2003	N	46.8	13.7	< 10 U
MW-30	MW-30-20040414-FS	4/14/2004	N	36.6	11.8	< 10 U
MW-30	MW-30-20040922-FS	9/22/2004	N	36.2	12.1	< 10 U
MW-30	MW-30-20050928-FS	9/28/2005	N	59.6	15.6	< 10 U
MW-30	MW-30-20061012-FS	10/12/2006	N	53	15	< 10 U
MW-30	MW-30-20070920-FS	9/20/2007	N	39	11	< 10 U
MW-30	MW-30-20081210-FS	12/10/2008	N	37	11	< 5 U
MW-30	MW-30-20101103-FS	11/3/2010	N	50	15	< 5 U
MW-30	MW-30-20111026-FS	10/26/2011	N	57	16	< 5 U
MW-30	MW-30-20120418-FS	4/18/2012	N	150	32	< 5 U
MW-30	MW-30-20121018	10/18/2012	N	65	19	< 2.0 U
MW-30	MW-30-20130425	4/25/2013	N	49	18	0.49 J
MW-30	MW-30-101413	10/14/2013	N	40	16	< 2.0 U
MW-31	MW-31-20010105-FS	1/5/2001	N	< 5 U	< 5 U	< 10 U
MW-31	MW-31-20010326-FS	3/26/2001	N	< 5 U	< 5 U	< 10 U
MW-31	MW-31-20010913-FS	9/13/2001	N	< 5 U	< 5 U	< 10 U
MW-31	MW-31-20020911-FS	9/11/2002	N	< 5 U	< 5 U	< 10 U
MW-31	ITMW-31-20030228-FS	2/28/2003	N	< 5 U	< 5 U	< 10 U
MW-31	MW-31-20030925-FS	9/25/2003	N	< 5 U	< 5 U	< 10 U
MW-31	MW-31-20040415-FS	4/15/2004	N	< 5 U	< 5 U	< 10 U
MW-31	MW-31-20040923-FS	9/23/2004	N	< 5 U	< 5 U	< 10 U
MW-31	MW-31-20050405-FS	4/5/2005	N	< 5 U	< 5 U	< 10 U
MW-31	MW-31-20050927-FS	9/27/2005	N	< 5 U	< 5 U	< 10 U
MW-31	MW-31-20060315-FS	3/15/2006	N	< 5 U	< 5 U	< 10 U
MW-31	MW-31-20061011-FS	10/11/2006	N	3 J	< 5 U	< 10 U
MW-31	MW-31-20070419-FS	4/19/2007	N	< 5 U	< 5 U	< 10 U
MW-31	MW-31-20070918-FS	9/18/2007	N	< 5 U	< 5 U	< 10 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-31	MW-31-20080430-FS	4/30/2008	N	2 J	< 5 U	< 10 U
MW-31	MW-31-20081211-FS	12/11/2008	N	< 5 U	< 5 U	< 5 U
MW-31	MW-31-20090425-FS	4/25/2009	N	< 5 U	< 5 U	< 5 U
MW-31	MW-31-20100512-FS	5/12/2010	N	< 5 U	< 5 U	< 5 U
MW-31	MW-31-20101107-FS	11/7/2010	N	48	< 5 U	< 5 U
MW-31	MW-31-20110323-FS	3/23/2011	N	< 5 U	< 5 U	< 5 U
MW-31	MW-31-20111026-FS	10/26/2011	N	< 5 U	< 5 U	< 5 U
MW-31	MW-31-20121019	10/19/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-31	MW-31-101813	10/18/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-31	MW-31-201403	3/6/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-31	MW-31-201405	5/13/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-31	DUP-1-201407	7/30/2014	FD	< 5.0 U	< 5.0 U	< 2.0 U
MW-31	MW-31-201407	7/30/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-31	MW-31-201410	10/14/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-31	MW-31-201501	1/12/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-31R	MW-31R-GW-20150119	1/19/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-31R	MW-31R-201504	4/14/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-31R	MW-31R-201507	7/21/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-31R	MW-31R-201510	10/6/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-31R	MW-31R-201601	1/12/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-31R	MW-31R-201604	4/18/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-32	MW-32-20010105-FS	1/5/2001	N	108	< 5 U	< 10 U
MW-32	MW-32-20010327-FS	3/27/2001	N	174	< 5 U	< 10 U
MW-32	MW-32-20010913-FS	9/13/2001	N	95	< 5 U	< 10 U
MW-32	MW-32-20020911-FS	9/11/2002	N	109	< 5 U	< 10 U
MW-32	ITMW-32-20030228-FS	2/28/2003	N	133	< 5 U	< 10 U
MW-32	MW-32-20030925-FS	9/25/2003	N	32.3	< 5 U	< 10 U
MW-32	MW-32-20040415-FS	4/15/2004	N	76.9	< 5 U	< 10 U
MW-32	MW-32-20040923-FS	9/23/2004	N	51.4	< 5 U	< 10 U
MW-32	MW-32-20050405-FS	4/5/2005	N	158	< 5 U	< 10 U
MW-32	MW-32-20050927-FS	9/27/2005	N	97.6	< 5 U	< 10 U
MW-32	MW-32-20060315-FS	3/15/2006	N	111	< 5 U	< 10 U
MW-32	MW-32-20061012-FS	10/12/2006	N	85	4 J	< 10 U
MW-32	MW-32-20070419-FS	4/19/2007	N	66.3	10.1	< 10 U
MW-32	MW-32-20070918-FS	9/18/2007	N	78	< 5 U	< 10 U
MW-32	MW-32-20080430-FS	4/30/2008	N	70 0	2 J	< 10 U
MW-32	MW-32-20081211-FS	12/11/2008	N	60	< 5 U	< 5 U
MW-32	MW-32-20090425-FS	4/25/2009	N	47	< 5 U	< 5 U
MW-32	MW-32-20091028-FS	10/28/2009	N	68	1.8 J	< 5 U
MW-32	MW-32-20100512-FS	5/12/2010	N	58	< 5 U	< 5 U
MW-32	MW-32-20101106-FS	11/6/2010	N	120	< 5 U	< 5 U
MW-32	MW-32-20110324-FS	3/24/2011	N	66	1.4 J	< 5 U
MW-32	MW-32-20111026-FS	10/26/2011	N	73	< 5 U	< 5 U
MW-32	MW-32-20121019	10/19/2012	N	61	1.2 J	< 2.0 U
MW-32	MW-32-101813	10/18/2013	N	48	1.4 J	< 2.0 U
MW-32	MW-32-20140308	3/8/2014	N	36.8	1.1 J	< 2.0 U
MW-32	MW-32-201405	5/13/2014	N	33.1	0.19 J	< 2.0 U
MW-32	MW-32-201407	7/29/2014	N	37.2	1.0 J	< 2.0 U
MW-32	MW-32-201410	10/14/2014	N	29.7	0.80 J	< 2.0 U
MW-32	MW-32-201501	1/14/2015	N	20.2	0.55 J	< 1.0 U
MW-32R	MW-32R-GW-20150119	1/19/2015	N	12.9	< 1.0 U	< 1.0 U
MW-32R	MW-32R-201504	4/15/2015	N	11.2	< 1.0 U	< 1.0 U
MW-32R	MW-32R-201507	7/21/2015	N	7.4	0.29 J	< 1.0 U
MW-32R	MW-32R-201510	10/7/2015	N	8.2	0.37 J	< 1.0 U
MW-32R	MW-32R-201601	1/12/2016	N	13.1	0.45 J	< 1.0 U
MW-32R	MW-32R-201604	4/18/2016	N	8.8	< 1.0 U	< 1.0 U
MW-33	MW-33-20010105-FS	1/5/2001	N	120	< 5 U	< 10 U
MW-33	MW-33-20010327-FS	3/27/2001	N	260	7	< 10 U
MW-33	MW-33-20010913-FS	9/13/2001	N	310	8	< 10 U
MW-33	MW-33-20020911-FS	9/11/2002	N	450	8	< 10 U
MW-33	ITMW-33-20030228-FS	2/28/2003	N	274	6.62	< 10 U
MW-33	MW-33-20030925-FS	9/25/2003	N	198	5.95	< 10 U
MW-33	MW-33-20040415-FS	4/15/2004	N	871	21.3	< 10 U
MW-33	MW-33-20040923-FS	9/23/2004	N	798	15.3	< 10 U
MW-33	MW-33-20050405-FS	4/5/2005	N	1430	24.5	< 10 U
MW-33	MW-33-20050927-FS	9/27/2005	N	1030	15.2	< 10 U
MW-33	MW-33-20060315-FS	3/15/2006	N	1610	20.5	< 10 U
MW-33	MW-33-20061012-FS	10/12/2006	N	1300	19	< 10 U
MW-33	MW-33-20070419-FS	4/19/2007	N	1430	9.2 J	< 50 U
MW-33	MW-33-20070918-FS	9/18/2007	N	1700	25	< 10 U
MW-33	MW-33-20080430-FS	4/30/2008	N	1100 0	16 0	< 10 U
MW-33	MW-33-20081211-FS	12/11/2008	N	1200	18	< 5 U
MW-33	MW-33-20090425-FS	4/25/2009	N	1200	19	< 5 U
MW-33	MW-33-20090527-FS	5/27/2009	N	1000	19	< 5 U
MW-33	MW-33-20091028-FS	10/28/2009	N	1200	20	< 5 U
MW-33	MW-33-20100512-FS	5/12/2010	N	1100	21	< 5 U
MW-33	MW-33-20101106-FS	11/6/2010	N	1200	17	< 5 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-33	MW-33-20110304-FS	3/4/2011	N	500	14	< 5.0 U
MW-33	MW-33-20110523-FS	5/23/2011	N	1300	18	
MW-33	MW-33-20111026-FS	10/26/2011	N	1000	16	< 5 U
MW-33	MW-33-20121019	10/19/2012	N	1300	18	0.56 J
MW-33	MW-33-101813	10/18/2013	N	1100	19	< 2.0 U
MW-33	MW-33-201403	3/8/2014	N	918	15.9	0.56 J
MW-33	MW-33-201405	5/14/2014	N	954	15.1	0.56 J
MW-33	MW-33-201407	7/29/2014	N	1600	20.8	0.59 J
MW-33	MW-33-201410	10/15/2014	N	1290	15.3	< 2.0 U
MW-33	MW-33-201501	1/14/2015	N	1080	13.9	< 1.0 U
MW-33R	MW-33R-GW-20150118	1/18/2015	N	799	9.9	< 1.0 U
MW-33R	MW-33R-201504	4/15/2015	N	570	12.2	0.37 J
MW-33R	DUP-01-201504	4/15/2015	FD	624	10.5	< 1.0 U
MW-33R	MW-33R-201507	7/22/2015	N	488	6.8	< 1.0 U
MW-33R	DUP-04-201507	7/22/2015	FD	447	6.1	< 1.0 U
MW-33R	MW-33R-201510	10/8/2015	N	562	6.1	0.31 J
MW-33R	DUP-05-201510	10/8/2015	FD	460	6.3	0.28 J
MW-33R	MW-33R-201511	11/5/2015	N	752	8.0	0.39 J
MW-33R	MW-33R-201512	12/2/2015	N	675	6.5	0.30 J
MW-33R	MW-33R-201601	1/8/2016	N	724	7.6	< 1.0 U
MW-33R	MW-33R-201604	4/18/2016	N	776	6.7	0.23 J
MW-34	MW-34-20010328-FS	3/28/2001	N	83	< 5 U	< 10 U
MW-34	MW-34-20010913-FS	9/13/2001	N	61	< 5 U	< 10 U
MW-34	MW-34L-20020909-FS	9/9/2002	N	84	< 5 U	< 10 U
MW-34	ITMW-34-20030228-FS	2/28/2003	N	< 5 U	< 5 U	< 10 U
MW-34	MW-34-20030925-FS	9/25/2003	N	28.4	< 5 U	< 10 U
MW-34	MW-34-20031114-FS	11/14/2003	N	121	< 5 U	< 10 U
MW-34	MW-34-20040415-FS	4/15/2004	N	119	< 5 U	< 10 U
MW-34	MW-34-20040923-FS	9/23/2004	N	81.1	< 5 U	< 10 U
MW-34	MW-34-20041209-FS	12/9/2004	N	93.3	< 5 U	< 10 U
MW-34	MW-34-20050405-FS	4/5/2005	N	65.8	< 5 U	< 10 U
MW-34	MW-34-20050930-FS	9/30/2005	N	83.7	< 5 U	< 10 U
MW-34	MW-34-20060314-FS	3/14/2006	N	77.1	< 5 U	< 10 U
MW-34	MW-34-20061011-FS	10/11/2006	N	63	4 J	< 10 U
MW-34	MW-34-20070418-FS	4/18/2007	N	41	9.79	< 10 U
MW-34	MW-34-20070919-FS	9/19/2007	N	61	< 5 U	< 10 U
MW-34	MW-34-20080430-FS	4/30/2008	N	32 0	< 5 U	< 10 U
MW-34	MW-34-20081210-FS	12/10/2008	N	53	< 5 U	< 5 U
MW-34	MW-34-20090424-FS	4/24/2009	N	43	< 5 U	< 5 U
MW-34	MW-34-20090527-FS	5/27/2009	N	12	< 5 U	< 5 U
MW-34	MW-34-20091028-FS	10/28/2009	N	34	< 5 U	< 5 U
MW-34	MW-34-20100512-FS	5/12/2010	N	38	< 5 U	< 5 U
MW-34	DUP-01-20101107-FD	11/7/2010	FD	70	< 5 U	< 5 U
MW-34	MW-34-20101107-FS	11/7/2010	N	73	< 5 U	< 5 U
MW-34	DUP-2-20110324-FD	3/24/2011	FD	40	< 5 U	< 5 U
MW-34	MW-34-20110324-FS	3/24/2011	N	42	< 5 U	< 5 U
MW-34	MW-34-20111026-FS	10/26/2011	N	56	< 5 U	< 5 U
MW-34	MW-34-20121020	10/20/2012	N	90	1.6 J	< 2.0 U
MW-34	MW-34-101713	10/17/2013	N	43	0.90 J	< 2.0 U
MW-34	MW-34-20140308	3/8/2014	N	28.7	0.61 J	< 2.0 U
MW-34	MW-34-201405	5/13/2014	N	19.9	< 5.0 U	< 2.0 U
MW-34	MW-34-201407	7/29/2014	N	78.2	1.7 J	< 2.0 U
MW-34	MW-34-201410	10/15/2014	N	47.7	0.96 J	< 2.0 U
MW-34	MW-34-201501	1/13/2015	N	22.0	< 1.0 U	< 1.0 U
MW-34	MW-34-201504	4/14/2015	N	13.8	< 1.0 U	< 1.0 U
MW-34R	MW-34R-201507	7/21/2015	N	3.5	< 1.0 U	< 1.0 U
MW-34R	MW-34R-201510	10/8/2015	N	4.5	0.16 J	< 1.0 U
MW-34R	MW-34R-201601	1/11/2016	N	2.6	0.30 J	< 1.0 U
MW-34R	MW-34R-201605	5/3/2016	N	2.5	0.56 J	< 1.0 U
MW-35R	MW-35-20010328-FS	3/28/2001	N	960	34	< 10 U
MW-35R	MW-35-20010913-FS	9/13/2001	N	1030	40	< 20 U
MW-35R	MW-35L-20020909-FS	9/9/2002	N	900	31	< 10 U
MW-35R	ITMW-35-20030228-FS	2/28/2003	N	246	15.1	< 10 U
MW-35R	MW-35-20030925-FS	9/25/2003	N	297	19.8	< 10 U
MW-35R	MW-35-20031114-FS	11/14/2003	N	990	34.9	< 10 U
MW-35R	MW-35-20040415-FS	4/15/2004	N	1150	45.8	< 10 U
MW-35R	MW-35-20040923-FS	9/23/2004	N	685	28.4	< 10 U
MW-35R	MW-35-20041209-FS	12/9/2004	N	880	42	< 10 U
MW-35R	MW-35-20050406-FS	4/6/2005	N	886	35	< 10 U
MW-35R	MW-35-20050930-FS	9/30/2005	N	804	29.3	< 10 U
MW-35R	MW-35-20060314-FS	3/14/2006	N	858	24.2	< 10 U
MW-35R	MW-35R-20060406-FS	4/6/2006	N	1540	52.5	< 10 U
MW-35R	MW-35R-20061011-FS	10/11/2006	N	910	29	< 10 U
MW-35R	MW-35-20070418-FS	4/18/2007	N	900	27.6	< 10 U
MW-35R	MW-35-20070919-FS	9/19/2007	N	1100	28	< 10 U
MW-35R	MW-35R-20080430-FS	4/30/2008	N	1100 0	33 0	< 10 U
MW-35R	MW-35R-20081211-FS	12/11/2008	N	790	27	< 5 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-35R	MW-35R-20090424-FS	4/24/2009	N	1100	37	< 5 U
MW-35R	MW-35R-20090507-FS	5/7/2009	N	< 5 U	< 5 U	< 5 U
MW-35R	MW-35-20090527-FS	5/27/2009	N	< 5 U	< 5 U	< 5 U
MW-35R	MW-35R-20101105-FS	11/5/2010	N	240	9.9	< 5 U
MW-35R	MW-35R-20110304-FS	3/4/2011	N	180	8.4	< 5.0 U
MW-35R	MW-35R-20110523-FS	5/23/2011	N	260	13	
MW-35R	MW-35R-20111025-FS	10/25/2011	N	280	12	< 5 U
MW-35R	MW-35R-20121020	10/20/2012	N	280	10	< 2.0 U
MW-35R	MW-35R-101713	10/17/2013	N	200	12	< 2.0 U
MW-35R	MW-35R-101713-DUP	10/17/2013	FD	220	13	
MW-35R	MW-35R-201403	3/8/2014	N	345	14.9	< 2.0 U
MW-35R	MW-35R-201405	5/13/2014	N	183	6.1	< 2.0 U
MW-35R	MW-35R-201407	7/30/2014	N	64.7	2.8 J	< 2.0 U
MW-35R	MW-35R-201410	10/14/2014	N	79.2	2.6 J	< 2.0 U
MW-35R	MW-35R-201501	1/13/2015	N	10.9	< 1.0 U	< 1.0 U
MW-35R	MW-35R-201504	4/14/2015	N	39.5	1.3	< 1.0 U
MW-35R	MW-35R-201507	7/21/2015	N	33.7	1.0	< 1.0 U
MW-35R	MW-35R-201510	10/7/2015	N	15.4	0.58 J	< 1.0 U
MW-35R	MW-35R-201511	11/4/2015	N	23.6	0.36 J	< 1.0 U
MW-35R	MW-35R-201512	12/2/2015	N	0.89 J	< 1.0 U	< 1.0 U
MW-35R	MW-35R-201601	1/11/2016	N	13.2	0.34 J	< 1.0 U
MW-35R	MW-35R-201605	5/3/2016	N	19.3	0.49 J	< 1.0 U
MW-36	MW-36-20010328-FS	3/28/2001	N	< 5 U	< 5 U	< 10 U
MW-36	MW-36-20010913-FS	9/13/2001	N	< 5 U	< 5 U	< 10 U
MW-36	MW-36L-20020909-FS	9/9/2002	N	< 5 U	< 5 U	< 10 U
MW-36	ITMW-36-20030228-FS	2/28/2003	N	< 5 U	< 5 U	< 10 U
MW-36	MW-36-20030925-FS	9/25/2003	N	< 5 U	< 5 U	< 10 U
MW-36	MW-36-20031114-FS	11/14/2003	N	< 5 U	< 5 U	< 10 U
MW-36	MW-36-20040415-FS	4/15/2004	N	< 5 U	< 5 U	< 10 U
MW-36	MW-36-20040923-FS	9/23/2004	N	< 5 U	< 5 U	< 10 U
MW-36	MW-36-20050406-FS	4/6/2005	N	< 5 U	< 5 U	< 10 U
MW-36	MW-36-20050930-FS	9/30/2005	N	< 5 U	< 5 U	< 10 U
MW-36	MW-36-20060317-FS	3/17/2006	N	< 5 U	< 5 U	< 10 U
MW-36	MW-36-20061011-FS	10/11/2006	N	< 5 U	< 5 U	< 10 U
MW-36	MW-36-20070418-FS	4/18/2007	N	< 5 U	< 5 U	< 10 U
MW-36	MW-36-20070920-FS	9/20/2007	N	< 5 U	< 5 U	< 10 U
MW-36	MW-36-20080430-FS	4/30/2008	N	< 5 U	< 5 U	< 10 U
MW-36	MW-36-20081211-FS	12/11/2008	N	< 5 U	< 5 U	< 5 U
MW-36	MW-36-20090424-FS	4/24/2009	N	< 5 U	< 5 U	< 5 U
MW-36	MW-36-20090507-FS	5/7/2009	N	< 5 U	< 5 U	< 5 U
MW-36	MW-36-20090508-FS	5/8/2009	N	< 5 U	< 5 U	< 5 U
MW-36	MW-36-20090528-FS	5/28/2009	N	< 5 U	< 5 U	< 5 U
MW-36	MW-36-20091028-FS	10/28/2009	N	< 5 U	< 5 U	< 5 U
MW-36	MW-36-20100512-FS	5/12/2010	N	< 5 U	< 5 U	< 5 U
MW-36	MW-36-20101107-FS	11/7/2010	N	9.9	< 5 U	< 5 U
MW-36	MW-36-20110324-FS	3/24/2011	N	< 5 U	< 5 U	< 5 U
MW-36	MW-36-20111026-FS	10/26/2011	N	< 5 U	< 5 U	< 5 U
MW-36	MW-36-20121019	10/19/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-36	MW-36-101713	10/17/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-36	MW-36-201403	3/6/2014	N	0.22 J	< 5.0 U	< 2.0 U
MW-36	MW-36-201405	5/13/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-36	MW-36-201407	7/29/2014	N	0.61 J	< 5.0 U	< 2.0 U
MW-36	MW-36-201410	10/14/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-36	MW-36-201501	1/12/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-36	MW-36-201504	4/14/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-36R	MW-36R-201507	7/20/2015	N	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
MW-36R	MW-36R-201510	10/6/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-36R	MW-36R-201601	1/11/2016	N	0.31 J	< 1.0 U	< 1.0 U
MW-36R	MW-36R-201605	5/3/2016	N	1.7	< 1.0 U	< 1.0 U
MW-37	MW-37-20010914-FS	9/14/2001	N	5000	340	< 100 U
MW-37	MW-37-20011120-FS	11/20/2001	N	< 5 U	< 5 U	< 10 U
MW-37	MW-37-20020911-FS	9/11/2002	N	1400	10000	300
MW-37	ITMW-37-20030227-FS	2/27/2003	N	4050	5660	2500
MW-37	MW-37-20030717-FS	7/17/2003	N	2560	1710	316
MW-37	MW-37-20030924-FS	9/24/2003	N	3700	7020	973
MW-37	MW-37-20040413-FS	4/13/2004	N	5190	3160	1180
MW-37	MW-37-20040921-FS	9/21/2004	N	5030	5650	1370
MW-37	MW-37-20050405-FS	4/5/2005	N	5310	2360	1030 E
MW-37	MW-37-20050929-FS	9/29/2005	N	6780	3210	910 E
MW-37	MW-37-20060316-FS	3/16/2006	N	11200	5020	1730
MW-37	MW-37-20061013-FS	10/13/2006	N	13000	5300	1200
MW-37	DUP-3-20061013-FD	10/13/2006	FD	13000	5000	1200
MW-37	MW-37-20070419-FS	4/19/2007	N	9490	3010	780
MW-37	MW-37-20070921-FS	9/21/2007	N	22000	9100	2800
MW-37	MW-37-20080430-FS	4/30/2008	N	16000 0	3300 0	1800 0
MW-37	MW-37-20081210-FS	12/10/2008	N	24000	6300	1800
MW-37	MW-37-20090427-FS	4/27/2009	N	11000	3200	1200

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-37	MW-37-20091027-FS	10/27/2009	N	37000	7400	2200
MW-37	MW-37-20100511-FS	5/11/2010	N	33000	7200	2400
MW-37	MW-37-20101104-FS	11/4/2010	N	54000	10000	2200
MW-37	MW-37-20110322-FS	3/22/2011	N	36000	6000	2300
MW-37	MW-37-20111026-FS	10/26/2011	N	57000	9700	2500
MW-37	MW-37-20120418-FS	4/18/2012	N	29000	5300	2100
MW-37	MWF-37-20121019	10/19/2012	N	4800	1100	230
MW-37	MW-37-20130425	4/25/2013	N	1700	900	230
MW-37	MW-37-101713	10/17/2013	N	1100	1500	1300
MW-37	MW-37-201904	4/24/2019	N	8080	1410	375
MW-37	MW-37-201910	10/24/2019	N	12100	1950	662
MW-37	MW-37-202005	5/13/2020	N	4210	< 1.0 U	499
MW-37	MW-37-202010	10/8/2020	N	3990	648	186
MW-38	MW-38-20010914-FS	9/14/2001	N	620	90	< 20 U
MW-38	MW-38-20050929-FS	9/29/2005	N	< 5 U	98.9	2150
MW-38	MW-38-20061013-FS	10/13/2006	N	26	130	2000 J
MW-38	MW-38-20081210-FS	12/10/2008	N	44	110	1400
MW-38	MW-38-20111026-FS	10/26/2011	N	580	870	1100
MW-38	MW-38-20121018	10/18/2012	N	1000	750	700
MW-38	MW-38-101613	10/16/2013	N	2300	1200	560
MW-38	MW-38-201403	3/8/2014	N	1790	535	68.4
MW-38	DUP1-201405	5/14/2014	FD	2040	426 J	98.2
MW-38	MW-38-201405	5/14/2014	N	1650	428	97.9
MW-38	MW-38-201407	7/31/2014	N	1720	637	197
MW-38	MW-38-201410	10/16/2014	N	6750	781	321
MW-38	DUP-06-201410	10/16/2014	FD	6970	869	370
MW-38	MW-38-20141204	12/4/2014	N	3190	697	193
MW-38	MW-38-201501	1/15/2015	N	5440	1900	133
MW-38	DUP-06-201501	1/15/2015	FD	3910	1190	143
MW-38	MW-38-201504	4/16/2015	N	3060	2060	33.7
MW-38	MW-38-201507	7/23/2015	N	3420	1340	119
MW-38	MW-38-201510	10/8/2015	N	2740	1340	190
MW-38	MW-38-201601	1/13/2016	N	3680	1180	84.3
MW-38	MW-38-201605	5/5/2016	N	3040	950	18.1
MW-38	MW-38-201611	11/10/2016	N	2860	1070	597
MW-38	MW-38-201704	4/28/2017	N	2550	949	23.9
MW-38	MW-38-201710	10/26/2017	N	2240	823	< 1.0 U
MW-38	MW-38-201804	4/19/2018	N	2560	777	23.6
MW-38	MW-38-201811	11/15/2018	N	2340	675	360
MW-38	MW-38-201904	4/25/2019	N	1760	388	15.9
MW-38	DUP-02-201904	4/25/2019	FD	1890	416	14.1
MW-38	MW-38-201910	10/23/2019	N	2180	542	307
MW-38	MW-38-202005	5/14/2020	N	10500	295	5.2
MW-38	MW-38-202010	10/7/2020	N	1110	353	237
MW-38	MW-38-202104	4/13/2021	N	1280	260	7.3
MW-38	DUP-06-202104	4/13/2021	FD	1340	265	6.8
MW-38	MW-38-202110	10/21/2021	N	5830	1060	204
MW-38	MW-38-202204	4/14/2022	N	816	257	< 1.0 U
MW-38	MW-38-202210_4073	10/20/2022	N	1250	695	541
MW-38	MW-38-202304	4/20/2023	N	963	234	12.7
MW-38	MW-38-202310	10/19/2023	N	108	2.2	< 1.0 U
MW-39	MW-39-20030718-FS	7/18/2003	N	< 5 U	< 5 U	< 10 U
MW-39	MW-39-20030925-FS	9/25/2003	N	< 5 U	< 5 U	< 10 U
MW-39	MW-39-20031114-FS	11/14/2003	N	< 5 U	< 5 U	< 10 U
MW-39	MW-39-20040415-FS	4/15/2004	N	< 5 U	< 5 U	< 10 U
MW-39	MW-39-20040923-FS	9/23/2004	N	< 5 U	< 5 U	< 10 U
MW-39	MW-39-20050408-FS	4/8/2005	N	< 5 U	< 5 U	< 10 U
MW-39	MW-39-20050930-FS	9/30/2005	N	< 5 U	< 5 U	< 10 U
MW-39	MW-39-20060317-FS	3/17/2006	N	< 5 U	< 5 U	< 10 U
MW-39	MW-39-20061011-FS	10/11/2006	N	< 5 U	< 5 U	< 10 U
MW-39	MW-39-20070418-FS	4/18/2007	N	< 5 U	< 5 U	< 10 U
MW-39	MW-39-20070919-FS	9/19/2007	N	< 5 U	< 5 U	< 10 U
MW-39	MW-39-20080430-FS	4/30/2008	N	< 5 U	< 5 U	< 10 U
MW-39	MW-39-20081209-FS	12/9/2008	N	< 5 U	< 5 U	< 5 U
MW-39	MW-39-20090424-FS	4/24/2009	N	< 5 U	< 5 U	< 5 U
MW-39	MW-39-20091027-FS	10/27/2009	N	< 5 U	< 5 U	< 5 U
MW-39	MW-39-20100511-FS	5/11/2010	N	< 5 U	< 5 U	< 5 U
MW-39	MW-39-20101107-FS	11/7/2010	N	20	< 5 U	< 5 U
MW-39	MW-39-20110324-FS	3/24/2011	N	< 5 U	< 5 U	< 5 U
MW-39	MW-39-20111026-FS	10/26/2011	N	< 5 U	< 5 U	< 5 U
MW-39	MW-39-20121019	10/19/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-39	MW-39-101813	10/18/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-39	MW-39-201403	3/6/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-39	MW-39-201405	5/13/2014	N	0.23 J	< 5.0 U	< 2.0 U
MW-39	MW-39-201407	7/29/2014	N	0.79 J	< 5.0 U	< 2.0 U
MW-39	MW-39-201410	10/13/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-39	MW-39-201501	1/12/2015	N	< 1.0 U	< 1.0 U	< 1.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-39	MW-39-201504	4/14/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-39R	MW-39R-201507	7/20/2015	N	< 1.0 UJ	< 1.0 UJ	< 1.0 UJ
MW-39R	MW-39R-201510	10/7/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-39R	MW-39R-201601	1/12/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-39R	MW-39R-201605	5/2/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-39R	MW-39R-201611	11/7/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-39R	MW-39R-201704	4/27/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-39R	MW-39R-201710	10/25/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-39R	FD-05-201710	10/25/2017	FD	< 1.0 U	< 1.0 U	< 1.0 U
MW-39R	MW-39R-201804	4/18/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-39R	MW-39R-201811	11/15/2018	N	< 1.0	< 1.0 U	< 1.0 U
MW-39R	MW-39R-201904	4/24/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-39R	MW-39R-201910	10/22/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-39R	MW-39R-202005	5/12/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-39R	DUP-05-202005	5/12/2020	FD	< 1.0 U	< 1.0 U	< 1.0 U
MW-39R	MW-39R-202010	10/6/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-39R	MW-39R-202110	10/18/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-39R	MW-39R-202204	4/12/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-39R	MW-39R-202210	10/17/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-39R	MW-39R-202304	4/19/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-39R	MW-39R-202310	10/16/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40	MW-40-20030718-FS	7/18/2003	N	< 5 U	< 5 U	< 10 U
MW-40	MW-40-20030925-FS	9/25/2003	N	< 5 U	< 5 U	< 10 U
MW-40	MW-40-20031114-FS	11/14/2003	N	< 5 U	< 5 U	< 10 U
MW-40	MW-40 DUP-1-20031114-FD	11/14/2003	FD	< 5 U	< 5 U	< 10 U
MW-40	MW-40-20040415-FS	4/15/2004	N	< 5 U	< 5 U	< 10 U
MW-40	MW-40-20040923-FS	9/23/2004	N	< 5 U	< 5 U	< 10 U
MW-40	MW-40-20050407-FS	4/7/2005	N	< 5 U	< 5 U	< 10 U
MW-40	MW-40-20050929-FS	9/29/2005	N	< 5 U	< 5 U	< 10 U
MW-40	MW-40-20060314-FS	3/14/2006	N	< 5 U	< 5 U	< 10 U
MW-40	MW-40-20061010-FS	10/10/2006	N	< 5 U	< 5 U	< 10 U
MW-40	MW-40-20070418-FS	4/18/2007	N	< 5 U	< 5 U	< 10 U
MW-40	MW-40-20070918-FS	9/18/2007	N	< 5 U	< 5 U	< 10 U
MW-40	MW-40-20080428-FS	4/28/2008	N	< 5 U	< 5 U	< 10 U
MW-40	MW-40-20081211-FS	12/11/2008	N	< 5 U	< 5 U	< 5 U
MW-40	MW-40-20090424-FS	4/24/2009	N	< 5 U	< 5 U	< 5 U
MW-40	MW-40-20090527-FS	5/27/2009	N	< 5 U	< 5 U	< 5 U
MW-40	MW-40-20091029-FS	10/29/2009	N	< 5 U	< 5 U	< 5 U
MW-40	MW-40-20100512-FS	5/12/2010	N	< 5 U	< 5 U	< 5 U
MW-40	MW-40-20101104-FS	11/4/2010	N	< 5 U	< 5 U	< 5 U
MW-40	MW-40-20110323-FS	3/23/2011	N	< 5 U	< 5 U	< 5 U
MW-40	MW-40-20111026-FS	10/26/2011	N	< 5 U	< 5 U	< 5 U
MW-40	MW-40-20120418-FS	4/18/2012	N	3.9 J	< 5 U	< 5 U
MW-40	MW-40-20121017	10/17/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-40	MW-40-20130423	4/23/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-40	MW-40-101513	10/15/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-40	MW-40-201403	3/6/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-40	MW-40-201405	5/12/2014	N	0.76 J	< 5.0 U	< 2.0 U
MW-40	MW-40-201407	7/29/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-40	MW-40-201410	10/13/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-40	MW-40-201501	1/12/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40	MW-40-201504	4/14/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40R	MW-40R-201507	7/20/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40R	MW-40R-201510	10/6/2015	N	0.30 J	0.23 J	< 1.0 U
MW-40R	DUP-03-201510	10/6/2015	FD	0.83 J	< 1.0 U	< 1.0 U
MW-40R	MW-40R-201601	1/12/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40R	DUP-06-201601	1/12/2016	FD	0.28 J	0.22 J	< 1.0 U
MW-40R	MW-40R-201605	5/2/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40R	MW-40R-201611	11/7/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40R	MW-40R-201704	4/27/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40R	MW-40R-201710	10/24/2017	N	0.31 J	< 1.0 U	< 1.0 U
MW-40R	MW-40R-201804	4/17/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40R	MW-40R-201811	11/14/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40R	MW-40R-201904	4/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40R	MW-40R-201910	10/22/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40R	MW-40R-202005	5/12/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40R	MW-40R-202010	10/6/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40R	MW-40R-202104	4/13/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40R	MW-40R-202110	10/19/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40R	MW-40R-202204	4/12/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40R	MW-40R-202210	10/19/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40R	MW-40R-202304	4/18/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-40R	MW-40R-202310	10/17/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-41	MW-41-20030718-FS	7/18/2003	N	972	50.6	< 10 U
MW-41	MW-41 DUP-1-20030718-FD	7/18/2003	FD	964	45.5	< 10 U
MW-41	MW-41-20030925-FS	9/25/2003	N	722	37.8	< 10 U
MW-41	MW-41-20031114-FS	11/14/2003	N	331	205	< 10 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-41	MW-41-20040415-FS	4/15/2004	N	760	54.2	< 10 U
MW-41	MW-41-20040923-FS	9/23/2004	N	1060	48	< 10 U
MW-41	MW-41-20050407-FS	4/7/2005	N	1170	58	< 10 U
MW-41	MW-41-20050930-FS	9/30/2005	N	1120	55.8	< 10 U
MW-41	MW-41-20060317-FS	3/17/2006	N	917	52.5	< 10 U
MW-41	MW-41-20061013-FS	10/13/2006	N	970	43	< 10 UJ
MW-41	MW-41-20070418-FS	4/18/2007	N	900	30.1	< 10 U
MW-41	MW-41-20070920-FS	9/20/2007	N	850	32	< 10 U
MW-41	MW-41-20080430-FS	4/30/2008	N	730 0	31 0	< 10 U
MW-41	MW-41-20081211-FS	12/11/2008	N	820	29	< 5 U
MW-41	MW-41-20090424-FS	4/24/2009	N	660	25	< 5 U
MW-41	MW-41-20090507-FS	5/7/2009	N	180	4.7 J	< 5 U
MW-41	MW-41-20090508-FS	5/8/2009	N	180	4.7 J	< 5 U
MW-41	MW-41-20090527-FS	5/27/2009	N	230	16	< 5 U
MW-41	MW-41-20091028-FS	10/28/2009	N	180	4 J	< 5 U
MW-41	MW-41-20100513-FS	5/13/2010	N	610	19	< 5 U
MW-41	MW-41-20101105-FS	11/5/2010	N	930	31	< 5 U
MW-41	MW-41-20110304-FS	3/4/2011	N	120	20	< 5.0 U
MW-41	MW-41-20110523-FS	5/23/2011	N	370	15	
MW-41	MW-41-20111025-FS	10/25/2011	N	420	18	< 5 U
MW-41	MW-41-20121020	10/20/2012	N	620	23	< 2.0 U
MW-41	DUP-3-20121020	10/20/2012	FD	550	21	< 2.0 U
MW-41	MW-41-101613	10/16/2013	N	520	24	< 2.0 U
MW-41	MW-41-201403	3/7/2014	N	501	19.7	0.68 J
MW-41	MW-41-201405	5/14/2014	N	518	18.0	0.50 J
MW-41	MW-41-201407	7/30/2014	N	480	19.7	< 2.0 U
MW-41	DUP-2-201407	7/30/2014	FD	511	19.1	< 2.0 U
MW-41	MW-41-201410	10/15/2014	N	491	16.9	< 2.0 U
MW-41	MW-41-201501	1/14/2015	N	425	15.6	< 1.0 U
MW-41	MW-41-201504	4/15/2015	N	386	15.2	0.27 J
MW-41	DUP-02-201504	4/15/2015	FD	410	13.5	< 1.0
MW-41R	MW-41R-201507	7/21/2015	N	40.4	3.3	< 1.0 U
MW-41R	DUP-03-201507	7/21/2015	FD	43.0	2.8	< 1.0 U
MW-41R	MW-41R-201510	10/6/2015	N	48.7	36.7	0.39 J
MW-41R	DUP-07-201510	10/6/2015	FD	46.4	35.2	0.33 J
MW-41R	MW-41R-201601	1/12/2016	N	59.9	40.9	0.38 J
MW-41R	DUP-07-201601	1/12/2016	FD	56.6	40.1	0.35 J
MW-41R	MW-41R-201605	5/3/2016	N	87.8	17.3	0.18 J
MW-41R	DUP-03-201605	5/3/2016	FD	82.9	17.5	0.20 J
MW-42B	MW-42 B-20031114-FS	11/14/2003	N	481	21.1	< 10 U
MW-42B	MW-42-20040415-FS	4/15/2004	N	856	29.3	< 10 U
MW-42B	MW-42-20040923-FS	9/23/2004	N	400	19.8	< 10 U
MW-42B	MW-42-20050405-FS	4/5/2005	N	1310	32	< 10 U
MW-42B	MW-42-20050927-FS	9/27/2005	N	1470	27.3	< 10 U
MW-42B	MW-42-20060315-FS	3/15/2006	N	2270	37.2	< 10 U
MW-42B	MW-42-20061010-FS	10/10/2006	N	2000	35	2 J
MW-42B	MW-42-20070417-FS	4/17/2007	N	1600	36.8	< 10 U
MW-42B	MW-42B-20070918-FS	9/18/2007	N	2100	39	4 J
MW-42B	MW-42B-20080429-FS	4/29/2008	N	1600 0	33 0	3 J
MW-42B	MW-42B-20081209-FS	12/9/2008	N	1100	30	< 5 U
MW-42B	MW-42B-20090425-FS	4/25/2009	N	1500	35	< 5 U
MW-43	MW-43-20031114-FS	11/14/2003	N	223	18.5	< 10 U
MW-43	MW-43-20040415-FS	4/15/2004	N	510	12.1	< 10 U
MW-43	MW-43-20040923-FS	9/23/2004	N	64.7	6.31	< 10 U
MW-43	MW-43-20050405-FS	4/5/2005	N	304	11.9	< 10 U
MW-43	MW-43-20050927-FS	9/27/2005	N	518	21.3	< 10 U
MW-43	MW-43-20060315-FS	3/15/2006	N	1300	35	< 10 U
MW-43	MW-43-20061011-FS	10/11/2006	N	920	30	< 10 U
MW-43	MW-43-20070417-FS	4/17/2007	N	220	14.1	< 10 U
MW-43	MW-43-20070918-FS	9/18/2007	N	350	13	< 10 U
MW-43	MW-43-20080428-FS	4/28/2008	N	120 0	4 J	< 10 U
MW-43	MW-43-20081209-FS	12/9/2008	N	150	5.3	< 5 U
MW-43	MW-43-20090425-FS	4/25/2009	N	120	< 5 U	< 5 U
MW-43	MW-43-20090507-FS	5/7/2009	N	180	6	< 5 U
MW-43	MW-43-20090508-FS	5/8/2009	N	180	6	< 5 U
MW-46R	MW-46-20031114-FS	11/14/2003	N	39.9	< 5 U	< 10 U
MW-46R	MW-46-20040415-FS	4/15/2004	N	77.1	27.2	< 10 U
MW-46R	MW-46-20040923-FS	9/23/2004	N	142	21.2	< 10 U
MW-46R	MW-46-20050406-FS	4/6/2005	N	210	28.4	< 10 U
MW-46R	MW-46-20050928-FS	9/28/2005	N	222	15.6	< 10 U
MW-46R	MW-46-20060316-FS	3/16/2006	N	111	6.37	< 10 U
MW-46R	MW-46R-20060406-FS	4/6/2006	N	300	< 5 U	< 10 U
MW-46R	MW-46-20061011-FS	10/11/2006	N	450	8	< 10 U
MW-46R	MW-46R-20070417-FS	4/17/2007	N	440	12.5	< 10 U
MW-46R	MW-46R-20070918-FS	9/18/2007	N	420	9	< 10 U
MW-46R	MW-46R-20080429-FS	4/29/2008	N	430 0	8 0	< 10 U
MW-46R	MW-46R-20081209-FS	12/9/2008	N	310	19	< 5 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-46R	MW-46R-20090425-FS	4/25/2009	N	460	11	< 5 U
MW-46R	MW-46-20090527-FS	5/27/2009	N	< 5 U	< 5 U	< 5 U
MW-46R	MW-46-20091027-FS	10/27/2009	N	390	12	< 5 U
MW-46R	MW-46R-20091221-FS	12/21/2009	N	410	10	< 5.0 U
MW-46R	MW-46R-20100511-FS	5/11/2010	N	610	13	< 5 U
MW-46R	MW-46R-20101105-FS	11/5/2010	N	650	12	< 5 U
MW-46R	MW-46R-20110307-FS	3/7/2011	N	670	14	< 5.0 U
MW-46R	MW-46R-20110322-FS	3/22/2011	N	680	11	< 5 U
MW-46R	MW-46R-20110523-FS	5/23/2011	N	610	13	
MW-46R	MW-46-20111026-FS	10/26/2011	N	460	10	< 5 U
MW-46R	MW-46-20120418-FS	4/18/2012	N	680	14	< 5 U
MW-46R	MW-46R-20121020	10/20/2012	N	410	7.9	0.44 J
MW-46R	MW-46R-20130423	4/23/2013	N	470	7.6	0.91 J
MW-46R	MW-46R-10182013	10/18/2013	N	410	11	< 2.0 U
MW-46R	MW-46R-201403	3/7/2014	N	469	12.8	0.46 J
MW-46R	MW-46R-201405	5/14/2014	N	471	12.8	0.76 J
MW-46R	MW-46R-201407	7/29/2014	N	472	13.7	0.64 J
MW-46R	MW-46R-201410	10/16/2014	N	410	24.6	< 2.0 U
MW-46R	DUP-03-201410	10/16/2014	FD	373	25.2	< 2.0 U
MW-46R	MW-46R-201501	1/13/2015	N	452	11.6	0.71 J
MW-46R	DUP-03-201501	1/13/2015	FD	428	12.0	0.90 J
MW-46R	MW-46R-201504	4/14/2015	N	220 J	13.8	0.47 J
MW-46R	DUP-07-201504	4/14/2015	FD	482	13.9	0.51 J
MW-46R	MW-46R-201507	7/21/2015	N	460	11.2	0.37 J
MW-46R	DUP-05-201507	7/21/2015	FD	444	10.3	0.40 J
MW-46R	MW-46R-201510	10/7/2015	N	371	10.2	0.43 J
MW-46R	MW-46R-201601	1/12/2016	N	432	10.9	0.56 J
MW-46R	MW-46R-201605	5/3/2016	N	445	12.6	0.40 J
MW-46R	DUP-10-201605	5/3/2016	FD	461	11.1	0.52 J
MW-46R	MW-46R-201611	11/8/2016	N	411	10.3	0.79 J
MW-46R	MW-46R-201704	4/27/2017	N	486	12.4	0.47 J
MW-46R	MW-46R-201710	10/24/2017	N	408	10.7	0.51 J
MW-46R	MW-46R-201804	4/18/2018	N	520	12.6	0.56 J
MW-46R	MW-46R-201811	11/14/2018	N	603	14.4	1.2
MW-46R	MW-46R-201904	4/24/2019	N	560 M1	13.4 J-	0.46 J
MW-46R	MW-46R-201910	10/23/2019	N	555	22.1	0.69 J
MW-46R	DUP-03-201910	10/23/2019	FD	560	16.5	0.56 J
MW-46R	MW-46R-202005	5/12/2020	N	483	14.2	0.54 J
MW-46R	MW-46R-202010	10/8/2020	N	460	14.6	2.1
MW-46R	MW-46R-202104	4/14/2021	N	466	16.2	1.1
MW-46R	MW-46R-202110	10/21/2021	N	461	30.8	0.63 J
MW-46R	MW-46R-202204	4/14/2022	N	471	11.6	< 1.0 U
MW-46R	DUP-10-202204	4/14/2022	FD	499	11.7	< 1.0 U
MW-46R	MW-46R-202210	10/20/2022	N	298	8.7	0.26 J
MW-46R	MW-46R-202304	4/20/2023	N	352	12.0	0.32 J
MW-46R	DUP-01-202304	4/20/2023	FD	353	11.6	0.31 J
MW-46R	MW-46R-202310	10/19/2023	N	288	8.8	0.47 J
MW-50	MW-50-20040415-FS	4/15/2004	N	6.51	< 5 U	< 10 U
MW-50	NW-50-20040923-FS	9/23/2004	N	< 5 U	< 5 U	< 10 U
MW-50	MW-50-20041210-FS	12/10/2004	N	< 5 U	< 5 U	< 10 U
MW-50	MW-50-20050406-FS	4/6/2005	N	< 5 U	< 5 U	< 10 U
MW-50	MW-50-20050928-FS	9/28/2005	N	< 5 U	< 5 U	< 10 U
MW-50	MW-50-20060317-FS	3/17/2006	N	< 5 U	< 5 U	< 10 U
MW-50	MW-50-20061012-FS	10/12/2006	N	< 5 U	< 5 U	< 10 U
MW-50	MW-50-20070419-FS	4/19/2007	N	< 5 U	< 5 U	< 10 U
MW-50	MW-50-20070919-FS	9/19/2007	N	< 5 U	< 5 U	< 10 U
MW-50	MW-50-20080429-FS	4/29/2008	N	< 5 U	< 5 U	< 10 U
MW-50	MW-50-20081210-FS	12/10/2008	N	< 5 U	< 5 U	< 5 U
MW-50	MW-50-20090424-FS	4/24/2009	N	< 5 U	< 5 U	< 5 U
MW-50	MW-50-20091027-FS	10/27/2009	N	< 5 U	< 5 U	< 5 U
MW-50	MW-50-20100511-FS	5/11/2010	N	< 5 U	< 5 U	< 5 U
MW-50	MW-50-20101105-FS	11/5/2010	N	< 5 U	< 5 U	< 5 U
MW-50	MW-50-20110323-FS	3/23/2011	N	< 5 U	< 5 U	< 5 U
MW-50	MW-50-20111025-FS	10/25/2011	N	< 5 U	< 5 U	< 5 U
MW-50	MW-50-20121017	10/17/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-50	MW-50-101613	10/16/2013	N	1.6 J	< 5.0 U	< 2.0 U
MW-50	MW-50-201403	3/6/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-50	MW-50-201405	5/13/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-50	MW-50-201407	7/28/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-50	MW-50-201410	10/14/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-50	MW-50-201501	1/13/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-50	MW-50-201504	4/14/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-50	MW-50-201710	10/23/2017	N	0.26 J	< 1.0 U	< 1.0 U
MW-50	MW-50-202104	4/14/2021	N	1.3	< 1.0 U	< 1.0 U
MW-50R	MW-50R-201507	7/21/2015	N	0.22 J	< 1.0 U	< 1.0 U
MW-50R	MW-50R-201510	10/6/2015	N	0.35 J	< 1.0 U	< 1.0 U
MW-50R	MW-50R-201601	1/11/2016	N	0.42 J	< 1.0 U	< 1.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-50R	MW-50R-201605	5/2/2016	N	0.46 J	< 1.0 U	< 1.0 U
MW-50R	MW-50R-201611	11/7/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-50R	MW-50R-201704	4/26/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-50R	MW-50R-201804	4/17/2018	N	0.61 J	< 1.0 U	< 1.0 U
MW-50R	MW-50R-201811	11/13/2018	N	0.73 J	< 1.0 U	< 1.0 U
MW-50R	MW-50R-201904	4/23/2019	N	0.72 J	< 1.0 U	< 1.0 U
MW-50R	MW-50R-201910	10/23/2019	N	0.61 J	< 1.0 U	< 1.0 U
MW-50R	MW-50R-202005	5/12/2020	N	0.66 J	< 1.0 U	< 1.0 U
MW-50R	MW-50R-202010	10/5/2020	N	0.98 J	< 1.0 U	< 1.0 U
MW-50R	MW-50R-202110	10/19/2021	N	0.61 J	< 1.0 U	< 1.0 U
MW-50R	MW-50R-202204	4/13/2022	N	1.4	0.17 J	< 1.0 U
MW-50R	MW-50R-202210_3494	10/18/2022	N	1.1	< 1.0 U	< 1.0 U
MW-50R	MW-50R-202304	4/18/2023	N	1.9	0.18 J	< 1.0 U
MW-50R	MW-50R-202310	10/17/2023	N	1.6	0.16 J	< 1.0 U
MW-55	MW-55-20041209-FS	12/9/2004	N	< 5 U	< 5 U	< 10 U
MW-55	MW-55-20050408-FS	4/8/2005	N	< 5 U	< 5 U	< 10 U
MW-55	MW-55-20050928-FS	9/28/2005	N	< 5 U	< 5 U	< 10 U
MW-55	MW-55-20060316-FS	3/16/2006	N	< 5 U	< 5 U	< 10 U
MW-55	MW-55-20061013-FS	10/13/2006	N	2 J	< 5 U	< 10 UJ
MW-55	MW-55-20070419-FS	4/19/2007	N	2.6 J	< 5 U	< 10 U
MW-55	MW-55-20070919-FS	9/19/2007	N	5 J	< 5 U	< 10 U
MW-55	MW-55-20080429-FS	4/29/2008	N	< 5 U	< 5 U	< 10 U
MW-55	MW-55-20081210-FS	12/10/2008	N	< 5 U	< 5 U	< 5 U
MW-55	MW-55-20090424-FS	4/24/2009	N	< 5 U	< 5 U	< 5 U
MW-55	MW-55-20091027-FS	10/27/2009	N	3.6 J	< 5 U	< 5 U
MW-55	MW-55-20100512-FS	5/12/2010	N	4.2 J	< 5 U	< 5 U
MW-55	MW-55-20101106-FS	11/6/2010	N	14	< 5 U	< 5 U
MW-55	MW-55-20110323-FS	3/23/2011	N	5.5	< 5 U	< 5 U
MW-55	MW-55-20111025-FS	10/25/2011	N	7	< 5 U	< 5 U
MW-55	MW-55-20121020	10/20/2012	N	9.2	< 5.0 U	< 2.0 U
MW-55	MW-55-101613	10/16/2013	N	13	< 5.0 U	< 2.0 U
MW-55R	MW-55R-201507	7/20/2015	N	8.2	0.42 J	0.13 J
MW-55R	MW-55R-201510	10/6/2015	N	4.4	0.53 J	0.14 J
MW-55R	MW-55R-201601	1/12/2016	N	0.26 J	< 1.0 U	< 1.0 U
MW-55R	MW-55R-201605	5/2/2016	N	2.1	< 1.0 U	< 1.0 U
MW-55R	MW-55R-201611	11/7/2016	N	3.1	< 1.0 U	< 1.0 U
MW-55R	MW-55R-201704	4/27/2017	N	7.0	0.58 J	< 1.0 U
MW-55R	MW-55R-201710	10/25/2017	N	10.9	0.77 J	0.15 J
MW-55R	MW-55R-201804	4/18/2018	N	17.0	0.77 J	< 1.0 U
MW-55R	DUP-05-201804	4/18/2018	FD	18.1	0.82 J	0.16 J
MW-55R	MW-55R-201811	11/15/2018	N	22.3	0.91 J	< 1.0 U
MW-55R	DUP-08-201811	11/15/2018	FD	23.1	0.85 J	< 1.0 U
MW-55R	MW-55R-201904	4/25/2019	N	10.9	0.60 J	< 1.0 U
MW-55R	MW-55R-201910	10/23/2019	N	26.4	0.98 J	0.16 J
MW-55R	DUP-04-2019110	10/23/2019	FD	27.7	1.2	0.18 J
MW-55R	MW-55R-202005	5/12/2020	N	23.9	0.94 J	0.19 J
MW-55R	MW-55R-202010	10/6/2020	N	29.9	1.0	< 1.0 U
MW-55R	MW-55R-202104	4/14/2021	N	23.9	0.96 J	< 1.0 U
MW-55R	MW-55R-202110	10/19/2021	N	29.9	1.2	0.19 J
MW-55R	MW-55R-202204	4/13/2022	N	22.3	0.97 J	0.18 J
MW-55R	MW-55R-202210	10/19/2022	N	27.5	0.72 J	< 1.0 U
MW-55R	MW-55R-202304	4/19/2023	N	25.1	0.93 J	< 1.0 U
MW-55R	DUP-10-202304	4/19/2023	FD	25.6	1.0	0.17 J
MW-55R	MW-55R-202310	10/18/2023	N	26.9	1.1	< 1.0 U
MW-56	MW-56-20041210-FS	12/10/2004	N	90.2	< 5 U	< 10 U
MW-56	MW-56-20050408-FS	4/8/2005	N	88.2	< 5 U	< 10 U
MW-56	MW-56-20050928-FS	9/28/2005	N	207	< 5 U	< 10 U
MW-56	MW-56-20060316-FS	3/16/2006	N	8.7	< 5 U	< 10 U
MW-56	MW-56-20061014-FS	10/14/2006	N	110	2 J	< 10 UJ
MW-56	MW-56-20070419-FS	4/19/2007	N	< 5 U	< 5 U	< 10 U
MW-56	MW-56-20070919-FS	9/19/2007	N	38	< 5 U	< 10 U
MW-56	MW-56-20080429-FS	4/29/2008	N	4 J	< 5 U	< 10 U
MW-56	MW-56-20081210-FS	12/10/2008	N	93	< 5 U	< 5 U
MW-56	MW-56-20090424-FS	4/24/2009	N	14	< 5 U	< 5 U
MW-56	MW-56-20091027-FS	10/27/2009	N	8.7	< 5 U	< 5 U
MW-56	MW-56-20100512-FS	5/12/2010	N	230	6.4	< 5 U
MW-56	MW-56-20110323-FS	3/23/2011	N	71	2.6 J	< 5 U
MW-56	MW-56-20111025-FS	10/25/2011	N	150	11	1.9 J
MW-56	MW-56-20121020	10/20/2012	N	470	11	< 2.0 U
MW-56	MW-56-101713	10/17/2013	N	590	17	< 2.0 U
MW-56	MW-56-201403	3/7/2014	N	618	15.3	0.15 J
MW-56	MW-56-201405	6/11/2014	N	307	17.6	0.16 J
MW-56	MW-56-201407	7/29/2014	N	516	19.3	< 2.0 U
MW-56	MW-56-201410	10/15/2014	N	408	12.1	< 2.0 U
MW-56	MW-56-201501	1/13/2015	N	326	10	< 1.0 U
MW-56	MW-56-201504	4/16/2015	N	495	8.2	< 1.0 U
MW-56R	MW-56R-201507	7/20/2015	N	156	8.0	0.31 J

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-56R	MW-56R-201510	10/6/2015	N	278	18.1	0.42 J
MW-56R	MW-56R-201601	1/11/2016	N	408	19.2	0.32 J
MW-56R	MW-56R-201605	5/3/2016	N	734	19.7	0.52 J
MW-56R	MW-56R-201611	11/8/2016	N	679	27.8	0.37 J
MW-56R	MW-56R-201710	10/24/2017	N	815	33.8	< 1.0 U
MW-56R	MW-56R-201811	11/14/2018	N	902	21.1	0.38 J
MW-56R	MW-56R-201904	4/25/2019	N	803	20.0	0.36 J
MW-56R	DUP-03-201904	4/25/2019	FD	798	20.3	0.31 J
MW-56R	MW-56R-201910	10/23/2019	N	649	16.9	0.32 J
MW-56R	MW-56R-202005	5/12/2020	N	619	17.3	0.28 J
MW-56R	MW-56R-202010	10/6/2020	N	706	16.8	0.36 J
MW-56R	MW-56R-202110	10/21/2021	N	619	14.8	0.20 J
MW-56R	MW-56R-202210	10/20/2022	N	615	11.5	< 1.0 U
MW-56R	MW-56R-202310	10/19/2023	N	552	10.7	< 1.0 U
MW-57	MW-57-20041210-FS	12/10/2004	N	207	6.72	< 10 U
MW-57	MW-57-20050408-FS	4/8/2005	N	282	6.83	< 10 U
MW-57	MW-57-20050928-FS	9/28/2005	N	96	< 5 U	< 10 U
MW-57	MW-57-20060316-FS	3/16/2006	N	254	7.56	< 10 U
MW-57	MW-57-20061013-FS	10/13/2006	N	64	< 5 U	< 10 UJ
MW-57	MW-57-20070419-FS	4/19/2007	N	201	3.77 J	< 10 U
MW-57	MW-57-20070920-FS	9/20/2007	N	250	5 J	< 10 U
MW-57	MW-57-20080430-FS	4/30/2008	N	14 0	< 5 U	< 10 U
MW-57	MW-57-20081210-FS	12/10/2008	N	130	7.4	< 5 U
MW-57	MW-57-20090424-FS	4/24/2009	N	96	4.2 J	< 5 U
MW-57	MW-57-20091027-FS	10/27/2009	N	100	2.6 J	< 5 U
MW-57	MW-57-20100512-FS	5/12/2010	N	210	6	< 5 U
MW-57	MW-57-20110323-FS	3/23/2011	N	110	2.3 J	< 5 U
MW-57	MW-57-20111025-FS	10/25/2011	N	59	2 J	< 5 U
MW-57	MW-57-20121020	10/20/2012	N	120	5.1	< 2.0 U
MW-57	MW-57-101713	10/17/2013	N	210	7.4	< 2.0 U
MW-57	MW-57-201403	3/7/2014	N	134	3.0 J	0.14 J
MW-57	MW-57-201405	6/11/2014	N	167	4.4 J	< 2.0 U
MW-57	MW-57-201407	7/29/2014	N	308	8.2	< 2.0 U
MW-57	MW-57-201410	10/15/2014	N	172	4.2 J	< 2.0 U
MW-57	MW-57-201501	1/13/2015	N	177	5.4	< 1.0 U
MW-57	MW-57-201504	4/16/2015	N	194	4.8	< 1.0 U
MW-57R	MW-57R-201507	7/20/2015	N	409	10.6	0.53 J
MW-57R	MW-57R-201510	10/6/2015	N	400	13.0	0.42 J
MW-57R	MW-57R-201601	1/11/2016	N	422	15.7	0.48 J
MW-57R	MW-57R-201605	5/3/2016	N	425	12.8	0.51 J
MW-57R	MW-57R-201611	11/8/2016	N	441	23.0	0.44 J
MW-57R	DUP-07-201611	11/8/2016	FD	453	24.3	0.45 J
MW-57R	MW-57R-201710	10/24/2017	N	441	17.5	< 1.0 U
MW-57R	MW-57R-201811	11/14/2018	N	286	7.7	0.21 J
MW-57R	MW-57R-201904	4/25/2019	N	393	10.4	0.45 J
MW-57R	MW-57R-201910	10/23/2019	N	317	12.4	0.39 J
MW-57R	MW-57R-202005	5/12/2020	N	61.0	1.4	< 1.0 U
MW-57R	MW-57R-202010	10/7/2020	N	327	14.2	0.41 J
MW-57R	DUP-02-202010	10/7/2020	FD	326	14.4	0.37 J
MW-57R	MW-57R-202104	4/15/2021	N	349	13.7	0.46 J
MW-57R	MW-57R-202110	10/21/2021	N	286	22.1	0.38 J
MW-57R	MW-57R-202204	4/14/2022	N	185	9.9	0.33 J
MW-57R	MW-57R-202210	10/20/2022	N	258	12.0	1.3
MW-57R	MW-57R-202304	4/20/2023	N	252	15.2	1.2
MW-57R	MW-57R-202310	10/19/2023	N	240	16.4	2.8
MW-58	MW-58-20041209-FS	12/9/2004	N	526	14.5	< 10 U
MW-58	MW-58-20050407-FS	4/7/2005	N	809	18.8	< 10 U
MW-58	MW-58-20050928-FS	9/28/2005	N	486	10.9	< 10 U
MW-58	MW-58-20060316-FS	3/16/2006	N	421	8.66	< 10 U
MW-58	MW-58-20061013-FS	10/13/2006	N	620	14	< 10 UJ
MW-58	MW-58-20070419-FS	4/19/2007	N	784	30.7	< 25 U
MW-58	DUP-2-20070419-FD	4/19/2007	FD	717	9.54 J	< 25 U
MW-58	MW-58-20070919-FS	9/19/2007	N	650	17	< 10 U
MW-58	DUP-1-20070919-FD	9/19/2007	FD	640	16	< 10 U
MW-58	MW-58-20080430-FS	4/30/2008	N	630 0	15 0	< 10 U
MW-58	DUP-2-20080430-FD	4/30/2008	FD	580 0	14 0	< 10 U
MW-58	MW-58-20081211-FS	12/11/2008	N	530	12	< 5 U
MW-58	DUP-1-20081211-FD	12/11/2008	FD	510	13	< 5 U
MW-58	MW-58-20090425-FS	4/25/2009	N	590	14	< 5 U
MW-58	DUP-1-20090425-FD	4/25/2009	FD	580	15	< 5 U
MW-58	MW-58-20091028-FS	10/28/2009	N	480	11	< 5 U
MW-58	DUP-2-20091028-FD	10/28/2009	FD	480	11	< 5 U
MW-58	MW-58-20100512-FS	5/12/2010	N	660	14	< 5 U
MW-58	DUP-02-20101106-FD	11/6/2010	FD	560	11	< 5 U
MW-58	MW-58-20101106-FS	11/6/2010	N	580	12	< 5 U
MW-58	MW-58-20110324-FS	3/24/2011	N	710	12	< 5 U
MW-58	DUP-1-20110324-FD	3/24/2011	FD	700	14	1.1 J

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-58	MW-58-20121020	10/20/2012	N	440	18	0.84 J
MW-58	MW-58-101713	10/17/2013	N	410	13	1.5 J
MW-58	MW-58-101713-FD	10/17/2013	FD	420	12	1.1 J
MW-58	MW-58-201403	3/7/2014	N	293	22.3	0.93 J
MW-58	MW-58-201405	5/12/2014	N	397	12.1	0.72 J
MW-58	MW-58-201407	7/29/2014	N	399	12.7	0.76 J
MW-58	MW-58-201410	10/15/2014	N	360	10.8	0.68 J
MW-58	MW-58-201501	1/14/2015	N	385	14.7	0.71 J
MW-58	MW-58-201504	4/16/2015	N	356	19.7	1.5
MW-58R	MW-58R-201507	7/21/2015	N	337	9.5	0.57 J
MW-58R	MW-58R-201510	10/8/2015	N	299	10.5	0.55 J
MW-58R	MW-58R-201601	1/12/2016	N	312	28.7	0.67 J
MW-58R	DUP-10-201601	1/12/2016	FD	319	29.4	0.66 J
MW-58R	MW-58R-201605	5/4/2016	N	352	29.7	0.81 J
MW-58R	DUP-04-201605	5/4/2016	FD	308	25.2	0.64 J
MW-58R	MW-58R-201611	11/10/2016	N	< 1.0 U	28.5	0.85 J
MW-58R	MW-58R-201612	12/14/2016	N	265	30.3	0.61 J
MW-58R	MW-58R-201710	10/24/2017	N	360	10.0	0.65 J
MW-58R	MW-58R-201811	11/15/2018	N	312	10.2	0.43 J
MW-58R	DUP-05-201811	11/15/2018	FD	319	9.8	0.47 J
MW-58R	MW-58R-201904	4/25/2019	N	305	9.8	0.48 J
MW-58R	MW-58R-201910	10/23/2019	N	299	9.1	0.51 J
MW-58R	DUP-01-201910	10/23/2019	FD	311	9.6	0.55 J
MW-58R	MW-58R-202005	5/12/2020	N	258	8.7	0.50 J
MW-58R	MW-58R-202010	10/7/2020	N	298	9.7	0.61 J
MW-58R	MW-58R-202110	10/21/2021	N	208	8.2	< 5.0 U
MW-58R	MW-58R-202210_4073	10/20/2022	N	226	6.9	0.45 J
MW-58R	MW-58R-202310	10/19/2023	N	218	7.3	0.42 J
MW-60	MW-60-20050401-FS	4/1/2005	N	< 5 U	< 5 U	< 10 U
MW-60	MW-60-20050930-FS	9/30/2005	N	< 5 U	< 5 U	< 10 U
MW-60	MW-60-20060317-FS	3/17/2006	N	< 5 U	< 5 U	< 10 U
MW-60	MW-60-20061012-FS	10/12/2006	N	< 5 U	< 5 U	< 10 U
MW-60	MW-60-20070419-FS	4/19/2007	N	< 5 U	< 5 U	< 10 U
MW-60	MW-60-20070919-FS	9/19/2007	N	< 5 U	< 5 U	< 10 U
MW-60	MW-60-20080429-FS	4/29/2008	N	< 5 U	< 5 U	< 10 U
MW-60	MW-60-20081210-FS	12/10/2008	N	< 5 U	< 5 U	< 5 U
MW-60	MW-60-20090424-FS	4/24/2009	N	< 5 U	< 5 U	< 5 U
MW-60	MW-60-20091027-FS	10/27/2009	N	< 5 U	< 5 U	< 5 U
MW-60	MW-60-20100511-FS	5/11/2010	N	< 5 U	< 5 U	< 5 U
MW-60	MW-60-20101104-FS	11/4/2010	N	< 5 U	< 5 U	< 5 U
MW-60	MW-60-20110323-FS	3/23/2011	N	< 5 U	< 5 U	< 5 U
MW-60	MW-60-20111025-FS	10/25/2011	N	< 5 U	< 5 U	< 5 U
MW-60	MW-60-20121017	10/17/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-60	MW-60-101513	10/15/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-60	MW-60-201403	3/6/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-60	MW-60-201405	5/13/2014	N	0.21 J	< 5.0 U	< 2.0 U
MW-60	MW-60-201407	7/28/2014	N	1.0 J	< 5.0 U	< 2.0 U
MW-60	MW-60-201410	10/14/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-60	MW-60-201501	1/13/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-60	MW-60-201504	4/14/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-60R	MW-60R-201507	7/21/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-60R	MW-60R-201510	10/6/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-60R	MW-60R-201601	1/11/2016	N	0.22 J	< 1.0 U	< 1.0 U
MW-60R	MW-60R-201605	5/2/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-60R	MW-60R-201611	11/8/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-60R	MW-60R-201704	4/26/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-60R	MW-60R-201710	10/24/2017	N	0.83 J	< 1.0 U	< 1.0 U
MW-60R	MW-60R-201804	4/17/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-60R	MW-60R-201811	11/14/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-60R	MW-60R-201904	4/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-60R	MW-60R-201910	10/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-60R	MW-60R-202005	5/12/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-60R	MW-60R-202010	10/6/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-60R	MW-60R-202104	4/13/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-60R	MW-60R-202110	10/19/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-60R	MW-60R-202204	4/12/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-60R	MW-60R-202210	10/17/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-60R	MW-60R-202304	4/18/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-60R	MW-60R-202310	10/16/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-61	MW-61-20050401-FS	4/1/2005	N	< 5 U	< 5 U	< 10 U
MW-61	DUP-041005-20050401-FD	4/1/2005	FD	< 5 U	< 5 U	< 10 U
MW-61	MW-61-20050930-FS	9/30/2005	N	< 5 U	< 5 U	< 10 U
MW-61	MW-61-20060317-FS	3/17/2006	N	< 5 U	< 5 U	< 10 U
MW-61	MW-61-20061012-FS	10/12/2006	N	< 5 U	< 5 U	< 10 U
MW-61	MW-61-20070419-FS	4/19/2007	N	< 5 U	< 5 U	< 10 U
MW-61	MW-61-20070919-FS	9/19/2007	N	< 5 U	< 5 U	< 10 U
MW-61	MW-61-20080429-FS	4/29/2008	N	< 5 U	< 5 U	< 10 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-61	MW-61-20081210-FS	12/10/2008	N	< 5 U	< 5 U	< 5 U
MW-61	MW-61-20090424-FS	4/24/2009	N	4 J	< 5 U	< 5 U
MW-61	MW-61-20091027-FS	10/27/2009	N	< 5 U	< 5 U	< 5 U
MW-61	MW-61-20100511-FS	5/11/2010	N	< 5 U	< 5 U	< 5 U
MW-61	MW-61-20101104-FS	11/4/2010	N	< 5 U	< 5 U	< 5 U
MW-61	MW-61-20110323-FS	3/23/2011	N	1.8 J	< 5 U	< 5 U
MW-61	MW-61-20111025-FS	10/25/2011	N	< 5 U	< 5 U	< 5 U
MW-61	MW-61-20121017	10/17/2012	N	2.4 J	< 5.0 U	< 2.0 U
MW-61	MW-61-101613	10/16/2013	N	4.0 J	< 5.0 U	< 2.0 U
MW-61	MW-61-201403	3/6/2014	N	4.7 J	< 5.0 U	< 2.0 U
MW-61	MW-61-201405	5/13/2014	N	6.6	< 5.0 U	< 2.0 U
MW-61	MW-61-201407	7/28/2014	N	8.1	< 5.0 U	< 2.0 U
MW-61	MW-61-201410	10/14/2014	N	7.9	< 5.0 U	< 2.0 U
MW-61	MW-61-201501	1/13/2015	N	10.2	< 1.0 U	< 1.0 U
MW-61	MW-61-201504	4/14/2015	N	10.9	< 1.0 U	< 1.0 U
MW-61R	MW-61R-201507	7/21/2015	N	14.7	< 1.0 U	< 1.0 U
MW-61R	MW-61R-GW-091815	9/18/2015	N	16.5	< 1.0 U	< 1.0 U
MW-61R	MW-61R-201510	10/8/2015	N	11.7	< 1.0 U	< 1.0 U
MW-61R	DUP-02-201510	10/8/2015	FD	13.3	< 1.0 U	< 1.0 U
MW-61R	MW-61R-201511	11/4/2015	N	9.2	1.1	< 1.0 U
MW-61R	MW-61R-201512	12/1/2015	N	5.0	4.6	< 1.0 U
MW-61R	MW-61R-201601	1/8/2016	N	3.9	4.6	< 1.0 U
MW-61R	MW-61R-201605	5/3/2016	N	5.3	3.8	< 1.0 U
MW-61R	MW-61R-201611	11/7/2016	N	2.3	2.9	< 1.0 U
MW-61R	MW-61R-201704	4/27/2017	N	2.4	2.6	< 1.0 U
MW-61R	MW-61R-201710	10/23/2017	N	2.9	2.1	< 1.0 U
MW-61R	MW-61R-201804	4/17/2018	N	4.0	1.9	< 1.0 U
MW-61R	MW-61R-201807	7/31/2018	N	7.0	1.8	< 1.0 U
MW-61R	MW-61R-201811	11/13/2018	N	7.7	1.9	< 1.0 U
MW-61R	DUP-06-201811	11/13/2018	FD	7.7	1.8	< 1.0 U
MW-61R	MW-61R-201904	4/25/2019	N	14.9	1.1	< 1.0 U
MW-61R	MW-61R-201910	10/23/2019	N	20.8	1.7	< 1.0 U
MW-61R	MW-61R-202005	5/14/2020	N	15.6	1.0	< 1.0 U
MW-61R	MW-61R-202010	10/6/2020	N	15.8	1.1	< 1.0 U
MW-61R	MW-61R-202104	4/14/2021	N	15.3	1.3	< 1.0 U
MW-61R	DUP-10-202104	4/14/2021	FD	14.2	1.3	< 1.0 U
MW-61R	MW-61R-202110	10/20/2021	N	6.9	2.0	0.53 J
MW-61R	MW-61R-202204	4/13/2022	N	9.1	2.1	0.79 J
MW-61R	MW-61R-202210_3699	10/19/2022	N	2.8	2.0	1.4
MW-61R	MW-61R-202304	4/18/2023	N	5.0	2.0	1.2
MW-61R	DUP-07-202304	4/18/2023	FD	4.9	2.0	1.2
MW-61R	MW-61R-202310	10/18/2023	N	1.7	1.3	1.7
MW-62	MW-62-20050401-FS	4/1/2005	N	< 5 U	< 5 U	< 10 U
MW-62	MW-62-20050930-FS	9/30/2005	N	< 5 U	< 5 U	< 10 U
MW-62	MW-62-20060316-FS	3/16/2006	N	< 5 U	< 5 U	< 10 U
MW-62	MW-62-20061012-FS	10/12/2006	N	< 5 U	< 5 U	< 10 U
MW-62	MW-62-20070419-FS	4/19/2007	N	< 5 U	< 5 U	< 10 U
MW-62	MW-62-20070919-FS	9/19/2007	N	< 5 U	< 5 U	< 10 U
MW-62	MW-62-20080429-FS	4/29/2008	N	< 5 U	< 5 U	< 10 U
MW-62	MW-62-20081210-FS	12/10/2008	N	< 5 U	< 5 U	< 5 U
MW-62	MW-62-20090424-FS	4/24/2009	N	< 5 U	< 5 U	< 5 U
MW-62	MW-62-20091027-FS	10/27/2009	N	< 5 U	< 5 U	< 5 U
MW-62	MW-62-20100511-FS	5/11/2010	N	< 5 U	< 5 U	< 5 U
MW-62	MW-62-20110323-FS	3/23/2011	N	< 5 U	< 5 U	< 5 U
MW-62	MW-62-20111025-FS	10/25/2011	N	1.9 J	< 5 U	< 5 U
MW-62	MW-62-20121017	10/17/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-62	MW-62-101713	10/17/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-62	MW-62-201403	3/7/2014	N	0.18 J	< 5.0 U	< 2.0 U
MW-62	MW-62-201405	5/14/2014	N	0.62 J	< 5.0 U	< 2.0 U
MW-62	MW-62-201407	7/29/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-62	MW-62-201410	10/14/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-62	MW-62-201501	1/13/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-62	MW-62-201504	4/14/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-62R	MW-62R-201507	7/21/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-62R	MW-62R-201510	10/6/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-62R	MW-62R-201601	1/11/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-62R	MW-62R-201605	5/3/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-62R	MW-62R-201611	11/7/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-62R	MW-62R-201704	4/26/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-62R	FD-02-201710	10/24/2017	FD	< 1.0 U	< 1.0 U	< 1.0 U
MW-62R	MW-62R-201710	10/25/2017	N	< 1.0 U	0.17 J	< 1.0 U
MW-62R	MW-62R-201804	4/17/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-62R	MW-62R-201811	11/14/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-62R	MW-62R-201904	4/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-62R	MW-62R-201910	10/22/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-62R	MW-62R-202005	5/12/2020	N	0.21 J	< 1.0 U	< 1.0 U
MW-62R	MW-62R-202010	10/6/2020	N	< 1.0 U	< 1.0 U	< 1.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-62R	MW-62R-202104	4/12/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-62R	MW-62R-202110	10/18/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-62R	MW-62R-202204	4/12/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-62R	MW-62R-202210	10/17/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-62R	MW-62R-202304	4/18/2023	N	0.23 J	< 1.0 U	< 1.0 U
MW-62R	MW-62R-202310	10/16/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-63	MW-63-20050401-FS	4/1/2005	N	8.14	< 5 U	< 10 U
MW-63	MW-63-20050930-FS	9/30/2005	N	< 5 U	< 5 U	< 10 U
MW-63	MW-63-20060316-FS	3/16/2006	N	9.76	< 5 U	< 10 U
MW-63	MW-63-20060406-FS	4/6/2006	N	11.6	< 5 U	< 10 U
MW-63	MW-63-20061012-FS	10/12/2006	N	4 J	< 5 U	< 10 U
MW-63	MW-63-20070419-FS	4/19/2007	N	4.08 J	< 5 U	< 10 U
MW-63	MW-63-20070919-FS	9/19/2007	N	8	< 5 U	< 10 U
MW-63	MW-63-20080430-FS	4/30/2008	N	3 J	< 5 U	< 10 U
MW-63	MW-63-20081210-FS	12/10/2008	N	< 5 U	< 5 U	< 5 U
MW-63	MW-63-20090424-FS	4/24/2009	N	4.3 J	< 5 U	< 5 U
MW-63	MW-63-20091027-FS	10/27/2009	N	7.7	< 5 U	< 5 U
MW-63	MW-63-20100511-FS	5/11/2010	N	7.6	< 5 U	< 5 U
MW-63	MW-63-20101106-FS	11/6/2010	N	11	< 5 U	< 5 U
MW-63	MW-63-20110323-FS	3/23/2011	N	12	< 5 U	< 5 U
MW-63	MW-63-20111025-FS	10/25/2011	N	9.8	< 5 U	< 5 U
MW-63	MW-63-20121019	10/19/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-63	MW-63-101713	10/17/2013	N	7.5	< 5.0 U	< 2.0 U
MW-63	MW-63-201403	3/7/2014	N	9.4	1.3 J	< 2.0 U
MW-63	MW-63-201405	5/14/2014	N	12.2	0.61 J	0.13 J
MW-63	MW-63-201407	7/28/2014	N	8.3	0.99 J	< 2.0 U
MW-63	MW-63-201410	10/14/2014	N	9.4	0.98 J	< 2.0 U
MW-63	MW-63-201501	1/13/2015	N	8.2	1.0	< 1.0 U
MW-63	MW-63-201504	4/14/2015	N	9.2	0.99 J	< 1.0 U
MW-63R	MW-63R-201507	7/21/2015	N	5.6	0.70 J	< 1.0 U
MW-63R	MW-63R-201510	10/8/2015	N	3.9	0.70 J	< 1.0 U
MW-63R	MW-63R-201601	1/12/2016	N	3.2	0.39 J	< 1.0 U
MW-63R	MW-63R-201605	5/2/2016	N	3.3	0.55 J	< 1.0 U
MW-63R	MW-63R-201611	11/7/2016	N	2.9	0.21 J	< 1.0 U
MW-63R	MW-63R-201704	4/26/2017	N	3.8 B	< 1.0 U	< 1.0 U
MW-63R	MW-63R-201710	10/23/2017	N	4.4	0.85 J	< 1.0 U
MW-63R	MW-63R-201804	4/17/2018	N	4.8	0.44 J	< 1.0 U
MW-63R	DUP-01-201804	4/17/2018	FD	4.9	0.38 J	< 1.0 U
MW-63R	MW-63R-201811	11/14/2018	N	4.5	0.66 J	< 1.0 U
MW-63R	MW-63R-201904	4/23/2019	N	4.1	0.52 J	< 1.0 U
MW-63R	MW-63R-201910	10/22/2019	N	7.4	0.59 J	< 1.0 U
MW-63R	MW-63R-202005	5/12/2020	N	7.2	0.76 J	< 1.0 U
MW-63R	MW-63R-202010	10/6/2020	N	7.1	0.81 J	< 1.0 U
MW-63R	MW-63R-202104	4/14/2021	N	7.9	0.86 J	< 1.0 U
MW-63R	MW-63R-202110	10/20/2021	N	3.9	0.81 J	< 1.0 U
MW-63R	MW-63R-202204	4/13/2022	N	5.5	0.89 J	< 1.0 U
MW-63R	DUP-03-202204	4/13/2022	FD	6.5	< 1.0 U	< 1.0 U
MW-63R	MW-63R-202210	10/19/2022	N	5.8	0.82 J	< 1.0 U
MW-63R	MW-63R-202304	4/19/2023	N	6.6	0.83 J	< 1.0 U
MW-63R	DUP-03-202304	4/19/2023	FD	6.4	0.94 J	< 1.0 U
MW-63R	MW-63R-202310	10/18/2023	N	7.2	0.87 J	< 1.0 U
MW-65	MW-65-20061011-FS	10/11/2006	N	470	19	< 10 U
MW-65	DUP-1-20061011-FD	10/11/2006	FD	560	18	< 10 U
MW-65	MW-65-20070419-FS	4/19/2007	N	1350	23.4	< 10 U
MW-65	MW-65-20070920-FS	9/20/2007	N	580	17	< 10 U
MW-65	MW-65-20080430-FS	4/30/2008	N	570 0	16 0	< 10 U
MW-65	MW-65-20081211-FS	12/11/2008	N	460	11	< 5 U
MW-65	MW-65-20090424-FS	4/24/2009	N	620	19	< 5 U
MW-65	MW-65-20101107-FS	11/7/2010	N	400	11	< 5 U
MW-65	MW-65-20110304-FS	3/4/2011	N	370	13	< 5.0 U
MW-65	MW-65-20111025-FS	10/25/2011	N	310	10	< 5 U
MW-65	MW-65-20121020	10/20/2012	N	280	8.9	< 2.0 U
MW-65	MW-65-101713	10/17/2013	N	220	8.6	< 2.0 U
MW-65	MW-65-20140308	3/8/2014	N	199	6.6	< 2.0 U
MW-65	MW-65-201405	5/14/2014	N	195	6.9	< 2.0 U
MW-65	MW-65-201407	7/30/2014	N	17.1	< 5.0 U	< 2.0 U
MW-65	MW-65-201410	10/14/2014	N	30.8	0.54 J	< 2.0 U
MW-65	MW-65-201501	1/13/2015	N	19.2	< 1.0 U	< 1.0 U
MW-65	MW-65-201504	4/15/2015	N	16.0	< 1.0 U	< 1.0 U
MW-65	MW-65-201507	7/20/2015	N	26.3	0.38 J	< 1.0 U
MW-65	MW-65-201510	10/7/2015	N	0.28 J	< 1.0 U	< 1.0 U
MW-65	MW-65-201511	11/4/2015	N	7.7	< 1.0 U	< 1.0 U
MW-65	MW-65-201512	12/2/2015	N	6.6	< 1.0 U	< 1.0 U
MW-65	MW-65-201601	1/11/2016	N	14.5	0.32 J	< 1.0 U
MW-65	MW-65-201605	5/3/2016	N	21.5	0.35 J	< 1.0 U
MW-66	MW-66-20060406-FS	4/6/2006	N	< 5 U	< 5 U	< 10 U
MW-66	MW-66-20061012-FS	10/12/2006	N	2 J	< 5 U	< 10 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-66	MW-66-20070418-FS	4/18/2007	N	< 5 U	< 5 U	< 10 U
MW-66	MW-66-20070919-FS	9/19/2007	N	4 J	< 5 U	< 10 U
MW-66	MW-66-20080429-FS	4/29/2008	N	< 5 U	< 5 U	< 10 U
MW-66	MW-66-20081210-FS	12/10/2008	N	< 5 U	< 5 U	< 5 U
MW-66	MW-66-20090425-FS	4/25/2009	N	< 5 U	< 5 U	< 5 U
MW-66	MW-66-20091028-FS	10/28/2009	N	< 5 U	< 5 U	< 5 U
MW-66	MW-66-20100511-FS	5/11/2010	N	< 5 U	< 5 U	< 5 U
MW-66	MW-66-20101103-FS	11/3/2010	N	< 5 U	< 5 U	< 5 U
MW-66	MW-66-20110324-FS	3/24/2011	N	1.6 J	< 5 U	< 5 U
MW-66	MW-66-20111026-FS	10/26/2011	N	1.8 J	< 5 U	< 5 U
MW-66	MW-66-20121017	10/17/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-66	MW-66-101713	10/17/2013	N	2.1 J	< 5.0 U	< 2.0 U
MW-66	MW-66-201403	3/7/2014	N	3.5 J	< 5.0 U	< 2.0 U
MW-66	MW-66-201405	5/13/2014	N	3.1 J	< 5.0 U	< 2.0 U
MW-66	MW-66-201407	7/28/2014	N	2.6 J	< 5.0 U	< 2.0 U
MW-66	MW-66-201410	10/13/2014	N	2.3 J	< 5.0 U	< 2.0 U
MW-66	MW-66-201501	1/14/2015	N	2.4	< 1.0 U	< 1.0 U
MW-66	MW-66-201504	4/15/2015	N	2.6	< 1.0 U	< 1.0 U
MW-66	MW-66-201507	7/20/2015	N	3.3	0.22 J	< 1.0 U
MW-66	MW-66-201510	10/6/2015	N	2.3	0.18 J	< 1.0 U
MW-66	MW-66-201601	1/11/2016	N	0.53 J	< 1.0 U	< 1.0 U
MW-66	MW-66-201605	5/2/2016	N	2.6	0.20 J	< 1.0 U
MW-67	MW-67-20060406-FS	4/6/2006	N	< 5 U	< 5 U	< 10 U
MW-67	MW-67-20061012-FS	10/12/2006	N	1 J	< 5 U	< 10 U
MW-67	MW-67-20070419-FS	4/19/2007	N	< 5 U	< 5 U	< 10 U
MW-67	MW-67-20070918-FS	9/18/2007	N	< 5 U	< 5 U	< 10 U
MW-67	MW-67-20080429-FS	4/29/2008	N	< 5 U	< 5 U	< 10 U
MW-67	MW-67-20081210-FS	12/10/2008	N	< 5 U	< 5 U	< 5 U
MW-67	MW-67-20090425-FS	4/25/2009	N	< 5 U	< 5 U	< 5 U
MW-67	MW-67-20091028-FS	10/28/2009	N	< 5 U	< 5 U	< 5 U
MW-67	MW-67-20100511-FS	5/11/2010	N	< 5 U	< 5 U	< 5 U
MW-67	MW-67-20101103-FS	11/3/2010	N	< 5 U	< 5 U	< 5 U
MW-67	MW-67-20110324-FS	3/24/2011	N	< 5 U	< 5 U	< 5 U
MW-67	MW-67-20111026-FS	10/26/2011	N	< 5 U	< 5 U	< 5 U
MW-67	MW-67-20121017	10/17/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-67	MW-67-101713	10/17/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-67	MW-67-201403	3/7/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-67	MW-67-201405	5/13/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-67	MW-67-201407	7/28/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-67	MW-67-201410	10/13/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-67	MW-67-201501	1/12/2015	N	1.3	< 1.0 U	< 1.0 U
MW-67	MW-67-201504	4/15/2015	N	0.77 J	< 1.0 U	< 1.0 U
MW-67R	MW-67R-201507	7/20/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-67R	MW-67R-201510	10/6/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-67R	MW-67R-201601	1/11/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-67R	MW-67R-201605	5/2/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-68	MW-68-20090115-FS	1/15/2009	N	< 5 U	< 5 U	< 5 U
MW-68	MW-68-20090424-FS	4/24/2009	N	< 5 U	< 5 U	< 5 U
MW-68	MW-68-20091028-FS	10/28/2009	N	< 5 U	< 5 U	< 5 U
MW-68	MW-68-20100513-FS	5/13/2010	N	< 5 U	< 5 U	< 5 U
MW-68	MW-68-20101106-FS	11/6/2010	N	9.5	< 5 U	< 5 U
MW-68	MW-68-20111026-FS	10/26/2011	N	< 5 U	< 5 U	< 5 U
MW-68	MW-68-20121017	10/17/2012	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-68	MW-68-101613	10/16/2013	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-68	MW-68-201403	3/6/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-68	MW-68-201405	5/14/2014	N	0.49 J	< 5.0 U	< 2.0 U
MW-68	MW-68-201407	7/29/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-68	MW-68-201410	10/14/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-68	MW-68-201501	1/12/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-68	MW-68-201504	4/13/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-68	MW-68-201507	7/20/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-68	MW-68-201510	10/6/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-68	MW-68-201601	1/12/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-68	MW-68-201605	5/2/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-68	MW-68-201611	11/7/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-68	MW-68-201704	4/27/2017	N	0.22 J	< 1.0 U	< 1.0 U
MW-68	MW-68-201710	10/24/2017	N	0.31 J	< 1.0 U	< 1.0 U
MW-68	MW-68-201804	4/17/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-68	MW-68-201811	11/13/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-68	MW-68-201904	4/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-68	MW-68-201910	10/22/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-68	MW-68-202005	5/12/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-68	MW-68-202010	10/6/2020	N	0.57 J	< 1.0 U	< 1.0 U
MW-68	MW-68-202104	4/13/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-68	MW-68-202110	10/19/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-68	MW-68-202204	4/12/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-68	MW-68-202210	10/18/2022	N	< 1.0 U	< 1.0 U	< 1.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-68	MW-68-202304	4/17/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-68	MW-68-202310	10/16/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-70	MW-70-20101104-FS	11/4/2010	N	540	14	< 5 U
MW-70	MW-70-20110322-FS	3/22/2011	N	170	9.2	1.2 J
MW-70	MW-70-20111026-FS	10/26/2011	N	320	7.7	< 5 U
MW-70	MW-70-20120418-FS	4/18/2012	N	330	11	< 5 U
MW-70	MW-70-20121018	10/18/2012	N	200	11	< 2.0 U
MW-70	MW-70-20130423	4/23/2013	N	180	3.6 J	0.32 J
MW-70	MW-70-101613	10/16/2013	N	270	7.2	0.30 J
MW-71	MW-71-20091028-FS	10/28/2009	N	190	6.3	< 5 U
MW-71	MW-71-20100513-FS	5/13/2010	N	160	7.4	< 5 U
MW-71	MW-71-20101104-FS	11/4/2010	N	250	7.2	< 5 U
MW-71	MW-71-20110322-FS	3/22/2011	N	76	1.6 J	< 5 U
MW-71	MW-71-20111026-FS	10/26/2011	N	130	2.7 J	< 5 U
MW-71	MW-71-20120418-FS	4/18/2012	N	160	5.3	< 5 U
MW-71	MW-71-20121020	10/20/2012	N	210	7.3	< 2.0 U
MW-71	MW-71-20130423	4/23/2013	N	220	4.8 J	0.23 J
MW-71	MW-71-101613	10/16/2013	N	160	6.1	0.57 J
MW-71	MW-71-201403	3/7/2014	N	166	5.8	0.19 J
MW-71	MW-71-201405	5/13/2014	N	164	5.3	0.33 J
MW-71	MW-71-201407	7/29/2014	N	181	6.4	< 2.0 U
MW-71	MW-71-201410	10/14/2014	N	185	6.0	< 2.0 U
MW-71	MW-71-201501	1/14/2015	N	170	6.0	< 1.0 U
MW-71	MW-71-201504	4/14/2015	N	156	5.7	< 1.0 U
MW-71	MW-71-201507	7/20/2015	N	165	5.3	0.48 J
MW-71	MW-71-201510	10/6/2015	N	179	6.5	0.43 J
MW-71	MW-71-201601	1/11/2016	N	171	6.1	0.40 J
MW-71	MW-71-201605	5/3/2016	N	140	5.3	0.23 J
MW-81	MW-81-201405	5/29/2014	N	512	14.3	0.21 J
MW-81	20140708-GW-MW-81	7/9/2014	N	518	11.4	< 2.0 U
MW-81	MW-81-201409	9/11/2014	N	463	13.5	< 2.0 U
MW-81	MW-81-201501	1/13/2015	N	385	9.9	< 1.0 U
MW-81	MW-81-201504	4/15/2015	N	198	4.2	< 1.0 U
MW-81	MW-81-201507	7/22/2015	N	275	7.7	< 1.0 U
MW-81	MW-81-201510	10/8/2015	N	160	3.8	< 1.0 U
MW-81	MW-81-201511	11/5/2015	N	233	6.5	< 1.0 U
MW-81	MW-81-201512	12/2/2015	N	56.1	0.84 J	< 1.0 U
MW-81	MW-81-201601	1/11/2016	N	157	3.9	< 1.0 U
MW-81	MW-81-201605	5/4/2016	N	256	8.3	< 1.0 U
MW-82	MW-82-201405	5/28/2014	N	285	4.8 J	0.14 J
MW-82	20140708-GW-MW-82	7/9/2014	N	48.2	1.2 J	< 2.0 U
MW-82	MW-82-201409	9/11/2014	N	50.0	1.1 J	< 2.0 U
MW-82	MW-82-201501	1/13/2015	N	66.0	1.2	< 1.0 U
MW-82	MW-82-201504	4/15/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-82	MW-82-201507	7/22/2015	N	5.3	< 1.0 U	< 1.0 U
MW-82	MW-82-201510	10/6/2015	N	4.2	< 1.0 U	< 1.0 U
MW-82	MW-82-201601	1/11/2016	N	5.6	0.18 J	< 1.0 U
MW-82	MW-82-201605	5/4/2016	N	31.7	0.81 J	< 1.0 U
MW-82	MW-82-201611	11/9/2016	N	36.2	0.24 J	< 1.0 U
MW-82	MW-82-201710	10/24/2017	N	34.3	0.80 J	< 1.0 U
MW-82	FD-03-201710	10/24/2017	FD	34.1	0.80 J	< 1.0 U
MW-82	MW-82-201811	11/15/2018	N	60.3	1.2	< 1.0 U
MW-82	MW-82-201910	10/23/2019	N	55.6	1.1	< 1.0 U
MW-82	DUP-02-201910	10/23/2019	FD	55.9	0.99 J	< 1.0 U
MW-82	MW-82-202010	10/7/2020	N	55.1	1.3	< 1.0 U
MW-82	MW-82-202110	10/22/2021	N	40.0	0.83 J	< 1.0 U
MW-82	MW-82-202210	10/19/2022	N	34.7	0.62 J	< 1.0 U
MW-82	MW-82-202310	10/18/2023	N	31.5	0.67 J	< 1.0 U
MW-83	MW-83-20140523	5/23/2014	N	470	8.3	< 2.0 U
MW-83	MW-83-201409	9/12/2014	N	213	4.9 J	< 2.0 U
MW-83	MW-83-20141023	10/23/2014	N	210	5.2	< 2.0 U
MW-83	MW-83-201501	1/15/2015	N	101	1.8	< 1.0 U
MW-83	MW-83-201504	4/16/2015	N	151	2.8	< 1.0 U
MW-83	MW-83-201507	7/22/2015	N	27.9	0.49 J	< 1.0 U
MW-83	MW-83-201510	10/8/2015	N	9.8	0.25 J	< 1.0 U
MW-83	MW-83-201511	11/5/2015	N	3.2	< 1.0 U	< 1.0 U
MW-83	MW-83-201512	12/2/2015	N	1.3	< 1.0 U	< 1.0 U
MW-83	MW-83-201601	1/7/2016	N	1.1	< 1.0 U	< 1.0 U
MW-83	MW-83-201605	5/4/2016	N	3.3	< 1.0 U	< 1.0 U
MW-83	MW-83-201611	11/9/2016	N	0.63 J	< 1.0 U	< 1.0 U
MW-83	MW-83-201710	10/25/2017	N	4.8	< 1.0 U	< 1.0 U
MW-83	MW-83-201811	11/14/2018	N	34.2	0.63 J	< 1.0 U
MW-83	MW-83-201910	10/24/2019	N	41.9	0.85 J	< 1.0 U
MW-83	MW-83-202010	10/7/2020	N	40.5	0.81 J	< 1.0 U
MW-83	DUP-01-202010	10/7/2020	FD	40.9	0.82 J	< 1.0 U
MW-83	MW-83-202110	10/20/2021	N	27.8	0.52 J	< 1.0 U
MW-83	MW-83-202210	10/19/2022	N	28.1	0.54 J	< 1.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-83	MW-83-202310	10/18/2023	N	27.5	0.54 J	< 1.0 U
MW-84	MW-84-201405	5/27/2014	N	214	4.6 J	0.16 J
MW-84	MW-84-201409A	9/12/2014	N	0.93 J	< 5.0 U	< 2.0 U
MW-84	MW-84-20141023	10/23/2014	N	0.68 J	< 5.0 U	< 2.0 U
MW-84	MW-84-201501	1/14/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-84	MW-84-201504	4/16/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-84	MW-84-201507	7/23/2015	N	0.29 J	< 1.0 U	< 1.0 U
MW-84	MW-84-201510	10/7/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-84	MW-84-201601	1/7/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-84	MW-84-201605	5/5/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-84	MW-84-201611	11/9/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-84	MW-84-201704	4/27/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-84	MW-84-201710	10/25/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-84	MW-84-201804	4/18/2018	N	0.54 J	< 1.0 U	< 1.0 U
MW-84	MW-84-201811	11/14/2018	N	1.5	< 1.0 U	< 1.0 U
MW-84	MW-84-201904	4/23/2019	N	0.61 J	< 1.0 U	< 1.0 U
MW-84	DUP-01-201904	4/23/2019	FD	0.69 J	< 1.0 U	< 1.0 U
MW-84	MW-84-201910	10/23/2019	N	2.4	< 1.0 U	< 1.0 U
MW-84	MW-84-202005	5/13/2020	N	1.7	< 1.0 U	< 1.0 U
MW-84	MW-84-202010	10/6/2020	N	1.6	< 1.0 U	< 1.0 U
MW-84	MW-84-20201020	10/20/2020	N	1.7	< 1.0 U	< 1.0 U
MW-84	MW-84-202104	4/13/2021	N	1.4	< 1.0 U	< 1.0 U
MW-84	MW-84-202110	10/21/2021	N	7.8	< 1.0 U	< 1.0 U
MW-84	MW-84-202204	4/13/2022	N	1.8	< 1.0 U	< 1.0 U
MW-84	MW-84-202210	10/19/2022	N	2.2	< 1.0 U	< 1.0 U
MW-84	MW-84-202304	4/19/2023	N	2.4	< 1.0 U	< 1.0 U
MW-84	MW-84-202310	10/18/2023	N	2.7	< 1.0 U	< 1.0 U
MW-85	MW-85-201405	5/29/2014	N	1970	99.4	23.1
MW-85	20140708-GW-MW-85	7/8/2014	N	3780	133	3.9
MW-85	MW-85-201409	9/11/2014	N	5820	226 J	35.3
MW-85	MW-85-20141205	12/5/2014	N	27700	280	7.7
MW-85	MW-85-201501	1/15/2015	N	5940	167	1.1
MW-85	MW-85-201504	4/16/2015	N	256	16.8	< 1.0 U
MW-85	MW-85-201507	7/23/2015	N	132	6.3	< 1.0 U
MW-85	MW-85-201510	10/8/2015	N	12000	52.6	1.8
MW-85	MW-85-201601	1/13/2016	N	6980	32.8	0.70 J
MW-85	MW-85-201605	5/5/2016	N	678	12.0	0.82 J
MW-85R	MW-85R-201910	10/24/2019	N	68300	103	4.5
MW-85R	DUP-09-201910	10/24/2019	FD	74500	101	4.8
MW-85R	MW-85R-202010	10/8/2020	N	4860	76.0	1.7
MW-86	MW-86-201405	5/29/2014	N	533000	1220 J	341 J
MW-86	MW-86-201409	9/11/2014	N	129000	91.6	4.1
MW-86	MW-86-20141205	12/5/2014	N	169000	290 E	24.7
MW-86	MW-86-201501	1/15/2015	N	81200	128	4.5
MW-86	MW-86-201504	4/16/2015	N	46700	128	5.8
MW-86	MW-86-201507	7/23/2015	N	65100	292 J	46.7
MW-86	MW-86-201510	10/8/2015	N	131000	1020	127
MW-86	MW-86-201601	1/13/2016	N	95500	610 J	57.1
MW-86	MW-86-201605	5/5/2016	N	64900	348 J	35.7
MW-86	MW-86-201611	11/9/2016	N	75100	< 1000 U	65.4 J
MW-86	MW-86-201704	4/28/2017	N	29900	1330	< 1.0 U
MW-86	MW-86-201710	10/26/2017	N	61300	2210	< 1000 U
MW-86	MW-86-201804	4/19/2018	N	61200	2450	171
MW-86	MW-86-201811	11/16/2018	N	188000	19500	2780
MW-86	MW-86-201904	4/25/2019	N	75000	4350	264 J
MW-87	20140625-GW-MW-87	6/25/2014	N	564	41.8	< 2.0 U
MW-87	MW-87-201410	10/16/2014	N	594	47.8	< 2.0 U
MW-87	MW-87-201501	1/14/2015	N	661	51.3	< 1.0 U
MW-87	MW-87-201504	4/16/2015	N	758	58.6	0.33 J
MW-87	MW-87-201507	7/23/2015	N	758	56.5	0.34 J
MW-87	MW-87-201510	10/7/2015	N	708	54.5	0.31 J
MW-87	MW-87-201601	1/13/2016	N	757	61.9	0.47 J
MW-87	DUP-09-201601	1/13/2016	FD	781	63.2	0.40 J
MW-87	MW-87-201605	5/5/2016	N	839	51.6	0.36 J
MW-87	MW-87-201611	11/8/2016	N	701 J	51.9	0.25 J
MW-87	DUP-05-201611	11/8/2016	FD	948 J	49.0	0.39 J
MW-87	MW-87-201710	10/26/2017	N	486	36.4	< 1.0 U
MW-87	MW-87-201811	11/15/2018	N	397	28.3	0.77 J
MW-87	MW-87-201910	10/23/2019	N	315	22.4	0.21 J
MW-87	MW-87-202010	10/8/2020	N	320	22.3	< 1.0 U
MW-87	MW-87-202104	4/15/2021	N	233	18.0	< 1.0 U
MW-87	MW-87-202110	10/21/2021	N	276	20.6	0.17 J
MW-87	MW-87-202204	4/14/2022	N	330	20.3	< 1.0 U
MW-87	MW-87-202210_4073	10/20/2022	N	242	20.9	< 1.0 U
MW-87	MW-87-202304	4/20/2023	N	219	17.4	< 1.0 U
MW-87	MW-87-202310	10/18/2023	N	257	14.8	< 1.0 U
MW-88	20140624-GW-MW-88	6/24/2014	N	< 5.0 U	< 5.0 U	< 2.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-88	MW-88-201410	10/16/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-88	MW-88-201501	1/13/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-88	MW-88-201504	4/16/2015	N	0.58 J	< 1.0 U	< 1.0
MW-88	MW-88-201507	7/23/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-88	MW-88-201510	10/7/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-88	MW-88-201601	1/12/2016	N	0.58 J	< 1.0 U	< 1.0 U
MW-88	MW-88-201605	5/4/2016	N	0.25 J	< 1.0 U	< 1.0 U
MW-89	20140624-GW-MW-89	6/24/2014	N	19.5	< 5.0 U	< 2.0 U
MW-89	MW-89-201410	10/15/2014	N	11.3	< 5.0 U	< 2.0 U
MW-89	MW-89-201501	1/13/2015	N	11.4	< 1.0 U	< 1.0 U
MW-89	MW-89-201504	4/16/2015	N	15.9	< 1.0 U	< 1.0
MW-89	MW-89-201507	7/23/2015	N	14.5	0.18 J	< 1.0 U
MW-89	MW-89-201510	10/7/2015	N	12.7	0.24 J	< 1.0 U
MW-89	MW-89-201601	1/12/2016	N	11.6	0.20 J	< 1.0 U
MW-89	MW-89-201605	5/3/2016	N	14.0	0.30 J	< 1.0 U
MW-89	MW-89-201611	11/8/2016	N	13.4	< 1.0 U	< 1.0 U
MW-89	MW-89-201710	10/26/2017	N	11.3	0.48 J	< 1.0 U
MW-89	MW-89-201811	11/14/2018	N	9.7	0.53 J	< 1.0 U
MW-89	MW-89-201910	10/22/2019	N	9.0	0.51 J	< 1.0 U
MW-89	MW-89-202010	10/8/2020	N	6.4	0.48 J	< 1.0 U
MW-89	MW-89-202110	10/20/2021	N	3.9	0.30 J	< 1.0 U
MW-89	MW-89-202210_3494	10/18/2022	N	4.8	0.25 J	< 1.0 U
MW-89	MW-89-202310	10/17/2023	N	4.6	0.30 J	< 1.0 U
MW-90	20140625-GW-MW-90	6/25/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-90	MW-90-201410	10/16/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-90	MW-90-201501	1/12/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-90	MW-90-201504	4/15/2015	N	< 1.0 U	< 1.0 U	< 1.0
MW-90	MW-90-201507	7/22/2015	N	0.38 J	< 1.0 U	< 1.0 U
MW-90	MW-90-201510	10/7/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-90	MW-90-201601	1/12/2016	N	0.25 J	< 1.0 U	< 1.0 U
MW-90	MW-90-201605	5/4/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-91	20140625-GW-MW-91	6/25/2014	N	234	21.7	< 2.0 U
MW-91	MW-91-201410	10/16/2014	N	319	28.8	< 2.0 U
MW-91	MW-91-201501	1/13/2015	N	354	31.5	< 1.0 U
MW-91	DUP-07-201501	1/13/2015	FD	317	31.0	< 1.0 U
MW-91	MW-91-201504	4/16/2015	N	438	36.6	0.18 J
MW-91	MW-91-201507	7/23/2015	N	411	34.8	0.23 J
MW-91	MW-91-201510	10/7/2015	N	405	35.2	0.17 J
MW-91	DUP-08-201510	10/7/2015	FD	442	35.7	0.19 J
MW-91	MW-91-201601	1/13/2016	N	413	36.1	0.24 J
MW-91	DUP-08-201601	1/13/2016	FD	422	38.6	0.24 J
MW-91	MW-91-201605	5/4/2016	N	530	37.8	0.23 J
MW-91	DUP-02-201605	5/4/2016	FD	459	33.4	0.26 J
MW-91	MW-91-201611	11/10/2016	N	574	41.6	0.36 J
MW-91	DUP-03-201611	11/10/2016	FD	599	40.6	0.38 J
MW-91	MW-91-201704	4/27/2017	N	605	44.3	0.20 J
MW-91	DUP-04-201704	4/27/2017	FD	556	42.6	0.15 J
MW-91	MW-91-201710	10/25/2017	N	534	36.4	0.27 J
MW-91	MW-91-201804	4/19/2018	N	557	38.6	0.21 J
MW-91	MW-91-201811	11/15/2018	N	437	33.4	0.30 J
MW-91	MW-91-201904	4/25/2019	N	454	29.9	0.21 J
MW-91	MW-91-201910	10/24/2019	N	437	26.8	0.18 J
MW-91	MW-91-202005	5/14/2020	N	59.8	104	0.36 J
MW-91	MW-91-202010	10/6/2020	N	51.9	136	0.67 J
MW-91	MW-91-202104	4/14/2021	N	8.1	49.9	0.54 J
MW-91	MW-91-202110	10/21/2021	N	9.5	70.3	0.39 J
MW-91	MW-91-202204	4/13/2022	N	3.6	61.1	< 1.0 U
MW-91	MW-91-202210_3494	10/18/2022	N	14.9	41.2	0.20 J
MW-91	MW-91-202304	4/19/2023	N	62.3	82.8	0.24 J
MW-91	MW-91-202310	10/17/2023	N	132	107	0.38 J
MW-92	MW-92-20141022	10/22/2014	N	2160	16.0	7.2
MW-92	MW-92-20141204	12/4/2014	N	2200	23.4	10.3
MW-92	MW-92-201501	1/15/2015	N	1410	10.4	4.6
MW-92	MW-92-201504	4/16/2015	N	736	5.4	2.1
MW-92	MW-92-201507	7/23/2015	N	617	6.7	1.0
MW-92	MW-92-201510	10/8/2015	N	1400	10.8	1.4
MW-92	MW-92-201601	1/13/2016	N	1840	7.1	0.66 J
MW-92	MW-92-201605	5/4/2016	N	2210	25.5	1.8
MW-92	DUP-08-201605	5/4/2016	FD	1840	25.7	1.7
MW-92	MW-92-202310	10/19/2023	N	404	2.3	< 1.0 U
MW-93	MW-93-20141022	10/22/2014	N	18200	145	5.0
MW-93	MW-93-20141204	12/4/2014	N	14600	85.7	2.5
MW-93	MW-93-201501	1/15/2015	N	18000	131	3.4
MW-93	MW-93-201504	4/16/2015	N	21500	160	3.9
MW-93	MW-93-201507	7/23/2015	N	20800	164	3.4
MW-93	MW-93-201510	10/8/2015	N	21100	120	3.3
MW-93	MW-93-201601	1/13/2016	N	21200	103	2.6

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-93	MW-93-201605	5/5/2016	N	17300	127	7.6
MW-93	MW-93-201611	11/9/2016	N	18300	98.8	0.93 J
MW-93	MW-93-201704	4/28/2017	N	28200	127	5.8
MW-93	MW-93-201710	10/26/2017	N	16600	111	9.1
MW-93	MW-93-201804	4/19/2018	N	17000	97.9	4.5
MW-93	MW-93-201811	11/15/2018	N	16300	106	3.6
MW-93	MW-93-201904	4/24/2019	N	13700	124	2.3
MW-93	MW-93-201910	10/24/2019	N	14700	93.2	2.1
MW-93	MW-93-202010	10/8/2020	N	9130	64.5	1.0
MW-93	MW-93-202104	4/14/2021	N	9260	62.8	0.96 J
MW-93	MW-93-202110	10/21/2021	N	8560	62.3	0.90 J
MW-93	MW-93-202204	4/14/2022	N	5800	69.5	1.6
MW-93	MW-93-202210	10/20/2022	N	9010	81.9	1.2
MW-93	MW-93-202304	4/19/2023	N	8970	70.0	1.3
MW-93	MW-93-202310	10/19/2023	N	8370	48.9	< 1.0 U
MW-94	MW-94-20141022	10/22/2014	N	11100	309 J	2.5
MW-94	MW-94-20141204	12/4/2014	N	9570	250 J	3.0
MW-94	MW-94-201501	1/15/2015	N	9530	297	2.4
MW-94	MW-94-201504	4/16/2015	N	11800	325	1.3
MW-94	MW-94-201507	7/23/2015	N	3890	119	0.61 J
MW-94	MW-94-201510	10/8/2015	N	1990	59.5	0.25 J
MW-94	MW-94-201601	1/13/2016	N	936	30.3	< 1.0 U
MW-94	MW-94-201605	5/5/2016	N	424	15.6	< 1.0 U
MW-94	MW-94-WG-20200717	7/17/2020	N	2680	56.7	< 1.0 U
MW-95	MW-95-20141022	10/22/2014	N	22300	151	25.7
MW-95	MW-95-20141204	12/4/2014	N	20900	159	29.9
MW-95	MW-95-201501	1/15/2015	N	21100	177	25.6
MW-95	MW-95-201504	4/16/2015	N	26700	184	14.9
MW-95	MW-95-201507	7/23/2015	N	25200	181	17.1
MW-95	MW-95-201510	10/8/2015	N	26300	161	32.0
MW-95	MW-95-201601	1/13/2016	N	24700	161	31.0
MW-95	MW-95-201605	5/5/2016	N	21600	164	14.8
MW-95	MW-95-201611	11/9/2016	N	28700	191	46.9 J
MW-95	MW-95-201704	4/28/2017	N	36300	181	10.7
MW-95	MW-95-201710	10/26/2017	N	23900	198	51.2
MW-95	MW-95-201804	4/19/2018	N	24100	153	13.1
MW-95	MW-95-201811	11/15/2018	N	20300	152	39.6
MW-95	MW-95-201904	4/25/2019	N	22200	199	10.2
MW-95	DUP-06-201904	4/25/2019	FD	20400	194	8.3
MW-95	MW-95-201910	10/24/2019	N	24700	265	25.9
MW-95	MW-95-WG-20200717	7/17/2020	N	21200	314	10.0
MW-95	MW-95-202010	10/8/2020	N	21100	315	10.4
MW-95	MW-95-202104	4/14/2021	N	21600	278	4.7
MW-95	MW-95-202110	10/21/2021	N	28600	402	< 200 U
MW-95	MW-95-202204	4/14/2022	N	26200	335	< 1.0 U
MW-95	MW-95-202210_3912	10/21/2022	N	36200 J	674	5.3
MW-95	MW-95-202304	4/19/2023	N	39200	739	2.2
MW-95	MW-95-202310	10/19/2023	N	44300	828	3.7
MW-96	MW-96-20141022	10/22/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-96	MW-96-201501	1/15/2015	N	0.59 J	< 1.0 U	< 1.0 U
MW-96	MW-96-201504	4/16/2015	N	< 1.0 U	< 1.0 U	< 1.0
MW-96	DUP-06-201504	4/16/2015	FD	< 1.0 U	< 1.0 U	< 1.0
MW-96	MW-96-201507	7/23/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	DUP-06-201507	7/23/2015	FD	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	MW-96-201510	10/7/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	MW-96-201601	1/12/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	MW-96-201605	5/3/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	MW-96-201611	11/8/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	MW-96-201704	4/27/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	MW-96-201710	10/25/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	MW-96-201804	4/19/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	MW-96-201811	11/15/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	MW-96-201904	4/24/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	MW-96-201910	10/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	MW-96-202005	5/12/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	MW-96-202010	10/8/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	MW-96-202104	4/13/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	DUP-01-202104	4/13/2021	FD	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	MW-96-202110	10/19/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	DUP-02-202110	10/19/2021	FD	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	MW-96-202204	4/12/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	DUP-04-202204	4/12/2022	FD	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	MW-96-202210	10/17/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	DUP-08-202210	10/17/2022	FD	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	MW-96-202304	4/18/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	DUP-09-202304	4/18/2023	FD	< 1.0 U	< 1.0 U	< 1.0 U
MW-96	MW-96-202310	10/16/2023	N	< 1.0 U	< 1.0 U	< 1.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-96	DUP-10-202310	10/16/2023	FD	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	MW-97-20141022	10/22/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-97	MW-97-201501	1/15/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	MW-97-201504	4/16/2015	N	< 1.0 U	< 1.0 U	< 1.0
MW-97	MW-97-201507	7/23/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	MW-97-201510	10/7/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	MW-97-201601	1/12/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	MW-97-201605	5/5/2016	N	< 1.0 U	0.28 J	< 1.0 U
MW-97	MW-97-201611	11/8/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	MW-97-201704	4/27/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	MW-97-201710	10/25/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	MW-97-201804	4/19/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	MW-97-201811	11/15/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	MW-97-201904	4/24/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	MW-97-201910	10/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	MW-97-202005	5/13/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	MW-97-202010	10/8/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	DUP-10-202010	10/8/2020	FD	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	MW-97-202104	4/13/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	MW-97-202110	10/19/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	MW-97-202204	4/12/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	MW-97-202210	10/17/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-97	MW-97-202304	4/18/2023	N	0.82 J	< 1.0 U	< 1.0 U
MW-97	MW-97-202310	10/17/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-98	MW-98-GW-2014 1029	10/29/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-98	MW-98-201501	1/15/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-98	MW-98-201504	4/16/2015	N	< 1.0 U	< 1.0 U	< 1.0
MW-98	MW-98-201507	7/23/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-98	MW-98-201510	10/6/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-98	MW-98-201601	1/11/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-98	MW-98-201605	5/3/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-98	MW-98-201611	11/8/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-98	MW-98-201704	4/27/2017	N	0.21 J	0.23 J	< 1.0 U
MW-98	MW-98-201710	10/24/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-98	MW-98-201804	4/18/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-98	MW-98-201811	11/14/2018	N	0.29 J	< 1.0 U	< 1.0 U
MW-98	MW-98-201904	4/24/2019	N	0.22 J	< 1.0 U	< 1.0 U
MW-98	MW-98-201910	10/23/2019	N	0.38 J	< 1.0 U	< 1.0 U
MW-98	MW-98-202005	5/12/2020	N	0.18 J	< 1.0 U	< 1.0 U
MW-98	DUP-4-202005	5/12/2020	FD	0.23 J	< 1.0 U	< 1.0 U
MW-98	MW-98-202010	10/7/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-98	MW-98-202104	4/12/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-98	MW-98-202110	10/18/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-98	MW-98-202204	4/12/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-98	MW-98-202210	10/17/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-98	MW-98-202304	4/17/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-98	MW-98-202310	10/18/2023	N	1.2	0.20 J	< 1.0 U
MW-99	MW-99-20141022	10/22/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
MW-99	MW-99-201501	1/15/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-99	MW-99-201504	4/16/2015	N	< 1.0 U	< 1.0 U	< 1.0
MW-99	MW-99-201507	7/23/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-99	MW-99-201510	10/6/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-99	MW-99-201601	1/11/2016	N	0.21 J	< 1.0 U	< 1.0 U
MW-99	MW-99-201605	5/3/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-99	MW-99-201704	4/26/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-99	MW-99-201710	10/24/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-99	MW-99-201804	4/18/2018	N	1.3	0.12 J	< 1.0 U
MW-99	MW-99-201811	11/13/2018	N	8.1	0.64 J	< 1.0 U
MW-99	MW-99-201904	4/24/2019	N	23.6	1.6	< 1.0 U
MW-99	MW-99-201910	10/23/2019	N	72.6	4.8	< 1.0 U
MW-99	MW-99-202005	5/14/2020	N	1.5	10.7	< 1.0 U
MW-99	MW-99-202010	10/7/2020	N	0.85 J	5.0	< 1.0 U
MW-99	MW-99-202104	4/13/2021	N	0.34 J	3.3	< 1.0 U
MW-99	MW-99-202110	10/19/2021	N	0.26 J	2.0	< 1.0 U
MW-99	MW-99-202204	4/12/2022	N	< 1.0 U	1.0	< 1.0 U
MW-99	MW-99-202210_3699	10/19/2022	N	2.2	1.9	< 1.0 U
MW-99	MW-99-202304	4/19/2023	N	13.0	9.0	< 1.0 U
MW-99	MW-99-202310	10/18/2023	N	0.37 J	10.2	< 1.0 U
MW-172	MW-172-20141022	10/22/2014	N	3010	21.4	2.4
MW-172	MW-172-20141205	12/5/2014	N	1810	15.6	1.3 J
MW-172	MW-172-201501	1/15/2015	N	3600	22.4	1.2
MW-172	MW-172-201504	4/16/2015	N	1740	11.9	0.92 J
MW-172	MW-172-201507	7/23/2015	N	2140	12.4	0.69 J
MW-172	MW-172-201510	10/8/2015	N	2110	12.4	0.51 J
MW-172	MW-172-201601	1/13/2016	N	3190	13.5	< 1.0 U
MW-172	MW-172-201605	5/5/2016	N	2160	13.3	< 1.0 U
MW-173	MW-173-201504	4/15/2015	N	< 1.0 U	< 1.0 U	< 1.0

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-173	MW-173-201507	7/22/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-173	MW-173-201510	10/6/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-173	MW-173-201601	1/12/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-173	MW-173-201605	5/4/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-174	MW-174-GW-20150120	1/20/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-174	MW-174-201504	4/14/2015	N	0.68 J	< 1.0 U	< 1.0
MW-174	MW-174-201507	7/21/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-174	MW-174-201510	10/6/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-174	MW-174-201601	1/12/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-174	MW-174-201605	5/4/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-175	MW-175-GW-20150120	1/20/2015	N	123	2.0	< 1.0 U
MW-175	MW-175-201504	4/15/2015	N	98.8	1.5	< 1.0
MW-175	MW-175-201507	7/21/2015	N	20.3	0.32 J	< 1.0 U
MW-175	MW-175-201510	10/7/2015	N	78.6	1.6	0.19 J
MW-175	MW-175-201601	1/11/2016	N	52.6	1.1	< 1.0 U
MW-175	MW-175-201605	5/3/2016	N	54.9	1.2	< 1.0 U
MW-175	MW-175-201611	11/8/2016	N	50.9	0.49 J	< 1.0 U
MW-175	MW-175-201704	4/28/2017	N	53.2	1.3	< 1.0 U
MW-175	MW-175-201710	10/24/2017	N	72.2	0.27 J	< 1.0 U
MW-175	MW-175-201804	4/18/2018	N	117	1.9	0.15 J
MW-175	MW-175-201811	11/13/2018	N	70.7	1.5	0.17 J
MW-175	MW-175-201904	4/23/2019	N	102	1.6	< 1.0 U
MW-175	MW-175-201910	10/23/2019	N	138	2.2	0.16 J
MW-175	MW-175-202005	5/13/2020	N	135	2.6	< 1.0 U
MW-175	MW-175-202010	10/6/2020	N	69.5	1.7	< 1.0 U
MW-175	MW-175-202104	4/13/2021	N	82.3	1.9	< 1.0 U
MW-175	MW-175-202110	10/20/2021	N	91.1	1.9	< 1.0 U
MW-175	MW-175-202204	4/14/2022	N	121	2.8	< 1.0 U
MW-175	MW-175-202210	10/20/2022	N	139	2.2	< 1.0 U
MW-175	MW-175-202304	4/20/2023	N	138	3.1	< 1.0 U
MW-175	MW-175-202310	10/19/2023	N	133	3.1	< 1.0 U
MW-176	MW-176-GW-20150120	1/20/2015	N	720	16.8	0.57 J
MW-176	MW-176-201504	4/14/2015	N	528	16.7	0.69 J
MW-176	MW-176-201507	7/21/2015	N	575	21.5	0.79 J
MW-176	MW-176-201510	10/6/2015	N	420	111	1.2
MW-176	MW-176-201601	1/12/2016	N	306	125	1.3
MW-176	MW-176-201605	5/3/2016	N	389	93.7	0.45 J
MW-176	MW-176-201611	11/8/2016	N	320	202	1.6
MW-176	MW-176-201704	4/28/2017	N	355	140	0.63 J
MW-176	MW-176-201710	10/24/2017	N	281	187	0.29 J
MW-176	MW-176-201804	4/17/2018	N	426	105	1.1
MW-176	MW-176-201811	11/13/2018	N	397	127	2.1
MW-176	MW-176-201904	4/23/2019	N	503	67.0	1.6
MW-176	MW-176-201910	10/22/2019	N	317	28.8	16.5
MW-176	MW-176-202005	5/12/2020	N	323	32.0	27.7
MW-176	MW-176-202010	10/6/2020	N	359	28.2	29.4
MW-176	MW-176-202104	4/13/2021	N	369	22.3	24.0
MW-176	MW-176-202110	10/20/2021	N	310	17.0	19.3
MW-176	MW-176-202204	4/12/2022	N	380	< 5.0 U	< 5.0 U
MW-176	MW-176-202210	10/18/2022	N	329	13.5	18.9
MW-176	MW-176-202304	4/18/2023	N	282	14.2	17.2
MW-176	MW-176-202310	10/17/2023	N	319	13.4	20.1
MW-177	MW-177-GW-20150121	1/21/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-177	MW-177-201504	4/14/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-177	MW-177-201510	10/6/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-177	MW-177-201601	1/11/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-177	MW-177-201605	5/2/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-178	MW-178-GW-20150118	1/18/2015	N	5.2	0.99 J	< 1.0 U
MW-178	MW-178-201504	4/16/2015	N	5.0	1.3	< 1.0 U
MW-178	MW-178-201507	7/22/2015	N	4.6	1.1	< 1.0 U
MW-178	MW-178-201510	10/7/2015	N	5.8	1.4	< 1.0 U
MW-178	MW-178-201611	11/10/2016	N	3.2	0.15 J	< 1.0 U
MW-178	MW-178-201704	4/27/2017	N	4.6	1.3	< 1.0 U
MW-178	MW-178-201710	10/25/2017	N	3.9	0.97 J	< 1.0 U
MW-178	FD-06-201710	10/25/2017	FD	3.6	0.96 J	< 1.0 U
MW-178	MW-178-201804	4/18/2018	N	5.3	1.4	< 1.0 U
MW-178	MW-178-201811	11/14/2018	N	4.5	1.4	< 1.0 U
MW-178	MW-178-201904	4/24/2019	N	2.9	0.79 J	< 1.0 U
MW-178	MW-178-201910	10/23/2019	N	4.1	1.2	< 1.0 U
MW-178	MW-178-202005	5/13/2020	N	2.0	0.42 J	< 1.0 U
MW-178	MW-178-202010	10/7/2020	N	1.9	0.66 J	< 1.0 U
MW-178	MW-178-202104	4/15/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-178	DUP-03-202104	4/15/2021	FD	0.47 J	< 1.0 U	< 1.0 U
MW-178	MW-178-202110	10/21/2021	N	< 1.0 U	0.19 J	< 1.0 U
MW-178	MW-178-202204	4/14/2022	N	< 1.0 U	0.29 J	< 1.0 U
MW-178	MW-178-202304	4/20/2023	N	0.28 J	0.25 J	< 1.0 U
MW-178	MW-178-202310	10/19/2023	N	0.34 J	0.26 J	< 1.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-179	MW-179-201504	4/16/2015	N	41.2	1.6	< 1.0
MW-179	MW-179-201507	7/22/2015	N	27.3	1.1	< 1.0 U
MW-179	MW-179-201601	1/13/2016	N	30.6	1.1	< 1.0 U
MW-179	MW-179-201605	5/4/2016	N	6.6	< 1.0 U	< 1.0 U
MW-179	MW-179-201704	4/28/2017	N	20.4	1.0	< 1.0 U
MW-179	MW-179-201710	10/26/2017	N	10.7	0.35 J	< 1.0 U
MW-179	MW-179-201804	4/19/2018	N	21.7	0.85 J	< 1.0 U
MW-179	MW-179-201811	11/13/2018	N	1.4	< 1.0 U	< 1.0 U
MW-179	MW-179-201904	4/24/2019	N	8.9	0.23 J	< 1.0 U
MW-179	MW-179-201910	10/24/2019	N	23.7	0.74 J	< 1.0 U
MW-179	MW-179-202005	5/15/2020	N	21.4	1.1	< 1.0 U
MW-179	MW-179-202010	10/8/2020	N	22.9	1.0	< 1.0 U
MW-179	MW-179-202104	4/15/2021	N	19.3	0.82 J	< 1.0 U
MW-179	MW-179-202110	10/21/2021	N	20.1	1.1	< 1.0 U
MW-179	MW-179-202204	4/14/2022	N	24.7	1.4	< 1.0 U
MW-179	MW-179-202210	10/20/2022	N	28.9	3.8	< 1.0 U
MW-179	MW-179-202304	4/20/2023	N	20.7	0.88 J	< 1.0 U
MW-179	MW-179-202310	10/19/2023	N	32.6	1.3	< 1.0 U
MW-180	MW-180-GW-20150119	1/19/2015	N	23.7	3.4	< 1.0 U
MW-180	MW-180-201504	4/16/2015	N	21.4	3.8	< 1.0
MW-180	MW-180-201507	7/22/2015	N	22.1	3.0	< 1.0 U
MW-180	MW-180-201510	10/7/2015	N	18.5	3.0	< 1.0 U
MW-180	MW-180-201601	1/14/2016	N	10.6	1.5	< 1.0 U
MW-180	MW-180-201605	5/5/2016	N	10.3	1.4	< 1.0 U
MW-181	MW-181-GW-20150121	1/21/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-181	MW-181-201504	4/14/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-181	MW-181-201507	7/21/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-181	MW-181-201601	1/11/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-181	MW-181-201605	5/4/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-182	MW-182-201507	7/23/2015	N	193	17.8	0.28 J
MW-182	MW-182-201510	10/5/2015	N	196	17.2	0.25 J
MW-182	MW-182-201601	1/13/2016	N	258	19.9	0.30 J
MW-182	MW-182-201605	5/4/2016	N	283	18.9	0.31 J
MW-182	DUP-09-201605	5/4/2016	FD	271	16.6	0.32 J
MW-182	MW-182-201611	11/9/2016	N	192	14.6	0.28 J
MW-182	DUP-02-201611	11/9/2016	FD	204	15.5	0.20 J
MW-182	MW-182-201710	10/24/2017	N	92.2	5.7	< 1.0 U
MW-182	MW-182-201804	4/19/2018	N	58.3	3.9	< 1.0 U
MW-182	DUP-06-201804	4/19/2018	FD	59.3	4.1	< 1.0 U
MW-182	MW-182-201811	11/15/2018	N	40.8	2.5	< 1.0 U
MW-182	MW-182-201904	4/24/2019	N	29.1	1.8	< 1.0 U
MW-182	MW-182-201910	10/23/2019	N	26.3	1.8	< 1.0 U
MW-182	MW-182-202005	5/13/2020	N	19.8	1.6	< 1.0 U
MW-182	DUP-08-202005	5/13/2020	FD	19.5	1.6	< 1.0 U
MW-182	MW-182-202010	10/7/2020	N	24.9	1.7	< 1.0 U
MW-182	MW-182-202110	10/21/2021	N	19.2	1.2	< 1.0 U
MW-182	DUP-10-202110	10/21/2021	FD	19.6	1.3	< 1.0 U
MW-182	MW-182-202210	10/19/2022	N	16.3	0.87 J	< 1.0 U
MW-182	DUP-02-202210	10/19/2022	FD	16.7	0.79 J	< 1.0 U
MW-182	MW-182-202310	10/20/2023	N	16.4	0.79 J	< 1.0 U
MW-182	DUP-07-202310	10/20/2023	FD	16.7	0.88 J	< 1.0 U
MW-183	MW-183-201510	10/6/2015	N	2.0	0.30 J	< 1.0 U
MW-183	MW-183-201601	1/12/2016	N	2.7	0.32 J	< 1.0 U
MW-183	MW-183-201605	5/4/2016	N	2.8	0.34 J	< 1.0 U
MW-183	MW-183-201611	11/9/2016	N	5.3	< 1.0 U	< 1.0 U
MW-183	MW-183-201704	4/26/2017	N	2.0	0.26 J	< 1.0 U
MW-183	DUP-03-201704	4/26/2017	FD	1.9	0.17 J	< 1.0 U
MW-183	MW-183-201710	10/25/2017	N	2.8	0.24 J	< 1.0 U
MW-183	MW-183-201804	4/18/2018	N	1.9	0.14 J	< 1.0 U
MW-183	MW-183R-201811	11/14/2018	N	1.1	< 1.0 U	< 1.0 U
MW-183	MW-183R-201904	4/24/2019	N	0.54 J	< 1.0 U	< 1.0 U
MW-183R	MW-183R-201910	10/23/2019	N	1.2	< 1.0 U	< 1.0 U
MW-183R	MW-183R-202005	5/13/2020	N	0.74 J	< 1.0 U	< 1.0 U
MW-183R	MW-183R-202010	10/7/2020	N	0.82 J	< 1.0 U	< 1.0 U
MW-183R	MW-183R-202104	4/13/2021	N	0.70 J	< 1.0 U	< 1.0 U
MW-183R	MW-183R-202110	10/19/2021	N	0.67 J	< 1.0 U	< 1.0 U
MW-183R	MW-183R-202204	4/13/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-183R	MW-183R-202210	10/18/2022	N	0.83 J	< 1.0 U	< 1.0 U
MW-183R	MW-183R-202304	4/19/2023	N	0.41 J	< 1.0 U	< 1.0 U
MW-183R	MW-183R-202310	10/17/2023	N	0.50 J	< 1.0 U	< 1.0 U
MW-184	MW-184-201510	10/5/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-184	MW-184-201601	1/11/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-184	MW-184-201605	5/3/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-184	MW-184-201611	11/8/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-184	MW-184-201704	4/28/2017	N	0.45	< 1.0 U	< 1.0 U
MW-184	MW-184-201710	10/24/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-184	MW-184-201804	4/18/2018	N	< 1.0 U	< 1.0 U	< 1.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-184	MW-184-201811	11/14/2018	N	< 1.0	< 1.0 U	< 1.0 U
MW-184	MW-184-201904	4/24/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-184	MW-184-201910	10/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-184	MW-184-202005	5/13/2020	N	0.25 J	< 1.0 U	< 1.0 U
MW-184	MW-184-202010	10/7/2020	N	0.40 J	< 1.0 U	< 1.0 U
MW-184	DUP-05-202010	10/7/2020	FD	0.29 J	< 1.0 U	< 1.0 U
MW-184	MW-184-202104	4/13/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-184	DUP-05-202104	4/13/2021	FD	< 1.0 U	< 1.0 U	< 1.0 U
MW-184	MW-184-202110	10/19/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-184	DUP-01-202110	10/19/2021	FD	< 1.0 U	< 1.0 U	< 1.0 U
MW-184	MW-184-202204	4/12/2022	N	0.43 J	< 1.0 U	< 1.0 U
MW-184	MW-184-202210	10/18/2022	N	0.49 J	< 1.0 U	< 1.0 U
MW-184	DUP-10-202210	10/18/2022	FD	0.55 J	< 1.0 U	< 1.0 U
MW-184	MW-184-202304	4/17/2023	N	2.6	0.22 J	< 1.0 U
MW-184	MW-184-202310	10/16/2023	N	1.4	0.18 J	< 1.0 U
MW-184	DUP-01-202310	10/16/2023	FD	1.8	0.16 J	< 1.0 U
MW-185	MW-185-GW-091615	9/16/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-185	MW-185-201510	10/5/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-185	MW-185-201601	1/11/2016	N	0.87 J	< 1.0 U	< 1.0 U
MW-185	MW-185-201605	5/4/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-185	MW-185-201611	11/8/2016	N	3.1	< 1.0 U	< 1.0 U
MW-185	MW-185-201704	4/26/2017	N	8.0	< 1.0 U	< 1.0 U
MW-185	MW-185-201710	10/24/2017	N	12.7	< 1.0 U	< 1.0 U
MW-185	MW-185-201804	4/19/2018	N	12.0	1.4	< 1.0 U
MW-185	DUP-07-201804	4/19/2018	FD	11.1	1.4	< 1.0 U
MW-185	MW-185-201807	7/31/2018	N	11.7	1.4	< 1.0 U
MW-185	MW-185-201811	11/14/2018	N	11.7	2.6	< 1.0 U
MW-185	MW-185-201904	4/25/2019	N	17.0	3.4	< 1.0 U
MW-185	MW-185-201910	10/24/2019	N	52.7	6.3	0.12 J
MW-185	MW-185-202005	5/13/2020	N	94.5	7.9	< 1.0 U
MW-185	DUP-07-202005	5/13/2020	FD	95.0	7.4	< 1.0 U
MW-185	MW-185-202010	10/7/2020	N	176	10.6	< 1.0 U
MW-185	MW-185-202104	4/15/2021	N	194	11.6	0.28 J
MW-185	MW-185-202110	10/21/2021	N	182	11.7	0.25 J
MW-185	MW-185-202204	4/13/2022	N	199	10.7	< 1.0 U
MW-185	MW-185-202210	10/20/2022	N	168	8.9	< 1.0 U
MW-185	MW-185-202304	4/19/2023	N	188	8.1	< 1.0 U
MW-185	MW-185-202310	10/19/2023	N	177	8.5	< 1.0 U
MW-186	MW-186-GW-091415	9/14/2015	N	< 1.0 U	0.37 J	< 1.0 U
MW-186	MW-186-201510	10/5/2015	N	1.2	2.4	< 1.0 U
MW-186	MW-186-201601	1/7/2016	N	3.0	3.2	< 1.0 U
MW-186	MW-186-201605	5/4/2016	N	4.0	3.0	< 1.0 U
MW-186	MW-186-201611	11/7/2016	N	5.2	3.3	0.16 J
MW-186	MW-186-201704	4/26/2017	N	4.7	2.7	< 1.0 U
MW-186	DUP-02-201704	4/26/2017	FD	5.0 B	2.8	< 1.0 U
MW-186	MW-186-201710	10/24/2017	N	7.8	4.1	0.14 J
MW-186	FD-04-201710	10/24/2017	FD	7.8	3.8	0.16 J
MW-186	MW-186-20180402	4/2/2018	N	13.1	4.2	0.22 J
MW-186	DUP-01-20180402	4/2/2018	FD	12.9	4.7	0.21 J
MW-186	MW-186-201804	4/19/2018	N	14.2	4.8	0.23 J
MW-186	MW-186-201807	8/3/2018	N	17.7	4.5	0.15 J
MW-186	MW-186-201811	11/14/2018	N	10.2 F1	6.5	< 5.0 U
MW-186	MW-186-201904	4/26/2019	N	5.6	8.8	0.14 J
MW-186	MW-186-201910	10/24/2019	N	2.9	3.0	2.2
MW-186	MW-186-202005	5/14/2020	N	1.0 J+	0.62 J	0.36 J
MW-186	MW-186-202010	10/8/2020	N	0.43 J	0.40 J	0.33 J
MW-186	MW-186-202104	4/13/2021	N	0.40 J	0.42 J	0.43 J
MW-186	DUP-08-202104	4/13/2021	FD	0.33 J	0.58 J	0.45 J
MW-186	MW-186-202110	10/19/2021	N	0.49 J	0.66 J	0.45 J
MW-186	MW-186-202204	4/12/2022	N	0.26 J	< 1.0 U	< 1.0 U
MW-186	DUP-02-202204	4/12/2022	FD	< 1.0 U	< 1.0 U	< 1.0 U
MW-186	MW-186-202210_3494	10/18/2022	N	0.49 J	0.76 J	0.43 J
MW-186	MW-186-202304	4/18/2023	N	0.33 J	0.51 J	0.41 J
MW-186	DUP-04-202304	4/18/2023	FD	0.29 J	0.53 J	0.36 J
MW-186	MW-186-202310	10/20/2023	N	1.1	0.61 J	0.59 J
MW-187	MW-187-GW-091415	9/14/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-187	MW-187-201510	10/5/2015	N	< 1.0 U	0.21 J	< 1.0 U
MW-187	MW-187-201601	1/8/2016	N	0.22 J	0.27 J	< 1.0 U
MW-187	MW-187-201605	5/4/2016	N	0.56 J	0.59 J	< 1.0 U
MW-187	MW-187-201611	11/9/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-187	MW-187-201704	4/26/2017	N	0.46 J	0.55 J	< 1.0 U
MW-187	MW-187-201710	10/24/2017	N	0.65 J	0.73 J	< 1.0 U
MW-187	MW-187-201804	4/18/2018	N	< 1.0 U	0.77 J	< 1.0 U
MW-187	MW-187-201811	11/14/2018	N	0.86 J	0.81 J	< 1.0 U
MW-187	MW-187-201904	4/24/2019	N	1.4	1.3	< 1.0 U
MW-187	MW-187-201910	10/22/2019	N	3.5	2.2	< 1.0 U
MW-187	MW-187-202005	5/14/2020	N	5.2	3.0	< 1.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-187	MW-187-202010	10/6/2020	N	9.8	3.7	< 1.0 U
MW-187	MW-187-202104	4/13/2021	N	22.4	3.8	< 1.0 U
MW-187	MW-187-202110	10/19/2021	N	16.8	3.8	< 1.0 U
MW-187	MW-187-202204	4/13/2022	N	51.4	4.1	< 1.0 U
MW-187	MW-187-202210	10/19/2022	N	74.2 J+	3.2	0.17 J
MW-187	MW-187-202304	4/19/2023	N	79.4	3.9	< 1.0 U
MW-187	MW-187-202310	10/20/2023	N	96.0	3.5	< 1.0 U
MW-188	MW-188A-GW-091715	9/17/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-188	MW-188-201510	10/5/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-188	MW-188-201601	1/8/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-188	MW-188-201605	5/3/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-188	MW-188-201611	11/9/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-188	MW-188-201704	4/27/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-188	MW-188-201710	10/24/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-188	MW-188-201804	4/19/2018	N	0.20 J	< 1.0 U	< 1.0 U
MW-188	DUP-04-201804	4/19/2018	FD	0.18 J	< 1.0 U	< 1.0 U
MW-188	MW-188-201811	11/14/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-188	MW-188-201904	4/24/2019	N	0.88 J	0.33 J	< 1.0 U
MW-188	MW-188-201910	10/22/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-188	MW-188-202005	5/13/2020	N	2.9	0.51 J	< 1.0 U
MW-188	MW-188-202010	10/6/2020	N	11.7	1.3	< 1.0 U
MW-188	MW-188-202104	4/14/2021	N	3.4	0.38 J	< 1.0 U
MW-188	MW-188-202110	10/19/2021	N	1.1	0.14 J	< 1.0 U
MW-188	MW-188-202204	4/13/2022	N	7.3	0.67 J	< 1.0 U
MW-188	MW-188-202210	10/19/2022	N	11.2	0.94 J	< 1.0 U
MW-188	MW-188-202304	4/19/2023	N	8.6	0.73 J	< 1.0 U
MW-188	MW-188-202310	10/20/2023	N	7.3	0.64 J	< 1.0 U
MW-189	MW-189A-GW-091715	9/17/2015	N	2.4	3.1	< 1.0 U
MW-189	MW-189-201510	10/5/2015	N	4.1	4.5	0.14 J
MW-189	MW-189-201601	1/7/2016	N	4.5	5.4	0.19 J
MW-189	MW-189-201605	5/4/2016	N	5.5	6.1	0.19 J
MW-189	MW-189-201611	11/7/2016	N	10.2	9.7	0.31 J
MW-189	MW-189-201704	4/26/2017	N	30.1	11.1	0.29 J
MW-189	MW-189-201710	10/25/2017	N	195	9.5	0.40 J
MW-189	MW-189-201804	4/19/2018	N	385	11.1	0.48 J
MW-189	MW-189-201811	11/15/2018	N	670	11.3	0.64 J
MW-189	MW-189-201904	4/25/2019	N	188	3.1	0.14 J
MW-189	MW-189-201910	10/24/2019	N	510	8.9	0.47 J
MW-189	DUP-08-201910	10/24/2019	FD	506	8.7	0.50 J
MW-189	MW-189-202005	5/13/2020	N	183	4.0	< 1.0 U
MW-189	MW-189-202010	10/6/2020	N	359	7.2	0.44 J
MW-189	MW-189-202104	4/14/2021	N	66.8	1.7	< 1.0 U
MW-189	MW-189-202110	10/21/2021	N	238	6.1	0.25 J
MW-189	MW-189-202204	4/14/2022	N	231	7.1	0.37 J
MW-189	MW-189-202210	10/20/2022	N	221	7.0	0.23 J
MW-189	MW-189-202304	4/20/2023	N	249	8.8	0.27 J
MW-189	MW-189-202310	10/19/2023	N	261	9.6	0.27 J
MW-190	MW-190-GW-091415	9/14/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-190	MW-190-201510	10/5/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-190	MW-190-201601	1/11/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-190	MW-190-201605	5/4/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-190	MW-190-201611	11/8/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-190	MW-190-201704	4/26/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-190	MW-190-201710	10/25/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-190	MW-190-201804	4/18/2018	N	0.58 J	< 1.0 U	< 1.0 U
MW-190	MW-190-201811	11/15/2018	N	< 1.0	< 1.0 U	< 1.0 U
MW-190	MW-190-201904	4/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-190	MW-190-201910	10/22/2019	N	< 1.0 U	0.21 J	< 1.0 U
MW-190	MW-190-202005	5/13/2020	N	2.7	1.7	< 1.0 U
MW-190	MW-190-202010	10/7/2020	N	14.5	3.0	< 1.0 U
MW-190	MW-190-202104	4/13/2021	N	111	4.8	< 1.0 U
MW-190	MW-190-202110	10/21/2021	N	199	4.6	0.22 J
MW-190	MW-190-202204	4/14/2022	N	409	7.2	< 1.0 U
MW-190	MW-190-202210	10/19/2022	N	319	4.7	0.28 J
MW-190	MW-190-202304	4/19/2023	N	439	5.6	< 1.0 U
MW-190	MW-190-202310	10/17/2023	N	533	6.5	0.32 J
MW-191	MW-191-GW-091515	9/15/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-191	MW-191-201510	10/5/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-191	MW-191-201601	1/11/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-191	MW-191-201605	5/4/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-191	MW-191-201611	11/8/2016	N	< 1.0 U	< 1.0 U	< 1.0
MW-191	MW-191-201704	4/26/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-191	MW-191-201710	10/25/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-191	MW-191-201804	4/18/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-191	MW-191-201811	11/14/2018	N	< 1.0	< 1.0 U	< 1.0 U
MW-191	MW-191-201904	4/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-191	MW-191-201910	10/22/2019	N	< 1.0 U	< 1.0 U	< 1.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-191	MW-191-202005	5/13/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-191	MW-191-202010	10/7/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-191	MW-191-202104	4/12/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-191	MW-191-202110	10/18/2021	N	0.62 J	< 1.0 U	< 1.0 U
MW-191	MW-191-202204	4/13/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-191	MW-191-202210	10/17/2022	N	2.8	< 1.0 U	< 1.0 U
MW-191	MW-191-202304	4/18/2023	N	2.3	< 1.0 U	< 1.0 U
MW-191	MW-191-202310	10/16/2023	N	10.5	0.24 J	< 1.0 U
MW-192	MW-192-GW-091615	9/16/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-192	MW-192-201510	10/5/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-192	MW-192-201601	1/11/2016	N	0.30 J	< 1.0 U	< 1.0 U
MW-192	MW-192-201605	5/4/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-192	MW-192-201611	11/9/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-192	MW-192-201704	4/26/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-192	MW-192-201710	10/25/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-192	MW-192-201804	4/18/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-192	DUP-07-201811	11/14/2018	FD	< 1.0 U	< 1.0 U	< 1.0 U
MW-192	MW-192-201811	11/14/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-192	MW-192-201904	4/24/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-192	MW-192-201910	10/22/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-192	MW-192-202005	5/13/2020	N	0.58 J	< 1.0 U	< 1.0 U
MW-192	MW-192-202010	10/7/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-192	DUP-04-202010	10/7/2020	FD	0.42 J	< 1.0 U	< 1.0 U
MW-192	MW-192-202104	4/13/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-192	MW-192-202110	10/20/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-192	MW-192-202204	4/12/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-192	MW-192-202210	10/19/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-192	MW-192-202304	4/18/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-192	MW-192-202310	10/17/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-193	MW-193-201510	10/6/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-193	MW-193-201601	1/11/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-193	MW-193-201605	5/2/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-194	MW-194-GW-080516	8/5/2016	N	6.6	0.66 J	< 1.0 U
MW-194	MW-194-201611	11/7/2016	N	12.7	< 1.0 U	< 1.0 U
MW-194	MW-194-201704	4/26/2017	N	10.8	< 1.0 U	< 1.0 U
MW-194	MW-194-201710	10/23/2017	N	15.4	1.1	< 1.0 U
MW-194	MW-194-201804	4/17/2018	N	9.4	0.57 J	< 1.0 U
MW-194	MW-194-201807	7/31/2018	N	13.3	0.79 J	< 1.0 U
MW-194	MW-194-201811	11/14/2018	N	10.7	0.87 J	< 1.0 U
MW-194	MW-194-201904	4/25/2019	N	8.6	0.75 J	< 1.0 U
MW-194	MW-194-201910	10/23/2019	N	10.8	0.97 J	< 1.0 U
MW-194	MW-194-202005	5/14/2020	N	4.4	0.61 J	< 1.0 U
MW-194	MW-194-202010	10/7/2020	N	5.6	0.78 J	< 1.0 U
MW-194	MW-194-202104	4/14/2021	N	3.6	0.80 J	< 1.0 U
MW-194	MW-194-202110	10/20/2021	N	4.1	1.8	< 1.0 U
MW-194	MW-194-202204	4/13/2022	N	3.1	1.5	< 1.0 U
MW-194	MW-194-202210_3699	10/19/2022	N	3.8	1.8	< 1.0 U
MW-194	MW-194-202304	4/20/2023	N	8.3	3.1	< 1.0 U
MW-194	MW-194-202310	10/18/2023	N	7.1	2.6	< 1.0 U
MW-195	MW-195-GW-080516	8/5/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-195	MW-195-201611	11/9/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-195	MW-195-201704	4/28/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-195	MW-195-201710	10/23/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-195	MW-195-201804	4/17/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-195	DUP-02-201804	4/17/2018	FD	< 1.0 U	< 1.0 U	< 1.0 U
MW-195	MW-195-201811	11/13/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-195	MW-195-201904	4/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-195	MW-195-201910	10/22/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-195	MW-195-202005	5/12/2020	N	0.22 J	< 1.0 U	< 1.0 U
MW-195	MW-195-202010	10/6/2020	N	0.35 J	< 1.0 U	< 1.0 U
MW-195	MW-195-202104	4/13/2021	N	0.52 J	< 1.0 U	< 1.0 U
MW-195	MW-195-202110	10/19/2021	N	0.49 J	< 1.0 U	< 1.0 U
MW-195	DUP-05-202110	10/19/2021	FD	0.40 J	< 1.0 U	< 1.0 U
MW-195	MW-195-202204	4/12/2022	N	1.0	< 1.0 U	< 1.0 U
MW-195	DUP-06-202204	4/12/2022	FD	0.93 J	< 1.0 U	< 1.0 U
MW-195	MW-195-202210	10/18/2022	N	3.0	< 1.0 U	< 1.0 U
MW-195	DUP-06-202210	10/18/2022	FD	3.0	0.20 J	< 1.0 U
MW-195	MW-195-202304	4/18/2023	N	5.1	< 1.0 U	< 1.0 U
MW-195	DUP-06-202304	4/18/2023	FD	4.6	0.26 J	< 1.0 U
MW-195	MW-195-202310	10/17/2023	N	5.6	0.30 J	< 1.0 U
MW-195	DUP-05-202310	10/17/2023	FD	5.3	0.30 J	< 1.0 U
MW-196	MW-196-GW-080516	8/5/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-196	MW-196-201611	11/9/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-196	MW-196-201704	4/26/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-196	MW-196-201710	10/24/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-196	MW-196-201804	4/17/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-196	MW-196-201811	11/13/2018	N	< 1.0 U	< 1.0 U	< 1.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-196	MW-196-201904	4/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-196	MW-196-201910	10/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-196	MW-196-202005	5/12/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-196	MW-196-202010	10/6/2020	N	0.54 J	< 1.0 U	< 1.0 U
MW-196	MW-196-202104	4/13/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-196	MW-196-202110	10/19/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-196	MW-196-202204	4/12/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-196	MW-196-202210	10/18/2022	N	0.33 J	< 1.0 U	< 1.0 U
MW-196	MW-196-202304	4/18/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-196	MW-196-202310	10/17/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-197	MW-197-WG-2020922	9/22/2020	N	17.0	7.8	0.99 J
MW-197	MW-197-202010	10/6/2020	N	20.1	8.4	0.96 J
MW-197	MW-197-202104	4/14/2021	N	22.1	6.7	0.43 J
MW-197	MW-197-202204	4/13/2022	N	2.8	17.8	< 1.0 U
MW-197	MW-197-202304	4/19/2023	N	2.1	17.4	< 1.0 U
MW-197	MW-197-202310	10/18/2023	N	1.3	14.7	< 1.0 U
MW-198	MW-198-202010	10/8/2020	N	20600	1550	84.4
MW-198	MW-198-202104	4/14/2021	N	15900	1320	56.0
MW-198	MW-198-202110	10/21/2021	N	22800	1540	86.5
MW-198	MW-198-202204	4/14/2022	N	10400	947	81.9
MW-198	MW-198-202210_3912	10/21/2022	N	18800	1720	95.4
MW-198	MW-198-202304	4/20/2023	N	20800	1530	111
MW-198	MW-198-202310	10/19/2023	N	31400	2650	129 J
MW-199	MCP-HP-06-WG-22	7/15/2020	N	41.8	4.7	0.40 J
MW-199	MW-199-WG-2020922	9/22/2020	N	66.7	5.1	0.35 J
MW-199	MW-199-202010	10/6/2020	N	92.3	6.7	0.35 J
MW-199	MW-199-202104	4/14/2021	N	84.1	7.4	0.32 J
MW-199	MW-199-202110	10/21/2021	N	82.3	10.2	< 1.0 U
MW-199	MW-199-202204	4/14/2022	N	75.2	10.1	< 1.0 U
MW-199	MW-199-202210	10/20/2022	N	83.0	10.2	< 1.0 U
MW-199	MW-199-202304	4/19/2023	N	101	9.9	< 1.0 U
MW-199	MW-199-202310	10/19/2023	N	93.1	10.5	< 1.0 U
MW-200	NE-HP-01	7/14/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-200	MW-200-202010	10/8/2020	N	0.25 J	< 1.0 U	< 1.0 U
MW-200	MW-200-202104	4/13/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-200	MW-200-202110	10/19/2021	N	1.0	0.13 J	< 1.0 U
MW-200	MW-200-202204	4/12/2022	N	2.9	< 1.0 U	< 1.0 U
MW-200	MW-200-202210	10/18/2022	N	7.4	0.59 J	< 1.0 U
MW-200	MW-200-202304	4/18/2023	N	18.8	1.7	< 1.0 U
MW-200	MW-200-202310	10/17/2023	N	26.5	2.4	< 1.0 U
MW-201	HM-HP-05-WG-37	7/15/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-201	MW-201-202010	10/7/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-201	MW-201-202104	4/13/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-201	MW-201-202110	10/19/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-201	MW-201-202204	4/12/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-201	MW-201-202210	10/19/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-201	MW-201-202304	4/18/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-201	MW-201-202310	10/17/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
MW-202	NE-HP-02-WG-24.7	7/15/2020	N	1.5	0.36 J	< 1.0 U
MW-202	MW-202-202010	10/8/2020	N	9.3	1.1	< 1.0 U
MW-202	MW-202-202104	4/14/2021	N	33.3	3.2	< 1.0 U
MW-202	MW-202-202110	10/20/2021	N	67.3	6.1	< 1.0 U
MW-202	MW-202-202204	4/13/2022	N	96.7	9.0	< 1.0 U
MW-202	MW-202-202210	10/20/2022	N	158	15.7	< 1.0 U
MW-202	MW-202-202304	4/19/2023	N	165	18.3	< 1.0 U
MW-202	MW-202-202310	10/19/2023	N	276	24.0	< 1.0 U
MW-203	MW-203-WG-20200925	9/25/2020	N	0.57 J	< 1.0 U	< 1.0 U
MW-203	MW-203-202104	4/14/2021	N	3.7	0.22 J	< 1.0 U
MW-203	MW-203-202110	10/19/2021	N	102	2.9	< 1.0 U
MW-203	MW-203-202204	4/14/2022	N	92.4	2.2	< 1.0 U
MW-203	MW-203-202210	10/19/2022	N	228	5.7	< 1.0 U
MW-203	MW-203-202304	4/19/2023	N	247	6.9	< 1.0 U
MW-203	MW-203-202310	10/17/2023	N	330	9.3	0.22 J
MW-204	MW-204-WG-20200925	9/25/2020	N	34.8	3.0	< 1.0 U
MW-204	MW-204-202010	10/8/2020	N	55.6	4.1	< 1.0 U
MW-204	MW-204-202104	4/13/2021	N	46.3	4.0	< 1.0 U
MW-204	MW-204-202110	10/20/2021	N	49.6	3.2	< 1.0 U
MW-204	MW-204-202204	4/14/2022	N	45.2	4.1	< 1.0 U
MW-204	MW-204-202210	10/20/2022	N	39.4	4.8	< 1.0 U
MW-204	MW-204-202304	4/19/2023	N	40.4	3.2	< 1.0 U
MW-204	MW-204-202310	10/18/2023	N	40.7	3.1	< 1.0 U
MW-205	MW-205-202110	10/21/2021	N	400	135	0.74 J
MW-205	MW-205-202204	4/14/2022	N	539	153	1.0
MW-205	MW-205-202210	10/19/2022	N	500	102	0.32 J
MW-205	MW-205-202304	4/19/2023	N	566	130	0.74 J
MW-205	MW-205-202310	10/19/2023	N	582	122	0.90 J
MW-206	MW-206-202110	10/20/2021	N	1.2	0.41 J	< 1.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
MW-206	MW-206-202204	4/13/2022	N	1.9	0.62 J	< 1.0 U
MW-206	MW-206-202210	10/18/2022	N	3.9	0.58 J	< 1.0 U
MW-206	MW-206-202304	4/19/2023	N	5.9	0.79 J	< 1.0 U
MW-206	MW-206-202310	10/17/2023	N	7.9	0.90 J	< 1.0 U
NE-HP-03	NE-HP-03-WG-24.3	7/15/2020	N	0.17 J	< 1.0 U	< 1.0 U
NE-Manhole-SW	NE-MANHOLE-SW-20140818	8/18/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
RW-1	RW-1-202110	10/22/2021	N	36000	2580	12.7
RW-1	RW-1-202210	10/20/2022	N	82400	17100	< 1000 U
RW-1	RW-1-202310	10/18/2023	N	62300	55700	389 J
RW-69	RW -69-20090115-FS	1/15/2009	N	170	7.1	< 5 U
RW-69	RW-69-20090424-FS	4/24/2009	N	62	< 5 U	< 5 U
RW-69	RW-69-20090527-FS	5/27/2009	N	290	10	< 5 U
RW-69	RW-69-20091221-FS	12/21/2009	N	200	6.3	< 5.0 U
RW-69	RW-69-20100513-FS	5/13/2010	N	170	8.2	< 5 U
RW-69	RW-69-20101104-FS	11/4/2010	N	320	9	< 5 U
RW-69	RW-69-20110303-FS	3/3/2011	N	200	7.1	< 5.0 U
RW-69	RW-69-20110523-FS	5/23/2011	N	130	3.0 J	
RW-69	RW-69-20111026-FS	10/26/2011	N	210	5.7	< 5 U
RW-69	RW-69-20120418-FS	4/18/2012	N	150	3.6 J	< 5 U
RW-69	RW-69-20121018	10/18/2012	N	180	5.0	< 2.0 U
RW-69	RW-69-20130423	4/23/2013	N	190	2.8 J	< 2.0 U
RW-69	RW-69-101613	10/16/2013	N	190	7.7	< 2.0 U
RW-69	RW-69-201403	3/7/2014	N	105	3.5 J	0.41 J
RW-69	RW-69-201405	5/13/2014	N	110	3.3 J	0.30 J
RW-69	RW-69R-201407	7/29/2014	N	164	5.6	0.50 J
RW-69	RW-69-201410	10/14/2014	N	173	6.9	< 2.0 U
RW-69	RW-69-201501	1/14/2015	N	115	4.7	< 1.0 U
RW-69	RW-69-201504	4/14/2015	N	113	4.5	< 1.0 U
RW-69	RW-69-201507	7/21/2015	N	135	5.5	0.31 J
RW-69	RW-69-201510	10/6/2015	N	184	6.7	0.24 J
RW-69	RW-69-201601	1/12/2016	N	128	4.6	< 1.0 U
RW-69	RW-69-201605	5/3/2016	N	91.1	4.1	< 1.0 U
RW-69	RW-69-201611	11/9/2016	N	185	6.2	0.26 J
RW-69	RW-69-201704	4/27/2017	N	158	4.6	< 1.0 U
RW-69	RW-69-201710	10/24/2017	N	159	5.2	0.21 J
RW-69	RW-69-201804	4/18/2018	N	110	5.0	0.19 J
RW-69	RW-69-201811	11/14/2018	N	141 J+	5.4	0.53 J
RW-69	RW-69-201904	4/24/2019	N	99.9	4.4	0.16 J
RW-69	RW-69-201910	10/23/2019	N	150	5.6	0.53 J
RW-69	RW-69-202005	5/13/2020	N	102	4.4	0.30 J
RW-69	DUP-06-202005	5/13/2020	FD	101	4.3	0.23 J
RW-69	RW-69-202010	10/6/2020	N	101 J-	4.6	0.60 J
RW-69	RW-69-202104	4/13/2021	N	52.8	2.8	0.34 J
RW-69	RW-69-202110	10/21/2021	N	44.4	49.3	0.69 J
RW-69	RW-69-202204	4/14/2022	N	88.7	8.4	< 1.0 U
RW-69	RW-69-202210_3699	10/19/2022	N	97.6	7.8	0.30 J
RW-69	RW-69-202304	4/19/2023	N	130	3.5	0.29 J
RW-69	RW-69-202310	10/19/2023	N	89.0	6.1	0.43 J
SLUG-01	SLUG-01-GW-20140108	1/8/2014	N	230	7.7	< 2.0 U
SLUG-02	SLUG-02-GW-20140108	1/8/2014	N	300	11	< 2.0 U
SLUG-06	SLUG-06-GW-20140112	1/12/2014	N	11000	620	31
SV-04D	SV-04D-20140916	9/16/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
TMW-01	TMW-01-062613-GW	6/26/2013	N	< 5.0 U	< 5.0 U	
TMW-01	TMW-01-062613-LL	6/26/2013	N			< 2.0 U
TMW-02	TMW-02-062613-GW	6/26/2013	N	< 5.0 U	< 5.0 U	
TMW-02	TMW-02-062613-LL	6/26/2013	N			< 2.0 U
TMW-04	TMW-04-062613-GW	6/26/2013	N	< 5.0 U	< 5.0 U	
TMW-04	TMW-04-062613-LL	6/26/2013	N			< 2.0 U
TMW-05	TMW-05-062613-GW	6/26/2013	N	< 5.0 U	< 5.0 U	
TMW-05	TMW-05-062613-LL	6/26/2013	N			< 2.0 U
TMW-10	TMW-10-GW-091815	9/18/2015	N	190	1.9	< 1.0 U
TMW-10	TMW-10-201510	10/8/2015	N	102	1.1	< 1.0 U
TMW-10	TMW-10-201511	11/4/2015	N	120	0.72 J	< 1.0 U
TMW-10	TMW-10-201512	12/1/2015	N	114	0.88 J	< 1.0 U
TMW-10	TMW-10-201601	1/8/2016	N	103	3.1	< 1.0 U
TMW-10	TMW-10-201605	5/4/2016	N	123	12.9	< 1.0 U
TMW-10	TMW-10-201611	11/8/2016	N	95.4	4.4	< 1.0 U
TMW-10	TMW-10-201704	4/27/2017	N	96.2	5.1	0.32 J
TMW-10	DUP-05-201704	4/27/2017	FD	102	5.9	0.38 J
TMW-10	TMW-10-201710	10/24/2017	N	89.5	4.5	0.91 J
TMW-10	TMW-10-201804	4/18/2018	N	85.0	5.2	0.46 J
TMW-10	TMW-10-201807	7/31/2018	N	91.1	5.9	0.66 J
TMW-10	TMW-10-201811	11/13/2018	N	14.3	15.0	6.2
TMW-10	TMW-10-201904	4/25/2019	N	11.5	2.4	3.7
TMW-10	TMW-10-201910	10/22/2019	N	8.6	1.4	2.4
TMW-10	TMW-10-202005	5/14/2020	N	2.5	0.67 J	2.8
TMW-10	TMW-10-202010	10/5/2020	N	4.8	0.86 J	3.8

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
TMW-10	TMW-10-202104	4/14/2021	N	0.90 J	0.53 J	3.8
TMW-10	TMW-10-202110	10/19/2021	N	0.59 J	0.46 J	2.2
TMW-10	TMW-10-202204	4/12/2022	N	0.65 J	< 1.0 U	< 1.0 U
TMW-10	TMW-10-202210_3699	10/19/2022	N	2.1	0.71 J	3.8
TMW-10	TMW-10-202304	4/19/2023	N	1.2	0.65 J	3.3
TMW-10	TMW-10-202310	10/18/2023	N	4.4	1.6	4.8
TMW-11	TMW-11-GW-091815	9/18/2015	N	31.1	0.15 J	< 1.0 U
TMW-11	TMW-11-201510	10/8/2015	N	14.3	< 1.0 U	< 1.0 U
TMW-11	TMW-11-201511	11/4/2015	N	6.3	2.5	< 1.0 U
TMW-11	TMW-11-201512	12/1/2015	N	0.63 J	5.8	< 1.0 U
TMW-11	TMW-11-201601	1/8/2016	N	3.1	5.3	< 1.0 U
TMW-11	TMW-11-201605	5/3/2016	N	8.1	3.6	< 1.0 U
TMW-11	TMW-11-201611	11/8/2016	N	1.2	4.7	< 1.0 U
TMW-11	TMW-11-201704	4/27/2017	N	0.85 J	3.6	0.36 J
TMW-11	TMW-11-201710	10/23/2017	N	0.62 J	1.7	0.70 J
TMW-11	TMW-11-201804	4/17/2018	N	0.67 J	1.2	0.59 J
TMW-11	TMW-11-201811	11/13/2018	N	0.40 J	0.73 J	0.46 J
TMW-11	TMW-11-201904	4/25/2019	N	1.4	0.78 J	0.64 J
TMW-11	TMW-11-201910	10/22/2019	N	0.70 J	0.79 J	0.29 J
TMW-11	TMW-11-202005	5/14/2020	N	0.75 J	0.55 J	< 1.0 U
TMW-11	TMW-11-202010	10/5/2020	N	0.70 J	0.66 J	0.34 J
TMW-11	TMW-11-202104	4/14/2021	N	< 1.0 U	0.18 J	< 1.0 U
TMW-11	TMW-11-202110	10/20/2021	N	< 1.0 U	0.22 J	< 1.0 U
TMW-11	TMW-11-202204	4/12/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-11	TMW-11-202210_3699	10/19/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-11	TMW-11-202304	4/19/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-11	TMW-11-202310	10/18/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-12	TMW-12-201704	4/27/2017	N	463	12.0	0.34 J
TMW-12	TMW-12-201804	4/18/2018	N	563	12.0	0.37 J
TMW-12	TMW-12-201811	11/15/2018	N	429	13.7	0.41 J
TMW-12	DUP-04-201811	11/15/2018	FD	470	12.8	0.37 J
TMW-12	TMW-12-201904	4/24/2019	N	470	11.9	0.37 J
TMW-12	TMW-12-201910	10/23/2019	N	471	10.1	0.26 J
TMW-12	TMW-12-202005	5/12/2020	N	372	10.3	0.21 J
TMW-12	TMW-12-202010	10/7/2020	N	415	11.1	0.32 J
TMW-12	TMW-12-202104	4/14/2021	N	335	10	0.33 J
TMW-12	TMW-12-202110	10/21/2021	N	366	8.9	0.20 J
TMW-12	DUP-08-202110	10/21/2021	FD	359	9.6	0.23 J
TMW-12	TMW-12-202204	4/14/2022	N	368	9.4	0.28 J
TMW-12	TMW-12-202210	10/20/2022	N	330	8.4	0.22 J
TMW-12	DUP-07-202210	10/20/2022	FD	318	9.0	0.20 J
TMW-12	TMW-12-202304	4/20/2023	N	282	8.7	0.21 J
TMW-12	TMW-12-202310	10/18/2023	N	323	8.5	0.19 J
TMW-12	DUP-09-202310	10/18/2023	FD	328	8.8	0.20 J
TMW-13	TMW-13-201704	4/27/2017	N	193	4.2	0.15 J
TMW-14	TMW-14-201704	4/27/2017	N	10.9	0.29 J	< 1.0 U
TMW-14	TMW-14-201804	4/18/2018	N	2.1	< 1.0 U	< 1.0 U
TMW-14	DUP-03-201804	4/18/2018	FD	2.0	< 1.0 U	< 1.0 U
TMW-14	TMW-14-201811	11/14/2018	N	0.24 J	< 1.0 U	< 1.0 U
TMW-14	TMW-14-201904	4/24/2019	N	10.1 J+	0.39 J	< 1.0 U
TMW-14	TMW-14-201910	10/23/2019	N	2.6	0.60 J	< 1.0 U
TMW-14	TMW-14-202005	5/11/2020	N	0.60 J	< 1.0 U	< 1.0 U
TMW-14	TMW-14-202010	10/7/2020	N	3.0	3.2	< 1.0 U
TMW-14	TMW-14-202110	10/20/2021	N	0.55 J	0.64 J	< 1.0 U
TMW-14	TMW-14-202210	10/19/2022	N	6.1	7.2	< 1.0 U
TMW-14	TMW-14-202310	10/17/2023	N	3.3	2.1	< 1.0 U
TMW-15	TMW-15-201704	4/26/2017	N	5.3	0.41 J	< 1.0 U
TMW-16	TMW-16-201704	4/25/2017	N	682	8.4	0.57 J
TMW-16	TMW-16-201710	10/24/2017	N	956	10.4	< 1.0 U
TMW-16	TMW-16-20180402	4/2/2018	N	985	11.5	0.78 J
TMW-16	TMW-16-201804	4/19/2018	N	1030	13.6	0.90 J
TMW-16	TMW-16-201807	8/2/2018	N	988	15.1	0.81 J
TMW-16	TMW-16-201811	11/16/2018	N	368	29.1	1.6 J
TMW-16	TMW-16-201904	4/25/2019	N	23.8	236	1.4
TMW-16	TMW-16-201910	10/23/2019	N	6.0	8.8	2.4
TMW-16	TMW-16-202005	5/14/2020	N	0.71 J	1.0 J	0.57 J
TMW-16	TMW-16-202010	10/8/2020	N	0.59 J	1.2 J+	0.38 J
TMW-16	TMW-16-202104	4/13/2021	N	0.68 J	0.45 J	0.52 J
TMW-16	TMW-16-202110	10/19/2021	N	0.31 J	1.2	0.77 J
TMW-16	TMW-16-202210_3494	10/18/2022	N	0.54 J	0.57 J	0.62 J
TMW-16	TMW-16-202310	10/20/2023	N	31.8	0.67 J	0.74 J
TMW-17	TMW-17-201704	4/25/2017	N	154	7.6	0.37 J
TMW-18	TMW-18-201704	4/25/2017	N	0.60 J	0.72 J	< 1.0 U
TMW-19	TMW-19-201704	4/25/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-19	DUP-01-201704	4/25/2017	FD	0.30 J	< 1.0 U	< 1.0 U
TMW-19	TMW-19-201710	10/24/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-19	TMW-19-201804	4/19/2018	N	0.41 J	0.32 J	< 1.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
TMW-19	TMW-19-201811	11/14/2018	N	0.97 J	0.69 J	< 1.0 U
TMW-19	TMW-19-201904	4/24/2019	N	5.6	1.1	< 1.0 U
TMW-19	TMW-19-201910	10/23/2019	N	13.6	1.6	< 1.0 U
TMW-19	DUP-06-201910	10/23/2019	FD	12.2	1.5	< 1.0 U
TMW-19	TMW-19-202005	5/13/2020	N	7.8	0.97 J	< 1.0 U
TMW-19	TMW-19-202010	10/5/2020	N	16.0	1.7	< 1.0 U
TMW-19	TMW-19-202104	4/14/2021	N	9.5	0.63 J	< 1.0 U
TMW-19	TMW-19-202110	10/22/2021	N	40.4	2.6	< 1.0 U
TMW-19	TMW-19-202204	4/14/2022	N	66.5	4.0	< 1.0 U
TMW-19	TMW-19-202210	10/18/2022	N	31.8	2.7	< 1.0 U
TMW-19	TMW-19-202304	4/19/2023	N	72.8	3.8	0.17 J
TMW-19	TMW-19-202310	10/17/2023	N	88.5	4.7	< 1.0 U
TMW-20	TMW-20-201710	10/10/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-20	TMW-20-20171023	10/23/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-20	FD-01-201710	10/23/2017	FD	< 1.0 U	< 1.0 U	< 1.0 U
TMW-20	TMW-20-201804	4/17/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-20	TMW-20-201811	11/13/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-20	DUP-01-201811	11/13/2018	FD	< 1.0 U	< 1.0 U	< 1.0 U
TMW-20	TMW-20-201904	4/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-20	TMW-20-201910	10/22/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-20	TMW-20-202005	5/14/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-20	TMW-20-202010	10/6/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-20	TMW-20-202110	10/19/2021	N	< 1.0 U	0.28 J	< 1.0 U
TMW-20	TMW-20-202210	10/18/2022	N	0.21 J	< 1.0 U	< 1.0 U
TMW-20	TMW-20-202310	10/17/2023	N	0.24 J	< 1.0 U	< 1.0 U
TMW-21	TMW-21-201710	10/10/2017	N	375	8.7	0.16 J
TMW-21	TMW-21-20171024	10/24/2017	N	461	9.2	< 1.0 U
TMW-21	TMW-21-201804	4/18/2018	N	340	7.4	< 1.0 U
TMW-21	TMW-21-20180419	4/19/2018	N	420	10.0	0.21 J
TMW-21	TMW-21-201807	7/31/2018	N	564	12.6	0.31 J
TMW-21	TMW-21-201811	11/15/2018	N	22.1 J-	86.3 J-	0.52 J
TMW-21	TMW-21-201904	4/25/2019	N	47.0	27.7	5.9
TMW-21	TMW-21-201910	10/22/2019	N	21.8	13.5	1.9
TMW-21	TMW-21-202005	5/14/2020	N	3.8	6.8	1.9
TMW-21	TMW-21-202010	10/6/2020	N	7.2	3.2	1.9
TMW-21	TMW-21-202104	4/14/2021	N	2.3	1.3	1.5
TMW-21	TMW-21-202110	10/20/2021	N	5.2	2.1	1.7
TMW-21	TMW-21-202204	4/14/2022	N	0.68 J	0.83 J	< 1.0 U
TMW-21	TMW-21-202210_3494	10/18/2022	N	2.8	1.3	2.0
TMW-21	TMW-21-202304	4/20/2023	N	0.41 J	0.30 J	0.64 J
TMW-21	TMW-21-202310	10/17/2023	N	3.7	1.9	6.2
TMW-22	TMW-22-20171013	10/13/2017	N	636	13.9	< 1.0 U
TMW-22	TMW-22-201710	10/24/2017	N	486	9.8	< 1.0 U
TMW-22	TMW-22-201804	4/18/2018	N	224	20.1	< 1.0 U
TMW-22	TMW-22-201807	8/1/2018	N	460	28.7	0.20 J
TMW-22	TMW-22R-201811	11/15/2018	N	347	71.2	0.16 J
TMW-22	TMW-22R-201904	4/25/2019	N	202	184	8.3
TMW-22R	TMW-22R-201910	10/23/2019	N	146	126	7.9
TMW-22R	TMW-22R-202005	5/14/2020	N	61.1	94.6	26.3
TMW-22R	TMW-22R-202010	10/6/2020	N	56.6	70.3	15.4
TMW-22R	TMW-22R-202104	4/14/2021	N	67.6	129	57.7
TMW-22R	TMW-22R-202110	10/21/2021	N	21.9	24.7	12.8
TMW-22R	TMW-22R-202204	4/14/2022	N	88.3	124	< 1.0 U
TMW-22R	TMW-22R-202210	10/20/2022	N	35.9	35.6	21.4
TMW-22R	TMW-22R-202304	4/19/2023	N	127	91.9	33.0
TMW-22R	TMW-22R-202310	10/19/2023	N	52.2	37.8	21.0
TMW-23	TMW-23-20171013	10/13/2017	N	131	2.0	< 1.0 U
TMW-23	TMW-23-201710	10/25/2017	N	62.2	0.89 J	< 1.0 U
TMW-23	TMW-23-201804	4/18/2018	N	125	1.5	< 1.0 U
TMW-23	TMW-23-201811	11/16/2018	N	110	1.2	< 1.0 U
TMW-23	DUP-03-201811	11/16/2018	FD	116	1.6	< 1.0 U
TMW-23	TMW-23-201904	4/24/2019	N	190	2.3	< 1.0 U
TMW-23	TMW-23-2019110	10/23/2019	N	189	2.5	< 1.0 U
TMW-23	TMW-23-202005	5/11/2020	N	182	2.9	< 1.0 U
TMW-23	TMW-23-202010	10/7/2020	N	168	3.0	< 1.0 U
TMW-23	DUP-03-202010	10/7/2020	FD	164	2.9	< 1.0 U
TMW-23	TMW-23-202104	4/14/2021	N	179	3.1	< 1.0 U
TMW-23	DUP-09-202104	4/14/2021	FD	172	3.1	< 1.0 U
TMW-23	TMW-23-202110	10/20/2021	N	186	2.9	< 1.0 U
TMW-23	TMW-23-202204	4/14/2022	N	194	3.1	< 1.0 U
TMW-23	TMW-23-202210	10/20/2022	N	154	6.0	< 1.0 U
TMW-23	TMW-23-202304	4/20/2023	N	187	3.7	< 1.0 U
TMW-23	TMW-23-202310	10/18/2023	N	191	2.8	< 1.0 U
TMW-24	TMW-24-201710	10/10/2017	N	309	7.7	0.18 J
TMW-24	TMW-24-20171024	10/24/2017	N	385	8.1	< 1.0 U
TMW-24	TMW-24-201804	4/18/2018	N	601	11.9	0.25 J
TMW-24	TMW-24-201811	11/15/2018	N	540	10.9	0.25 J

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
TMW-24	TMW-24-201904	4/24/2019	N	565	12.3	0.47 J
TMW-24	TMW-24-2019110	10/23/2019	N	575	11.8	0.20 J
TMW-24	TMW-24-202005	5/12/2020	N	560	10.9	0.20 J
TMW-24	TMW-24-202010	10/6/2020	N	495	11.1	< 1.0 U
TMW-24	TMW-24-202104	4/14/2021	N	484	12.5	< 1.0 U
TMW-24	TMW-24-202110	10/21/2021	N	487	11.3	0.24 J
TMW-24	TMW-24-202204	4/14/2022	N	440	9.2	< 1.0 U
TMW-24	TMW-24-202210	10/20/2022	N	393	8.7	< 1.0 U
TMW-24	TMW-24-202304	4/20/2023	N	315	10.8	0.25 J
TMW-24	TMW-24-202310	10/19/2023	N	445	11.2	< 1.0 U
TMW-25	TMW-25-201710	10/11/2017	N	140	8.8	0.19 J
TMW-25	TMW-25-20171025	10/25/2017	N	245	11.2	0.41 J
TMW-25	TMW-25-201804	4/19/2018	N	240	10.9	0.29 J
TMW-25	TMW-25-201811	11/15/2018	N	58.6 J-	11.0 J-	< 5.0 UJ
TMW-25	TMW-25-201904	4/25/2019	N	38.6	47.7	0.39 J
TMW-25	TMW-25-201910	10/24/2019	N	23.6	39.9	0.41 J
TMW-25	TMW-25-202005	5/14/2020	N	17.0	5.5	1.2
TMW-25	TMW-25-202010	10/7/2020	N	3.1	1.1	< 1.0 U
TMW-25	TMW-25-202104	4/13/2021	N	3.2	1.0	0.74 J
TMW-25	TMW-25-202110	10/20/2021	N	6.8	1.4	0.45 J
TMW-25	TMW-25-202204	4/13/2022	N	4.1	0.99 J	< 1.0 U
TMW-25	TMW-25-202210_3699	10/19/2022	N	2.4	0.81 J	0.60 J
TMW-25	TMW-25-202304	4/19/2023	N	2.1	0.42 J	0.31 J
TMW-25	TMW-25-202310	10/20/2023	N	3.4	0.80 J	0.35 J
TMW-26	TMW-26-201710	10/11/2017	N	185	4.2	0.23 J
TMW-26	TMW-26-20171024	10/24/2017	N	36.3	< 1.0 U	< 1.0 U
TMW-26	TMW-26-20180402	4/2/2018	N	35.4	0.98 J	< 1.0 U
TMW-26	TMW-26-201804	4/19/2018	N	28.3	1.1	< 1.0 U
TMW-26	TMW-26-201807	8/2/2018	N	96.1	2.5	0.23 J
TMW-26	TMW-26-201811	11/15/2018	N	54.4 J-	11.1 J-	< 5.0 UJ
TMW-26	TMW-26-201904	4/25/2019	N	128	46.3	0.29 J
TMW-26	TMW-26-201910	10/23/2019	N	42.9	53.3	2.9
TMW-26	TMW-26-202005	5/14/2020	N	4.1	2.5	0.71 J
TMW-26	TMW-26-202010	10/7/2020	N	3.7	1.1	0.99 J
TMW-26	TMW-26-202104	4/13/2021	N	1.9	0.68 J	0.56 J
TMW-26	TMW-26-202110	10/19/2021	N	2.7	0.88 J	0.44 J
TMW-26	TMW-26-202204	4/14/2022	N	2.3	< 1.0 U	< 1.0 U
TMW-26	TMW-26-202210_3494	10/18/2022	N	1.8	0.53 J	0.74 J
TMW-26	TMW-26-202304	4/19/2023	N	1.5	0.40 J	0.52 J
TMW-26	TMW-26-202310	10/20/2023	N	37.2	0.75 J	0.62 J
TMW-27	TMW-27-201710	10/11/2017	N	0.20 J	< 1.0 U	< 1.0 U
TMW-27	TMW-27-20171025	10/25/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-27	TMW-27-20180402	4/2/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-27	TMW-27-201804	4/18/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-27	TMW-27-201811	11/14/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-27	TMW-27-201904	4/24/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-27	TMW-27-201910	10/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-27	TMW-27-202005	5/14/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-27	TMW-27-202010	10/7/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-27	DUP-06-202010	10/7/2020	FD	< 1.0 U	< 1.0 U	< 1.0 U
TMW-27	TMW-27-202110	10/19/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-27	TMW-27-202210	10/18/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-27	TMW-27-202310	10/20/2023	N	1.3	< 1.0 U	< 1.0 U
TMW-28	TMW-28-20171010	10/12/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-29	TMW-29-20171010	10/12/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-29	TMW-29-201710	10/23/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-29	TMW-29-201804	4/17/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-29	TMW-29-201811	11/13/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-29	TMW-29-201904	4/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-29	TMW-29-201910	10/22/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-29	TMW-29-202005	5/12/2020	N	0.12 J	< 1.0 U	< 1.0 U
TMW-29	TMW-29-202010	10/5/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-29	TMW-29-202104	4/12/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-29	TMW-29-202110	10/19/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-29	TMW-29-202204	4/12/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-29	DUP-01-202204	4/12/2022	FD	< 1.0 U	< 1.0 U	< 1.0 U
TMW-29	TMW-29-202210	10/17/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-29	DUP-02-202304	4/17/2023	FD	0.56 J	< 1.0 U	< 1.0 U
TMW-29	TMW-29-202310	10/16/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-30	TMW-30-20171013	10/13/2017	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-30	TMW-30-201710	10/24/2017	N	0.55 J	< 1.0 U	< 1.0 U
TMW-30	TMW-30-20180402	4/2/2018	N	1.5	0.49 J	< 1.0 U
TMW-30	TMW-30-201811	11/14/2018	N	< 25.0	< 25.0 U	< 25.0 U
TMW-30	TMW-30-201910	10/23/2019	N	2.5	2.3	0.12 J
TMW-30	TMW-30-202005	5/14/2020	N	< 5.0 U	2.9 J	< 5.0 U
TMW-30	TMW-30-202010	10/7/2020	N	12.7 J	< 20.0 U	< 20.0 U
TMW-30	TMW-30-202104	4/14/2021	N	34.3	76.4	< 10.0 U

APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
TMW-30	TMW-30-202110	10/21/2021	N	8.7 J	3.5 J	< 20.0 U
TMW-30	DUP-11-202110	10/21/2021	FD	7.8 J	2.7 J	< 20.0 U
TMW-30	TMW-30-202204	4/14/2022	N	30.0	6.4	< 1.0 U
TMW-30	TMW-30-202210	10/19/2022	N	7.2 J	< 20.0 U	< 20.0 U
TMW-30	DUP-01-202210	10/19/2022	FD	8.8 J	< 20.0 U	< 20.0 U
TMW-30	TMW-30-202304	4/20/2023	N	30.1	5.6 J	< 20.0 U
TMW-30	TMW-30-202310	10/20/2023	N	15.9	3.4	< 1.0 U
TMW-30	DUP-06-202310	10/20/2023	FD	19.3	3.8	< 1.0 U
TMW-31	TMW-31-20180403	4/3/2018	N	< 5.0 U	< 5.0 U	< 5.0 U
TMW-32	TMW-32-20180403	4/3/2018	N	65.8	3.3	< 1.0 U
TMW-32	TMW-32-201804	4/18/2018	N	101	3.7	< 1.0 U
TMW-32	TMW-32-201807	8/3/2018	N	83.5	3.4	< 1.0 U
TMW-32	TMW-32-201811	11/16/2018	N	16.0	1.9	0.35 J
TMW-32	TMW-32-201904	4/25/2019	N	12.5	36.4	0.13 J
TMW-32	TMW-32-201910	10/24/2019	N	29.2	21.0	0.13 J
TMW-32	TMW-32-202005	5/14/2020	N	31.6	16.1	1.5
TMW-32	TMW-32-202010	10/8/2020	N	27.6	7.3	0.90 J
TMW-32	TMW-32-202104	4/14/2021	N	43.1	9.4	0.91 J
TMW-32	DUP-04-202104	4/14/2021	FD	43.2	9.1	0.79 J
TMW-32	TMW-32-202110	10/20/2021	N	24.9	5.2	0.36 J
TMW-32	TMW-32-202204	4/13/2022	N	22.7	4.4	< 1.0 U
TMW-32	TMW-32-202210	10/20/2022	N	17.0	6.1	0.28 J
TMW-32	TMW-32-202304	4/19/2023	N	16.1	7.3	0.44 J
TMW-32	TMW-32-202310	10/20/2023	N	10.2	5.3	0.38 J
TMW-33	TMW-33-20180403	4/3/2018	N	55.8	2.3	0.17 J
TMW-33	TMW-33-SHALLOW-20180405	4/5/2018	N	156	3.0	0.26 J
TMW-34	TMW-34-201811	11/14/2018	N	7.4	1.5	< 1.0 U
TMW-34	TMW-34-201904	4/25/2019	N	10.3	2.2	< 1.0 U
TMW-34	TMW-34-201910	10/24/2019	N	17.6	6.9	< 1.0 U
TMW-34	TMW-34-202005	5/14/2020	N	46.6	18.1	< 1.0 U
TMW-34	TMW-34-202010	10/7/2020	N	84.4	46.0	< 1.0 U
TMW-34	TMW-34-202104	4/15/2021	N	59.9	20.9	< 1.0 U
TMW-34	TMW-34-202110	10/20/2021	N	126	65.5	< 1.0 U
TMW-34	TMW-34-202204	4/13/2022	N	50.9	11.0	< 1.0 U
TMW-34	TMW-34-202210	10/20/2022	N	151	38.7	< 1.0 U
TMW-34	TMW-34-202304	4/19/2023	N	148	27.0	< 1.0 U
TMW-34	TMW-34-202310	10/18/2023	N	147	24.3	< 1.0 U
TMW-35	TMW-35-201910	10/22/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-35	TMW-35-202005	5/12/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-35	DUP-01-202005	5/12/2020	FD	< 1.0 U	< 1.0 U	< 1.0 U
TMW-35	TMW-35-202010	10/6/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-35	TMW-35-202110	10/19/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-35	DUP-06-202110	10/19/2021	FD	< 1.0 U	< 1.0 U	< 1.0 U
TMW-35	TMW-35-202210	10/18/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-35	DUP-11-202210	10/18/2022	FD	< 1.0 U	< 1.0 U	< 1.0 U
TMW-35	TMW-35-202310	10/17/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-35	DUP-11-202310	10/17/2023	FD	< 1.0 U	< 1.0 U	< 1.0 U
TMW-36	TMW-36-201910	10/24/2019	N	389	8.4	0.31 J
TMW-36	TMW-36-202005	5/13/2020	N	235	7.6	0.30 J
TMW-36	TMW-36-202010	10/5/2020	N	299	8.7	0.40 J
TMW-36	TMW-36-202104	4/13/2021	N	11.3	3.2	< 1.0 U
TMW-36	TMW-36-202110	10/19/2021	N	110	64.3	0.27 J
TMW-36	TMW-36-202204	4/12/2022	N	2.3	9.5	< 1.0 U
TMW-36	TMW-36-202210_3494	10/18/2022	N	86.7	81.5	0.37 J
TMW-36	TMW-36-202304	4/17/2023	N	72.6	65.8	0.25 J
TMW-36	TMW-36-202310	10/16/2023	N	103	60.5	0.31 J
TMW-36B	TMW-36B-202007	7/15/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-36B	TMW-36B-202010	10/5/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-36B	TMW-36B-202104	4/12/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-36B	TMW-36B-202110	10/19/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-36B	TMW-36B-202204	4/12/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-36B	TMW-36B-202210_3494	10/18/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
TMW-36B	TMW-36B-202304	4/17/2023	N	0.35 J	< 1.0 U	< 1.0 U
TMW-36B	TMW-36B-202310	10/16/2023	N	< 1.0 U	0.19 J	< 1.0 U
TMW-188	MW-188-GW-091415	9/14/2015	N	2.0 J	2.4 J	< 5.0 U
TMW-189	MW-189-GW-091515	9/15/2015	N	2.6	4.7	0.22 J
VP-10	VP-10-GW-20150120	1/20/2015	N	636	18.8	0.61 J
VP-10	VP-10-20150422	4/22/2015	N	395	11.2	0.35 J
VP-10	VP-10-201507	7/30/2015	N	6.1	0.34 J	< 1.0 U
VP-10	VP-10-201510	10/6/2015	N	198	8.8	0.15 J
VP-10	VP-10-201601	1/12/2016	N	823	8.6	0.27 J
VP-10	VP-10-201605	5/3/2016	N	376	13.1	0.30 J
VP-10	VP-10-201611	11/8/2016	N	278	16.0	0.39 J
VP-10	VP-10-201704	5/3/2017	N	198	15.9	0.41 JB
VP-10	VP-10-201710	10/25/2017	N	211	12.7	0.42 J
VP-10	VP-10-201804	4/19/2018	N	357	14.9	0.40 J
VP-10	VP-10-201811	11/15/2018	N	250	14.4	0.55 J

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Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
VP-10	VP-10-201904	4/24/2019	N	211	12.6	0.36 J
VP-10	VP-10-201910	10/23/2019	N	3.3 J	11.9	0.52 J
VP-10	VP-10-202005	5/12/2020	N	27.5	1.4	0.24 J
VP-10	VP-10-202010	10/7/2020	N	110	12.5	0.48 J
VP-10	VP-10-202104	4/14/2021	N	169	10.2	0.39 J
VP-10	VP-10-202110	10/21/2021	N	177	12.4	0.33 J
VP-12	VP-12-GW-20150121	1/21/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-12	VP-12-20150422	4/22/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-12	VP-12-201507	7/30/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-12	VP-12-201510	10/7/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-12	VP-12-201601	1/11/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-12	VP-12-201605	5/2/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-12	VP-12-201611	11/8/2016	N	0.55 J	< 1.0 U	< 1.0 U
VP-12	VP-12-201704	5/3/2017	N	< 1.0 U	0.25 JB	< 1.0 U
VP-12	VP-12-201710	10/25/2017	N	0.22 J	< 1.0 U	< 1.0 U
VP-12	VP-12-201804	4/19/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-12	VP-12-201811	11/15/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-12	VP-12-201904	4/24/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-12	VP-12-201910	10/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-12	VP-12-202005	5/13/2020	N	0.62 J	< 1.0 U	< 1.0 U
VP-12	VP-12-202010	10/7/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-12	VP-12-202104	4/14/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-12	VP-12-202110	10/20/2021	N	0.31 J	< 1.0 U	< 1.0 U
VP-12	VP-12-202204	4/14/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-12	VP-12-202210	10/20/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-12	VP-12-202304	4/20/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-12	VP-12-202310	10/19/2023	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-14	VP-14-201507	7/30/2015	N	55.6	2.1	< 1.0 U
VP-14	VP-14-201510	10/7/2015	N	59.3	2.3	< 1.0 U
VP-14	VP-14-201601	1/13/2016	N	65.6	2.3	< 1.0 U
VP-14	VP-14-201605	5/4/2016	N	54.5	2.4	< 1.0 U
VP-14	VP-14-201704	5/3/2017	N	62.9	3.7 B	0.18 JB
VP-14	VP-14-201710	10/25/2017	N	69.0	3.3	< 1.0 U
VP-14	VP-14-201804	4/19/2018	N	55.8	2.6	< 1.0 U
VP-14	VP-14-201811	11/15/2018	N	64.1	2.6	< 1.0 U
VP-14	VP-14-201904	4/24/2019	N	53.6	2.1	< 1.0 U
VP-14	VP-14-201910	10/23/2019	N	87.9	3.9	< 1.0 U
VP-14	VP-14-202005	5/12/2020	N	42.9	2.1	< 1.0 U
VP-14	VP-14-202010	10/8/2020	N	38.3	1.9	< 1.0 U
VP-14	VP-14-202104	4/14/2021	N	26.1	1.5	< 1.0 U
VP-14	VP-14-202110	10/21/2021	N	25.6	1.1	< 1.0 U
VP-14	VP-14-202204	4/14/2022	N	40.3	2.0	< 1.0 U
VP-14	VP-14-202304	4/20/2023	N	23.1	1.6	< 1.0 U
VP-14	VP-14-202310	10/19/2023	N	21.7	1.1	< 1.0 U
VP-15	VP-15-GW-20150701	7/1/2015	N	< 1.0 U	0.18 J	0.24 J
VP-15	VP-15-201510	10/7/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-15	VP-15-201601	1/11/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-15	VP-15-201605	5/2/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-1S	VP-1-SHALLOW-20140916	9/16/2014	N	< 5.0 U	< 5.0 U	< 2.0 U
VP-1S	VP-1-SHALLOW-201410	10/15/2014	N	8.3	1.4 J	< 2.0 U
VP-2D	SV-2-DEEP-201407	7/29/2014	N	56.1	8.2	< 2.0 U
VP-2D	VP-2-DEEP-20140916	9/16/2014	N	48.0	6.5	< 2.0 U
VP-2D	VP-2-DEEP-20140916-DUP	9/16/2014	FD	49.4	6.8	< 2.0 U
VP-2D	VP-2-DEEP-201410	10/15/2014	N	46.3	6.3	< 2.0 U
VP-2S	SV-2-SHALLOW-201407	7/29/2014	N	33.8	5.7	< 2.0 U
VP-2S	VP-2-SHALLOW-20140916	9/16/2014	N	36.4	5.6	< 2.0 U
VP-2S	VP-2-SHALLOW-201410	10/15/2014	N	51.2	5.2	< 2.0 U
VP-5	VP-05-20150422	4/22/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-5	VP-05-201507	7/30/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-5	VP-05-201510	10/6/2015	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-5	VP-05-201601	1/12/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-5	VP-05-201605	5/4/2016	N	0.66 J	< 1.0 U	< 1.0 U
VP-5	VP-05-201611	11/8/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-6	VP-06-GW-20150120	1/20/2015	N	4.3	< 1.0 U	< 1.0 U
VP-6	VP-06-20150422	4/22/2015	N	2.3	0.30 J	< 1.0 U
VP-6	VP-06-201507	7/30/2015	N	0.76 J	0.20 J	< 1.0 U
VP-6	VP-06-201510	10/6/2015	N	0.75 J	< 1.0 U	< 1.0 U
VP-6	VP-06-201601	1/12/2016	N	1.3	0.20 J	< 1.0 U
VP-6	VP-06-201605	5/4/2016	N	0.78 J	0.17 J	< 1.0 U
VP-6	VP-06-201611	11/8/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-7	VP-07-201601	1/11/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-7	VP-07-201605	5/3/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-7	VP-07-201611	11/8/2016	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-7	VP-07-201704	5/3/2017	N	< 1.0 U	0.33 JB	< 1.0 U
VP-7	VP-07-201710	10/25/2017	N	0.71 J	< 1.0 U	< 1.0 U
VP-7	VP-7-201804	4/19/2018	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-7	VP-7-201811	11/15/2018	N	< 1.0 U	< 1.0 U	< 1.0 U

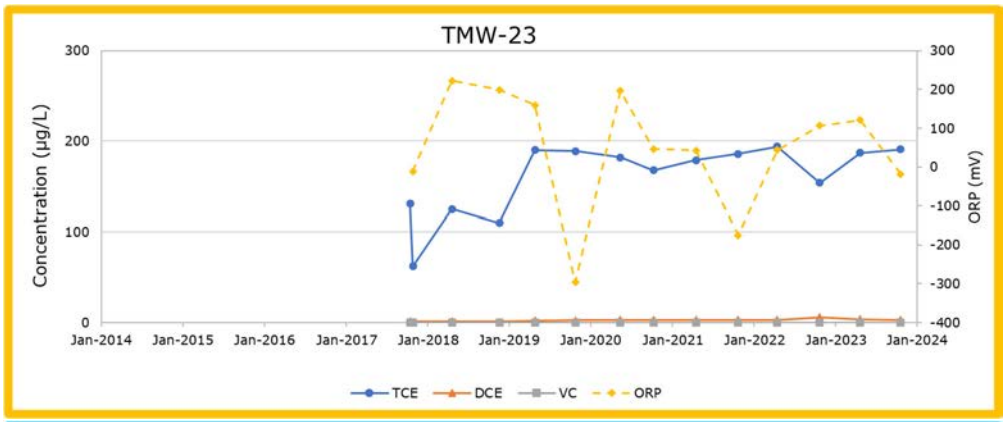
APPENDIX D
HISTORICAL SUMMARY OF MONITORING WELL GROUNDWATER CONCENTRATIONS FOR TCE AND DAUGHTER-PRODUCTS
Whirlpool Facility - Fort Smith, Arkansas

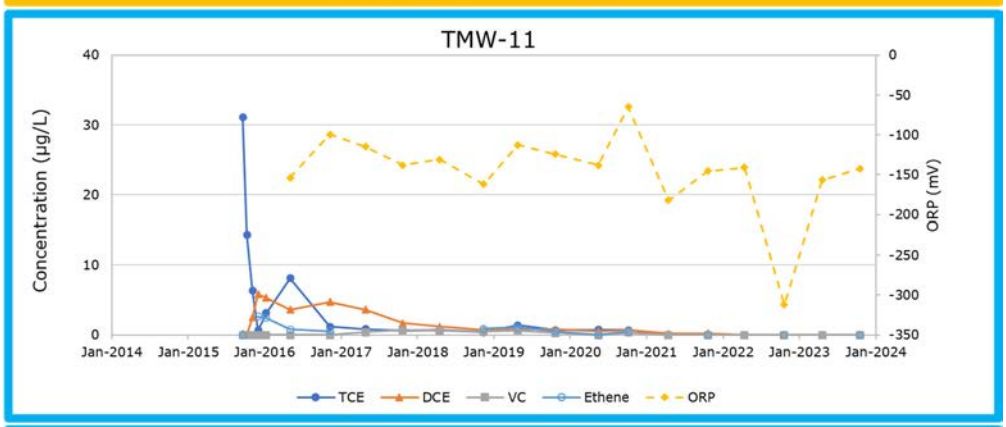
Location	Sample ID	Date	Sample Type	Trichloroethene	cis-1,2-Dichloroethene	Vinyl Chloride
VP-7	VP-7-201904	4/24/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-7	VP-7-201910	10/23/2019	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-7	VP-7-202005	5/12/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-7	VP-07-202010	10/7/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-7	VP-7-202104	4/14/2021	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-7	VP-7-202204	4/14/2022	N	0.27 J	< 1.0 U	< 1.0 U
VP-7	VP-7-202210	10/20/2022	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-7	VP-07-202304	4/20/2023	N	0.23 J	< 1.0 U	< 1.0 U
VP-8	VP-08-20150422	4/22/2015	N	1.2	< 1.0 U	< 1.0 U
VP-8	VP-08-201507	7/30/2015	N	2.2	< 1.0 U	< 1.0 U
VP-8	VP-08-201510	10/7/2015	N	2.5 B	< 1.0 U	< 1.0 U
VP-8	VP-08-201601	1/11/2016	N	3.2	< 1.0 U	< 1.0 U
VP-8	VP-08-201605	5/3/2016	N	3.8	< 1.0 U	0.15 J
VP-8	VP-08-201611	11/8/2016	N	2.4	< 1.0 U	< 1.0 U
VP-8	VP-08-201704	5/3/2017	N	2.5	0.35 JB	0.20 JB
VP-8	VP-08-201710	10/25/2017	N	2.9	< 1.0 U	0.18 J
VP-8	VP-8-201804	4/19/2018	N	3.4	< 1.0 U	0.17 J
VP-8	VP-8-201811	11/15/2018	N	4.5	< 1.0 U	0.17 J
VP-8	VP-8-201904	4/24/2019	N	4.8	< 1.0 U	0.18 J
VP-8	VP-8-201910	10/23/2019	N	5.8	0.23 J	0.26 J
VP-8	VP-8-202005	5/12/2020	N	4.4	0.19 J	0.14 J
VP-8	VP-08-202010	10/7/2020	N	< 1.0 U	< 1.0 U	< 1.0 U
VP-8	VP-8-202104	4/14/2021	N	5.8	0.18 J	< 1.0 U
VP-8	VP-8-202110	10/21/2021	N	4.2	0.13 J	< 1.0 U
VP-8	VP-8-202204	4/14/2022	N	5.3	0.22 J	< 1.0 U
VP-8	VP-8-202210	10/20/2022	N	5.6	0.15 J	< 1.0 U
VP-8	VP-08-202304	4/20/2023	N	6.8	0.22 J	< 1.0 U
VP-8	VP-8-202310	10/19/2023	N	5.5	0.25 J	< 1.0 U
VP-9	VP-09-201507	7/30/2015	N	2.4	< 1.0 U	< 1.0 U
WEST-SW	WEST-SW-20140818	8/18/2014	N	< 5.0 U	< 5.0 U	< 2.0 U

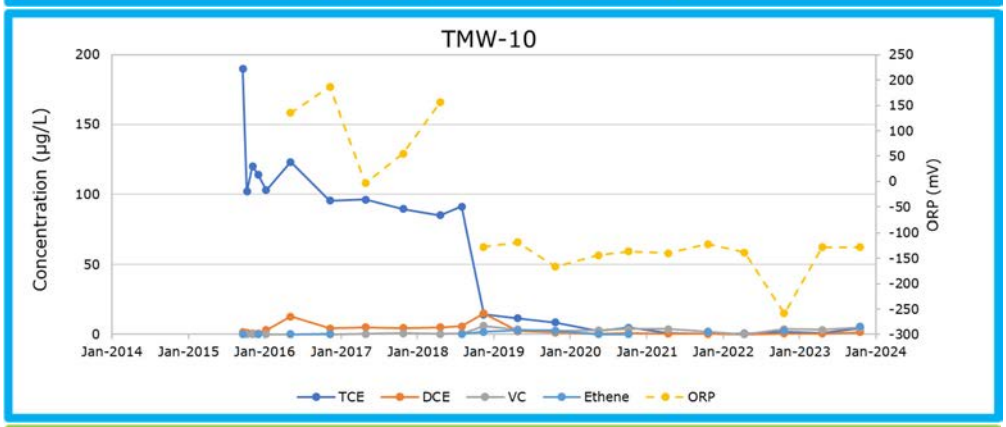
Appendix E

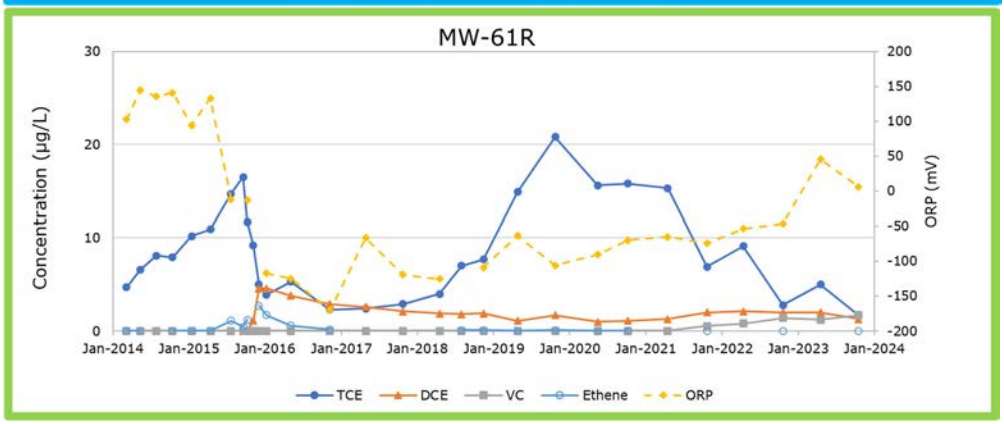
ISCR Data Graphs

North Plume – 61R-PH II Array



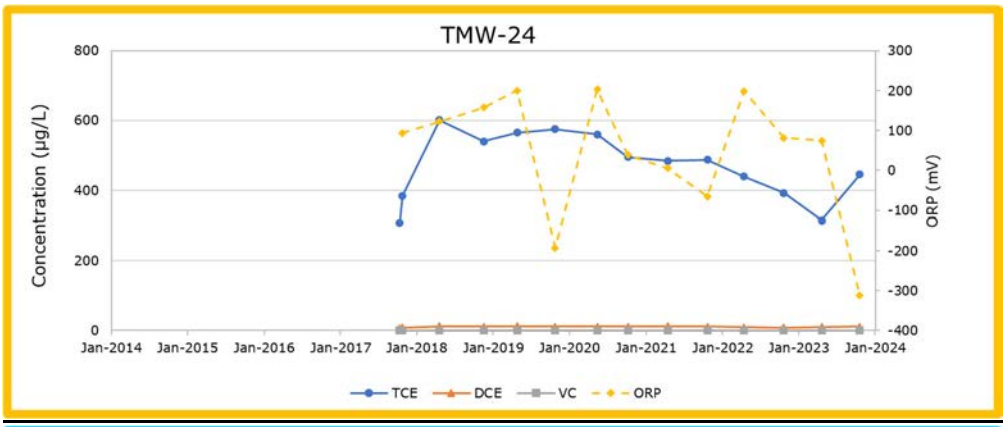


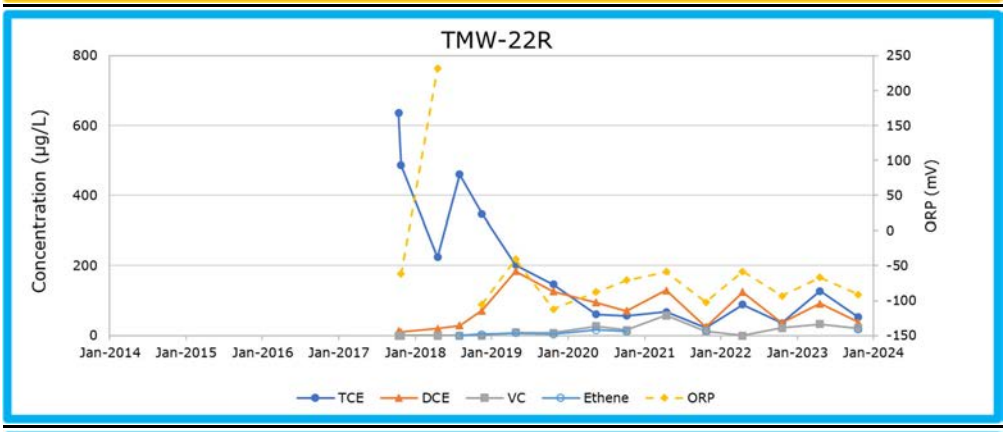


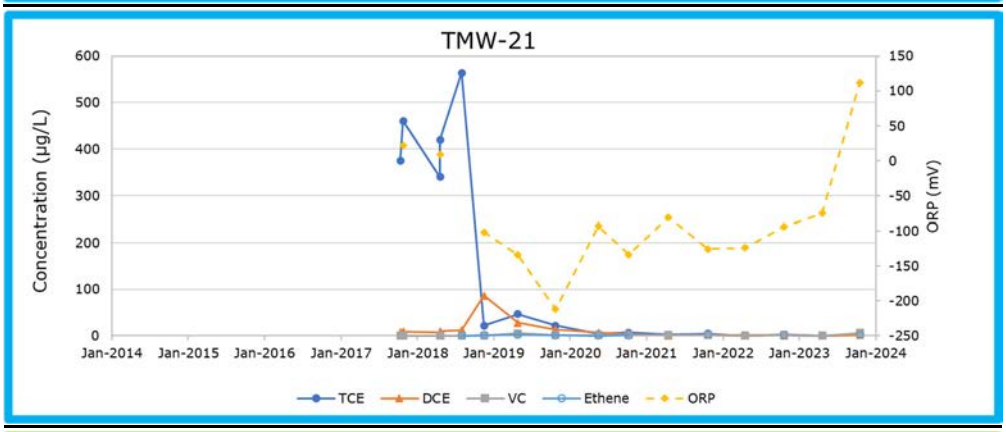


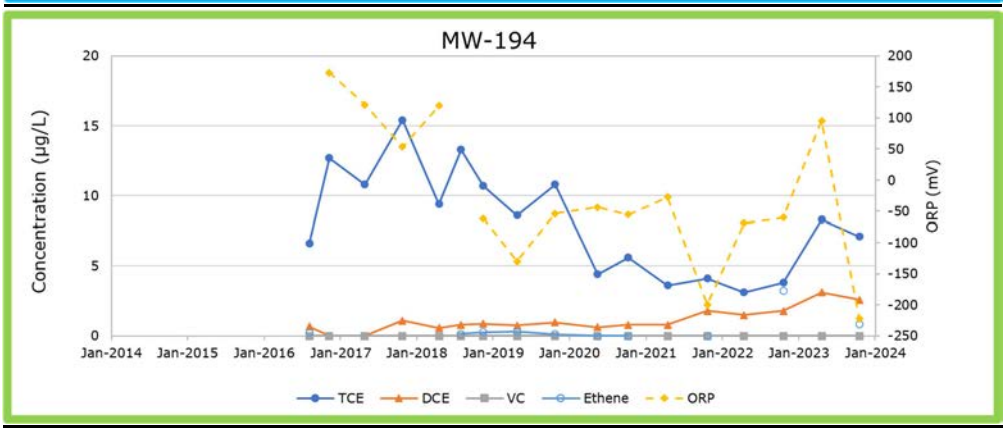
Orange – Upgradient, Blue – Plume Treatment Area, Green - Downgradient

North Plume – N1 and N3 Array



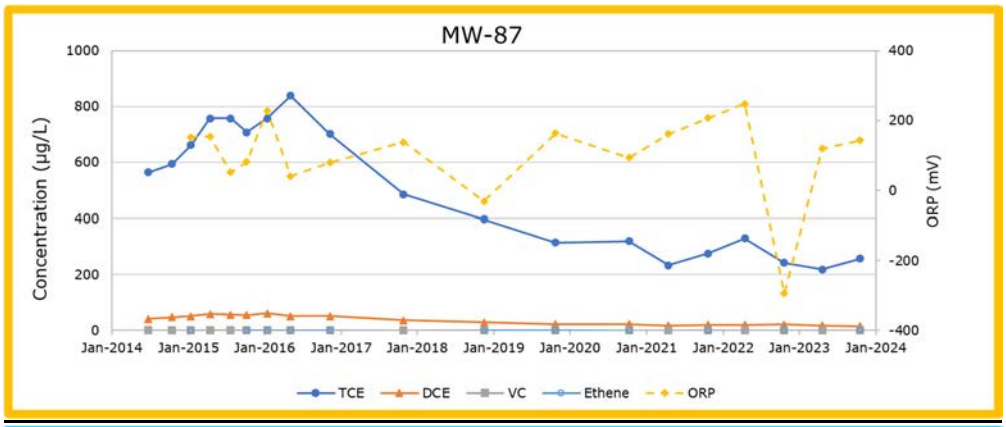


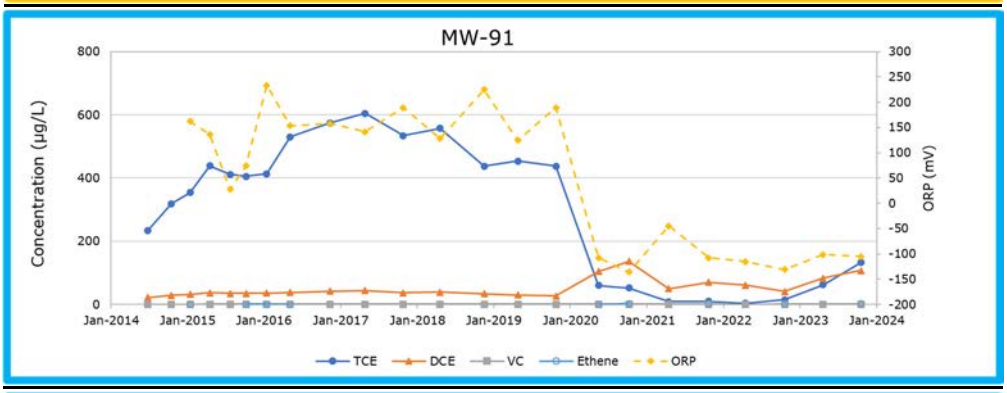


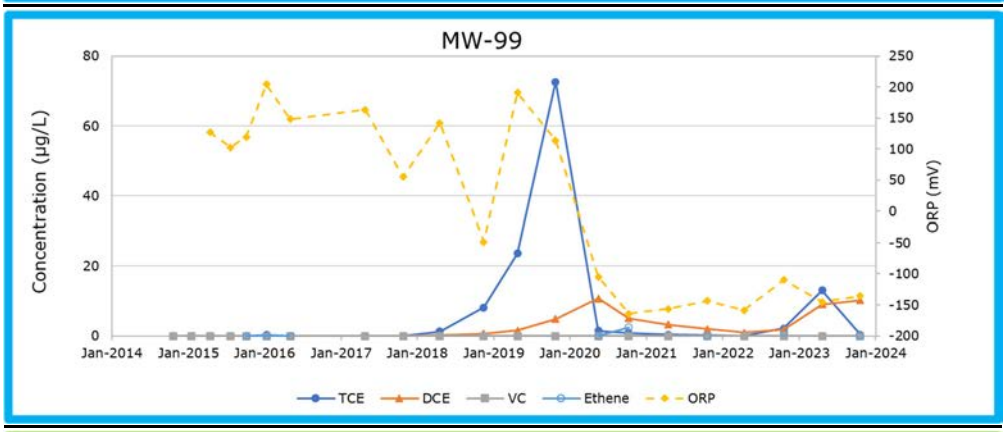


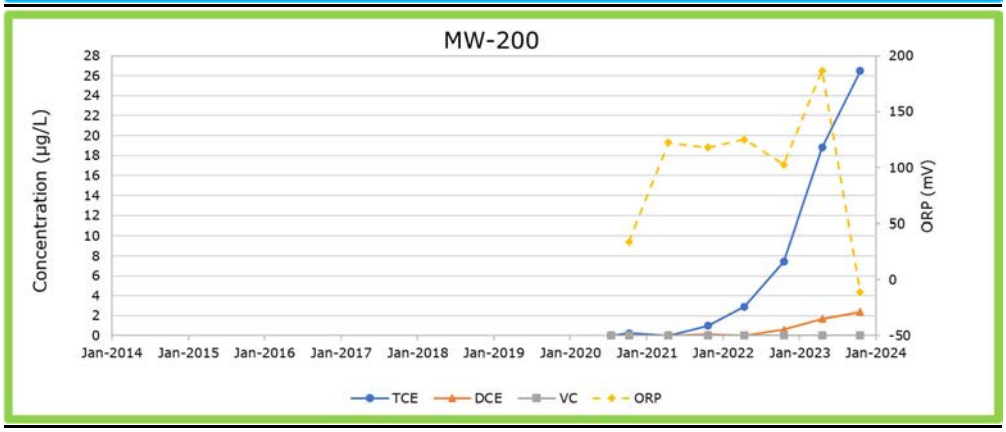
Orange – Upgradient, Blue – Plume Treatment Area, Green - Downgradient

East Plume



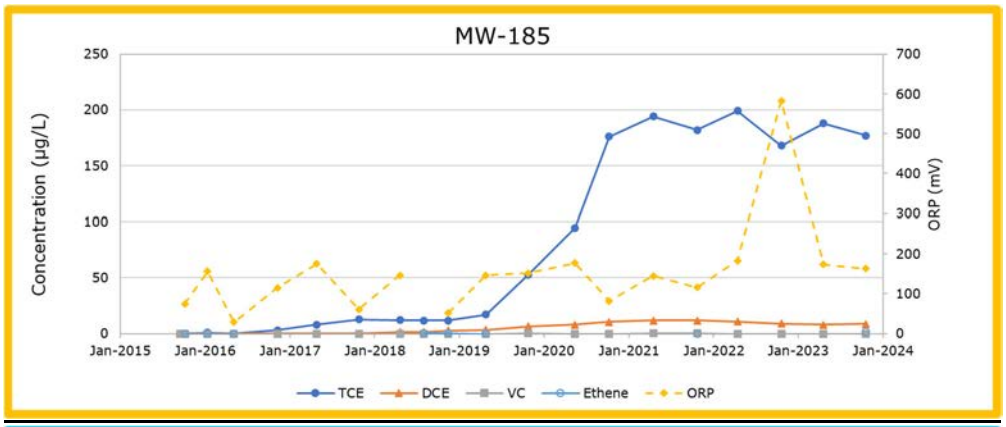


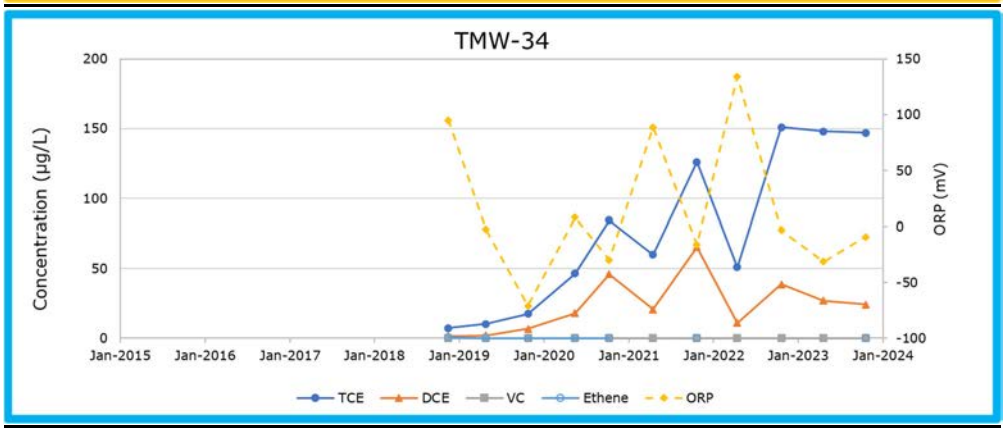




Orange – Upgradient, Blue – Plume Treatment Area, Green - Downgradient

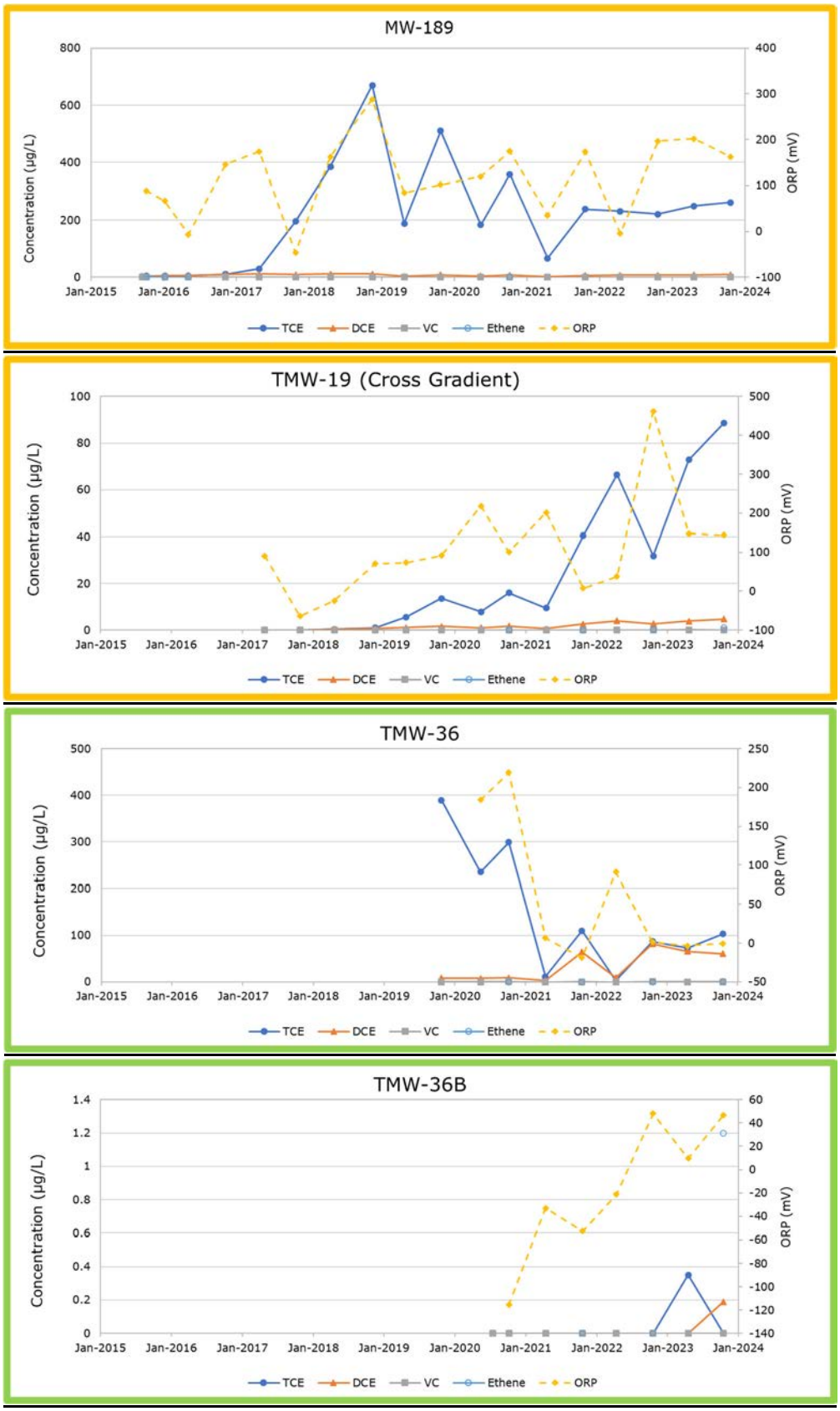
East Plume





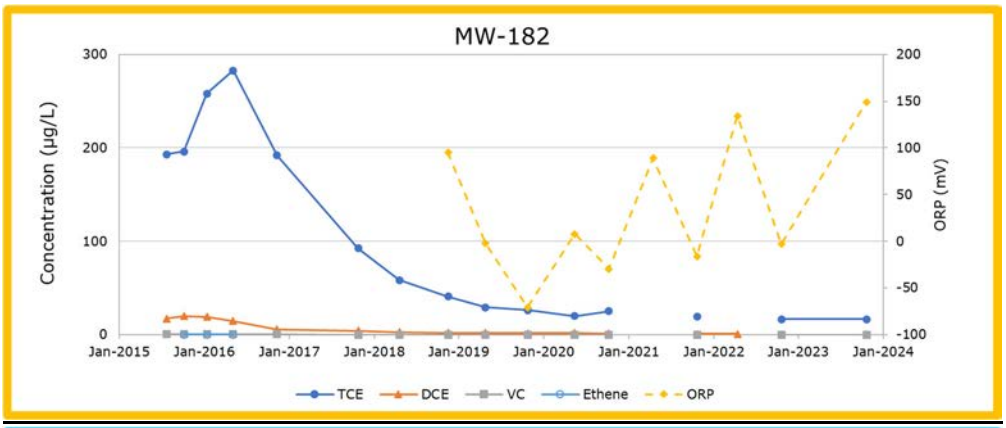
Orange – Upgradient, Blue – Plume Treatment Area, Green - Downgradient

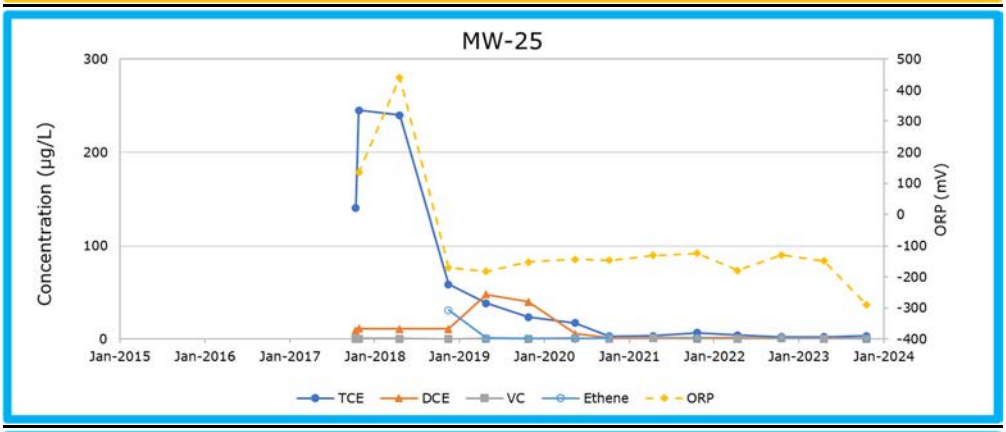
South Plume

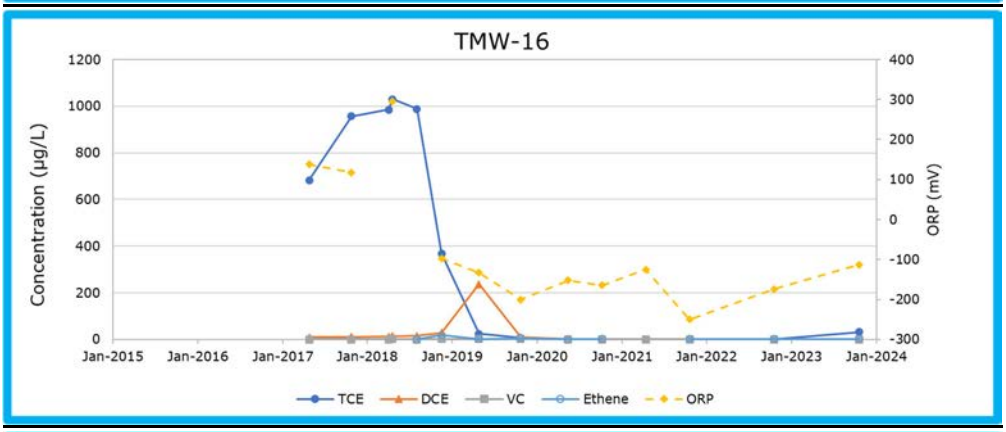


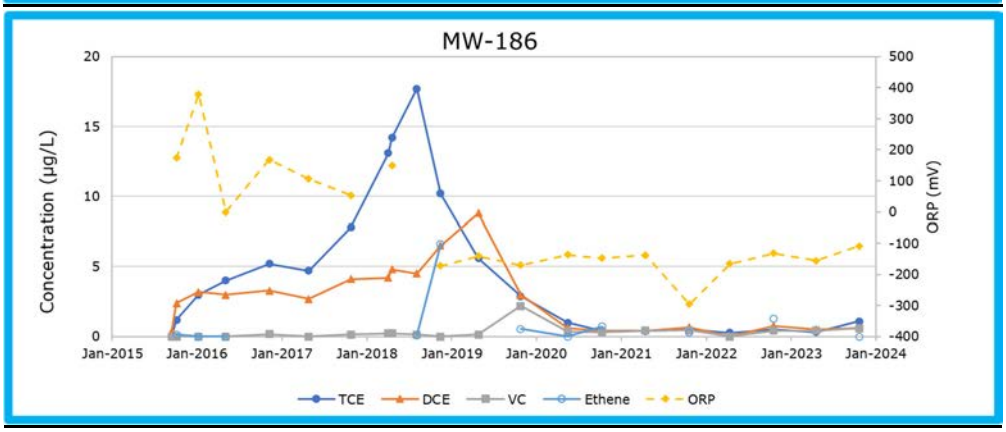
Orange – Upgradient, Blue – Plume Treatment Area, Green - Downgradient

South Plume









Orange – Upgradient, Blue – Plume Treatment Area, Green - Downgradient

Appendix F

Air Sampling Field Notes and Weather Data for October 2023

Whirlpool (GP/ND) 10/16/23

ONSITE - JZ/AT/EP/JK/ND/C/MB

-0745 Organize

-0930 Find vapor points/check

1000 Help find wells

Calibrate YSI (ALL) W/ND

SN: FA04893

Sp. Cond: 7001

ORP: 249.1 (249.17)

PH: °7.05 °4.00 °10.17

DO: 99.2

SN: FA05817

SP cond: 7001

ORP: 249.2 (249.17)

PH: °7.01 °4.06 °10.00

DO: 99.2

SN: FA02989

Sp cond: 6996

ORP: 249.0 (249.17)

PH: °7.04 °4.00 °10.00

DO: 99.2

(GP)

Annual-Event: Whirlpool 10/16/23

1220 Check in w/Jackie

1230 Lunch

1250 Mob to Emma to help gauge

1300 Gauging

Help Emma/Matt with gauging

Organize and Mob to MW-29 with Matt after staging area

1500 Mob to staging area for 2st well

1523 Pump start @ MW-29

1615 MW-29 collected

1615 MS/MSD collected

1630 Mob to MW-184 *Decon WL

1649 Pump start

1746 MW-184 sample collected *Decon WL

1746 DUP-01 collected

1800 Mob to staging area

* Wait for Emma, help w/ packing + send off of coolers organize for tomorrow air

Annual Event Whirlpool 10/17/23

VSITE

Start calibration

SN: FA04846

- SP cond: 7001

. ORP: 263.9 (263.87)

. pH: °7.07 °4.00 °10.00

. DO: 98.9

5 T10 = 0745

.19 in × 25.4 = 766.826 − 15.169 = 751.657

Finish calibration

See next notebook

CP

MADE IN TACOMA — SINCE 1916 —

Rite in the Rain®

DEFYING MOTHER NATURE



USE WET OR DRY
most pens stop writing when wet
- ALL PENCILS
- *RITE IN THE RAIN PENS*
- WAX MARKERS
- CRAYONS
- OIL PASTELS / PAINT

WHEN DRY ONLY
what you write won't wash off
- PERMANENT MARKERS
- STANDARD BALLPOINTS

WON'T WORK
water-based inks bead off sheet
- GEL PENS
- MOST HIGHLIGHTERS
- FOUNTAIN PENS
- WATER COLORS
- ACRYLIC PAINT

Yes, Rite in the Rain
is a wood-based & recyclable paper, but unlike plain paper...
it won't turn to mush when exposed to:



rain storms | *heavy sweat* | *oil & grease* | *mud & grime* | *laundry mishap*

ALL-WEATHER TOUGH!

BRAND HISTORY



The *Rite in the Rain* story began a century ago in the forests of the Great Pacific Northwest. Entrepreneur Jerry Darling recognized the logging industry's need for a durable material that could be written on and survive in poor weather conditions. Jerry developed a special coating that created a unique moisture shield on the hand-dipped sheets of paper that he and his wife, Mary, processed at their home. From these humble beginnings our first all-weather paper was born. Over the many years we've perfected and patented our environmentally responsible coating process. Still located in Tacoma, our continued mission is to provide innovative products for professionals and enthusiasts who brave the outdoors.

EQUIPPING MULTIPLE INDUSTRIES WORLD-WIDE



products available

35.35 °N, **94.35** °W

Fort Smith, AR Weather History

32° FORT SMITH REGIONAL AIRPORT STATION (/DASHBOARD/PWS/KARFORTS21?CM_VEN=LOCALWX_PWSDASH) | CHANGE

HISTORY (/HISTORY/DAILY/US/AR/FORT-SMITH/KFSM)

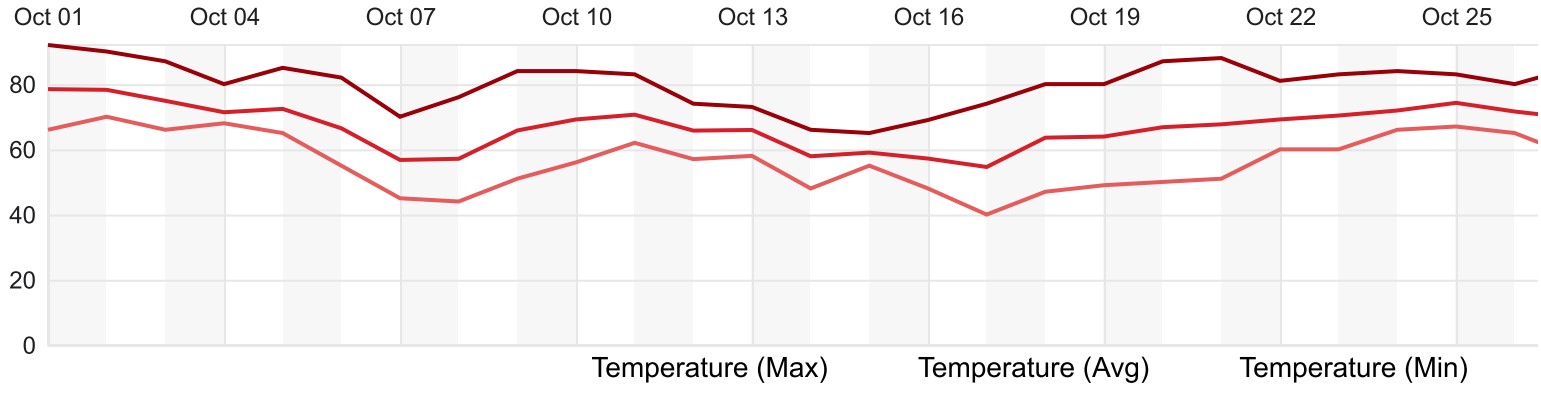
- TODAY (/WEATHER/US/AR/FORT-SMITH/KFSM)
- HOURLY (/HOURLY/US/AR/FORT-SMITH/KFSM)
- 10-DAY (/FORECAST/US/AR/FORT-SMITH/KFSM)
- CALENDAR (/CALENDAR/US/AR/FORT-SMITH/KFSM)
- HISTORY (/HISTORY/DAILY/US/AR/FORT-SMITH/KFSM)
- WUNDERMAP (/WUNDERMAP?LAT=35.35&LON=-94.352)

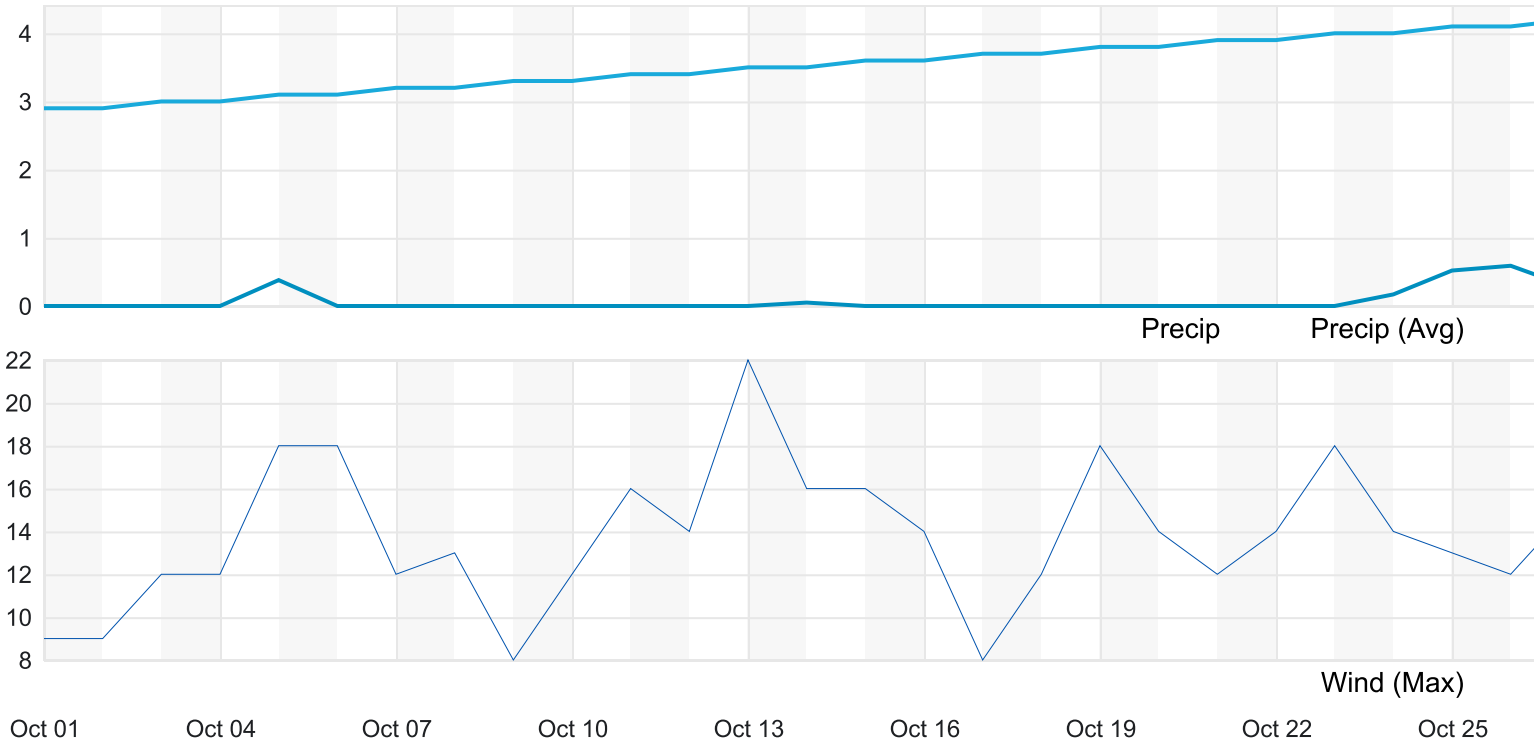
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Weekly (/history/weekly/us/ar/fort-smith/KFSM/date/2023-10-9)

Monthly (/history/monthly/us/ar/fort-smith/KFSM/date/2023-10-9)

October | 2023 | View





Summary

Temperature (°F)	Max	Average	Min
Max Temperature	92	76.61	48
Avg Temperature	78.46	63.76	19.4
Min Temperature	70	53.42	0

Dew Point (°F)	Max	Average	Min
Dew Point	71	51.53	0

Precipitation (in)	Max	Average	Min	Sum
Precipitation	3.14	0.19	0.00	5.85
Snowdepth	0.00	0.00	0.00	0.00

Wind (mph)	Max	Average	Min
Wind	22	6.28	0
Gust Wind	37	2.23	0

Sea Level Pressure (in)	Max	Average	Min
Sea Level Pressure	29.99	29.53	29.14

Daily Observations

Time	Temperature (°F)			Dew Point (°F)			Humidity (%)			Wind Speed (mph)			Pressu	
Oct	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Avg	Min	Max	Av
1	92	78.5	66	67	63.3	59	90	62.5	34	9	4.0	0	29.7	29
2	90	78.3	70	66	61.7	57	81	59.2	33	9	4.2	0	29.7	29
3	87	74.9	66	63	60.1	57	84	62.7	36	12	5.9	0	29.6	29
4	80	71.4	68	70	65.3	60	93	81.5	69	12	6.0	0	29.5	29
5	85	72.4	65	66	63.1	57	93	74.5	40	18	7.0	0	29.6	29
6	82	66.5	55	58	50.3	38	90	61.5	22	18	6.6	0	29.8	29
7	70	56.8	45	43	38.9	36	80	53.9	30	12	5.8	0	29.9	29
8	76	57.1	44	48	44.3	41	97	68.2	29	13	3.0	0	29.7	29
9	84	65.8	51	56	51.5	47	93	64.1	33	8	2.9	0	29.4	29
10	84	69.2	56	61	54.5	50	87	62.5	38	12	5.7	0	29.4	29
11	83	70.6	62	62	56.9	50	93	65.3	37	16	6.3	0	29.3	29
12	74	65.8	57	58	56.3	52	89	72.1	57	14	10.4	5	29.3	29
13	73	65.9	58	65	55.7	44	94	72.2	37	22	9.4	0	29.5	29
14	66	57.9	48	47	43.8	40	74	59.8	50	16	10.3	7	29.6	29
15	65	59.0	55	49	45.8	41	77	62.3	50	16	11.7	6	29.7	29
16	69	57.2	48	42	40.3	38	77	55.7	35	14	7.7	0	29.8	29
17	74	54.6	40	46	41.4	37	89	66.2	30	8	2.1	0	29.7	29
18	80	63.6	47	53	47.5	44	90	60.1	31	12	4.9	0	29.5	29
19	80	63.9	49	53	49.6	45	97	64.8	29	18	6.3	0	29.5	29
20	87	66.8	50	51	47.2	42	86	55.6	21	14	4.1	0	29.4	29
21	88	67.7	51	57	50.9	47	86	59.9	25	12	3.5	0	29.4	29
22	81	69.2	60	57	49.8	43	87	54.1	29	14	6.1	0	29.5	29
23	83	70.4	60	68	58.0	45	90	66.7	44	18	5.8	0	29.5	29

Time	Temperature (°F)			Dew Point (°F)			Humidity (%)			Wind Speed (mph)			Pressu	
24	84	71.9	66	66	61.1	50	93	72.2	32	14	4.8	0	29.6	29
25	83	74.3	67	66	63.9	61	93	71.9	47	13	7.4	3	29.6	29
26	80	71.6	65	69	66.0	63	100	83.5	60	12	5.6	0	29.5	29
27	85	69.6	58	71	65.0	54	97	85.9	61	15	7.3	0	29.7	29
28	60	56.2	53	58	54.5	52	100	94.2	87	15	5.7	0	29.6	29
29	52	48.1	41	52	45.8	38	100	91.6	80	15	10.1	6	29.8	29
30	50	42.2	35	37	28.8	25	86	61.0	39	17	10.7	3	29.9	29
31	48	19.4	0	33	16.3	0	96	45.3	0	9	3.4	0	30.0	29

:weatherchannel-wunderground&utm_medium=referral&utm_content=thumbnails-b:History Thumbnails:)
weatherchannel-wunderground&utm_medium=referral&utm_content=thumbnails-b:History Thumbnails:)
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(https://www.energybillcruncher.com/pa/)
(https://tick.luckyshiny.com/fa9cc5ef-e378-4a4f-b4d1-1dd43791574e)

Why Your Firewood Needs This Drill Bit?
Libiyi

(https://tick.luckyshiny.com/fa9cc5ef-e378-4a4f-b4d1-1dd43791574e)
(https://www.selectjustice.com/roundup-lp-2-us/)

Diagnosed with Non-Hodgkin's Lymphoma or CLL after Spraying Roundup®?
Select Justice

(https://www.selectjustice.com/roundup-lp-2-us/)
(https://link.healthinsightjournal.com/8a65682c-85e1-4c43-bf9c-a0613e1cd039)

Neuropathy Breakthrough: Experts Speechless
Health Insight Journal

(https://link.healthinsightjournal.com/8a65682c-85e1-4c43-bf9c-a0613e1cd039)
(https://articles.smartasset.com/vanguard-vs-fidelity-vs-schwab/)

Fidelity vs. Vanguard vs. Schwab
SmartAsset

(https://articles.smartasset.com/vanguard-vs-fidelity-vs-schwab/)

(https://cos-rd.com/18/12909)

Amazon Hates When You Do This, But They Can’t Stop You (It's Genius)

Coupon Code Finder

(https://cos-rd.com/18/12909)
(https://www.fool.com/the-ascent/credit-cards/landing/discover-it-cash-back-review-v2-csr/)

Hands Down One of the Best Cards for Good Credit

The Motley Fool

(https://www.fool.com/the-ascent/credit-cards/landing/discover-it-cash-back-review-v2-csr/)
(https://nexters.g2afse.com/click)

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Hero Wars

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Mazda CX50 Is A True Head Turner (You'll Double Take At The Price)

New Mazda CX50

(https://r.strateg.is/route)
(https://wallstreetstar.com/rio-tinto-scramble-for-control-of-the-worlds-lithium-supply-chain/)

A Lithium Field To Rival S. America and Australia

Wall Street Star

(https://wallstreetstar.com/rio-tinto-scramble-for-control-of-the-worlds-lithium-supply-chain/)
(https://track.perpetual-track.com/97fac7dc-293c-4144-8c02-13ce9bea6db5)

New Portable Stair Lifts That Don't Require Installation!

Life And Trends

(https://track.perpetual-track.com/97fac7dc-293c-4144-8c02-13ce9bea6db5)
(https://r.strateg.is/route)

The Killer New Volvo XC40: The Ultimate Vehicle For Seniors (Especially At These Prices)

Senior Volvo Deals

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(https://www.essentialaccessibility.com/the-weather-channel?utm_source=theweatherchannelhomepage&utm_medium=iconlarge&utm_term=eachannelpage&utm_content=header&utm_c

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PJK

Annual whirlpool Air

10/17/23

106 to stryten for Z6-2/Z5-2/Dvp

Z6-2-IA-202310 SET
CAN ID: 9365 init. pr: -30
FC: 029268 final pr: -6
start: 0825 stop: 1525

Dvp-1A-202310 SET
CAN ID: 12554 init pr: -29
FC: 029360 final pr: -16
start: 0826 stop: 1526

Z5-2-1A-202310 SET
CAN ID: 8783 init pr: -30
FC: 023439 final pr: -5
start: 0832 stop: 1530

Z5-0F-1A-202310 SET
CAN ID: 007948 init pr: -29
FC: 013498 final pr: -6
start: 0848 stop: 1544

Z6-1-1A-202310 SET
CAN ID: 011058 initial pr: -30
FC: 028993 final pr: -6

GP/JP

Annual Whirlpool Air

10/17

0922 Z3-1-1A-202310 SET
CAN ID: 009305 init pr: -29
FC: 013024 final pr: -6
start: 0922 stop: 1606

0926 Z4-1-1A-202310 SET
CAN ID: 021070 init pr: -29
FC: 013450 final pr: -7
start: 0926 stop: 1606

0936 AA-1-202310 SET
CAN ID: 11825 initial pr: -29
FC: 029248 final pr: -7
start: 0936 Stop: 1621

0956 Z1-1-IA-202310 SET
CAN ID: 9537 init pr: -30
FC: 013482 final pr:
start: 0956 Stop:

0959 Z3-2-IA-202310 SET
CAN ID: 012292 init pr: -29
FC: 011343 final pr: -2.5
start: 0959 stop: 1411

Annual Whirlpool Air/GW 10/17/23

21°C

Z2-1-IA-202310 SET

CAN ID: 011150 Init. pr: -29

FC: 010075 Final pr:

Start: 1008 Stop:

Mob to Woods to open wells

MW-187 : ~~WL~~ GR

Exit woods due to safety

Mob offsite to lunch

Mob to staging area

Ik to check summa cans

Mob to MW-25R

Pump start

purge dry per DM instructions

* Decon WL

Mob to staging area to dump water (Drum 2) = MW25R

Mob to check all summas

Z6-2 @ -14
Dup-01 @ -19 } Stryten
Z5-2 @ -14

GR 21°C Whirlpool Air 10/17

1334 Z3-2 @ -6 → grab/close summa after checking rest?

1337 Z4-2 @ -18

1339 Z2-1 @ -18

1342 Z3-2 (recheck @ -5)

1411 Z3-2 collected | 1411 - collected (waited)

1400 Mob to get ice/meet Collin

1425 Staging area - give Collin ice

1430 Mob to Josh Kahky to look for air cocs

1451 Mob to Jackie → Stryten

1524 Mob to Stryten

1525 Z6-2-IA collected

1526 Dup 01 collected

1530 Z5-2 collected

1544 Z5-0F collected

Z6-1 collected

Z5-1 NOT → collected later time

Z4-1 collected

AA-1 collected

Whirlpool Air (Annual Event) 10/18/23

ITE

40 Organize air boxes / H2S / help calibrate.

D Stryten – SVB slab sampling

Z6-2-202310

	1L	2L
1	0.1	0.1
2	0.3	0.3
	20.9	20.6
	78.7	79.0
	0	0

initial pr: -30+
final pr: -4
CAN ID: 13717
FC: 013560
start: 0812
stop: 0823

Z5-2-202310

1L	2L
0.0	0.0
1.8	1.8
19.0	19.0
79.1	79.2
0	0

initial pr: -30+
final pr: -4
CAN ID: 24593
FC: 013559
start: 0843 stop: 0854

AA-2-202310 SET

initial pr: -29 final pr: -5
start: 0849 stop: 1605

GRND

Whirlpool Air (Annual Event) 10/18/23

Z6-1-202310

	1L	2L
CH4	0.0	0.0
CO2	3.2	3.1
O2	16.9	17.1
Bal	79.9	79.9
He	0	0

initial pr: -30
final pr: -4
CAN ID: 22190
FC: 013562
start: 0925
stop: 0938

Z5-1-202310

	1L	2L
CH4	0.0	0.0
CO2	0.7	0.6
O2	19.5	19.5
Bal	79.8	79.8
He	0	0

initial pr: -30
final pr: -4
CAN ID: 12502
FC: 013562
start: 0957
stop: 1010

Z3-1-202310

	1L	2L
CH4	0.0	0.0
CO2	14.6	14.6
O2	0.6	0.5
Bal	84.8	84.9

initial pr: -30+
final pr: -4
CAN ID: 22536
FC: 013524
start: 1046

Whirlpool Annual Event 10/18/23

Z4-1-202310

1L	2L
0.0	0.0
1.3	1.3
19.4	19.3
79.4	79.4
0	0

initial pr: -30
final pr: -4
CAN ID: 10581
FC: 013565
start: 1202
stop: 1214

Z5-OF-202310

1L	2L
0.0	0.0
0.0	0.0
20.8	20.7
79.2	79.3
0	0

initial pr: -30
final pr: -3
CAN ID: 12018
FC: 012669
start: 1240
stop: 1249

Z1-1-202310

1L	2L
0.0	0.0
1.0	0.9
19.7	19.6
79.4	79.5

initial pr: -30
final pr: -4
CAN ID: 24046
FC: 013555
start: 1334

GP/ND

Whirlpool Annual Event 10/18

Z3-2-202310

	1L	2L
CH4	0.0	0.0
CO2	0.8	0.8
O2	19.8	19.7
Bal	79.4	79.5
He	0	0

initial pr: -30
final pr: -4
CAN ID: ~~12785~~ GP 12783
FC: 013459
start: 1400
stop: 1413

Z4-2-202310

	1L	2L
CH4	0.0	0.0
CO2	5.0	5.0
O2	15.1	15.0
Bal	80.0	80.1
He	0	0

initial pr: -30+
final pr: -4
CAN ID: 12501
FC: 013524
start: 1432
stop: 1445

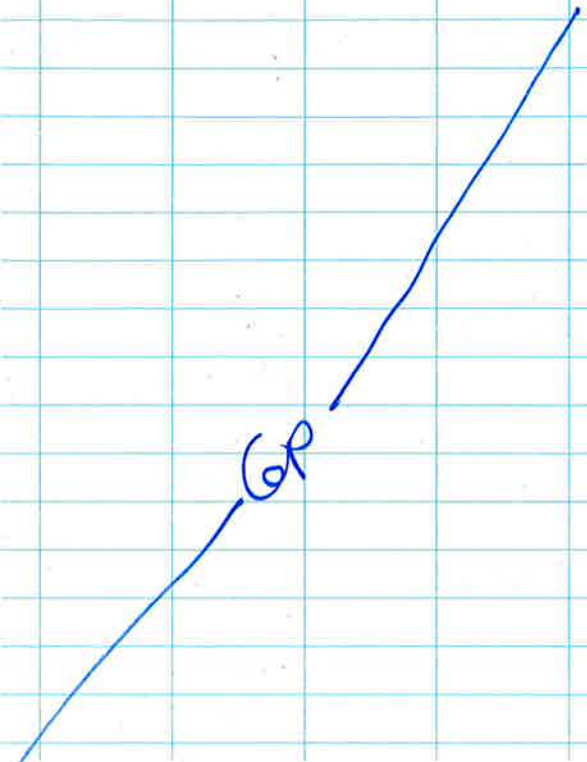
Z2-1-202310

	1L	2L
CH4	0.0	0.0
CO2	3.2	3.2
O2	17.3	17.2
Bal	79.5	79.6
He	0	0

initial pr: ~~-30~~ GP -29
final pr: -4
CAN ID: 28116
FC: 013587
start: 1459
stop: 1511

10/18/23

- Finish COCs – Air
- Help w/ GW COCs + packing
- Take Air + Microbial to Fedex
- ONSITE to pack up
- OFFSITE



Whirlpool

10/19/23

0700 ONSITE
0703 Calibrate
YSI SN: FA04646
1. Cond: 7001
2. ORP:
3. pH 6.98 3.99 recal – 7.04
4. DO:
⇒ Changed pH probes 7.06
pH 4 and 10 not calibrating
UNABLE to calibrate
0730-0845 roubleshoot w/ David – pH NOT working
0903 Mob to MW25R to sample DNA/Hydro
only able to sample DNA (0958)
will return for bubble stripping
0958 MW-25R DNA collected
1005 mob to MW98 to start purging
1110 MW-198-202310 collected (Drum 3)
– Bubble stripping took longer –
1240 Hydrogen
1230 Lunch – Emma grabbed

51°F Whirlpool 10/20/23

0630 ONSITE — start calibration

YSI SN: FA004469

Cond sp: 7000

ORP: 254.3

PH: 7.06 3.99 10.04

DO: 95.6

0654+10=0704 29.8 · 25.4) 758.698 −15.169 = 743.529

233 + 1.47 (25 − 10.5) = 254.315

0715 Mob to TMW-26

0732 Pump start

0816 TMW-26-202310 sample collected

*Decon WL + YSI

0845 Mob to TMW-16

0851 Pump start

0951 TMW-16-202310 sample

* Decon WL

Mob to staging area

1030 Pack coolers/ IDW ~~wells~~ GB samples

1100 Attemp to sample 25R (bubble str.)

Appendix G

Offsite Vapor Intrusion Risk Calculations and Input Parameters

Appendix G.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	Benzene	71-43-2	A	1	N			7.8E-03	1	60	3.0E-02	300	1	
VOC	Bromodichloromethane	75-27-4	B2	1	N								126	90
VOC	Bromoform	75-25-2	B2	1	N			1.1E-03	1				126	90
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	Dibromochloromethane	124-48-1	C	1	N								126	90
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						4.0E-02		126	
VOC	trans-1,2-Dichloroethene	156-60-5	ID	1	N								1	90
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	

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 February 2024.

References

1 USEPA. Integrated Risk Information System (IRIS). On-line database.

126 Provisional Peer Reviewed Toxicity Values for Superfund (PPRTV) Database.

129 ATSDR. 2013. Minimal Risk Levels. March.

Notes:

60 IRIS provides a range of 2.2E-6 to 7.8E-6 (ug/m3)-1 as the inhalation URF for Benzene.

79 For evaluating partial lifetime exposures that include early-life exposure, the unit risk factor is also used in risk calculations that do not prorate the early-life exposure, per USEPA's May 2000 Toxicological Review.

90 Inadequate data exist to derive a toxicity value, according to the indicated reference.

111 Value as published is an MRL in the indicated reference.

159 Because the chemical has a mutagenic mode of action according to USEPA, the SF and URF are adjusted by the following age-dependent adjustment factors (ADAFs) before use: 10 for ages 0 to 2; 3 for ages 2 to 16; and 1 for ages 16 and older (USEPA 2005).

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Appendix G.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	Benzene	71-43-2	2.3E-01	1.6E-01	44		7.6E-01	44	8.5E-05	44	2.5E+01
VOC	Bromodichloromethane	75-27-4	6.6E-02	4.5E-02	44		2.6E-01	44	9.2E-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	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	Dibromochloromethane	124-48-1	3.2E-02	2.4E-02	44		1.7E-01	44	9.1E-05	44	2.5E+01
VOC	1,1-Dichloroethene	75-35-4	1.1E+00	8.1E-01	44		7.8E-01	44	9.0E-05	44	2.5E+01
VOC	cis-1,2-Dichloroethene	156-59-2	1.7E-01	1.2E-01	44		6.4E-01	44	9.8E-05	44	2.5E+01
VOC	trans-1,2-Dichloroethene	156-60-5	3.9E-01	2.8E-01	44		6.1E-01	44	1.0E-04	44	2.5E+01
VOC	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

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.

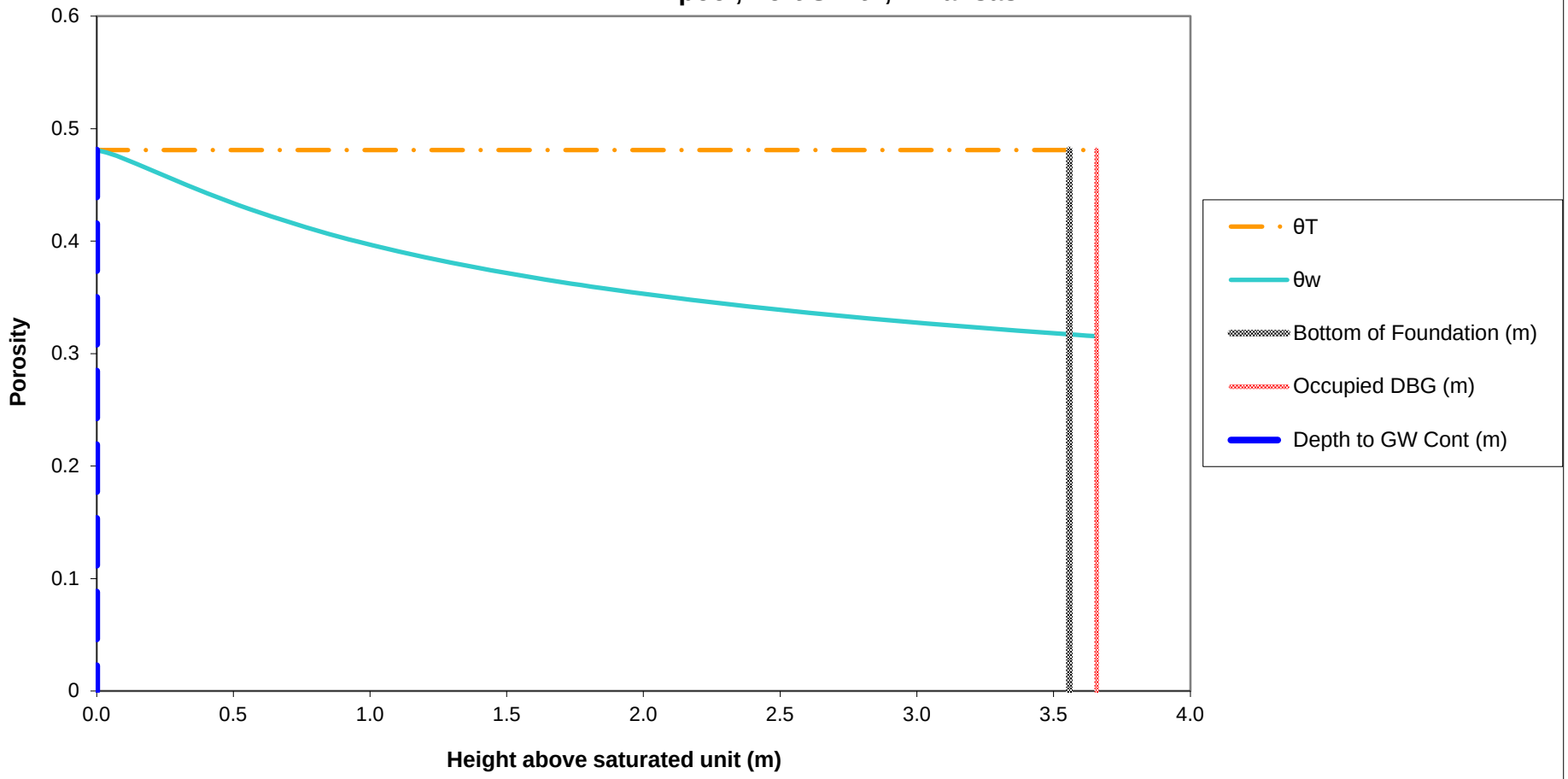
References:

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.
50.3	USEPA. 2014. Superfund Chemical Data Matrix (SCDM). Office of Superfund Remediation and Technology Innovation. June 20, 2014.
69	USEPA. 2004. WATER9. Version 2.0.0. Office of Air Quality Planning and Standards. July.
71	USEPA. 2002. Supplemental Guidance for Developing Soil Screening Levels for Superfund Sites. Office of Solid Waste and Emergency Response. OSWER 9355.4-24. December.

Notes:

92	Indicated source cites CHEMFATE.
123	Value has been assigned a default reference temperature.

Appendix G.3: Soil Moisture Profile for Residential Building (Slab-on-Grade) for Risk Calculations from Groundwater at 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.

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

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	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	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	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-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	Toluene	108-88-3	7.52E-01	7.43E-05	1.80E-01	1.21E-01	6.97E-04	2.71E-03	2.73E-03	7.41E-06	1.34E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.10E-01	5.23E-04	2.04E-03	2.73E-03	5.57E-06	1.60E-03
VOC	Vinyl Chloride	75-01-4	9.16E-01	1.06E-04	9.00E-01	1.47E-01	3.44E-04	1.34E-03	2.73E-03	3.66E-06	3.30E-03

Notes:	Crack Soil and Building Characteristics			Crack Soil
	SCS Soil texture class			Sand
	Bulk density	kg/L	ρ_b	1.66
	Total porosity	L/L-soil	θ_T	0.375
	Water-filled porosity	L/L-soil	θ_w	0.054
	Air-filled porosity	L/L-soil	θ_a	0.321
	Residual saturation	L/L-soil	θ_r	0.053
	Hydraulic conductivity	cm/s	K	7.4E-03
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307
	Density of water	g/cm^3	ρ_w	1.0
	Gravitational acceleration	cm/s^2	g	980.7
	Intrinsic permeability	cm^2	k	9.9E-08
	Relative saturation	unitless	S_e	0.004
	van Genuchten N	unitless	N	3.177
	van Genuchten M	unitless	M	0.685
	Relative air permeability	unitless	k_{rg}	0.998
	Permeability to vapor	cm^2	k_v	9.89E-08
	Distance from building foundation to source	m	L_{T-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
	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.

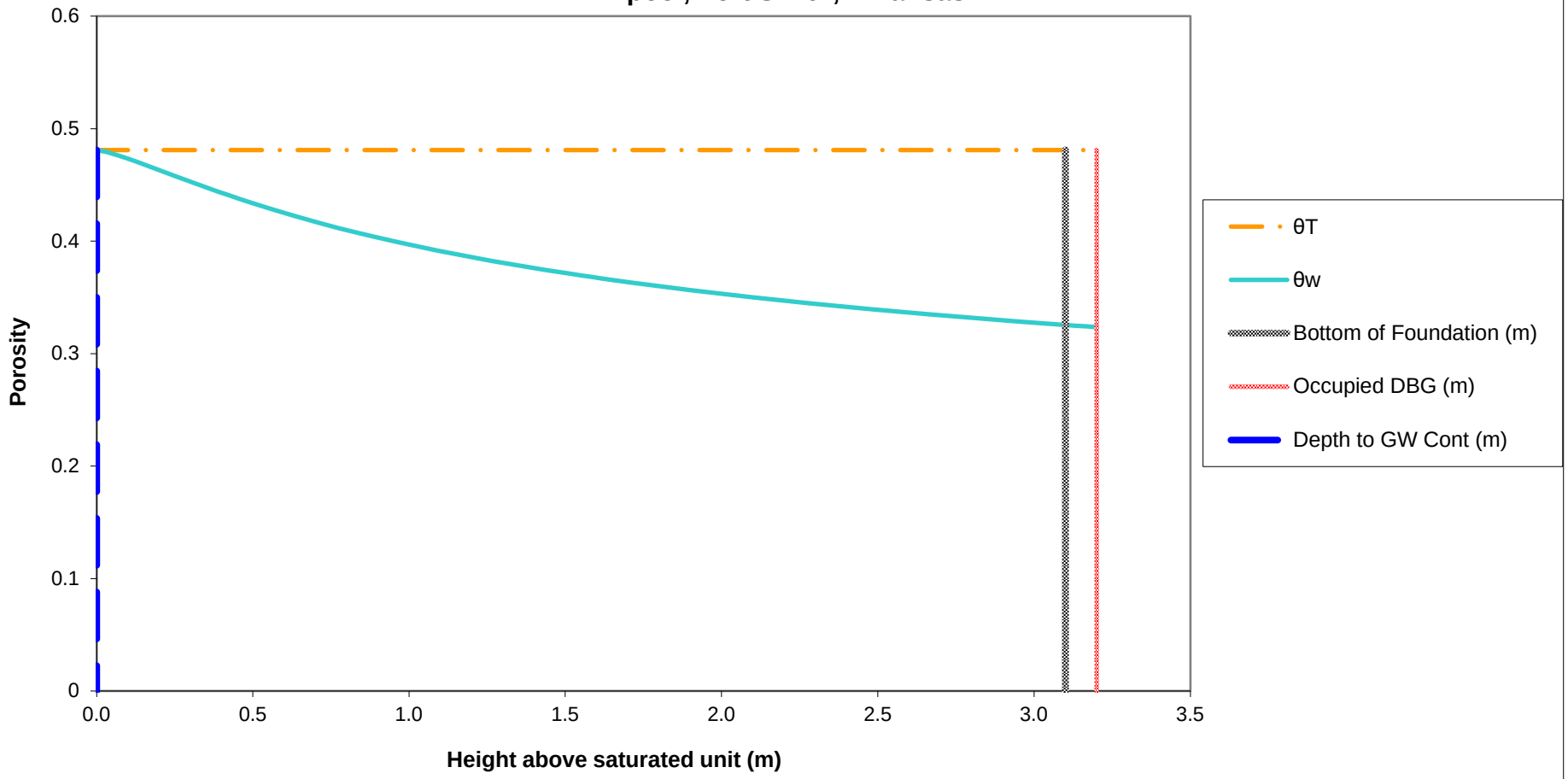
The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.

RAMBOLL

Appendix G.5: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater Monitoring Wells in the Neighborhood Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	Benzene	71-43-2	A	N	2.30E-04	3.17E-07	7.8E-03		1.0E-09		3.0E-02	1.0E-05
VOC	Bromodichloromethane	75-27-4	B2	N	2.70E-04	1.37E-07						
VOC	Bromoform	75-25-2	B2	N	1.89E-02	4.39E-06	1.1E-03		2.0E-09			
VOC	Carbon Disulfide	75-15-0		N	1.10E-03	3.18E-06					7.0E-01	4.4E-06
VOC	Chloroform	67-66-3	B2	N	6.10E-04	7.74E-07	2.3E-02		7.3E-09		5.0E-02	1.5E-05
VOC	Chloromethane	74-87-3	D	N	9.10E-04	1.49E-06					9.0E-02	1.6E-05
VOC	Dibromochloromethane	124-48-1	C	N	8.30E-04	2.67E-07						
VOC	1,1-Dichloroethene	75-35-4	C	N	2.10E-03	5.65E-06					2.0E-01	2.7E-05
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	1.64E-02	2.01E-05					4.0E-02	4.8E-04
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	7.70E-04	1.38E-06						
VOC	Toluene	108-88-3	ID	N	2.20E-03	2.94E-06					5.0E+00	5.6E-07
VOC	Trichloroethene	79-01-6	HC	Y	5.52E-01	8.86E-04	4.1E-03	0.2439	2.1E-06		2.0E-03	4.2E-01
VOC	Vinyl Chloride	75-01-4	A	N	2.01E-02	6.63E-05	4.4E-03		4.1E-07		1.0E-01	6.4E-04
							Cumulative Risk:		2E-06		**HI:**	4E-01
Note:												
f_{inh} is the fraction of the inhalation URF that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the Annual 2023 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.												

Appendix G.6: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Soil Vapor Monitoring Point VP-8 (Parcel 2) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

RAMBOLL

Appendix G.7: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Perched Water at VP-8 (Parcel 2) Whirlpool, Fort Smith, Arkansas

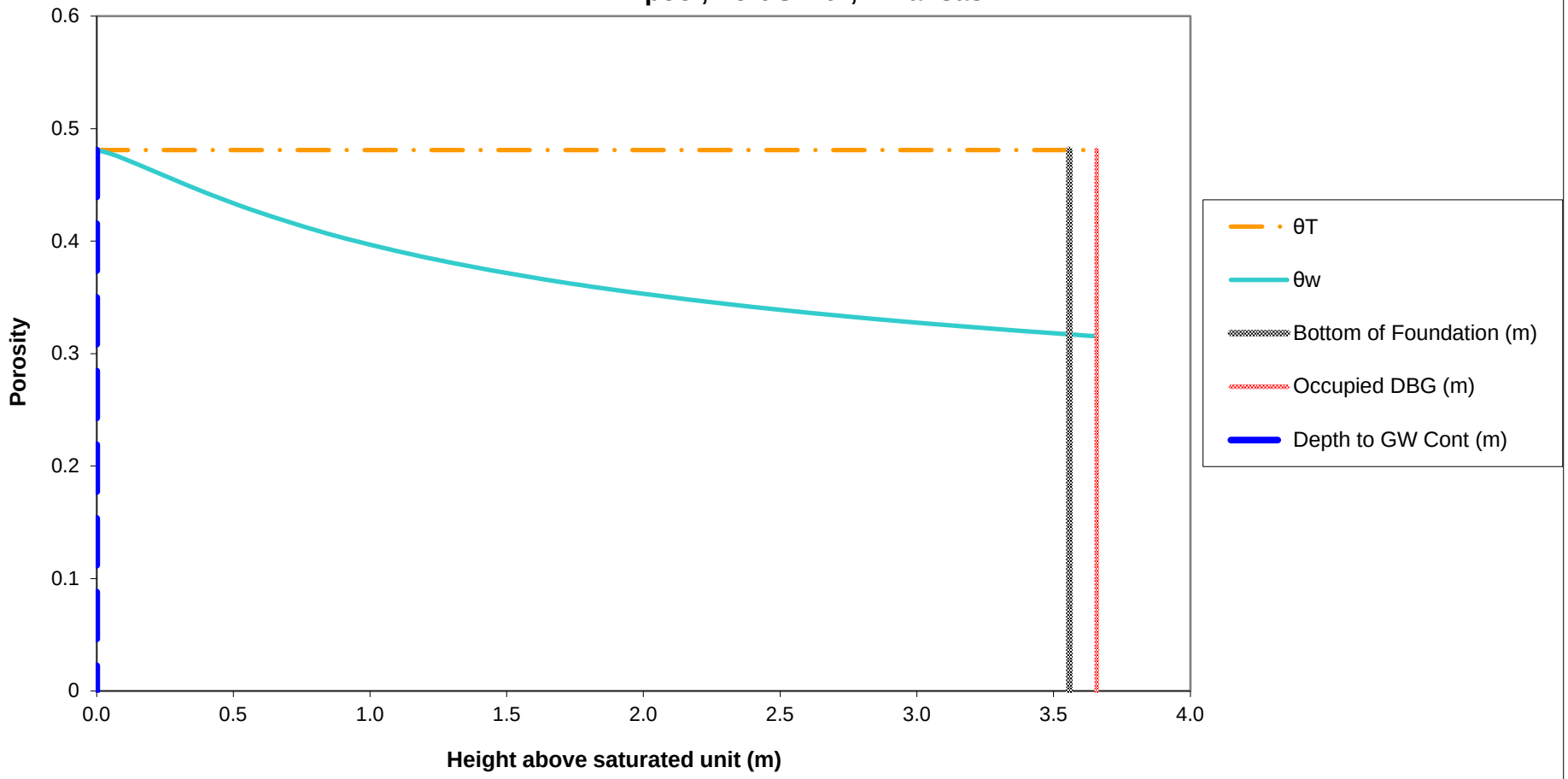
Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_∞	C_{bldg} (L-water/m^3)
VOC	Benzene	71-43-2	7.60E-01	8.47E-05	1.59E-01	1.21E-01	7.17E-04	3.20E-03	2.73E-03	8.74E-06	1.39E-03
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	1.02E-01	8.60E-04	3.84E-03	2.73E-03	1.05E-05	1.24E-03
VOC	Toluene	108-88-3	7.52E-01	7.43E-05	1.80E-01	1.20E-01	6.11E-04	2.73E-03	2.73E-03	7.46E-06	1.35E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.09E-01	4.58E-04	2.05E-03	2.73E-03	5.59E-06	1.61E-03
Notes:	**Crack Soil and Building Characteristics**			**Crack Soil**							
	SCS Soil texture class			Sand							
	Bulk density	kg/L	ρ_b	1.66							
	Total porosity	L/L-soil	θ_T	0.375							
	Water-filled porosity	L/L-soil	θ_w	0.055							
	Air-filled porosity	L/L-soil	θ_a	0.320							
	Residual saturation	L/L-soil	θ_r	0.053							
	Hydraulic conductivity	cm/s	K	7.4E-03							
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307							
	Density of water	g/cm^3	ρ_w	1.0							
	Gravitational acceleration	cm/s^2	g	980.7							
	Intrinsic permeability	cm^2	k	9.9E-08							
	Relative saturation	unitless	S_e	0.005							
	van Genuchten N	unitless	N	3.177							
	van Genuchten M	unitless	M	0.685							
	Relative air permeability	unitless	k_{rg}	0.997							
	Permeability to vapor	cm^2	k_v	9.88E-08							
	Distance from building foundation to source	m	L_{T-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							
	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.										

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

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	Benzene	71-43-2	A	N	4.30E-04	5.97E-07	7.8E-03		1.9E-09		3.0E-02	1.9E-05
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	2.50E-04	3.11E-07					4.0E-02	7.5E-06
VOC	Toluene	108-88-3	ID	N	2.70E-04	3.63E-07					5.0E+00	7.0E-08
VOC	Trichloroethene	79-01-6	HC	Y	5.50E-03	8.86E-06	4.1E-03	0.2439	2.1E-08		2.0E-03	4.2E-03
							Cumulative Risk:		2E-08		**HI:**	4E-03
Note:												
f_{inh} is the fraction of the inhalation URF that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the Annual 2023 groundwater sample at 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.												

Appendix G.9: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-175 (Parcel 2) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

RAMBOLL

Appendix G.10: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-175 (Parcel 2) Whirlpool, Fort Smith, Arkansas

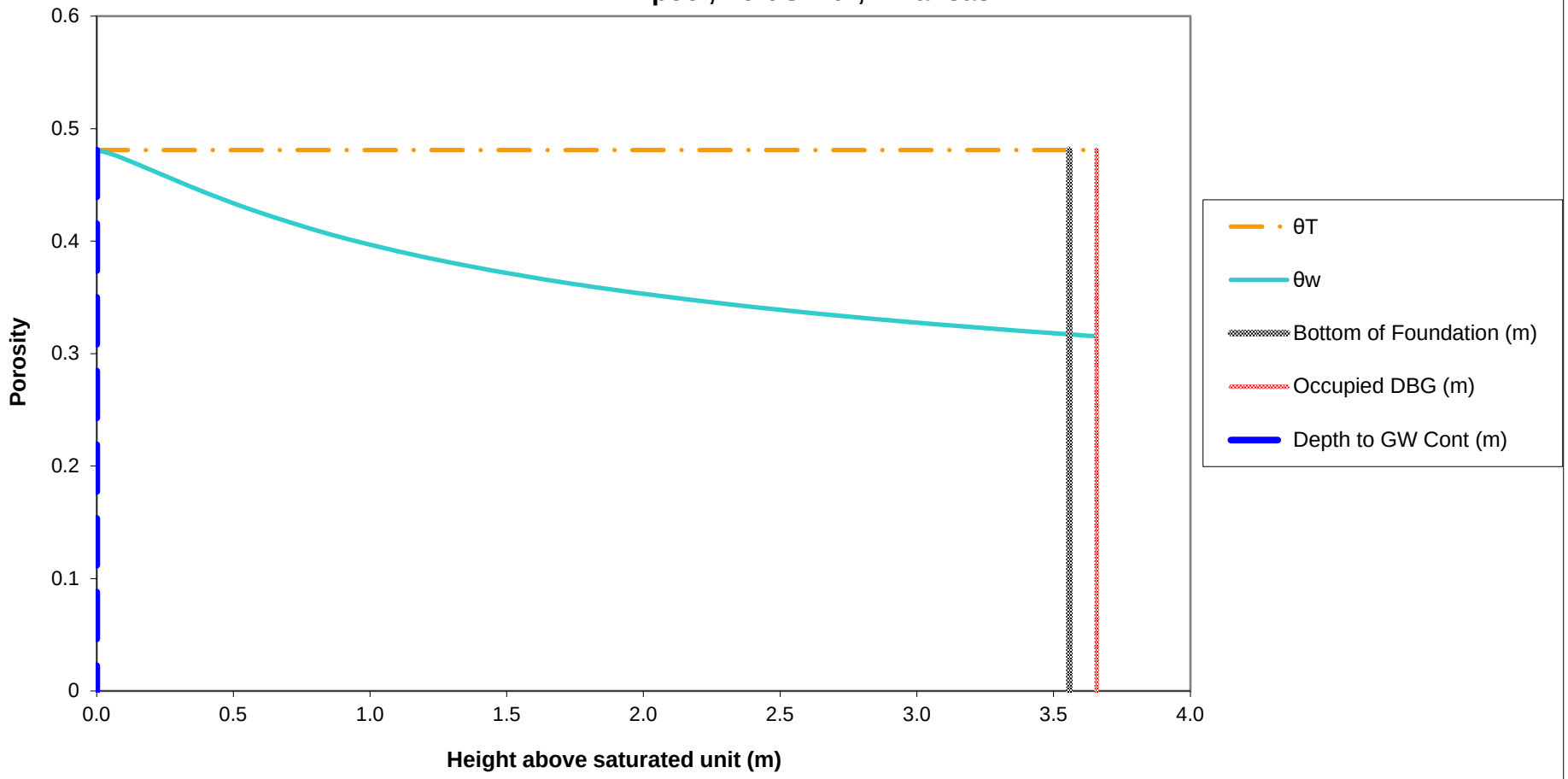
Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_∞	C_{bldg} (L-water/m^3)
VOC	1,1-Dichloroethene	75-35-4	7.78E-01	8.99E-05	8.10E-01	1.25E-01	3.12E-04	1.22E-03	2.73E-03	3.32E-06	2.69E-03
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	1.02E-01	9.72E-04	3.78E-03	2.73E-03	1.03E-05	1.22E-03
VOC	trans-1,2-Dichloroethene	156-60-5	6.11E-01	1.03E-04	2.81E-01	9.81E-02	5.96E-04	2.32E-03	2.73E-03	6.35E-06	1.79E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.10E-01	5.23E-04	2.04E-03	2.73E-03	5.57E-06	1.60E-03
Notes:	**Crack Soil and Building Characteristics**			**Crack Soil**							
	SCS Soil texture class			Sand							
	Bulk density	kg/L	ρ_b	1.66							
	Total porosity	L/L-soil	θ_T	0.375							
	Water-filled porosity	L/L-soil	θ_w	0.054							
	Air-filled porosity	L/L-soil	θ_a	0.321							
	Residual saturation	L/L-soil	θ_r	0.053							
	Hydraulic conductivity	cm/s	K	7.4E-03							
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307							
	Density of water	g/cm^3	ρ_w	1.0							
	Gravitational acceleration	cm/s^2	g	980.7							
	Intrinsic permeability	cm^2	k	9.9E-08							
	Relative saturation	unitless	S_e	0.004							
	van Genuchten N	unitless	N	3.177							
	van Genuchten M	unitless	M	0.685							
	Relative air permeability	unitless	k_{rg}	0.998							
	Permeability to vapor	cm^2	k_v	9.89E-08							
	Distance from building foundation to source	m	L_{T-gw}	3.56							
	Bldg foundation thickness	m	L_{crack}	0.1							
	Bldg foundation length	m		10.00							
	Bldg foundation width	m		10.00							
	Bldg occupied height	m		2.44							
	Bldg occupied volume	m^3		244.00							
	Occupied depth below ground	m		0.0							
	Bldg area for vapor intrusion	m^2	A_B	100.0							
	Ratio of A_{crack} to A_B		η	4E-04							
	Area of cracks	m^2	A_{crack}	4E-02							
	Air exchange rate	$hour^{-1}$	ach	0.45							
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03							
	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.										

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Appendix G.11: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-175 (Parcel 2) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	1,1-Dichloroethene	75-35-4	C	N	4.70E-04	1.26E-06					2.0E-01	6.1E-06
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	3.10E-03	3.80E-06					4.0E-02	9.1E-05
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	1.30E-04	2.32E-07						
VOC	Trichloroethene	79-01-6	HC	Y	1.33E-01	2.13E-04	4.1E-03	0.2439	4.9E-07		2.0E-03	1.0E-01
							Cumulative Risk:		5E-07		**HI:**	1E-01
Note:												
f_{inh} is the fraction of the inhalation URF that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the Annual 2023 water sample at MW-175 (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.												

Appendix G.12: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-176 (Parcel 3) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

RAMBOLL

Appendix G.13: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-176 (Parcel 3) Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_{∞}	C_{bldg} (L-water/m^3)
VOC	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	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.10E-01	5.23E-04	2.04E-03	2.73E-03	5.57E-06	1.60E-03
VOC	Vinyl Chloride	75-01-4	9.16E-01	1.06E-04	9.00E-01	1.47E-01	3.44E-04	1.34E-03	2.73E-03	3.66E-06	3.30E-03

Notes:	Crack Soil and Building Characteristics			Crack Soil
	SCS Soil texture class			Sand
	Bulk density	kg/L	ρ_b	1.66
	Total porosity	L/L-soil	θ_T	0.375
	Water-filled porosity	L/L-soil	θ_w	0.054
	Air-filled porosity	L/L-soil	θ_a	0.321
	Residual saturation	L/L-soil	θ_r	0.053
	Hydraulic conductivity	cm/s	K	7.4E-03
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307
	Density of water	g/cm^3	ρ_w	1.0
	Gravitational acceleration	cm/s^2	g	980.7
	Intrinsic permeability	cm^2	k	9.9E-08
	Relative saturation	unitless	S_e	0.004
	van Genuchten N	unitless	N	3.177
	van Genuchten M	unitless	M	0.685
	Relative air permeability	unitless	k_{rg}	0.998
	Permeability to vapor	cm^2	k_v	9.89E-08
	Distance from building foundation to source	m	L_{T-gw}	3.56
	Bldg foundation thickness	m	L_{crack}	0.1
	Bldg foundation length	m		10.00
	Bldg foundation width	m		10.00
	Bldg occupied height	m		2.44
	Bldg occupied volume	m^3		244.00
	Occupied depth below ground	m		0.0
	Bldg area for vapor intrusion	m^2	A_B	100.0
	Ratio of A_{crack} to A_B		η	4E-04
	Area of cracks	m^2	A_{crack}	4E-02
	Air exchange rate	$hour^{-1}$	ach	0.45
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03
	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.

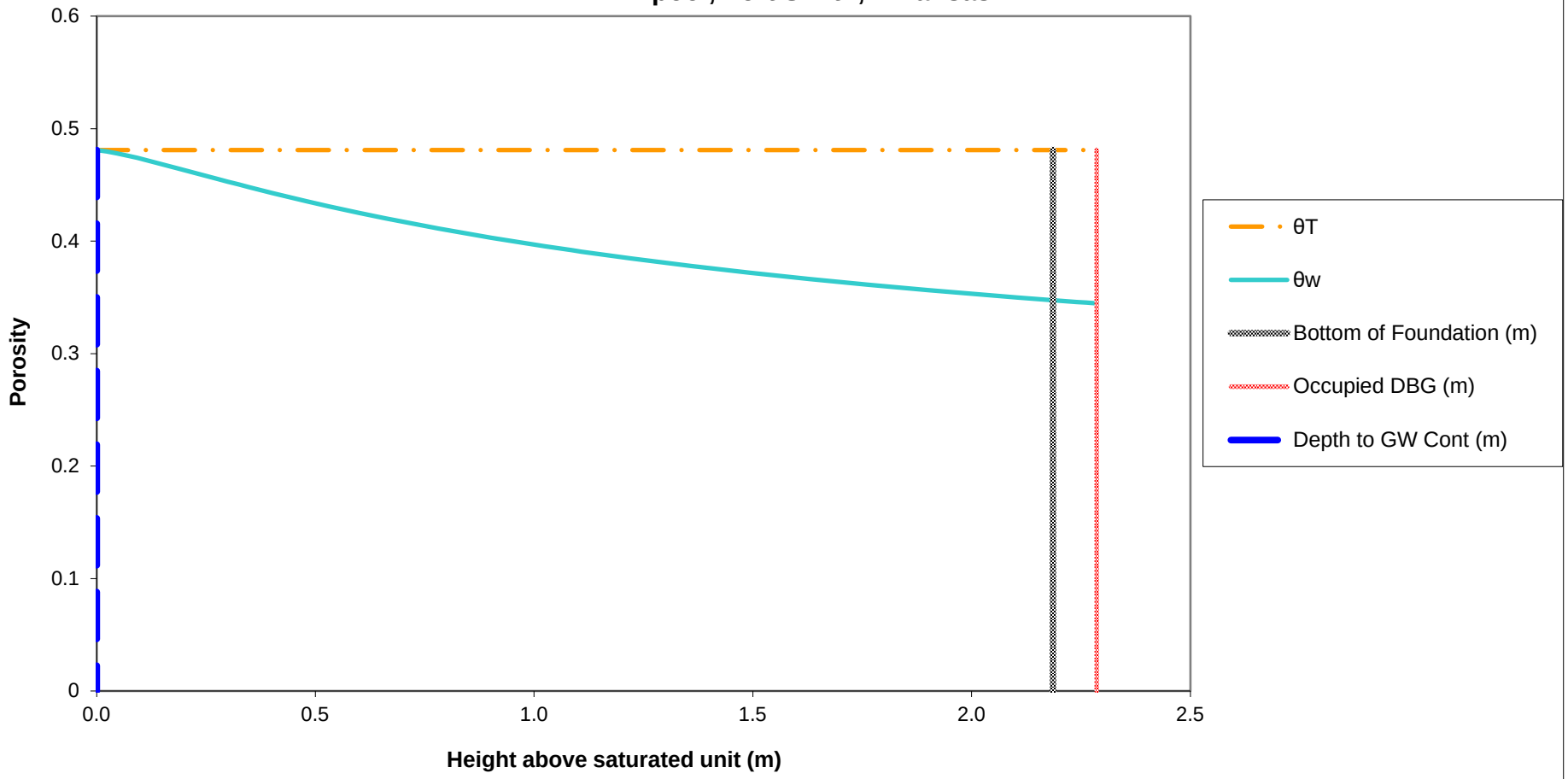
The effective diffusion term DeffT is calculated based on a silty clay soil, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Program.

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Appendix G.14: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-176 (Parcel 3) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	Chloroform	67-66-3	B2	N	6.10E-04	7.74E-07	2.3E-02		7.3E-09		5.0E-02	1.5E-05
VOC	1,1-Dichloroethene	75-35-4	C	N	2.10E-03	5.65E-06					2.0E-01	2.7E-05
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	1.34E-02	1.64E-05					4.0E-02	3.9E-04
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	3.30E-04	5.89E-07						
VOC	Trichloroethene	79-01-6	HC	Y	3.19E-01	5.12E-04	4.1E-03	0.2439	1.2E-06		2.0E-03	2.5E-01
VOC	Vinyl Chloride	75-01-4	A	N	2.01E-02	6.63E-05	4.4E-03		4.1E-07		1.0E-01	6.4E-04
							Cumulative Risk:		2E-06		**HI:**	2E-01
Note:												
f_{inh} is the fraction of the inhalation URF that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the Annual 2023 groundwater sample at MW-176 (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.												

Appendix G.15: 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.

Appendix G.16: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-178 (Parcel 5) Whirlpool, Fort Smith, Arkansas

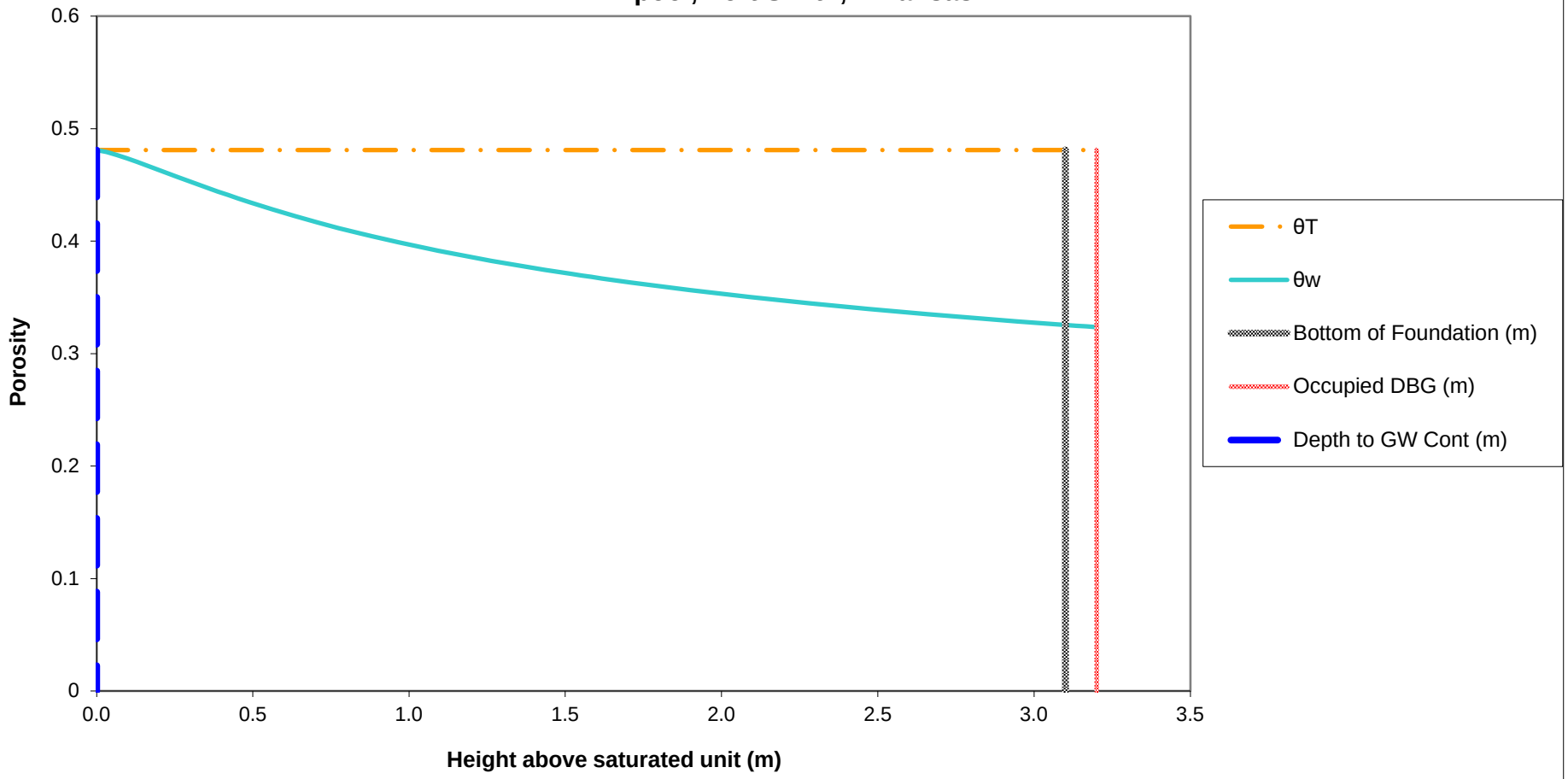
Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_∞	C_{bldg} (L-water/m^3)
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	9.95E-02	6.44E-04	4.08E-03	2.73E-03	1.11E-05	1.32E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.07E-01	3.33E-04	2.11E-03	2.73E-03	5.76E-06	1.66E-03
Notes:	**Crack Soil and Building Characteristics**			**Crack Soil**							
	SCS Soil texture class			Sand							
	Bulk density	kg/L	ρ_b	1.66							
	Total porosity	L/L-soil	θ_T	0.375							
	Water-filled porosity	L/L-soil	θ_w	0.057							
	Air-filled porosity	L/L-soil	θ_a	0.318							
	Residual saturation	L/L-soil	θ_r	0.053							
	Hydraulic conductivity	cm/s	K	7.4E-03							
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307							
	Density of water	g/cm^3	ρ_w	1.0							
	Gravitational acceleration	cm/s^2	g	980.7							
	Intrinsic permeability	cm^2	k	9.9E-08							
	Relative saturation	unitless	S_e	0.012							
	van Genuchten N	unitless	N	3.177							
	van Genuchten M	unitless	M	0.685							
	Relative air permeability	unitless	k_{rg}	0.992							
	Permeability to vapor	cm^2	k_v	9.84E-08							
	Distance from building foundation to source	m	L_{T-gw}	2.19							
	Bldg foundation thickness	m	L_{crack}	0.1							
	Bldg foundation length	m		10.00							
	Bldg foundation width	m		10.00							
	Bldg occupied height	m		2.44							
	Bldg occupied volume	m^3		244.00							
	Occupied depth below ground	m		0.0							
	Bldg area for vapor intrusion	m^2	A_B	100.0							
	Ratio of A_{crack} to A_B		η	4E-04							
	Area of cracks	m^2	A_{crack}	4E-02							
	Air exchange rate	$hour^{-1}$	ach	0.45							
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03							
	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.										

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Appendix G.17: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-178 (Parcel 5) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	2.60E-04	3.44E-07					4.0E-02	8.2E-06
VOC	Trichloroethene	79-01-6	HC	Y	3.40E-04	5.65E-07	4.1E-03	0.2439	1.3E-09		2.0E-03	2.7E-04
							Cumulative Risk:		1E-09		**HI:**	3E-04
Note:												
f_{inh} is the fraction of the inhalation URF that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the Annual 2023 water 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.												

Appendix G.18: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Soil Vapor Monitoring Point VP-14 (Parcel 5) Whirlpool, Fort Smith, Arkansas



Notes:
The soil-water profile in the vadose zone is estimated using the van Genuchten soil-water retention equation with default water retention parameters appropriate for silt clay, as discussed in Appendix A, Section 3.3.1 of the ADEQ-approved Revised Risk Management Plan, which was used as the basis for the ADEQ Remedial Action Decision.

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Appendix G.19: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Perched Water at VP-14 (Parcel 5) Whirlpool, Fort Smith, Arkansas

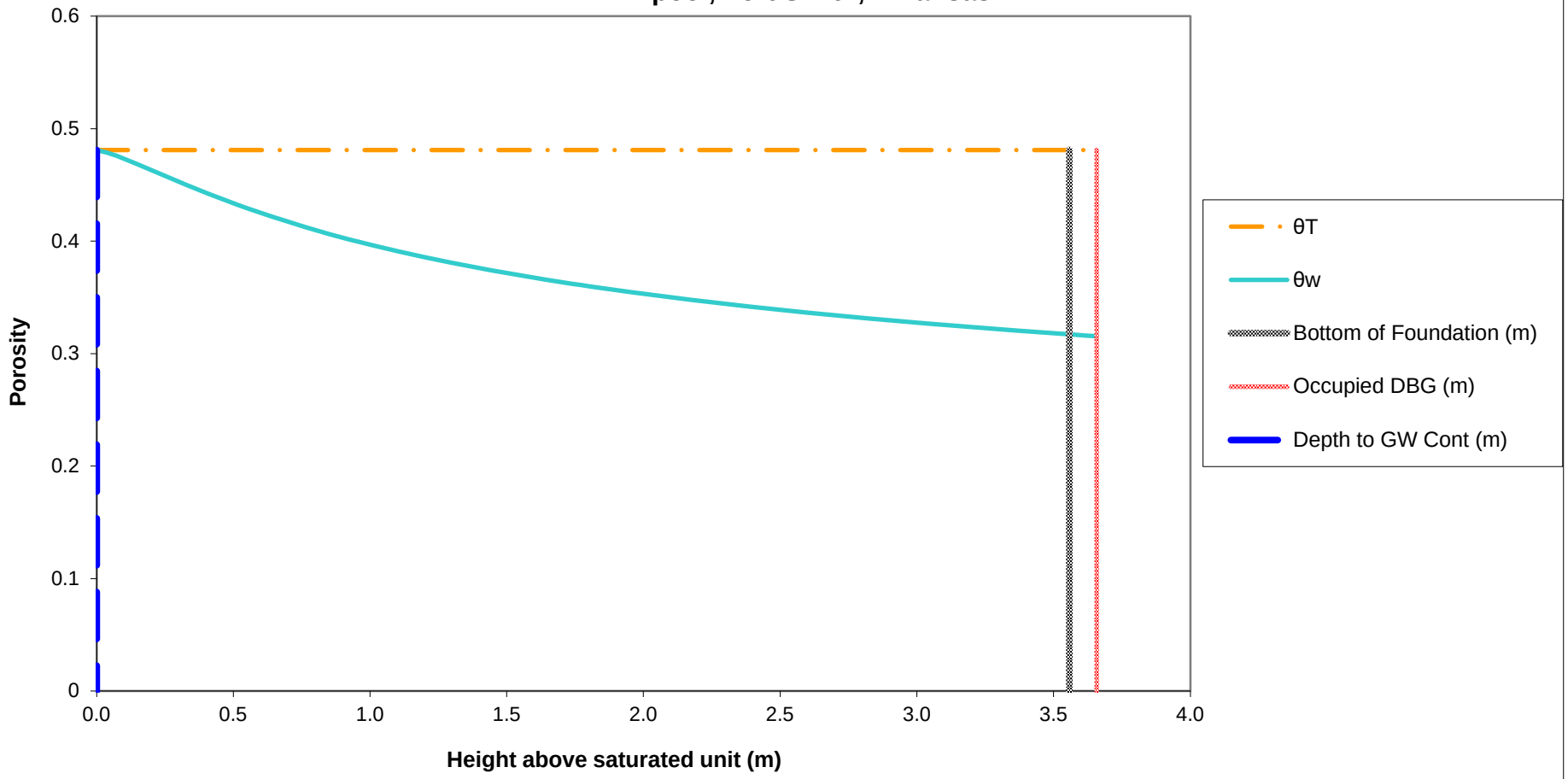
Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_∞	C_{bldg} (L-water/m^3)
VOC	1,1-Dichloroethene	75-35-4	7.78E-01	8.99E-05	8.10E-01	1.24E-01	2.71E-04	1.21E-03	2.73E-03	3.32E-06	2.69E-03
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	1.02E-01	8.60E-04	3.84E-03	2.73E-03	1.05E-05	1.24E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.09E-01	4.58E-04	2.05E-03	2.73E-03	5.59E-06	1.61E-03
Notes:	**Crack Soil and Building Characteristics**			**Crack Soil**							
	SCS Soil texture class			Sand							
	Bulk density	kg/L	ρ_b	1.66							
	Total porosity	L/L-soil	θ_T	0.375							
	Water-filled porosity	L/L-soil	θ_w	0.055							
	Air-filled porosity	L/L-soil	θ_a	0.320							
	Residual saturation	L/L-soil	θ_r	0.053							
	Hydraulic conductivity	cm/s	K	7.4E-03							
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307							
	Density of water	g/cm^3	ρ_w	1.0							
	Gravitational acceleration	cm/s^2	g	980.7							
	Intrinsic permeability	cm^2	k	9.9E-08							
	Relative saturation	unitless	S_e	0.005							
	van Genuchten N	unitless	N	3.177							
	van Genuchten M	unitless	M	0.685							
	Relative air permeability	unitless	k_{rg}	0.997							
	Permeability to vapor	cm^2	k_v	9.88E-08							
	Distance from building foundation to source	m	L_{T-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							
	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.										

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Appendix G.20: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Perched Water at VP-14 (Parcel 5) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	1,1-Dichloroethene	75-35-4	C	N	3.10E-04	8.33E-07					2.0E-01	4.0E-06
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	1.10E-03	1.37E-06					4.0E-02	3.3E-05
VOC	Trichloroethene	79-01-6	HC	Y	2.17E-02	3.50E-05	4.1E-03	0.2439	8.1E-08		2.0E-03	1.7E-02
							Cumulative Risk:		8E-08		**HI:**	2E-02
Note:												
f_{inh} is the fraction of the inhalation URF that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the Annual 2023 water sample at VP-14 (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 G.21: Soil Moisture Profile for Residential Building (Slab-on-Grade) at Groundwater Monitoring Well MW-179 (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.

Appendix G.22: Normalized Indoor Air Concentration in a Residential Building (Slab-on-Grade) due to Vapor Intrusion from Groundwater at MW-179 (Parcel 5) Whirlpool, Fort Smith, Arkansas

Chem Group	Chemical	CASRN	D_{air} (m^2/day)	D_{water} (m^2/day)	H (unitless)	D_{crack} (m^2/day)	D_{eff}^T (m^2/day)	α_{soil}	α_{slab}	α_∞	C_{bldg} (L-water/m^3)
VOC	1,1-Dichloroethene	75-35-4	7.78E-01	8.99E-05	8.10E-01	1.25E-01	3.12E-04	1.22E-03	2.73E-03	3.32E-06	2.69E-03
VOC	cis-1,2-Dichloroethene	156-59-2	6.36E-01	9.76E-05	1.19E-01	1.02E-01	9.72E-04	3.78E-03	2.73E-03	1.03E-05	1.22E-03
VOC	trans-1,2-Dichloroethene	156-60-5	6.11E-01	1.03E-04	2.81E-01	9.81E-02	5.96E-04	2.32E-03	2.73E-03	6.35E-06	1.79E-03
VOC	Trichloroethene	79-01-6	6.83E-01	7.86E-05	2.88E-01	1.10E-01	5.23E-04	2.04E-03	2.73E-03	5.57E-06	1.60E-03
Notes:	**Crack Soil and Building Characteristics**			**Crack Soil**							
	SCS Soil texture class			Sand							
	Bulk density	kg/L	ρ_b	1.66							
	Total porosity	L/L-soil	θ_T	0.375							
	Water-filled porosity	L/L-soil	θ_w	0.054							
	Air-filled porosity	L/L-soil	θ_a	0.321							
	Residual saturation	L/L-soil	θ_r	0.053							
	Hydraulic conductivity	cm/s	K	7.4E-03							
	Dynamic viscosity of water	g/cm-s	μ_w	0.01307							
	Density of water	g/cm^3	ρ_w	1.0							
	Gravitational acceleration	cm/s^2	g	980.7							
	Intrinsic permeability	cm^2	k	9.9E-08							
	Relative saturation	unitless	S_e	0.004							
	van Genuchten N	unitless	N	3.177							
	van Genuchten M	unitless	M	0.685							
	Relative air permeability	unitless	k_{rg}	0.998							
	Permeability to vapor	cm^2	k_v	9.89E-08							
	Distance from building foundation to source	m	L_{T-gw}	3.56							
	Bldg foundation thickness	m	L_{crack}	0.1							
	Bldg foundation length	m		10.00							
	Bldg foundation width	m		10.00							
	Bldg occupied height	m		2.44							
	Bldg occupied volume	m^3		244.00							
	Occupied depth below ground	m		0.0							
	Bldg area for vapor intrusion	m^2	A_B	100.0							
	Ratio of A_{crack} to A_B		η	4E-04							
	Area of cracks	m^2	A_{crack}	4E-02							
	Air exchange rate	$hour^{-1}$	ach	0.45							
	Building ventilation rate	m^3/day	Q_{bldg}	2.64E+03							
	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.										

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Appendix G.23: Cancer Risk and Hazard Index Calculations for Vapor Intrusion into a Residential Building (Slab-on-Grade) from Groundwater at MW-179 (Parcel 5) Whirlpool, Fort Smith, Arkansas

							Cancer				Noncancer	
Chem Group	**Chemical**	**CASRN**	**Carc Class**	**ADAF**	**C_{gw}** (mg/L)	**$C_{building}$** (mg/m^3)	**URF** (m^3/mg)	**f_{inh}**	**Risk**		**RfC** (mg/m^3)	**HQ**
VOC	1,1-Dichloroethene	75-35-4	C	N	5.10E-04	1.37E-06					2.0E-01	6.6E-06
VOC	cis-1,2-Dichloroethene	156-59-2	ID	N	1.30E-03	1.59E-06					4.0E-02	3.8E-05
VOC	trans-1,2-Dichloroethene	156-60-5	ID	N	1.10E-04	1.96E-07						
VOC	Trichloroethene	79-01-6	HC	Y	3.26E-02	5.23E-05	4.1E-03	0.2439	1.2E-07		2.0E-03	2.5E-02
							Cumulative Risk:		1E-07		**HI:**	3E-02
Note:												
f_{inh} is the fraction of the inhalation URF that USEPA identified as having a mutagenic mode of action.												
Only VOCs detected in the Annual 2023 groundwater sample at MW-179 (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.												